

D3.4.

Protocols and tools for business-to-business co-creation

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¹ PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

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List of Abbreviations

AR: Augmented Reality

B2B: Business to business

CoP: Community of Practice

CS: Case Study

D: Deliverable

DoA: Description of Action

LL: Living Lab

M: Milestone

VR: Virtual Reality

WP: Work Package

WSIS: Water Smart Industrial Symbiosis





Executive Summary

This deliverable 3.4 “Protocol and tools for business-to-business co-creation” was developed within Task 3.2 (B2B engagement) and involves subtask 3.2.1 (CoP) and subtask 3.2.2 (Co-creation). The Deliverable will provide the protocol and tools for business-to-business co-creation in ULTIMATE, and explain the process used of how the protocol and tools are selected and designed. We have two distinctly different protocols we will use; co-creation action and communities of practice (CoP).

Co-creation is a collaborative process where experts’ work closely with local people, end-users and stakeholders using methods, tools and protocols to propose, discuss and prototype new actions and solutions to relevant issues. Following a co-creation process, a compilation of documents with suggestions for future actions is drafted to provide an early prototype needed for future development of a service, action, or an intervention and to begin conversations with decision-makers. Our co-creation action involves local citizens and relevant stakeholders in the engagement process in our chosen three case studies (CS): CS2, CS3, and CS9. The selection process of the three CSs is described in this deliverable. CoPs do not involve the public, but sector and site-specific stakeholders on the technical and political elements of the nine ULTIMATE case studies.

The methodologies and tools that has been proven to achieve best results in our co-creation practice with the three CSs (CS2, CS3, and CS9) will be presented as a best practice in T3.3 (citizen engagement) and with results reported in D3.5 (results and insights from co-creation exercises in ULTIMATE CS, M30). We will use the final output of the co-creation to develop an immersive narrative intervention or action in D3.6 (validated and analysed immersive narratives for citizens, M46).

Conclusion

This report presents our approaches in co-creation. We have also outlined the processes, methodologies, and tools used for business-to-business co-creation within the ULTIMATE CSs using two best practices:

1. Co-creation leading to an immersive experience¹ using tools such as: the onboarding kit, facilitator’s slidedeck and the ULTIMATE’s playbook.
2. CoP using tools such as stakeholder identification theories, best practices from previous projects, and CoP monitoring and evaluation theory and techniques.

¹ An immersive experience is a perception of being present in an environment when you are actually in another; creating a feeling of immersion or suspension of disbelief using a number of different technologies.





We expect any co-creation action to require flexibility and adaptation based on what the CSs want to achieve, and on what happens on the process of doing it. All the tools we have provided to our CSs and their participants/stakeholders are considered best practices, but response of the receivers is expected to vary and may require adaptations of the proposed solutions. Making successful innovative practice and change may also require both social and political advocacy, which is beyond our scope in this deliverable.





1. Overview

1.1. What is the difference between a CoP, Living Labs and co-creation activities?

In ULTIMATE, **CoPs** are defined by the specific community of stakeholders (see Figure 1) they engage through online or face-to-face meetings, that share and exchange knowledge on a specific topic or across topics for a finite duration in time (i.e., the duration of the project). CoPs do not involve the public, but sector and site-specific stakeholders on the technical and political elements of the CS in question.

The **co-creation** process and actions in the ULTIMATE project on the other hand will enable collaboration and engagement between various stakeholders, and the general public based on a multi-use playspace. These spaces will use technologies such as artistic interventions, virtual and augmented reality (VR and AR, respectively) to increase learning and engagement for both business-to-business and the public about the solutions and case studies within the project towards a WSIS approach in society.

Finally, **Living Labs** (LLs) are defined by Water Europe as “user-centred, open innovation ecosystems based on a systematic user co-creation approach in public-private-people partnerships, integrating research and innovation processes in real-life communities and settings”. LLs are therefore real-life and demo-type or platform-type environments with a cross-sector nexus approach, which have the involvement and commitment of multi-stakeholders and provide a real life “field lab” to develop, test, and validate a combination of solutions. Therefore, LLs are different than CoPs, as they involved a broader range of stakeholders, including local communities, and can live beyond the project duration. LL is not part of this deliverable and will be included in Task 3.4 (M19).





Figure 1 ULTIMATE's Stakeholder Engagement

1.2. Purpose of the Deliverable

The aim of this deliverable is to define the processes, methodologies, protocols and tools used for business-to-business co-creation within the ULTIMATE CS. The methodologies and tools that has been proven to achieve best results in our co-creation practice with the three CSs (CS2, CS3, and CS9) will be presented as a best practice in T3.3 (citizen engagement) and with results reported in D3.5 (results and insights from co-creation exercises in ULTIMATE CS, M30). We will use final output of the co-creation to develop an immersive narrative intervention or action in D3.6 (validated and analysed immersive narratives for citizens, M46)





ULTIMATE promote active stakeholder engagement and innovation co-creation, which is essential to produce knowledge capable of addressing the complexities inherent in symbiotic arrangements. Stakeholders range from business-to-business to the general public and will be engaged through co-creation, CoP, immersive media experiences in multi-use playspaces, and through LLs, which will contain specific location-based stories and visualisations driven by real data adding immersive narrative/gamification elements (WP3).

1.3. Structure of the Deliverable

Co-creation is an iterative process of engaging stakeholders through a variety of methods and tools to collaborate towards a tangible result. In order to enhance this co-creation process we have taken advantage of using two tools:

1. The first part of the deliverable (Section 3) describes a co-creation action leading to an immersive narrative experience; and
2. The second part (Section 4) describes a Communities of Practice (CoP).

1.4. Methodology

The methodologies used for developing the two tools are: (1) co-creation; and (2) CoPs.

1.4.1. Co-creation

Since 2016, NTNU has been collaborating with several other faculties and had a diverse team of artists, scientists, researchers, designers and architects working on tools related to the concepts of multi-use playspaces², place by design and narrative experiences. We have implemented all these concepts in a public space called Adressaparken in Trondheim and on an EU project called +CityxChange³. We have also examined several local intervention sites in connection to the use of tools for engaging communities and have co-created installations and interventions using art, science and technology.

Based on the experiences with the methodology, WP3 started by identifying and mapping the criterion in the selection of the CSs. We examined the activities of the nine CSs initially through their online presence. Internet search, online project reports and literature reviews were gathered. We have also jointly analysed the presentation materials with our CS project partners and conducted a one-on-one interview with qualifying CSs. We have used four guiding principles as a selection criterion in a form of subjective survey questions described in detail in section 3.2: co-creation, sense of

² https://folk.ntnu.no/wendyann/Adressaparken_toolkit/

³ +CityxChange, under grant agreement no. 824260. <https://cityxchange.eu/>





community, openness, and change-making. After the selection of the three CSs (CS2, CS3 and CS9), we examined their business activities and created our visualisation of such. By understanding the CSs, their activities and potential player activity systems, we were able to decide on the appropriate tools for the CSs. We revisited the lessons learned from previous experiences in the co-creation process and in earlier implementations of multi-use playspaces, place by design and immersive experiences to provide a new dimension in solving challenges in stakeholder engagements applied in water-oriented cases. Selected tools from our previous projects were adopted and tested through workshops with our diverse team of artists, scientists, researchers, designers and architects at the Sense-IT⁴ Lab at NTNU. We use a human-centred design thinking in our co-creation framework. Through this methodology, we provide three tools to facilitate the co-creation process and have distributed them in our CS: onboarding Kit (contains tools that welcomes and guides a new participant into the project and the team), facilitator's slidedeck (explains the methodologies and tools that use CS facilitators can use in their co-creation sessions) and the ULTIMATE's playbook (contains tools that guide citizen participants through the co-creation session).

The result of our three CSs' co-creation process will impact the outcome and legacy of the D3.3 ULTIMATE playbook and the development of an immersive narrative intervention or action in D3.6 (validated and analysed immersive narratives for citizens).

1.4.2. Communities of Practice (CoPs)

KWR has many years of experience working in facilitating the stakeholder engagement and co-creation work packages and tasks in European projects. Prior to this project, KWR researchers have gained experience and developed methodologies in the implementation of CoPs in several EU Projects, including BINGO, NextGen, STOP-IT, ULTIMATE, BWater-Smart and Water Mining.

For the design of the ULTIMATE CoPs, WP3 has reviewed and compiled the best practices and lessons learned from these projects and developed a new framework to guide the case studies on their community-building journey. We also consulted the latest research in the social science literature on CoPs and integrated these into the guidance document. The current framework on guidance for CoPs in ULTIMATE includes:

- Definition, scope and key elements of a CoP.
- CoP meeting roadmap planning and design.
- Planning the community: roles and responsibilities and stakeholder mapping.
- Guide on how to prepare CoP meetings.
- Monitoring and evaluation.
- Moderation and engagement tools for in-person and online meetings.

⁴ <http://www.iet-multimedialabs.org/>





In compiling this document, we also consulted with 3 experts who have worked, organised and managed CoPs in other EU projects to ensure it was useful and tangible for the CoPs. Once compiled, we offered training on the guidance document for all the CoPs, gathering their insights and feedback as well. The result of this guidance document will support each of the case studies in the smooth operation of their CoP, with key guidance and advice on how to convene such a community. The CoPs will enable the ULTIMATE solutions and technologies to be better accepted locally thus ensuring added value in terms of, for example, local relevance, social acceptance, embedding of solutions into regulatory frameworks.





2. Co-creation

2.1. Introduction

Co-creation is a collaborative process where experts' work closely with local people, end-users and stakeholders using various resources and ideas to propose, discuss and prototype new actions and solutions to relevant issues. It involves joint creation of value by various participants, allowing them to co-construct the service experience to suit their needs, context and preferences.

Co-creation is practiced using methods and tools in engaging various stakeholders in a playing field. Through co-creation, all participants can come together with others to find common ground and potential solutions on issues that they identified and defined together through an open dialogue, and reflection of each other's unique perspective.

Following a co-creation process, a report with suggestions for future actions can be drafted to provide an early prototype needed for future development of a service, action, or an intervention and to begin conversations with decision-makers.

The ULTIMATE project can benefit from the co-creation process because it could positively change and create new forms of community action, social engagement and citizen involvement. Locally relevant stakeholders including citizens are invited to contribute, to share their stories, their ideas and to refine as well as prioritise the ideas shared by others in a systematic multi-stage process. Co-creation is utilised throughout the project development process to ensure that the new ideas or solutions generated serve their intended purpose.

By investing in this approach, we envision ULTIMATE case studies increase in the capacity and velocity to generate ideas. In this way innovation is ensured, risk is reduced, and a sense of community is built as well as project ownership and engagement. People involved in co-creating ideas and solutions are more likely to agree and support its implementation. By co-creating our envisioned future actions and doing so in synchrony with those who are part of the issue to begin with, we can generate and accommodate various ideas, account for risks before they happens, and optimally create a solution that supports those who are involved.

Within the ULTIMATE project, our co-creation process aims to involve locally relevant stakeholders in each CS including not only the industry but also local citizens in finding new ideas and potential solutions to challenges.

Our ULTIMATE Co-Creation approach aims to be clear, agile and re-usable, which will help us to easily realise and design solutions together in a physical (multi-use playspace) or an online space. It is guided by the concept of a "place by design". Place by design is a process of determining where and how we will play and win in





the implementation of our proposed site-specific action or intervention. It involves identifying the place where intervention or play will live, the local context and the needed structures that support choices in the environment, the local audience and the neighbourhood networks. The result of our co-creation will lead to co-designed interventions or immersive media experiences in our selected CS locations.

2.2. How does ULTIMATE implement Co-creation

As co-creation is a demanding process for the case studies, we have decided to only use this tool for three selected case studies.

Information about the nine case studies was gathered by their web presence, Internet searches, project reports and literature; or by presentation materials in our meetings with the partners and one on one interview with the case studies. We then identified and mapped the criterion in the selection of the case studies. We use our 4 guiding principles as a selection criterion: co-creation, sense of community, openness, and change-making. We ask them several survey questions and mapped them out in a matrix.

1. Co-creation

We selected the three CSs based on how their organisation and is willing to commit their time and resources to work together using a wide range of resources, ideas, methods and tools in creating actions and bringing changes in their environment.

Survey question: Are you willing to use your resources and connections to conduct frequent meetings within the next 2 to 3 years to use wide range of tools and methodologies for co-creation?

2. Sense of community

We consider the CSs' potential access, sense of belongingness and responsibility to their neighbourhood community.

Survey questions: How well can you identify your organisation with the idea that the local community matter to your ecosystem and to the co-creation group we are going to form together to effect change? How well can you identify your organisation addressing not just organisational but also community issue at large?

3. Openness

This refers to the CSs' strategic priorities in innovative solutions using arts, technology, and data to address community-related issues in their organisation.

Survey questions: Are you willing to use arts and technology to implement site-specific actions or local artistic interventions such as immersive experiences (examples are shown to the CSs) to address community issues? Do you have





access to public or community spaces that can be used to show solutions to these issues?

4. Change-making

Beyond the co-creation of technological solutions, we want to make sure that the organisation values community-led change and innovation. This involves change in individuals, communities, institutions and/or cultures, and in the way of thinking, value creation and societal consciousness.

Survey questions: Do you value community-led solutions? Beyond technological solutions, is there a need for you to align your mission and value statement with the community?

After the selection process, the following CSs were selected:

- CS2 – Nieuw Prinsenland, the Netherland
- CS3 – Rosignano, Italy
- CS9 – Kalundborg, Denmark

For the three CSs, we are guiding the co-creation CS leaders to re-design if needed and facilitate “plays” and disseminate them as an ULTIMATE onboarding kit, facilitator’s slidedeck and playbook.

These ULTIMATE co-creation tools will guide case studies to engage locally relevant stakeholders from various expertise and backgrounds in their co-creation sites. We have designed a co-creation framework by stages (see Figure 2) We have also provided them with a suggested co-creation stages roadmap (see Figure 3) as an example to guide them when to gather resources and engage people. The framework stages are also described in more detail both in the playbook and in the facilitator’s slidedeck distributed to the CS leaders.



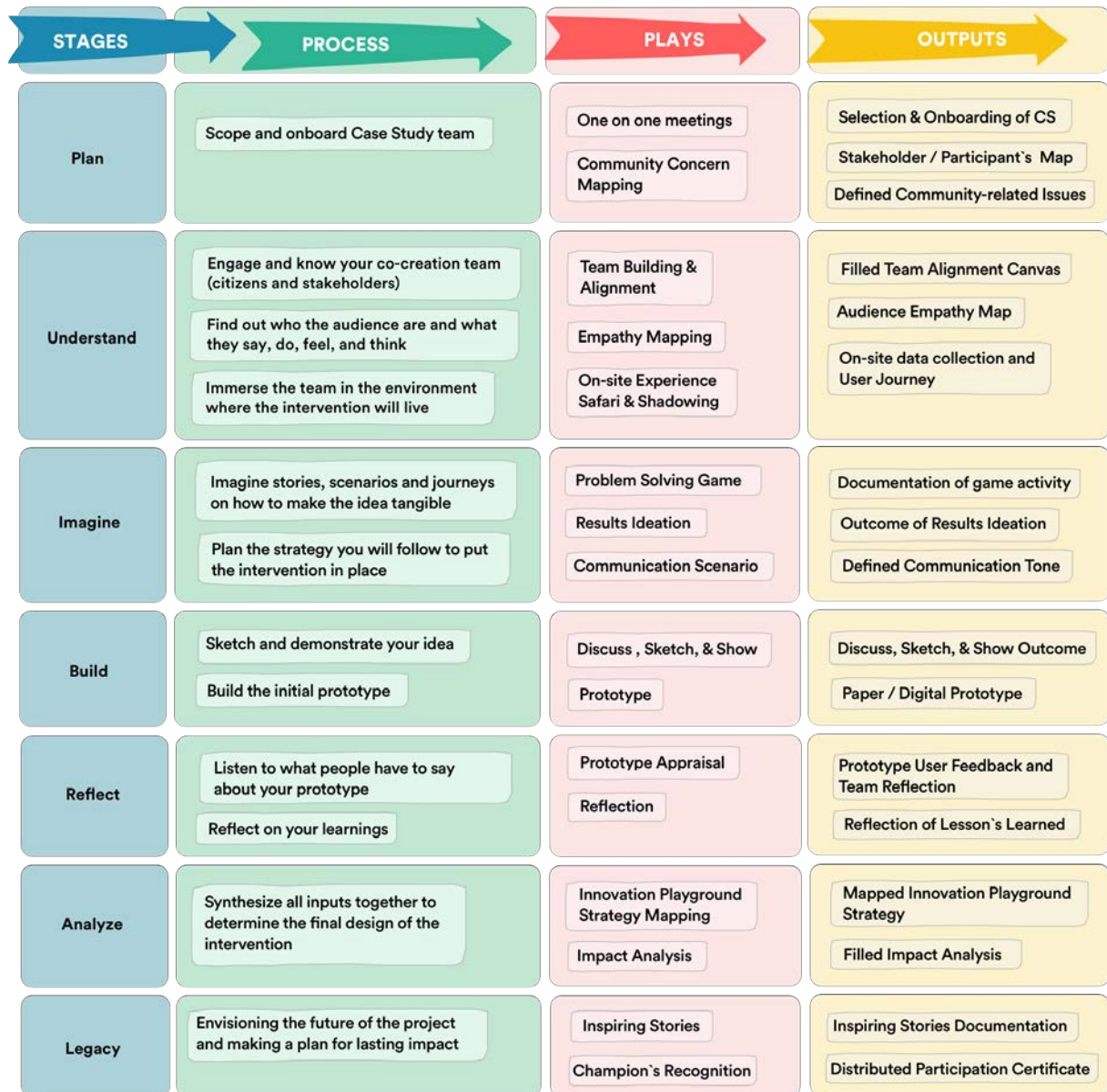


Figure 2 Co-creation framework stages

The stages of the framework provided to the CSs will give them an idea who is involved at which point of the project and what process and plays needs to take place at a certain stage. These stages can be followed in the order presented or in the order the case studies choose. Implementing co-creation involves several “plays” or sessions. Plays are ways of answering questions and developing new ideas through activities and they help the case studies understand challenges, people, practices, and the industry more deeply.



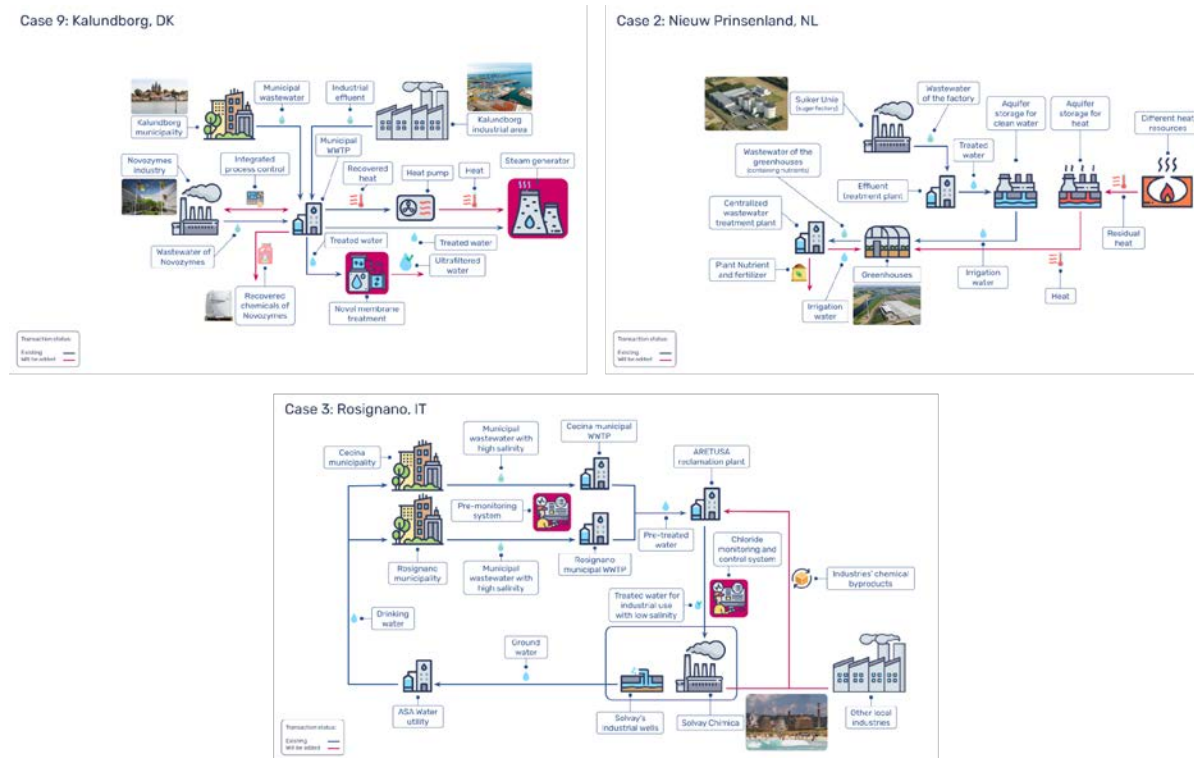


Figure 4 Visualised Activities and Transaction Flow of CS9, CS3 and CS2. Available documents of CS2, CS3, and CS9 have been analysed. The blue arrows show what is already happening while the red ones show the interactions that will be added by the ULTIMATE project. This is verified with the CS leaders in each of the three cases through a one-on-one meeting.





Figure 5 Augmented Reality and Virtual Reality Demos presented to the CSs to clarify the concept of immersive experience. Three examples in the form of storyboards were made for each CS. Two of the examples were ideas around augmented reality and one was an indoor interactive space using immersive displays.

If the CSs cannot readily identify the concerns of those in the community in relation to the challenges they are facing as an organisation, we recommend them to explore the community concern mapping canvas (Figure 6) before proceeding to the next stage.

Planning can take a few weeks or can develop during the entire project duration.





Community Concern Mapping Canvas

What is it?

If you cannot readily identify the concerns of those in the community in relation to the challenges you are facing as an organization, we recommend you to explore the Community Concern Mapping Canvas before proceeding to the next stage.



WHERE IS THE ISSUE?
HOW DO YOU IDENTIFY IT?
WHY IS THE ISSUE THERE?



Time: 45 minutes
Players: Community & Case Study Stakeholders



You need stickers dots, or coloured markers

How to go about it?

- 1 Form into groups and each group receives a copy of the case study map.
- 2 Locate the problem spot.
Locate the spot where your issues are forming. Mark them in red.
Locate the spot where the issues in your community are forming. Mark them in blue.
Locate the areas where your issues and your community issues intersect most. Mark them in yellow.
- 3 Discuss the aspects of this issue, its seriousness and as well its importance to the community.
- 4 Write down all the concerns of the community that intersects with your identified challenges.

Location: Kalundborg

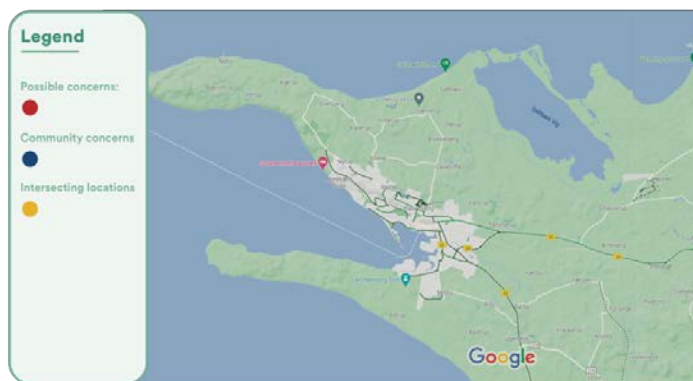


Figure 6 Community Concern Mapping canvas

Key participants:

WP3 project lead, CS leaders

2. Understand

At this stage, CSs are informed of the basic overview of the project. We provided the CSs with a participant's onboarding kit (Figure 7) that includes co-creation information and tools, identified issues, and community and team building, but also ways for participants to contribute. It includes basic information about immersive narrative experience as a potential way to solve their challenge.

We have also distributed two documents that will help facilitate the co-creation sessions. First is the facilitator's slidedeck, which is a guidance document explaining step by step how to facilitate co-creation plays. Another is a playbook that will help participants follow the co-creation plays; understand the co-creation team and audience and the playground where the immersive narrative will live.





Figure 7 Participant's Onboarding Kit (see Annex1)

3. Imagine

Once participants learn about their target audiences, the environment, and the community, they can now ideate scenarios to develop visions of the future. This is the stage where participants brainstorm and create strategies to realise their visions and ideas for this project. We also ask the participants to create user journeys, which is a step by-step-user experience depicting insights of what customers think and feel



when proceeding along the timeline. Collectively, participants also discuss and decide how the immersive narrative intervention will be communicated to the audience with consideration to the data gathered in the previous stage.

Key participants:

CS leaders and stakeholders (team), the community.

4. Build

Here participants work together to propose courses of action and solutions. It is important that an expert in immersive narrative intervention is involved at this stage to guide the participants on prototyping design concepts. A prototype is a draft version of a service, product or intervention that allows participants to explore the ideas they work on together and be able to demonstrate a proof of concept before investing time and money into development. We will provide participants selected demonstrations and immersive narrative digital tools to bring their ideas to life (Figure 8). This will allow them to digitally prototype their own design concepts based on the scenarios they laid out during the imagine phase. The aim of this stage is to create a prototype an immersive narrative solution in order to test ideas and show its impact to the target audiences.

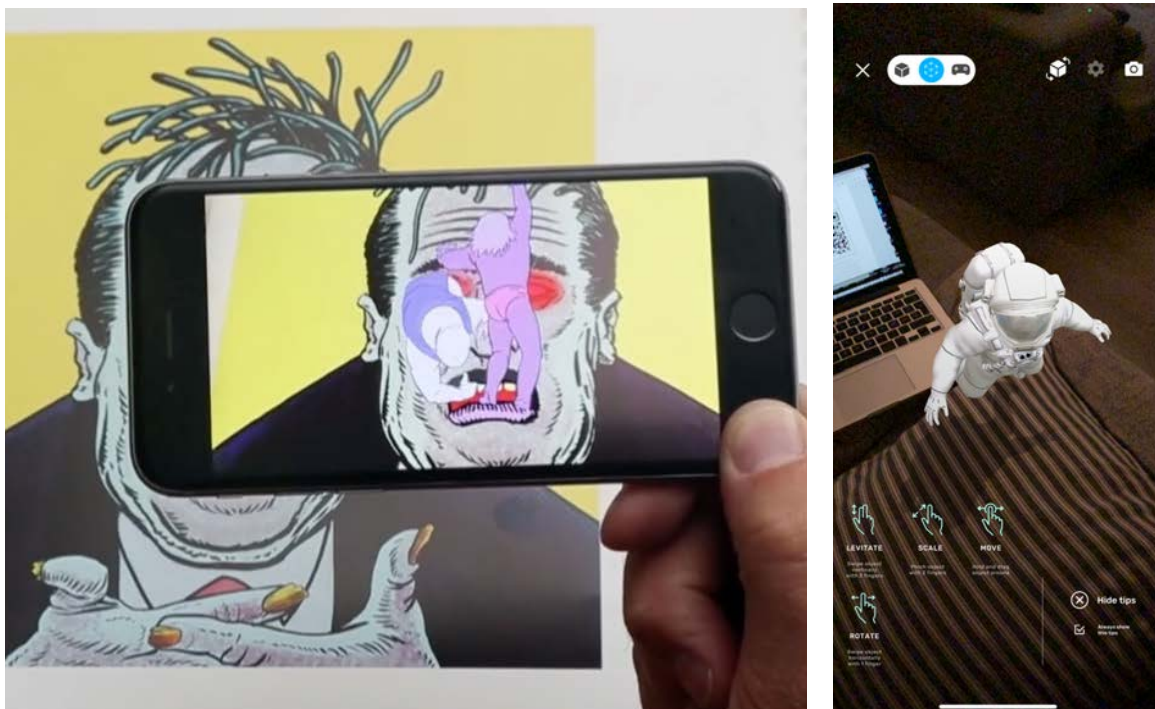


Figure 8 EyeJack⁵ (left) and Assemblr⁶ (right) are Augmented Reality tools that will be used in the Build phase that can create Immersive narrative experiences. Based on the results of the co-creation sessions from Stages 2 and 3, we will finalise the co-creation process from stages 4 to 9 in our version 2 of the playbook deliverable.

⁵ EyeJack Augmented Reality. <https://eyejackapp.com/>

⁶ Assemblr AugmentedReality Platform. <https://www.assemblrworld.com/>





Key participants:

Experts from WP3, CS leaders and stakeholders (CS team), the community.

5. Reflect

Participants reflect on the process of the co-creation, and consider what worked well and what could be improved. This can include testing their prototype and going out in the field to access potential failures and successes. This might require the participants to repeat stages or return to previous phases such as prototype to revise or learn from their previous approach.

Key participants:

CS leaders and stakeholders, the community.

6. Analyse

Using all the data gathered during the understand and imagine phases, information is analysed and discussed amongst the experts in the team and the CS. Bringing this information together is important for identifying areas for action and change. The aim is to build a collective understanding of the data. Our approach is to bring the innovation playground strategy (Figure 9) to co-create an on-site immersive narrative intervention.





INNOVATION PLAYGROUND STRATEGY

Innovation strategy to create engaged communities and urban playgrounds for citizens to meet, interact, and collaborate.

1. What is our purpose?

Innovation begins with defining goals and objectives. It's best to start at the end. Decide where we want to get to, ask everyone what our success would look like, and then work towards the present, one step at a time, to figure out the barriers and challenges that need to be addressed to achieve our goal.

2. Where is the right playground?

Identifying the place our intervention or play will live and the demographics we are targeting to create the right playground for citizens' participation in a neighbourhood community is of crucial importance for cities to effectively deal with future transitions. One condition to meet this is to have an access to the communication channels present. Another is to understand the local context of the place, the audience, and neighbourhood networks; which an approach we call "Place by Design".

3. How are we going to win and create value by playing?

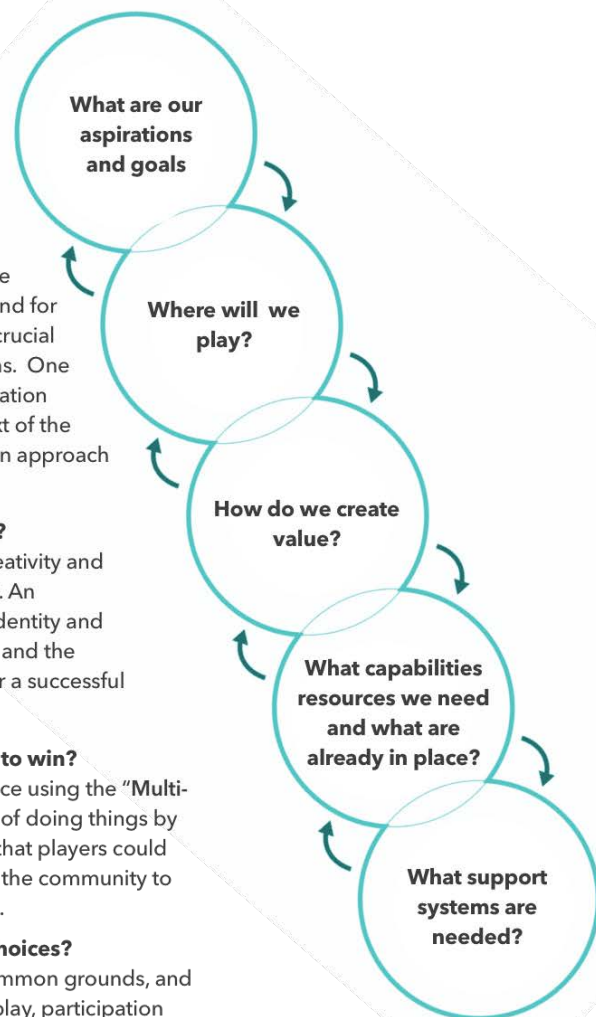
We create value by bringing together play, participation, creativity and the community using the "Creative Placemaking" approach. An approach which brings sense of community, participation, identity and culture together. This involves considering the public space and the neighbourhood community as an inseparable ingredient for a successful city.

4. What resources can be re-used, enhanced or replaced to win?

We use the flexible and user-driven orientation towards space using the "Multi-use Playspace" model to accelerate learning and new ways of doing things by providing resources, facilities, infrastructures or loose parts that players could readily use, re-use, move around, and manipulate. Allowing the community to create their own makeshift interventions, activities or events.

5. What structures, bridges, and measures can support choices?

We identify needed support, management systems, find common grounds, and knowledge creation to bridge the gaps that exist between play, participation and innovation; the "Bridge the Play Gap" approach. This is to ensure that everyone is working towards the same goal and aspirations.



Adopted from Lafley & Martin (2013)

Figure 9: Innovation playground strategy⁷. This framework can be seen as an innovation strategy to create engaged communities and urban playgrounds for citizens to meet, interact and collaborate. The framework helps to picture what capabilities and resources are needed to successfully develop playable places leading to an immersive narrative intervention. The purpose is to bring people together and use art, science and technology to address challenges.

Key participants:

Experts from WP3, CS leaders and validation from the community.

7. Legacy

Legacy is all about envisioning the future of the project and planning for lasting impact. Plans for sharing information should be included to ensure that the project is

⁷ Adopted from +CityxChange EU Project, D3.3, (Mee & Crowe, 2020).





sustainable. Lessons learned, tools and methodologies of the project are disseminated to the public.

Key participants:

WP3 Lead and CS leaders, the community.

2.4. Co-creation Tools

2.4.1. Onboarding Kit

An onboarding kit (Annex 1) welcomes and guides a new participant into the project and the team. It brings the participants on the issues and provides them a basic overview of the project, team, and quick information on what they are getting involved in from the start. It includes a mini-guide so participants can become acquainted with the immersive technology. It is composed of both informative resources as well as community-building tools to encourage contribution.

2.4.2. Facilitator's Slidedeck

Facilitator's Slidedeck (Annex 2) is a guidance document explaining step-by-step how to facilitate co-creation plays. It also includes a roadmap suggestion to guide participants when to gather resources and engage people.

2.4.3. ULTIMATE's Playbook

The ULTIMATE playbook (D3.3) will guide participant through the co-creation session; a printable template to help them to physically 'lay out' conversation on the table; collaborative exercise card, containing instructions to ideate on their challenges; canvasses, helping them to visualise or create a storyboard of their ideas.





3. Communities of Practice (CoP)

3.1. Executive Summary of CoPs Guidance

This executive summary serves a checklist for each of the key steps of forming a CoP. The CoP is a social learning system bringing together experts with local people, end-users and stakeholders to develop a common understanding of a given topic, to arrive at solutions that are co-developed, supported, and accepted by the stakeholders.

Step 1: Define the CoP Coordinator, Moderator

At the very start, the case CS leader should decide on who is going to be the CoP coordinator and moderator in order to be able to jointly design the CoP. In some cases, the CoP coordinator and moderator can be the same person. Step 1 provides more information about the characteristics and role of these two profiles.

Step 2: Define the Goals and Scope of your CoP

The CS leader, CoP coordinator (and CoP moderator when pertinent) together with other relevant CS partners define the goals and scope of the CoP. Goals: what do we want the CoP to achieve by the end of the project? What are the issues that we want to discuss with the community? Step 2 provides more information and examples to help define the CoP goals and scope.

Step 3: Decide on Preliminary Topics for CoP Meetings

The CS leader, CoP coordinator (and CoP moderator when pertinent) together with other relevant CS partners, articulate a list of more specific topics to be discussed with the CoP participants or a sub-set of the CoP participants in focus group meetings. Step 3 provides more information and examples to help define topics of the CoP/focus group.

Step 4: Identify Participants (Stakeholder Mapping)

Based on the goals, scope and topics of discussion, the CS leader, CoP coordinator (and CoP moderator when pertinent) together with other relevant CS partners identify the stakeholders to invite to the CoP. Step 4 provides more information about how to perform the stakeholder mapping.

Step 5: Reach out to Stakeholders





The CoP coordinator, in consultation or together with the CS leader, reaches out to the identified stakeholders with an invitation to join the first CoP meeting. Material for this first contact needs to be prepared (e.g., short project presentation/video, statements about the value for the stakeholder to join the CoP, etc.). Step 5 provides more information about how to prepare for the initial contact with stakeholders.

Step 6: Prepare and host CoP Meetings

The CoP coordinator and moderator prepare the CoP or focus group meetings. Step 6 provides more information and tips to prepare the first meeting, the last meeting and the meetings in between.

Step 7: Keep the CoP Engaged in between Meetings

The CoP coordinator and moderator need to devise a strategy to keep the CoP members engaged in between meetings. Step 7 provides more information on how to go about engaging stakeholders between meetings.

Step 8: Evaluate and Report

The CoP coordinator needs to fill in the meeting report; the CoP moderator needs to ask the CoP participants to fill in the evaluation form. Step 8 provides more information about these requirements and the link to the templates.

Topics

CoPs cover topics including co-creation, governance related issues and any specific issues related to the objective of the CSs. For example, specific focus groups can address topics such as reuse of wastewater, technologies on wastewater reuse, policy and regulatory requirements for reuse of wastewater, social acceptance of wastewater reuse, etc.

Cross-fertilisation

To enhance and reinforce mutual learning between the CoP organisers and stakeholders, cross-fertilisation or cross-learning meetings will be organised to share experiences on running CoP meetings. This will help strengthen and improve the organisation of CoP meetings with new ideas and approaches to ensure their added value.





3.2. Community of practice in research and innovation projects

“Communities of practice (CoPs), defined as social learning systems that bring together people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger-Trayner et al., 2015)

Innovative solutions to the globe’s most pressing issues will come about as a result of effective collaboration, communication and knowledge exchange. Research has shown that bringing people together from different backgrounds and interests can elevate the potential for relevant innovations to be effectively applied at the local level as well as up scaled and diffused. As such, CoPs are a vital component to EU Projects to deliver solutions tailored and co-created by a diverse group of individuals who can ensure the long-term success of technologies and innovations developed and tested in project CSs.

Within the ULTIMATE project, we will help CS leaders to design and implement CoPs, to engage locally relevant stakeholders from various expertise and backgrounds. Each CoP will enable the participants to discuss, work together and outline the steps towards successful design and implementation of water-related technologies and innovations. Furthermore, participants to the CoPs will benefit from learning from each other and developing relationships with local partners on tangible technologies and innovations for a water-wise world.

At each step of the way, our researchers will support the CoP coordinators and moderators to deliver effective CoP meetings, both online and in person, with the latest tools and techniques. KWR researchers can also offer training to those who feel they need additional support with the engagement and moderation techniques outlined in this report.


This guidance is intended for the use by CoPs coordinators and moderators in ULTIMATE. It builds on previous work conducted in a number of EU projects where CoPs were implemented, namely, BINGO (Freitas et al., 2018), STOP-IT (Koti et al., 2017), NextGen (Brouwer et al., 2018) as well as existing literature. The document is practical in application for CS leaders/owners, as well as innovative with a multitude of approaches and avenues to convene a multidisciplinary CoP meeting.





3.2.1. Definition and characteristics of Communities of Practice (CoPs)

What is a Community of Practice?



“Communities of practice (CoPs) are defined as social learning systems that bring together people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger-Trayner & Wenger-Trayner, 2015, in Fulgenzi et al., 2020).

Figure 10: Definition of a Community of Practice

There are three fundamental elements of a CoP (Figure 11): The domain, the community and the practice. To cultivate a CoP, the combination of the three have to be developed in parallel (Wenger-Trayner et al., 2015).

Three Fundamental Elements of a CoP



Domain:
A CoP distinguishes from other networks since its members identify themselves by a shared domain of interest. Membership involves a commitment to the domain and a shared competence.

Community:
While showing their interest in their domain, community members share information, help each other and join activities and discussions. In this form of interaction, members build relationships in order to learn from each other and to support each other.

Practice:
Members of a CoP do not only share a common interest, they are engaged in common practice, as an iterative social process, where they develop a shared repertoire of resources. These can be experiences, stories, tools or ways of addressing recurring problems. To develop this kind of a shared practice it takes time and continuous interaction.

Figure 11 Fundamental elements of a CoP





As such, CoPs bring together relevant stakeholders to develop a common understanding of a given topic, to arrive at solutions that are co-developed, supported, and finally acceptable to the stakeholders. A CoP can evolve naturally due to the members' common interest in a specific field, or it can be created deliberately with the goal of gaining knowledge related to a particular domain. When applied intentionally as a learning concept, the overall goal of a CoP is to maintain the already existing knowledge about a specific topic and use it to create new ideas through an ongoing exchange of information (Koti et al., 2017). The interaction among different actors seems to improve the decision-making process at the individual, societal and institutional level mostly when there is a strong investment on working based on a shared vision (Freitas et al., 2018).

In ensuring the viability of CoPs, it will be important to remember that they are made up of *people*. As a result, people need to feel that the following elements are available within the CoP to motivate them to join, contribute, engage, share and learn. Key elements to bring into CoPs for their effective implementation include: enabling a sense of belonging, respect, diversity, flexibility, motivation, and trust. From the beginning, CoPs need to follow bottom-up approaches that enable each stakeholder to take part in the formulation of their safe space for knowledge sharing, learning and exchange.

3.3. CoPs roadmap in ULTIMATE

This section provides practical guidance on how to organise and structure the CoP Meeting Roadmap for each CS in the ULTIMATE project. It includes a general indication of the content of each of the CoP meetings to be held throughout the project duration, with tips, suggestions, focus groups and an infographic to be populated for ease of understanding by all project partners and work packages. Templates are provided for CS owners, CoP coordinators and moderators to fill out in order to start planning the CoP meetings, to be later validated with the participants of the CoP. While filling out the templates below, it is important to keep in mind the planning processes as described in the CoP Guidance Document; Section 7.1. (CoP Coordinators and Moderators Roles and Responsibilities) and 8 (Prepare and Facilitate CoP Meetings).

CoP Roadmap

The CoP Roadmap includes:

- Definition of the scope of the CoP and focus group meetings
- Definition of the topic of each of the meetings
- Identification of the stakeholders to join the meetings
- Identification of type of meeting (entire community or a subset in focus groups)
- Timeline of the meetings





Tips and guidance

The template tables below include the minimum information to include in a roadmap. The roadmap can be expanded with additional rows as needed. For example, if you want to use this template as a starting point to prepare a CoP meeting, you can add a row including methods to use in the meeting (moderation techniques, engagement tools, etc.).

In general, at least four CoP meetings should be held throughout the duration of the ULTIMATE project (i.e., one per year), with participation from all identified CoP stakeholders (the entire community). More CoP meetings can be planned, either with the entire community or with a subset of the community in “focus groups” (depending on the topic to be discussed in further detail). The CoP meetings should address cross-cutting issues, whereas a focus group could address a specific topic with a smaller group of interested individuals from the stakeholders.

Having a roadmap will help plan project activities according to what needs to be shared/discussed with stakeholders as well as to allocate adequate time to plan the CoP meetings (do not underestimate the time needed to prepare a CoP meeting, especially on-line meetings).

All CoP meetings are advised to align with their respective CS objectives and should be in line with the DoA in terms of achieving the WSIS objectives. Topics discussed in meetings should be more general, where focus groups can be used to address more specific and technical topics with relevant stakeholders.

Checklist for filling out CoP Roadmap Templates

1. First CS leaders and coordinators discuss internally and fill in as many of the template tables as needed.
 - a. Discuss among CS partners the scope of the CoP: Think of stakeholders and their concerns and interests, think of cross-cutting issues to focus on for each meeting. Below are some examples of cross-cutting issues:
 - i. Legal aspects: legal/regulatory barriers and opportunities (EU and national regulations) e.g., for water reuse or recovered material use
 - ii. Social perception and barriers of use of recovered materials and water
 - iii. Requirements (e.g., quality) for the use/reuse of products (water, recovered material): e.g., water reuse tech: for what purpose? Depending on the purpose, what water quality is needed?
 - iv. Market for the products of the project
2. Once the scope of the CoP is identified, narrow it down to a number of specific topics to be discussed with the CoP stakeholders.
3. Depending on the topics and whether they need to be discussed with the entire CoP community or with a subset of individuals from the community, think of how many CoP and focus groups (FG) meetings you need to have throughout the





project (min. of four CoP meetings with the entire community, i.e., once a year to keep continuity of engagement).

4. Share the pre-filled in tables with WP leaders and LL coordinators to ask them to contribute with the related WP/LL content to the different meetings. WPs and LLs certainly have issues they would like to discuss with CoP stakeholders. Some of these issues have already been identified in the project proposal but others may become clear now that WPs have started to work. It is important for both WPs and case studies to know what and when CoPs will engage with WPS so that to plan accordingly.
5. Fill in the infographic (Figure 12) with the identified number and tentative date of the meetings, and topics.
6. Validate the planning of the CoP roadmap with all stakeholders at the 1st CoP meeting. Fill in the templates below as much as possible prior to that meeting.
7. Place the finalised document with tables and infographic in the online shared space accessible to all case studies and partners (shared space still to be defined, you will be informed).

3.3.1. First CoP Meeting Template

CoP #1 (first)	“Setting the Scene” (Or choose another title as you see fit for the first meeting)
Planning:	<i>Month (tentative – indicate in project month number and actual month and year)</i>
Participants:	<i>All stakeholders identified in stakeholder mapping and involved in the case study</i>
Objective(s) of the meeting	<ol style="list-style-type: none"> 1. <i>Validate with stakeholders pre-identified objectives, mission and scope of CoP</i> 2. <i>Validate with stakeholders the composition of the community and fill any gaps (are we missing any important stakeholder?)</i> 3. <i>Co-define with stakeholders short-term values and long-term value as well as the envisioned impact of the CoP</i> 4. <i>Co-define with stakeholders the specific ways the CoP will operate: decision-making procedures, communication strategy in between meetings, activities for the community in between meetings, responsibilities of members, contact person(s), etc.</i> 5. <i>Other as needed</i> <p><i>See Guidance Document Section 8.1.1 for more details</i></p>
Related WP:	<i>Indicate which WPs/ Living Labs will add content to this meeting. Also indicate what content the WPs/Living Labs will add</i>





Table 1 Template for preparation of the first CoP meeting

3.3.2. Template for in-between CoP Meetings / Focus Group Meetings

CoP #X (in-between meetings)	Topic (define the topics for the subsequent CoP meetings)
Planning:	<i>Month (tentative – indicate in project month number and actual month and year)</i>
Participants:	<i>All stakeholders identified in stakeholder mapping and involved in the case study, and any new ones identified in the 1st CoP meeting Any invited guest as needed (e.g., stakeholders potentially interested in the products of the project, for transferability)</i>
Objective(s) of the meeting:	<i>Indicate to the best of your knowledge now the possible objectives for the subsequent CoP meetings</i>
Related WP:	<i>Indicate which WPs/ Living Labs will add content to this meeting. Also indicate what content the WP/Living Labs will add</i>

Table 2 Template for preparation of in-between meetings

Focus Group (FG) Meetings (as needed / in between)	Topic (define the topics for the subsequent FG meetings)
Planning:	<i>Month (tentative – indicate in project month number and actual month and year)</i>
Participants:	<i>Subset of stakeholders from the CoP community, as needed, based on the topic selected for the FG meeting. You may want to keep the meeting open to also the other CoP members even if it is not their topic of expertise Any invited guest as needed (e.g., stakeholders potentially interested in the products of the project, for transferability)</i>
Objective(s) of the meeting:	<i>Indicate to the best of your knowledge now the possible objectives for a focus group meeting</i>
Related WP:	<i>Indicate which WPs/ Living Labs will add content to this meeting. Also indicate what content the WP/Living Labs will add</i>

Table 3 Template for preparation of focus group meetings





3.3.3. Last CoP Meeting Template

CoP #X (last)	Final deliberations and next steps
Planning:	Month (tentative – indicate in project month number and actual month and year)
Participants:	All stakeholders identified in stakeholder mapping and involved in the case study, and any new ones identified in the 1 st CoP meeting Any invited guest as needed (e.g. stakeholders potentially interested in the products of the project, for transferability)
Objective(s) of the meeting:	<ol style="list-style-type: none"> 1. Last resolutions 2. Future of CoP/outputs – beyond the project 3. Other as needed
Related WP:	Indicate which WPs/ Living Labs will add content to this meeting. Please also indicate what content the WP/Living Labs will add

Table 4 Template for preparation of the final CoP meeting

3.3.4. CoP Meeting Roadmap Infographic

Figure 12 is a suggested roadmap. The roadmap is to be adapted to include as many CoP meetings and focus group meetings as needed for you CS.

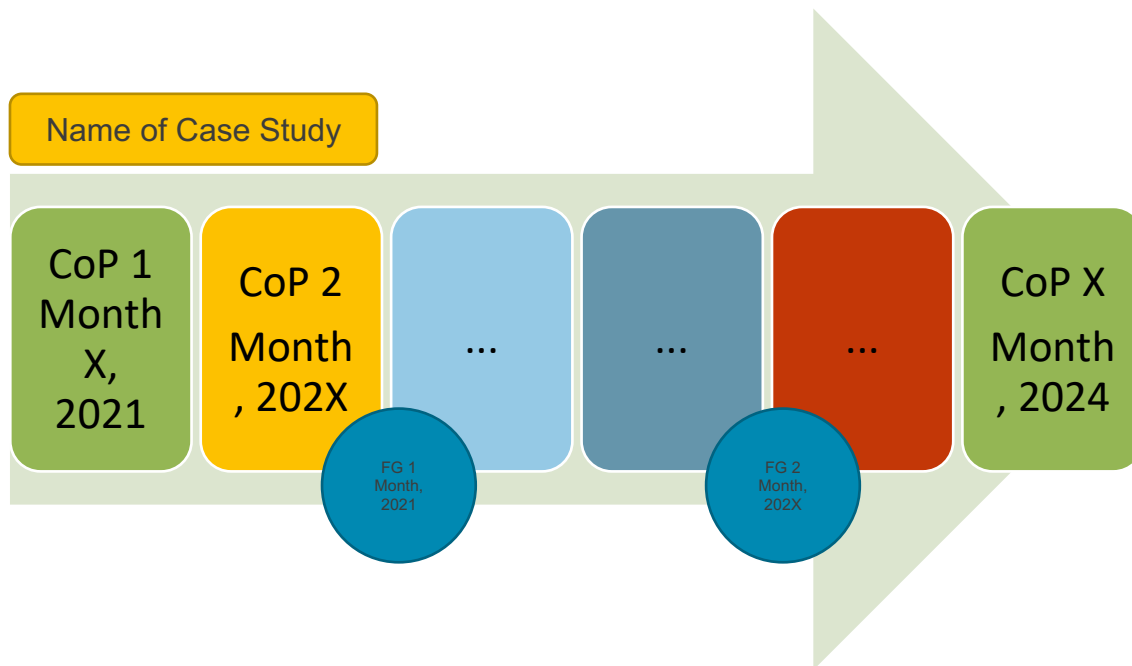


Figure 12 CoP Roadmap with an overview of planned CoP, in-between and focus group meetings





3.4. Planning the Community

Before launching a CoP, the CoP coordinator, moderator and participants have to be selected. The following sections explain each step in detail and in chronological order.

3.4.1. Select CoP coordinator and CoP moderator

One of the most important roles in a CoP is the role of the **CoP coordinator**. The coordinator is in charge of establishing and managing the CoPs, including setting up the community, maintaining stakeholder engagement throughout the project to build relationships, helping the members focus on the domain and developing the practice.

Coordinator & Moderator Checklist

Coordinator	Moderator
<input checked="" type="checkbox"/> Select CoP Moderator	<input checked="" type="checkbox"/> Support CoP Coordinator
<input checked="" type="checkbox"/> Select CoP stakeholders	<input checked="" type="checkbox"/> Organise & deliver meetings
<input checked="" type="checkbox"/> Build relationships	<input checked="" type="checkbox"/> Provide safe environment
<input checked="" type="checkbox"/> Share information	<input checked="" type="checkbox"/> Encourage active engagement
<input checked="" type="checkbox"/> Official contact person	

Figure 13 Coordinator and Moderator checklist with their respective roles

More specifically, the CoP coordinator is responsible for organising, preparing and facilitating the CoP meetings (Brouwer et al., 2018), as well as ensuring that information is trickling down from the project and case studies to the moderator and CoP stakeholders.

The CoP coordinator is the official contact person for the CoP and is responsible for selecting a CoP moderator and stakeholders (section 7.2). It is essential that the CoP coordinator remains the same active person over the course of the project.

The **CoP moderator** also fulfils an important role and is selected before the first CoP meeting. The role of CoP moderator is to support the CoP coordinator in delivering the CoP meetings. The CoP coordinator can fulfil both roles, but it is recommended to have both a coordinator and a moderator, and the roles and responsibilities for both should be clearly established before the first meeting. The CoP moderator is in charge of running the CoP meetings, moderating the meetings, and has to provide

Organisation Support

The **Work Package leader** and/or **KWR** can support you with training on moderation techniques, online tools, and provide support to organise the meetings etc.

Figure 14 CoP meeting support

the structure (rules) that ensure a creative and safe environment for the CoP participants to collaborate and exchange knowledge (Brouwer et al., 2018). Like the coordinator, it is important that the CoP moderator remains the same active person over the course of the project.





In the unfortunate case that the coordinator or moderator cannot remain the same throughout the duration of the project, the following hand-over elements apply: (1) inform the project leader about you leaving your role in the CoP at least 1 or 2 months in advance; (2) inform the coordinator and/or moderator too; (3) find a suitable new moderator or coordinator who can fulfil the responsibilities for the remainder of the project.

3.4.2. Identify CoP Participants: Stakeholder Mapping and Selection

Based on the ambitions set for the CoP, relevant stakeholders are invited to become a member (Brouwer et al., 2018). Therefore, elements and activities within the CoP should be designed as catalysts for a community’s natural evolution. Since CoPs usually build on pre-existing personal networks, it is the CoP coordinator and moderator’s task to help the community develop and grow through physical, social and organisational structures (Koti et al., 2017).

3.4.3. Criteria for stakeholders’ identification & mapping of relationships

Start with identifying the organisations and then the individual person in the organisation to approach. Start from the people in your network but be aware the people you know may not be the right one to join the CoP; however, they may be able to point you to the right people. Furthermore, clearly address whether the general public is involved or not: we recommend keeping CoPs only for experts, and to engage with the public in different ways. In the ULTIMATE project, involvement of the public will happen through the co-creation process and multi-use playspaces described in the co-creation section.

Questions and considerations before selecting CoP stakeholders – these are important to gain an understanding about the stakeholders, their interest and power dynamics within the CoP.

1. Which organisation should be invited?
2. Who are the key stakeholders/individuals in the organisation?
3. What is the professional experience and position in the organisation of the attendees?
4. What is the relationship of the organisation and/or individual

Who are the potential stakeholders of a CoP?

Organisations	Individuals
<ul style="list-style-type: none"> • Linked sectors (construction, agriculture, transport, food industry, energy) • Regulators • End-Users • Technology Providers • Industry • Municipalities • Consultancies • Waterboard or utility 	<ul style="list-style-type: none"> • Engineers • Natural Scientists • Social scientists • Policy-Makers • Leaders and heads of organisations • Operational level • Researchers • Junior experts • Data Scientists • Local experts • Living lab actors

Figure 15 List of potential CoP stakeholder





stakeholders with other stakeholders/organisations? (i.e., consider power relations and dynamics).

5. Consider the stakeholders' position within the context of ULTIMATE and their interest and influence in the specific CS or technology.
6. Consider also involving people with different levels of expertise within the same organisation, i.e., strategic and operational level. In order to determine which level of expertise is needed, reflect on the scope and objectives of the CoP. If both strategic and operational level stakeholders from one organisation within the CoP are needed, reflect on whether both could speak freely if attending the same meeting? These are important considerations in selecting and facilitating stakeholders within a CoP.
7. Relation of the organisation to the water sector (i.e., are they a linked sector, or directly involved, if so, in what way?).
8. Known enthusiasm/interest and knowledge of the invited person with regards to the mission of the project and CoP.
9. In order to build a solid member base, it is important to reach out to members that cover all aspects of the community stakeholders. Diversity is needed both in background, ethnicity, gender, and intervention experiences levels (local, regional, national) (Freitas et al., 2018).

Make a list of the potential stakeholders to reach out to and track your email outreach to them and their responses.

Finally, gather ideas about your stakeholders and **map relationships** between them (positive, neutral and negative) aligned with their interest and power dynamics. Note down some foreseeable successes and challenges for the CoP based on the stakeholders and prepare for the first meeting by outlining these challenges and potential barriers clearly.



Figure 16 Tip on managing stakeholders lists

3.4.3.1. Important considerations in stakeholder selection and involvement

It is advised that the stakeholders participating remain the same throughout the entire lifespan of the CoP (Brouwer et al., 2018). However, external experts may be invited on occasion to CoP meetings as desired by the stakeholders, supported by the CS owners, CoP coordinators and moderators.





Understand that different stakeholders will speak different “languages” (i.e., scientists vs. practitioners); accordingly, you need to ensure effective communication and knowledge understanding among the stakeholders in meetings.

Also note that different stakeholders within the CoP will have different levels of involvement or degrees of participation (Figure 17). CoPs consist of three main levels of community participation: The core group, the active group and the peripheral group (Koti et al., 2017). The core group (usually 10 to max. 15 percent of all members) is the heart of the community, actively participating in discussions, taking on community projects, identifying topics for the community and moving the community along its learning agenda. This group takes on much of the community’s leadership and becomes auxiliary to the coordinator. The level outside the core group is called the active group. It is also rather small and consists of 15 to 20 percent of the whole community. The active group members attend meetings regularly and participate occasionally in the community forums. The biggest group builds the members of the peripheral level. They rarely participate. Instead, they remain peripheral and watch the interaction of the core and active members. Even though they seem to be passive, their peripheral activities are an essential dimension of CoPs. Hence, make sure that the active group consists of a wide range of stakeholders (Koti et al., 2017).

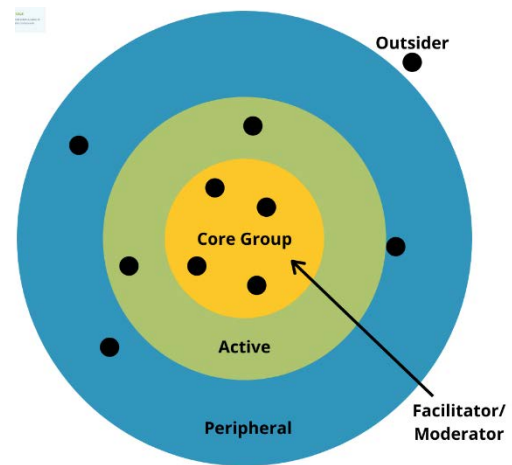


Figure 17 Degrees of participation (Koti et al., 2017)

There is no ideal number of stakeholders in a CoP. It is up to the CS owners, coordinators and stakeholders to determine who needs to be in the room. Note however, that a large group will mean additional planning and coordination, and potential complexities.


3.4.3.2. Highlighting the value of CoPs to stakeholders

Demonstrating the added value of CoPs to stakeholders is a crucial step in inviting them to join and ensuring their active involvement in the CoP. There are several factors and specific CS elements that will attract stakeholders to a CoP.






Consider mentioning in your invitation the following:



- Networking
- International expertise
- Innovation
- Shared sense of action
- Synergies



Tip !

Adopting a solid and diverse base for CoP development adds value by strengthening networking opportunities for members, as well as actively contributing to innovative and effective solutions.

Figure 18 Considerations and tips for the value of CoP meetings to stakeholders

Another step to motivate the stakeholders to participate in the CoP can be done through the **Wow-How-Now elevator pitch approach** (Figure 19), which can be used in your initial email to the potential stakeholders, as well as through identifying the short and long-term values with the help of the value matrix table below (Table 5). The table below provides some examples of benefits for institutions and community members, but it is adaptable based on the CoP context and the stakeholders invited. This can be used to inform your Wow-How-Now elevator pitch.

WOW | Think of an intriguing opening statement to get attention

HOW | Explain briefly how your community addresses a need or solves a problem

NOW | Give an example: "Now..." or "For example..." of current actions or activities

Figure 19 Wow-How-Now elevator pitch approach

	Short-term value	Long-term value
	Improve business outcomes	Develop organisational capabilities
Benefits to institutions	<ul style="list-style-type: none"> • Arena for problem solving • Quick answers to questions • Reduced time and costs • Improved quality of decisions • More perspectives on problems • Coordination, standardisation and synergies across stakeholders • Resources for implementing strategies • Strengthened quality assurance • Ability to take risk with backing of the community • Standardised messages 	<ul style="list-style-type: none"> • Ability to execute a strategic plan • Authority with clients • Increased retention of talent • Capacity for knowledge-development projects • Forum for “benchmarking” against rest of industry • Knowledge-based alliances • Emergence of unplanned capabilities • Capacity to develop new strategic options • Ability to foresee technological developments • Ability to take advantage of emerging market opportunities
	Improve experience of work	Foster professional development
Benefits to community members	<ul style="list-style-type: none"> • Help with challenges • Access to expertise 	<ul style="list-style-type: none"> • Forum for expanding skills and expertise • Network for keeping abreast of a field





	<ul style="list-style-type: none"> • Better able to contribute to team • Confidence in one’s approach to problems • Fun of being with colleagues • More meaningful participation • Sense of belonging • Trust in technology 	<ul style="list-style-type: none"> • Enhanced professional reputation • Increased marketability and employability • Strong sense of professional identity
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Table 5 Value Matrix - Benefits to institutions and community members (Wenger et al. 2002 in Koti et al., 2017)


3.5. Prepare and facilitate the CoP meetings

CoP meetings should be designed in such a way that participants are willing to collaborate, learn together and exchange knowledge. To create such conditions aimed at social learning, building trust and mutual understanding, facilitating ongoing reflection by embracing an intentional learning approach, and creating an enabling environment for informal and open discourse and dialogue is important (Brouwer et al., 2018).

3.5.1. How to plan the meeting(s)

Below are the steps you should follow to plan your CoP meetings.

1. CoP Coordinator and/or Moderator to pre-define the objectives and goals of each meeting together with relevant project partners
2. Logistics (In-person or online)
 - a. Decide on the venue and facilities (location/online tool)
 - b. Organise the set-up (IT resources, etc.)
 - c. Invite the participants
 - d. Define a budget (if applicable)
3. Define the timing and an agenda for the meeting
 - a. Email all defined stakeholders to define a date using a polling tool (e.g., Doodle Poll).
 - b. Outline the agenda and timing for each activity within the meeting
4. If the meeting is online, the duration of the meeting should not be too long (i.e., not exceeding a 2 or 3 hours) and allow for breaks to allow the participants to refresh. Interaction in online meetings is especially important, considering the differences in attention of the participants as compared to an



Tip !

Stakeholders are spending their valuable time - make this time as comfortable as possible and provide a fruitful atmosphere with some snacks and soft drinks if appropriate. For online meetings, ensure multiple breaks and support is offered for technical difficulties.

Figure 20 Tip to planning your CoP





in-person meeting (see Annexes 3 and 4 on Engagement Tools and Moderation Techniques). If the meeting is in person, it can be for slightly longer than an online meeting, also with breaks and interaction.

5. Prepare and provide any important information for the stakeholders to prepare for the meeting (i.e., information about the project, a consent form (Annex 7), rights to withdraw and anonymisation procedures).
6. Select moderation techniques and engagement tools: The following items are important considerations for each meeting. Specific moderation techniques and engagement tools are explained in detail in Annexes 3 and 4. Following this section are subsections on specific activities and elements to include in the 1st CoP meeting and subsequent meetings.
 - a. Deliver and transfer knowledge
 - b. Share experiences and co-produce knowledge
 - c. Co-create new ideas and innovations
 - d. Promote the long-term value of the CoP
 - e. Enable socialising and relationship building (informal or formal)

3.5.1.1. First Meeting with CoP Stakeholders

Below are key elements and activities that the first CoP meeting should consider in the agenda of the meeting. The first meeting is vital to build from the bottom-up, to meet the stakeholders and to co-define the objectives and ambitions of the CoP for the duration of the project.

Before the first CoP meeting, the CoP coordinator and/or moderator needs to **pre-define the objectives and goals**, which will then be validated by the participants during the meeting. Consider the following questions in defining the meeting goal and objectives:

- What is the ambition and goal of the CoP?
- What is the primary scope? (learning, support, communication)
- What is the value (benefits) it brings to its members? To the sector?
- What are the focus areas, key issues?

Below is some guidance on activities and elements to include in the first meeting to set up the CoP for success. The elements and activities are organised in chronological order and are vital for the effective set-up and long-term planning of the CoP.

Beginning

Greeting and Introduction

Explanation of meeting logistics and agenda (online or in-person)

Ask the participants to sign the consent form

In case of online meetings, ask the participants for consent to record the meeting





Round of introductions with stakeholders and CoP coordinator and moderator

Middle

Validate pre-identified objectives, mission and ambition (or vision) of CoP with the stakeholders – refine together to ensure that these are aligned with the stakeholders' expectations. Working towards a shared objective/vision is critical to community development.

Questions to be answered by the stakeholders are:

- What topics and issues do we really care about?
- What are the development challenges we want to address?
- What outcomes do we want to focus on?
- What is out of scope?
- How is this domain connected to the organisation's strategy?
- What is in it for us?
- What kind of influence do we want to have?
- How will we communicate the community's goals and achievements, and to whom?

The answers to these questions will help a community to develop a shared understanding of its objective, find its legitimacy in the organisation and engage the passion of its members (Brouwer et al., 2018).



TIP! Go to Annex 4 and use CoP point of departure moderation technique

Co-define the specific ways the community will operate, build relationships and grow. Establish the operating practice and knowledge system, as seen with example questions below (Brouwer et al., 2018):

Goals: Find the community's specific way to operate, build relationships, and grow.

- How will the community be organised and run?
- Is membership open, closed or something in between?
- What roles are members going to play?
- How will decisions be made?
- How often will the community meet?
- What kind of activities will generate energy and develop trust?
- What kind of behaviours can we expect from each other (respect, honest feedback, etc.)?
- How can the community balance the needs of various segments of members?



TIP! Go to Annex 4 and use Team purpose and culture moderation technique

Co-define the short and long-term value for the organisations and attending stakeholders, in connection with the identified needs and desired outcomes of the CoP. This can be done with reflection and/or a survey during the meeting. The Value





<p>Matrix in Table 1 above can be used to identify shared values of the CoP (Koti et al., 2017).</p>
<p>Co-design the community in a way that it becomes an effective knowledge resource to its members. Consider addressing the following questions in your first meeting.</p> <ul style="list-style-type: none"> • How will community actions result in outcomes? • What knowledge to share, develop, document? • What kinds of learning activities to organise? • How should we use collective learning, versus expert-apprentice, versus external research/expertise? • What potential work groups could be created? • Where are the sources of knowledge and benchmarks outside the community? • How should we support members as both experts and learners? • What are the benefits for members?
<p>Map out the most important stakeholders and to fill any gaps in terms of involvement of a particular organisation or person. Also discuss and consider the interest and power relations of stakeholders openly in a constructive and respectful manner, discussing the in a way that enables everyone to share their perspective and willingness to contribute. Should any stakeholders not wish to take part as a result of disagreement or lack of interest, find a mutually beneficial way to uphold the relationship even with minor or no involvement in the CoP (i.e., through period email correspondence, one-on-one discussions with some of the partners, etc.).</p>
<p>End</p>
<p>Summarise the discussions into a Community Charter, which will be agreed upon by all stakeholders involved in the CoP during this first meeting. Once it has been drafted and finalised, send around to all CoP Members, which will finalise the long-term design and accountability to the CoP (Koti et al., 2017).</p> <p>Share any relevant documents or links to meeting evaluation – reserve time during the meeting for this and send after in a summary email.</p> <p>Summarise meeting and define next steps together as a group.</p>

Table 6 Guidance on activities and elements to include in the first CoP meetings.

3.5.1.2. In-Between CoP meetings

<p>Beginning</p>
<p>Greeting and Introduction</p> <p>Checking-in or Warm-up activity with all stakeholders (See moderation techniques Annex 4)</p>
<p>Middle</p>





Discussion on relevant topics as set-up in the project roadmap through moderation and engagement activities that enable co-creation, learning and knowledge exchange.
End
Summarise meeting and define next steps together as a group. Share any relevant documents or links to a meeting evaluation – reserve time during the meeting for this and send after in a summary email. Communicate any reminders.

Table 7 Guidance on activities and elements to include in between CoP meetings.

3.5.1.3. Last CoP Meeting

Beginning
Greeting and Introduction Checking-in or Warm-up activity with all stakeholders (See moderation techniques Annex 4)
Middle
Discussion on: <ul style="list-style-type: none">● Final resolutions/decisions● Next steps for the community – future
End
Summarise meeting and define next steps together as a group. Share any relevant documents or links to a meeting evaluation – reserve time during the meeting for this and send after in a summary email. Communicate any reminders and final decisions.

Table 8 Guidance on activities and elements to include in the last CoP meetings.





3.6. After each CoP meeting and yearly

3.6.1. Responsibilities of the Moderators / Coordinators

When the CoP meeting has ended, the CoP moderator continues. To make sure that the CoP brings added value to the project and its members, the outcomes of the CoP meetings have to be collected, recorded and monitored. Therefore, it is important that the CoP participants fill in the evaluation form (See Annex 5). In the case of a face-to-face CoP, it is advised that the

participants are asked to fill in the paper form during the meeting, to ensure a high response rate. In the case of online CoPs, the CoP moderator will share a link to the online evaluation form directly at the end and after the meeting. The CoP moderator

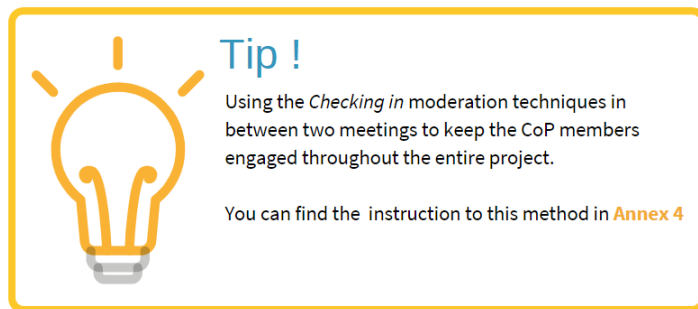


Figure 22 Tip to planning your CoP



Figure 21 Coordinator and Moderator checklist with their respective roles

is also responsible for filling in the meeting report (See Annex 6 for report template), which provides an overview of the goals, agenda, participants and main outcomes. The evaluation form, CoP report, together with the minutes of the CoP are crucial input for the work of WP3 in the ULTIMATE project.

3.6.2. How to maintain stakeholder interest in between meetings?

To create and maintain the community feeling between CoP meetings, which occur only periodically throughout the project duration (see project roadmaps), it is important to keep the members engaged and interacting between the different meetings (Brouwer et al., 2018). This can be done by setting up activities at the end of the CoP, in which the participants can act on their lessons learned in the previous CoP. Another option would be to use the *Checking in* moderation technique (see Annex 4). By setting up an online channel for the CoP members (e.g., in Microsoft teams, SharePoint or WhatsApp), the CoP moderator can regularly check in on the members by inquiring about their project goals and but also current successes. Focusing on the successes of the CoP is important to keep the members enthusiastic. CoP's are often long-term focused, meaning that the main success is expected at the end of the project. However, by paying attention and celebrating small victories throughout the duration of the CoP, participants stay motivated as these wins show the short-term benefits and added value of the CoP.





3.6.3. Information sharing: online platform

All documents (static or living document) related to CoPs will be shared in Sharepoint. It is the responsibility of the CoP coordinator to make the documents available and keep them up to date. The CoP coordinator can send a notification to the CS leader when a new version of the document is available.

Making CoPs documents available and keeping the up to date is an important form of sharing knowledge, in particular:

1. Lessons learned and best practices to implement for organisers, and
2. New ideas, innovations and updates based on the specific CoP case studies.

3.6.4. Evaluation of CoPs: rationale and approach

Evaluating the CoP is not only necessary to measure its success in terms of output, but also to measure its functioning over time in terms of process. It allows for continuous learning and improvement of the CoP throughout the project, with the overall goal to identify best practices for CoPs at the end of the project. The evaluation approach adopted in the ULTIMATE project is based on the framework of (Fulgenzi, Brouwer, Baker, & Frijns, 2020). The adopted method measures the CoP's **maturity**, **structures** and **processes** that support the CoP's success. Fulgenzi et al. (2020) have based their evaluation of CoPs on the three key CoP elements: community, domain, and practice, and have combined them with the goal of CoPs: social learning.

Social learning occurs through social interaction, within social networks and ULTIMATEly leads to a change in the individuals' perspective (Fulgenzi, 2019). By combining these social learning elements together with the key elements of CoPs, three CoP social learning outcomes (CoP-SLO) dimensions can be defined: 1) interaction and engagement of stakeholders, 2) changes in stakeholder issue frames and 3) stakeholder's awareness of their own role and those of others. A well-functioning CoP is expected to score high on these three CoP-SLO dimensions. The CoP-SLO elements are abstract and therefore difficult to measure. However, Fulgenzi et al. (2020) have identified key success factors that, if sufficiently present, should foster the CoP-SLO dimensions. Per CoP-SLO dimension, 6 key success factors are identified:

1. Organisational aspects, tools, artifacts
2. Adequate meeting atmosphere
3. Stakeholder inclusion and engagement
4. Convergence on a shared perspective
5. Identification of opportunities and challenges
6. Generation of useful knowledge

These key success factors are in turn operationalised through indicators and translated into questions in the evaluation form (Annex 5). Evaluating the CoPs





based on the approach of Fulgenzi et al. (2020) enables the identification of which success factors are sufficiently present in the CoP and which aspects deserve more attention. This allows to implement changes to the CoP meetings to improve their effectiveness as well as draw overall lessons to successful co-creation in CoPs.

3.7. Checklist for Coordinators and Moderators for Successful Meetings

Before the meeting

1. Define roles and responsibilities of the CoP coordinator, moderator and stakeholders early on before the meeting, i.e., who will manage the meeting logistics, who will facilitate the meeting, what roles do the stakeholders have, if any? Also define a reporter and take notes within the template provided in Annex 6.
2. Before the meeting, send out an email with:
 - a. A survey to better understand your stakeholders and their expectations so you can match them and adjust the meeting as necessary.
 - b. An invitation letter to motivate stakeholders to participate with an agenda invitation for their email calendar
 - c. The meeting agenda, and any other important documents to prepare for the meeting, as well as outlining the desired outcomes

During the meeting

3. During the meeting, ensure everyone feels welcomed, able to share, in a safe space to engage (consider languages, backgrounds, culture, personalities) – ensure balanced opportunities for all to engage in their own preferred way through the different meeting activities and moderation techniques (e.g., individual reflection vs. group discussions).
4. Ask the participants to fill in the consent form. In case of an online meeting, ask the participants for consent to record the meeting.
5. Plan activities (See Moderation Techniques Annex 4) that enable trust, maximise transparency, mutual understanding, and facilitating ongoing reflection by embracing an intentional learning approach, and creating an enabling environment for informal and open discourse and dialogue (Koti et al., 2017).



Figure 23 Creating win-win scenarios

6. Think out of the box – engage people in new ways with activities and engagement tools – this will enable more interaction, participation, attention,





and recall of the meeting and objectives to carry the CoP forward and its activities.

7. Design all your meetings and activities with the user in mind, i.e., following a user-centric design approach. This means knowing your stakeholders well and planning activities and discussions of relevance.

End of the Meeting

8. Set actions at the end of the meeting(s). Consider that actions are taken in between meetings.
9. Right before the end of the meeting, whether in-person or online, move through the following elements⁸:
 - a. Reflect with the group for 5-10 minutes on how they perceived the meeting (positive, negative, neutral, etc.) – The moderator and participants take part.
 - b. Evaluation forms – Reserve time at the end of the meeting to make sure that everyone fills the form online/in-person to get the highest response rates.
 - c. Further information on the topic, and
 - d. Contact information as needed.

After the meeting

10. Fill out meeting minutes in the CoP Reporting template in Annex 6 so that it is still fresh in your mind
11. Send out summary email with:
 - a. The evaluation form to participants in case they did not fill it in during the meeting
 - b. Meeting Minutes (on shared drive or as an attachment)
 - c. Next steps and action Items
 - d. Other relevant information on the project, contact info, etc.

3.8. Cross-Fertilisation CoPs

To enhance and reinforce mutual learning between the CoP organisers and stakeholders, cross-fertilisation or cross-learning meetings should take place at least

⁸ This information (9a-d) can be shared via the PowerPoint slides or via the chat during an online meeting.





2-3 times throughout the project duration (Brouwer et al., 2018). The cross-learning can be between:

Coordinators and moderators on **engagement and moderation** and overall progress of the CoPs, sharing best practices and lessons learned for coordinator and community management;

Stakeholders on the different **topics** of the CoPs and enabling further ideation and co-creation to achieve the project objectives and sharing across locations, and innovation.

Having these meetings will strengthen and improve overall learning from best practices and lessons learned between the organisers, and new ideas and concepts on science and technologies for the stakeholders. These meetings will add value to the overall CoPs in bridging the gaps across the topics, networking and innovation potential (Brouwer et al., 2018).

KWR will coordinate the design and implementation of these cross-fertilisation meetings in ULTIMATE.

In Annex 6, there is a template for reporting the minutes of the CoP meetings. It is used for providing info to the evaluation of CoPs, sharing with participants the results of the meeting and keep track of what has been discussed. These reports are essential input to the cross-fertilisation and learning between the different CoPs and are used also for reporting the cross-fertilisation meetings.

In summary, cross-fertilisation between CoPs can occur between moderators and coordinators, as well as between the stakeholders. This can happen by making CoP materials and documents available online in an openly accessible way, as well as through specific cross-fertilisation meetings where knowledge exchange and transfer can occur.).





4. Conclusions

This deliverable 3.4 “Protocol and tools for business-to-business co-creation” was developed within Task 3.2 (B2B engagement) and involves subtask 3.2.1 (CoP) and subtask 3.2.2 (Co-creation). We have also outlined the processes, methodologies, protocols and tools used for business-to-business co-creation within the ULTIMATE case studies (CSs) using two complementary approaches:

1. Co-creation leading to an immersive narrative experience (immersive experience is a perception of being present in an environment when you are actually in another; creating a feeling of immersion or suspension of disbelief using a number of different technologies) using tools such as: the onboarding kit, facilitator’s slidedeck and the ULTIMATE’s playbook.
2. Communities of Practice (CoP) using tools such as stakeholder identification theories, best practices from previous projects, and CoP monitoring and evaluation theory and techniques.

Because of our flexible design and prior experiences in co-creation practice, we expect it to require flexibility and adaptation based on what the CS wants to achieve, and on what happens in the process of doing it. All the tools we have provided to our case studies and their participants/stakeholders are considered best practice. The methods and tools we proposed allows for flexibility which is always useful in multi-national and transdisciplinary projects like ULTIMATE. Making successful innovative practice and change may also require both social and political advocacy, which is beyond our scope (refer to D4.1, Ethical Drivers & Societal Drivers for Circular Economy).





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6. Annexes

Annex 1: Onboarding kit (attached in a separate PDF file entitled, Onboarding Toolkit.pdf)

Annex 2: Facilitator's slidedeck (attached in a separate PDF file entitled, ULTIMATE Slidedeck.pdf)

Annex 3: Engagement tools for on-line meetings

Annex 4: Moderation techniques

Annex 5: Evaluation form

Annex 6: Template for CoP meeting reporting





Annex 3: Engagement tools for on-line meetings

The below tools for engagement can be used for a variety of on-line engagement and moderation opportunities. We have highlighted a selection of the most effective and tested tools based on the intended use for CoPs.

We recommend the following in choosing the best online tool for your CoP:

- 1) Use the tool that you are most comfortable or familiar with. For example, if you or your company have experience with using Microsoft Teams internally and externally to your company, then we recommend to go with that tool as it will reduce the planning and effort needed to coordinate a meeting.
- 2) If you are not already familiar with any of the tools below, the following shortlist is recommended based on the online tool's ease of use and use experience (noted with a star in the table below):
 - a. [Webinar Meeting Platform: Zoom Meetings](#) - Zoom is easy to use and tried and tested by a wide online community. Zoom is superior to competitors with its built-in polling functionality, connection stability, breakout-rooms and ease of logging into a meeting for external partners. Their security issues have been largely resolved, however, some companies have still banned its use. There are costs associated with its use, so please look into these as well as the free limited version.
 - b. [Collaboration Tools: GroupMap](#) – GroupMap is a great tool for mapping, vision setting and online collaboration on priorities, SWOT analyses and more. It is user-friendly and enables engagement during online meetings, with multiple templates already created for all types of meeting objectives. Furthermore, you can easily access the PDFs of the worksheets after the meeting. There are costs associated with its use, so please look into these as well as the free limited version.
 - c. [Polling or Surveying: Mentimeter or Slido](#) – If the online meeting tool you are using does not have a built-in polling system, then Mentimeter or Slido are great alternatives. Both platforms enable visually pleasing and simple online engagement through polling, quizzes with visual data analytics through graphs, barcharts and wordclouds. This can help to make a decision, highlight current knowledge levels, and enable your participants to give their opinions to shape your meeting. There are costs associated with its use, so please look into these as well as the free limited version.

***Please Note:** All tools below have outline data and privacy issues on their websites. If your company or institution is concerned with privacy, data and security in using these tools, we advise to verify your specific needs by visiting the website of any of the tools recommended below.







**Also be sure to ask participants in advance if they agree to share any data from the meetings, such as: recordings, screenshots, notes, etc.*

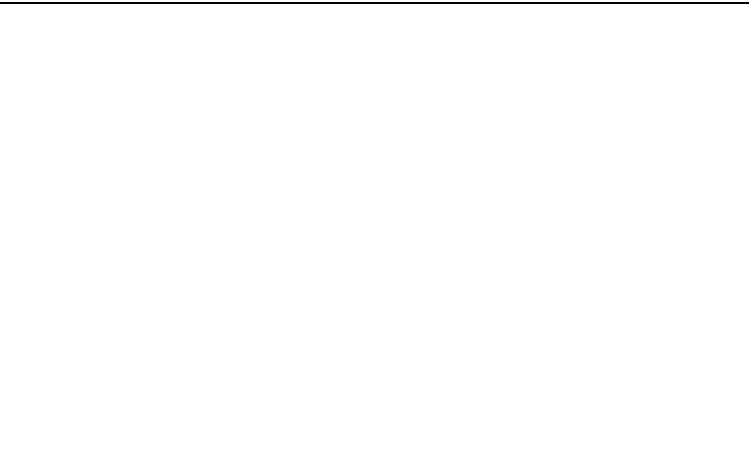
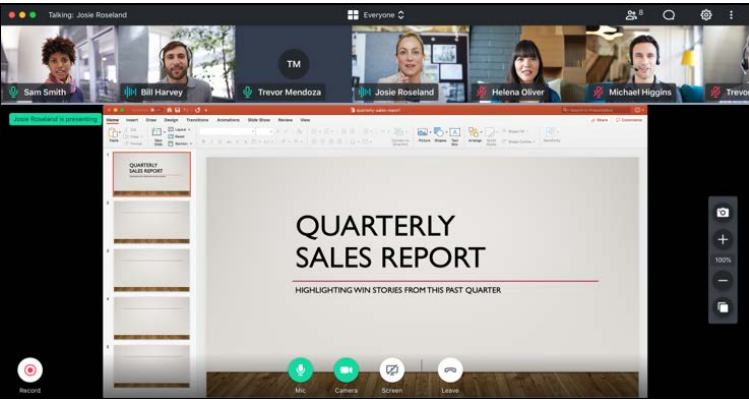
Legend

Used by KWR	Not yet explored /used to a full extent
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Tool	Pros & Cons	Features	Reference Photo
Webinar/Meeting Platforms			
<p>Zoom</p> 	<p>Pros:</p> <ul style="list-style-type: none"> • Most user friendly for meetings and webinars (no limits in speakers, moderators, attendees) • Simple to-use Breakout rooms • Raise hand function • Quick and easy to get into the meeting with a link • Can collect data on attendance and participation, recording downloads automatically to cloud or computer • Can record to computer or cloud • Meeting encryption • High quality video • Pricing and free trial exceeds other platforms • Up to 1000 participants 	<ul style="list-style-type: none"> • Built in polling options • Breakout rooms for smaller group discussions • Webinar and meeting functions • Join from anywhere on any device • Access robust security solutions throughout • Built-in tools for screen sharing • HD video and audio calls • Support for up to 1,000 video participants and 49 videos • Meet securely with role-based user permissions • Streamlined calendaring services with Outlook and Google • Team chat both for groups and one-on-one messaging 	 <p>Photo Source</p>






	<p>Cons:</p> <ul style="list-style-type: none"> • Some organisations do not allow use due to security issues, but these have largely been resolved by Zoom. • Basic features account: only up to 100 participants 	<p>Source</p>	
<p>GoToMeetings</p>	<p>Pros:</p> <ul style="list-style-type: none"> • Can offer recordings afterwards with a link • On-Demand meetings with a simple URL • Integrated into email platforms • Up to 250 participants <p>Cons:</p> <ul style="list-style-type: none"> • Control panel/portal not user-friendly • No raise hand function • No breakout rooms • Unstable connection compared to other tools • Limit to camera/video visibility <p>More information</p>	<ul style="list-style-type: none"> • Application Sharing • Audio conferencing via phone and computer • Drawing tools • Full desktop sharing • Instant Messaging • Instant meetings with a single click • Integrated scheduling with Microsoft Outlook® • Join from Mac, PC, iPad®, iPhone® or Android • One-click high-definition HDFaces™ video • One-time scheduled meetings • Recording • Recurring meetings 	 <p>Photo Source</p>






<p>Webex</p>	<p>Pros:</p> <ul style="list-style-type: none">● Meeting encryption● Basic features: up to 500 participants● Raise hand function● Collaboration and annotation tools● Breakout/interactive sessions● Easy to use <p>Cons:</p> <ul style="list-style-type: none">● Webex requires a lengthier registration and check in● No meeting registration reports● The menu system is not intuitive● Some issues with non-Webex users to connect via audio● Complicated to navigate compare to competition● Extra fee for “call-me” feature● Interface could be modernised● Expensive compared to competitors <p>More information here and More Information</p>	<p>Source</p> <ul style="list-style-type: none">● “Call me” Feature● Recording● Polling● Whiteboard● Transcription (only in English) <p>Source</p>	 <p>Photo Source</p>
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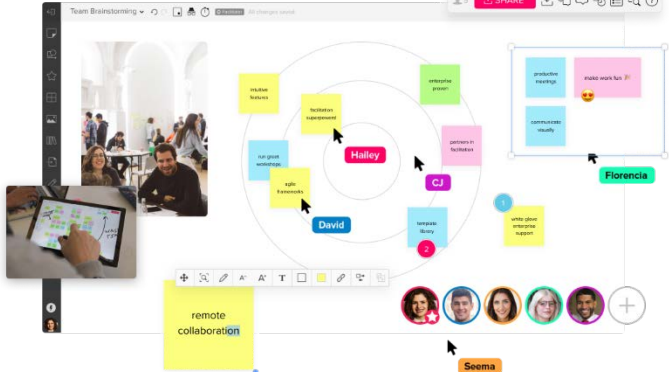




<p>Microsoft Teams (for meetings and webinars)</p>	<p>Pros:</p> <ul style="list-style-type: none">• Useful chat options (can send documents)• In sync with Microsoft Office suite• Raise hand function• Great for internal communication and meetings <p>Cons:</p> <ul style="list-style-type: none">• Not as good as competitors for external meetings• No built-in possibility during a meeting to go into breakout rooms (can do it through a Team/Channel, but complicated set-up)• Not-so-simple login to a Teams meeting (additional steps)• No built in polling for meetings, so need to use external app or program	<p>Latest features 2020</p> <ul style="list-style-type: none">• Enable spell check• Channel notification is simple using ... notification• Consult > transfer the call• Focus option on slides shares• Meeting notes• Meet now and schedule into channel top right corner• Channel setting, updates, and notification at the top right corner <p>Some of the great updates coming soon;</p> <ul style="list-style-type: none">• Speaker attribution for live captions• Live transcript for the meeting which can be used for review after the meeting• Increase to 1000 participants• Interactive meetings from 300• Whiteboard - faster load, sticky notes, and drag and drop capabilities• Reflect - new polling apps in MS Teams channels• Virtual breakout rooms <p>Source</p>	 <p>Photo Source</p>
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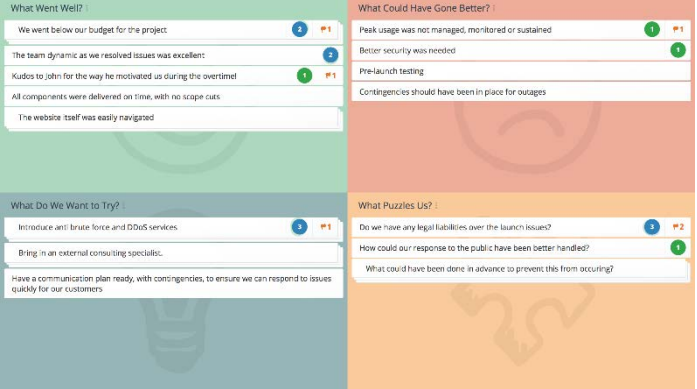
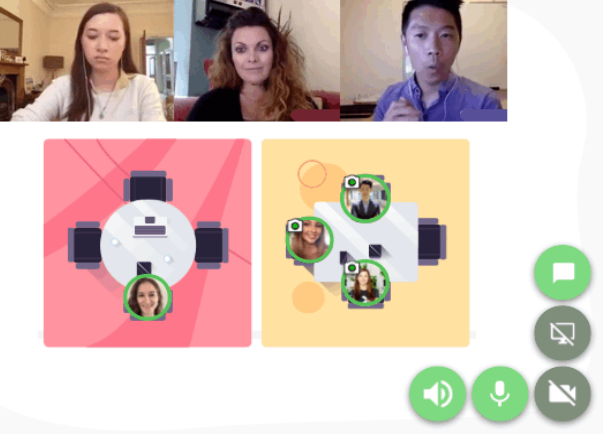




Collaboration Tools / Project Ideation and Management			
<p>Mural</p>	<p>Pros:</p> <ul style="list-style-type: none">● Great for real time and any time online collaboration and co-creation● Visually attractive for brainstorming● Hosts a variety of templates for collaboration and engagement for projects / project management● Integration into existing workflows <p>Cons:</p> <ul style="list-style-type: none">● Need to attend a training prior to use (for effective use, it is best to attend one of the free webinars and to test it out)● Needs a trial run for participants to get used to the interface	<ul style="list-style-type: none">● Free trial (30 days)● Sticky notes and text● Shapes and connectors● Icons● Frameworks● Images and gifs● Drawing● Meeting timer● Summon group members to location on mural● Outline your meeting with templates● Lock items on the mural board● Private mode● Sharing, commenting, chat, quick talk <p>Source</p>	 <p>Photo Source</p>





<p>GroupMap</p> 	<p>Pros:</p> <ul style="list-style-type: none"> • Very easy to use and intuitive • Templates pre-defined to enable individual and group reflection, voting, assigning tasks, etc. • Easy to comment • Grouping ideas • Project planning • Simple for the user to login and start using <p>Cons:</p> <ul style="list-style-type: none"> • Expensive compared to competitor <p>More information</p>	<ul style="list-style-type: none"> • Free trial • Web-based, Cloud, SaaS • Webinars, Live online, documentation • Brainstorming • Discussion boards • Project Management • Real time editing • News feed • Collaboration • Ideation and mind mapping • Whiteboard • Voting • Assigning tasks and timelines <p>Source</p>	 <p>Photo source</p>
<p>Remo</p>	<p>Pros:</p> <ul style="list-style-type: none"> • Great tool for collaboration and interaction for online meetings • Exciting/visual and looks great for fostering more dynamism in online/virtual meetings • Enables connections between attendees • Ability to have numerous different conversations throughout a room <p>Cons:</p> <ul style="list-style-type: none"> • Expensive 	<ul style="list-style-type: none"> • Host Controls • Alerts/Notifications • Auto Framing • Automatic Transcription • Branding • Chat Export • Communication Tools • Customizable Branding • Electronic Hand Raising • File Sharing 	 <p>Photo source</p>

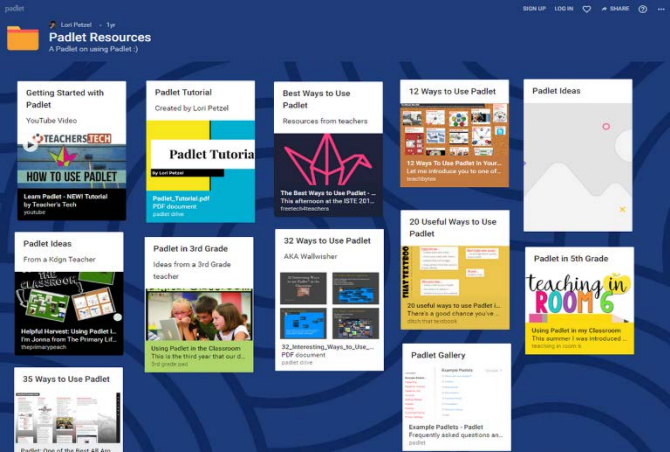




	<ul style="list-style-type: none">• Registration page not intuitive <p>More information More information</p>	<ul style="list-style-type: none">• HD Audio• Host Controls• Polls/Voting• Presentation Streaming• Presentation Tools• Private Chat• Q&A Sessions• Real-Time Chat• Record & Playback Ability• Reporting/Analytics• Screen Sharing• Two-Way Audio & Video• User Profiles• Video Conferencing• Webcasting <p>Source Updated features 2020</p>	
Trello	<p>Pros:</p> <ul style="list-style-type: none">• Good for coordinating projects, topics, content planning• Easy to add content and tag colleagues• Can consolidate information on a specific task and project• Project checklist• Easy upload feature	<ul style="list-style-type: none">• Task scheduler and prioritisation• Shared team calendar• Time tracking• Attachment options• Communication• File sharing• Team dashboards	<p>The screenshot shows a Trello board with five columns: 'To Do', 'Research', 'In Progress', 'Review', and 'Completed'. Each column contains several task cards with progress indicators and assignee icons. The 'To Do' column has cards for 'Create offer notification email', 'Compile video animation alongside blog articles', and 'Structure editorial calendar'. The 'Research' column includes 'Check all internal URLs work in blog archive', 'Create a-mat newsletter for blog subscribers', 'Launch podcast', and 'Prepare onboarding materials for new UI designers'. The 'In Progress' column has 'Offer notification email', 'Email to last week's conference attendees', 'Update social media content', and 'Research weekly blog post and suggest images'. The 'Review' column contains 'Create 1x FB ads', 'Share copy across homepage', 'Create infographics for weekly blog post', 'Squashed Story on upcoming post', and 'Post comments on blog posts'. The 'Completed' column lists 'Redesign About Us page', 'Redesign login', 'Squashed Story on upcoming post', 'Update iOS app', 'Source images for blog post', and 'Create logo for Medium'. The Trello logo is in the top left, and the 'nave' logo is in the bottom right.</p>

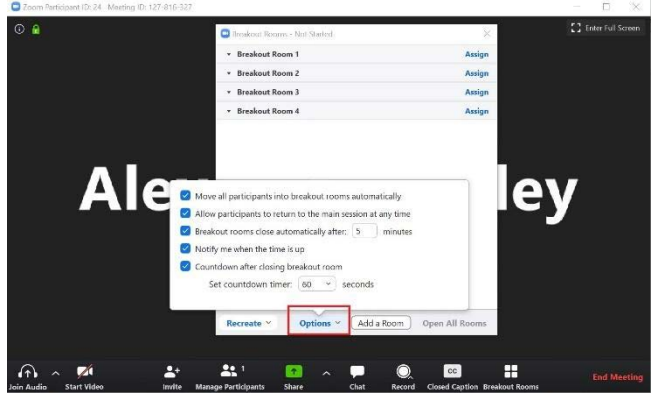




	<ul style="list-style-type: none">● Keep track of to-do lists● Share files with your team members● Ability to collaborate● Flexible <p>Cons:</p> <ul style="list-style-type: none">● Need to define an approach that works for your team, or could get messy● Lacking integration with other software● Difficult for big projects <p>More information</p>	<p>Source</p>	<p>Photo Source</p>
<p>Padlet</p>	<p>Pros:</p> <ul style="list-style-type: none">● Good for mind-mapping and brainstorming ideas● Easy to set up and use● Design thinking● Users can collaborate and share media easily● Good for virtual group-work● Online “bulletin board” <p>Cons:</p> <ul style="list-style-type: none">● None of relevance <p>More information</p>	<ul style="list-style-type: none">● Available in 29 languages, with more being added● Collaborate on padlets from around the globe● Working towards greater accessibility every day● Add posts with one click, copy-paste, or drag and drop● Works the way your mind works - with sight, sound, and touch● Changes are autosaved● Simple link sharing allows for quick collaboration	 <p>Photo Source</p>

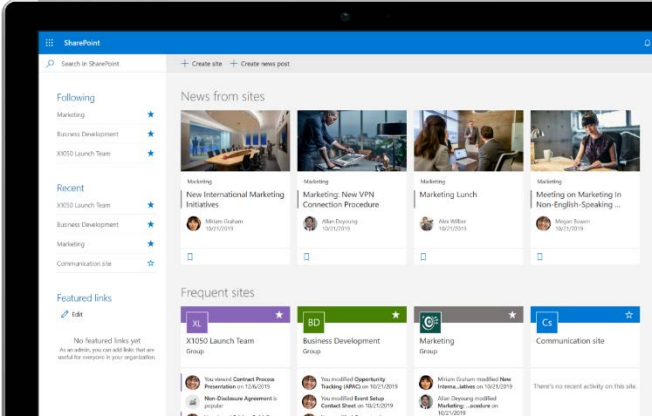




		<ul style="list-style-type: none">● Invite others to contribute - signup not required● Work with unlimited contributors● Give read-only, writing, moderator, or admin access; revoke at any time● Watch updates appear instantly across devices● Privacy and security options● Compatible with most file types and devices● Good customer support <p>Source and more information</p>	
Zoom Breakout Rooms	<p>Pros:</p> <ul style="list-style-type: none">● Built into Zoom● Great for breaking out into smaller groups for discussions <p>Cons:</p> <ul style="list-style-type: none">● If recording, need to click record again when into breakout rooms● Needs moderate training to apply effectively and in a timely manner	<p>See Zoom features above</p>	 <p>Photo source</p>

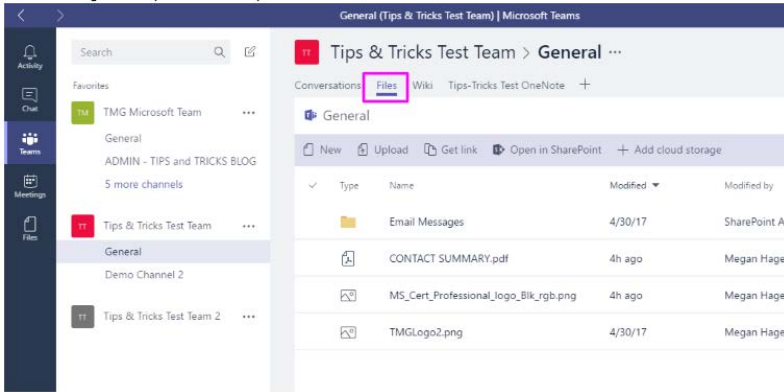




<p>SharePoint</p>	<p>Pros:</p> <ul style="list-style-type: none">● Good for file storing and sharing for collaborative projects● Connected to Microsoft Office● Permission management● Contact groups● Version history● Can lock documents upon final revision <p>Cons:</p> <ul style="list-style-type: none">● Need to be invited● Not so user-friendly● If files are used and edited from here, need to upload new files, so could create confusion● Advanced configurations – administration not straightforward● Unappealing aesthetically <p>More information</p>	<ul style="list-style-type: none">● File sharing● Synchronise with OneDrive● Integration with PowerApps and BI● File storage and organisation● Multiple device and/or browsers <p>More information</p>	 <p>Photo Source</p>
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<p>Microsoft Teams (for collaboration)</p>	<p>Pros:</p> <ul style="list-style-type: none">● Great for storing and collaborating on documents● Easy to edit and collaborate on Word Documents● Can share a collaborative document in a Teams meeting and having people work on / add information● Can make different channels for different projects● Include other apps all in one spot (e.g. Trello) <p>Cons:</p> <ul style="list-style-type: none">● Not so easy to track changes and see what has been done● Not great for working on multiple documents at once● Some formatting is lost when uploaded to Teams	<ul style="list-style-type: none">● Communication driven by instant messaging and audio/video chat● Live meetings and on-demand recordings● Integrations with Office 365 apps such as Planner as well as third-party services● Mobile app for on-the-go teamwork – access across all devices <p>Source</p> <ul style="list-style-type: none">● File sharing and viewing for editing● Collaborate live in real time● Tagging colleagues in chat and in Teams channels (reduces emails)● Collaborate internally and externally <p>Source</p>	 <p>Photo Source</p>
<p>Polling/Survey Tools</p>			

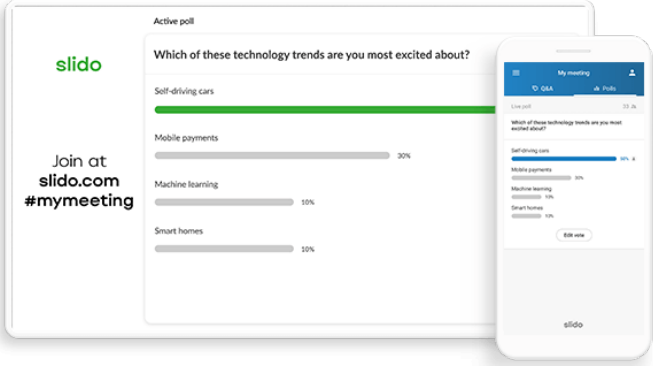
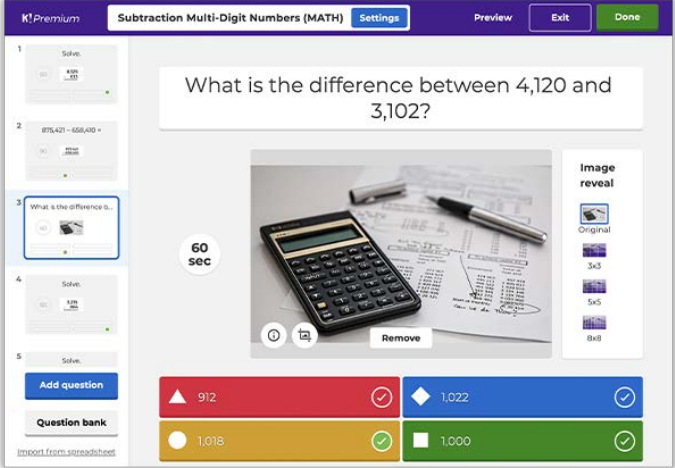




<p>Polling built into Zoom</p>	<p>Pros:</p> <ul style="list-style-type: none"> • Easy to use • Built in • Simple interface <p>Cons:</p> <ul style="list-style-type: none"> • Is not visible in recording of meeting or webinar, only to the live viewers 	<ul style="list-style-type: none"> • Single choice or multiple choice polling • Launch one poll at a time or multiple • Sharing results with the audience <p>Source</p>	<p>Photo Source</p>
<p>Mentimeter</p>	<p>Pros:</p> <ul style="list-style-type: none"> • Good for polling word clouds, bar graphs • Easy to set up • Data visualisation • Live results • Easy to connect and vote <p>Cons:</p> <ul style="list-style-type: none"> • Limited to 3 questions for free version 	<ul style="list-style-type: none"> • Interactive presentations • 13 interactive question types including word clouds and quiz • Your audience uses their smartphones or a separate tab on their web browser to connect to the presentation where they can answer questions • Visualise responses in real-time • Share and export your results • Translate • Compare data over time with trends • Profanity filters <p>Source</p>	<p>Photo source</p>
<p>Slido </p>	<p>Pros:</p> <ul style="list-style-type: none"> • Good for polling 	<ul style="list-style-type: none"> • Q&A sessions • Live polling & quizzes 	

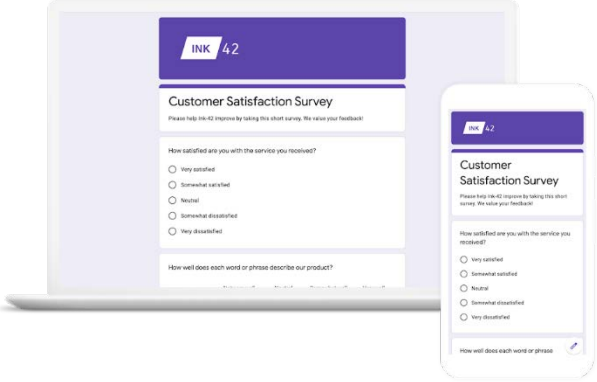




	<ul style="list-style-type: none">• Live results• Can change answers later on during meeting if in a discussion or debate and watch the responses change <p>Cons:</p> <ul style="list-style-type: none">• Limitations in free trial	<ul style="list-style-type: none">• Data and analytics• Collect and curate the best ideas from your participants• Integrations with (PowerPoint, Google Slides, Teams, Zoom, Youtube, etc.)• Question moderation• Privacy• Multiple rooms• Feedback surveys• Themes and branding• Event collaborators <p>Source</p>	 <p>Photo source</p>
Kahoot	<p>Pros:</p> <ul style="list-style-type: none">• Good for polling, quizzes, live results• Gamified interface• Colorful, vibrant• Easy interface• Adaptable for various age levels• Good for educational purposes• Multiple users in mobile app <p>Cons:</p> <ul style="list-style-type: none">• Tailored for younger crowd of students• Some additional barriers to connect and poll (need to put name, enter a code, then poll)	<ul style="list-style-type: none">• Minutes to create a game from scratch• Question bank• Templates• Live via video• Paced challenges• Timer• Assign and review• Create and share outside of live interface, i.e., before or after a meeting <p>Source</p>	 <p>Photo source</p>





	<ul style="list-style-type: none">● Interface is cluttered and overwhelming● Nicknames so difficult to track● Not able to integrate into presentations ahead of time <p>More information</p>		
Google Forms	<p>Pros:</p> <ul style="list-style-type: none">● Easy and user friendly set up● Can generate excel sheet of responses● Data visualisation● Free● Can customise response routes (i.e. if yes, go to Question 2)● Versions automatically saved to Google Drive <p>Cons:</p> <ul style="list-style-type: none">● None of relevance● Limited templates <p>More information</p>	<ul style="list-style-type: none">● Free● Manage event registrations, quick polling, collect information● Use your own photo or logo● Create or respond on the go● Organised data analytics and visualisation● Add collaborators <p>Source</p>	 <p>Photo source</p>





<p>Doodle Poll</p>	<p>Pros:</p> <ul style="list-style-type: none"> ● Recognised method of finding a date for large groups ● Easy to use and send out ● Free ● Convenient ● Calendar integration ● Avoid scheduling mistakes ● Skip many emails to schedule <p>Cons:</p> <ul style="list-style-type: none"> ● None of relevance ● If you have many dates, scrolling feature gets too long and hard to view <p>More information</p>	<ul style="list-style-type: none"> ● Visibility ● Time zones ● Scheduling collaborative ● Simplify updates ● Manage reminders ● Doodle Pro ● Integrations with Zoom <p>Source</p>	<p>3 participants</p> <table border="1"> <thead> <tr> <th></th> <th>Fri 9 2:30 PM</th> <th>Mon 12 over lunch</th> <th>Tue 13 10:45 AM</th> <th>Thu 15 5:00 PM</th> </tr> </thead> <tbody> <tr> <td>David</td> <td></td> <td>✓</td> <td></td> <td>✓</td> </tr> <tr> <td>Alice</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Richard</td> <td></td> <td>✓</td> <td></td> <td>✓</td> </tr> <tr> <td>Your name</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td>1</td> <td>3</td> <td>0</td> <td>2</td> </tr> </tbody> </table> <p>Photo Source</p>		Fri 9 2:30 PM	Mon 12 over lunch	Tue 13 10:45 AM	Thu 15 5:00 PM	David		✓		✓	Alice	✓	✓			Richard		✓		✓	Your name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1	3	0	2
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<p>Survey Monkey</p>	<p>Pros:</p> <ul style="list-style-type: none"> ● Templates built-it ● Affordable ● Tools to configure and customise ● Several languages available ● Simple links for use <p>Cons:</p> <ul style="list-style-type: none"> ● Costs money ● Limited integration of apps <p>More information</p>	<ul style="list-style-type: none"> ● Multiple question types ● Trend tracking ● Automatic reminders ● Customizable ● Document storage ● Integrations with email and social media and more ● Email response tracking ● Permission management ● Real-time feedback ● Recurring surveys ● Data export 	<p>SurveyMonkey Paradigm Belonging and Inclusion Template</p> <p>1. I feel like I belong at my company.</p> <p>2. When I speak up at work, my opinion is valued.</p> <p>7. My job performance is evaluated fairly.</p> <p>Photo source</p>																														





		<ul style="list-style-type: none">• Daily email updates• Customizable survey links• Password-protected surveys• Collaborative survey editing <p>More information</p>	
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Annex 4: Moderation techniques

This Annex aims to support CoP coordinators with explanations of various moderation techniques for CoP meetings over the course of the project. Each meeting will require a different set of activities to engage the stakeholders present and will require different activities as the project progresses. As such, the moderation techniques have been categorised per meeting element and/or activity in sequential order (i.e., introduction, setting the scene, defining scope and direction, brainstorming, making knowledge explicit, and decision making) to make it easier for the CoP coordinator to select a suitable moderation technique. Further explanation will be given for each moderation technique with online or in-person specifics. This overview draws upon KWR's work in the STOP-IT (Koti et al., 2017) and BINGO (Freitas et al., 2018) projects, and a literature scan (Dirkse-Hulscher & Talen, 2007; Dosière & Wilems, 2016; UNICEF, 2015). On the next page a decision tree can be found for selecting the right type of moderation technique.

Moderation Techniques for:

- [Introduction](#)
- [Energise](#)
- [Setting the scene](#)
- [Defining the scope and direction](#)
- [Brainstorming](#)
- [Making knowledge explicit](#)
- [Decision-making](#)





D3.4. Protocol and tools for business-to-business co-creation

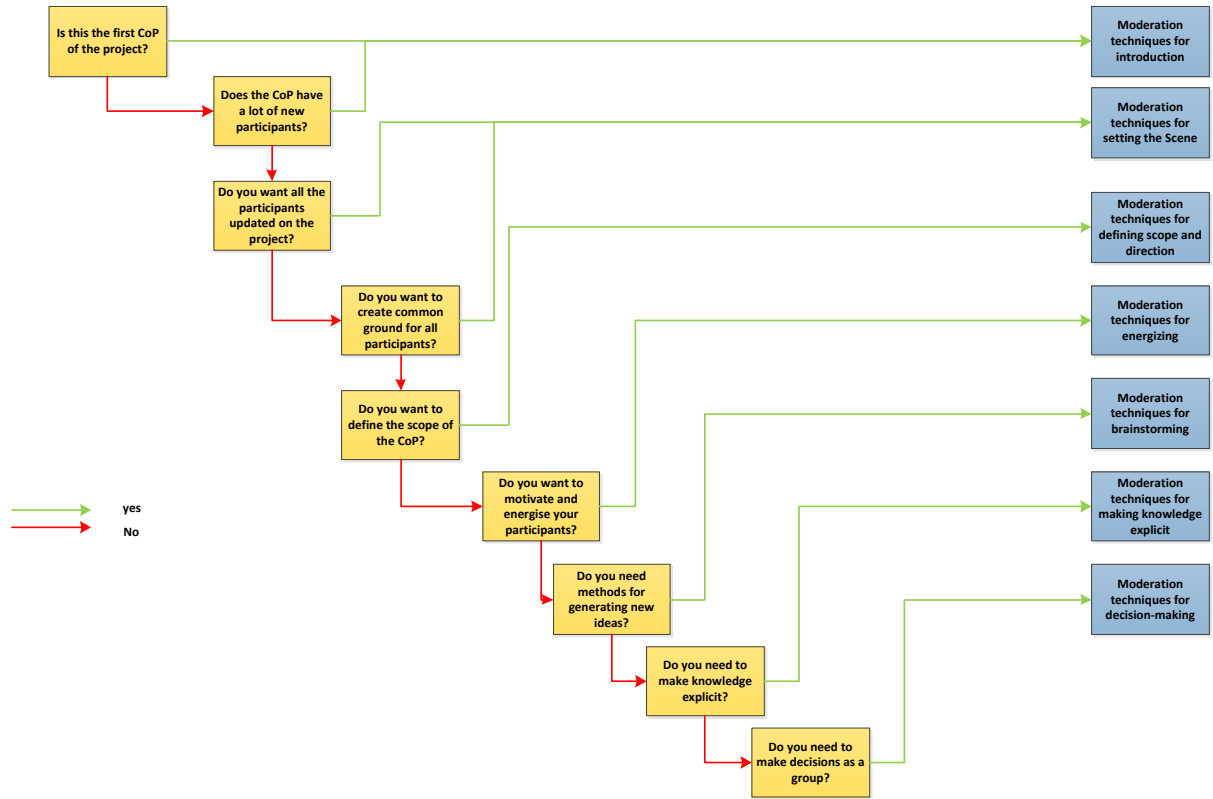


Figure: Decision tree for moderation techniques





Moderation techniques for introduction

Introduction techniques and “ice-breakers” are most suitable for the first round of CoP meetings or meetings which have many new participants. Successful CoPs require an open environment where the participants feel safe and can build trust among each other. Therefore, it is important that the participants get to know each other in formal and informal methods. The following moderation techniques can facilitate such introductions:

Overview

- [Welcome coffee and coffee corners](#)
- [Interviewing](#)
- [The elevator pitch](#)
- [Single word introductions](#)
- [Picture introductions](#)
- [Checking-in](#)
- [Campfire](#)





a. Welcome Coffee and Coffee corners

MODERATION TECHNIQUE

Welcome Coffee and Coffee corners

WHAT

Welcome Coffee and coffee corners aim to stimulate interactions between the participants and help breaking the ice (Freitas et al., 2018).

HOW

A welcome coffee should be hosted at the beginning of the meeting by setting up coffee corners. This gives participants the opportunity to network and get to know each other upon arrival. The coffee corners should remain available during the session to create a more informal setting and to stimulate continuous interaction and networking in a natural manner during the working session. Participants can take a break when needed and discussions can continue over the coffee breaks.

BENEFITS

- Saves time through avoiding formal introductions
- Facilitates networking and introduction in an informal manner
- Helps to maintain the energy

ONLINE TIP

This technique can also be used in online sessions through having separate breakout sessions at the beginning of the meeting. This does require more planning from the CoP facilitator to assign the incoming participants to different breakout rooms. There should also be a moderator in each session to facilitate the conversation. The coffee corners during the online session can be substituted by having coffee breaks in separate breakout sessions during the meeting.

MATERIALS NEEDED

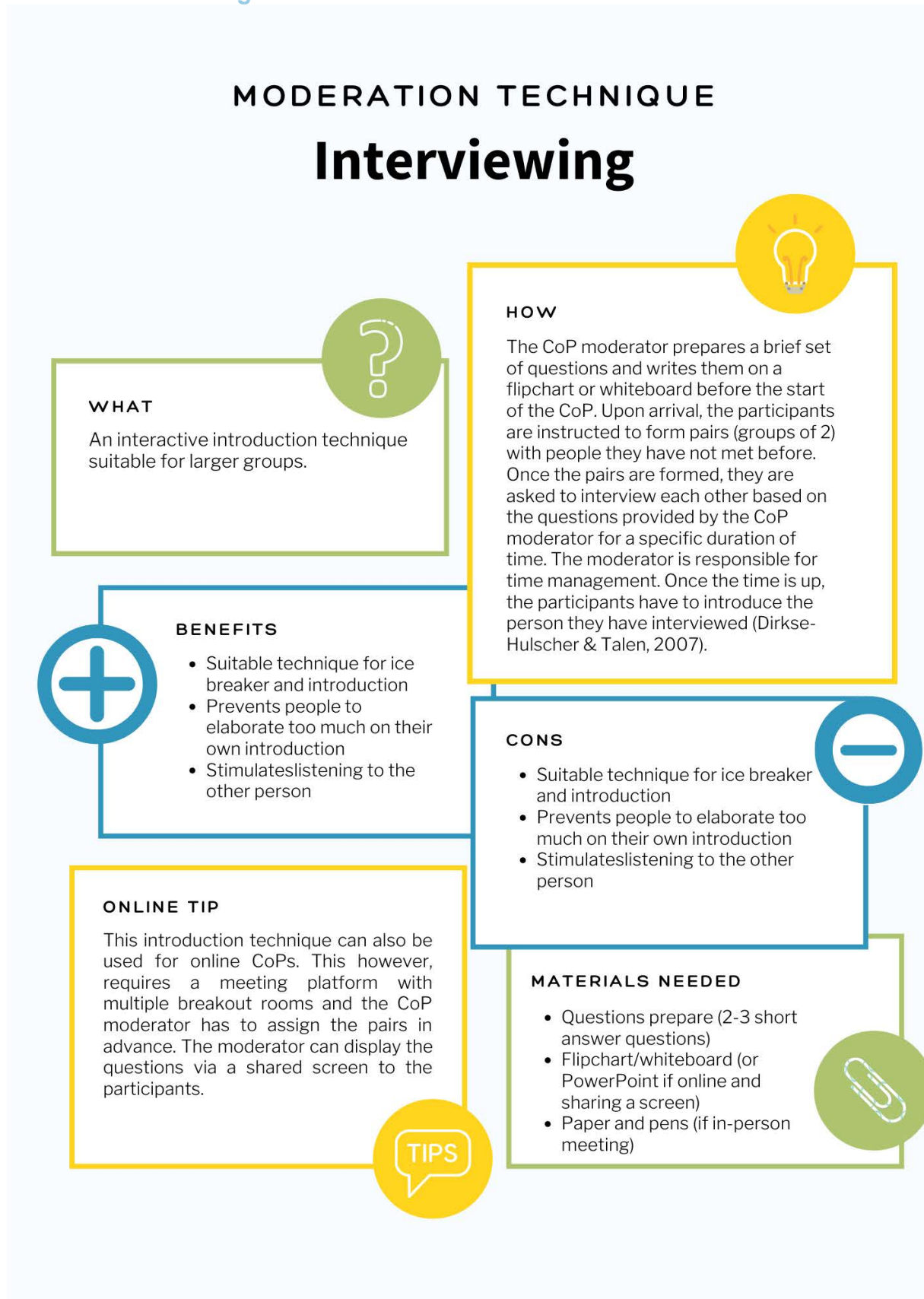
- Drinks: Coffee, Tea, Water
- Snacks: cookies, fruit or other easy to eat snacks
- Cups and napkins

TIPS





b. Interviewing

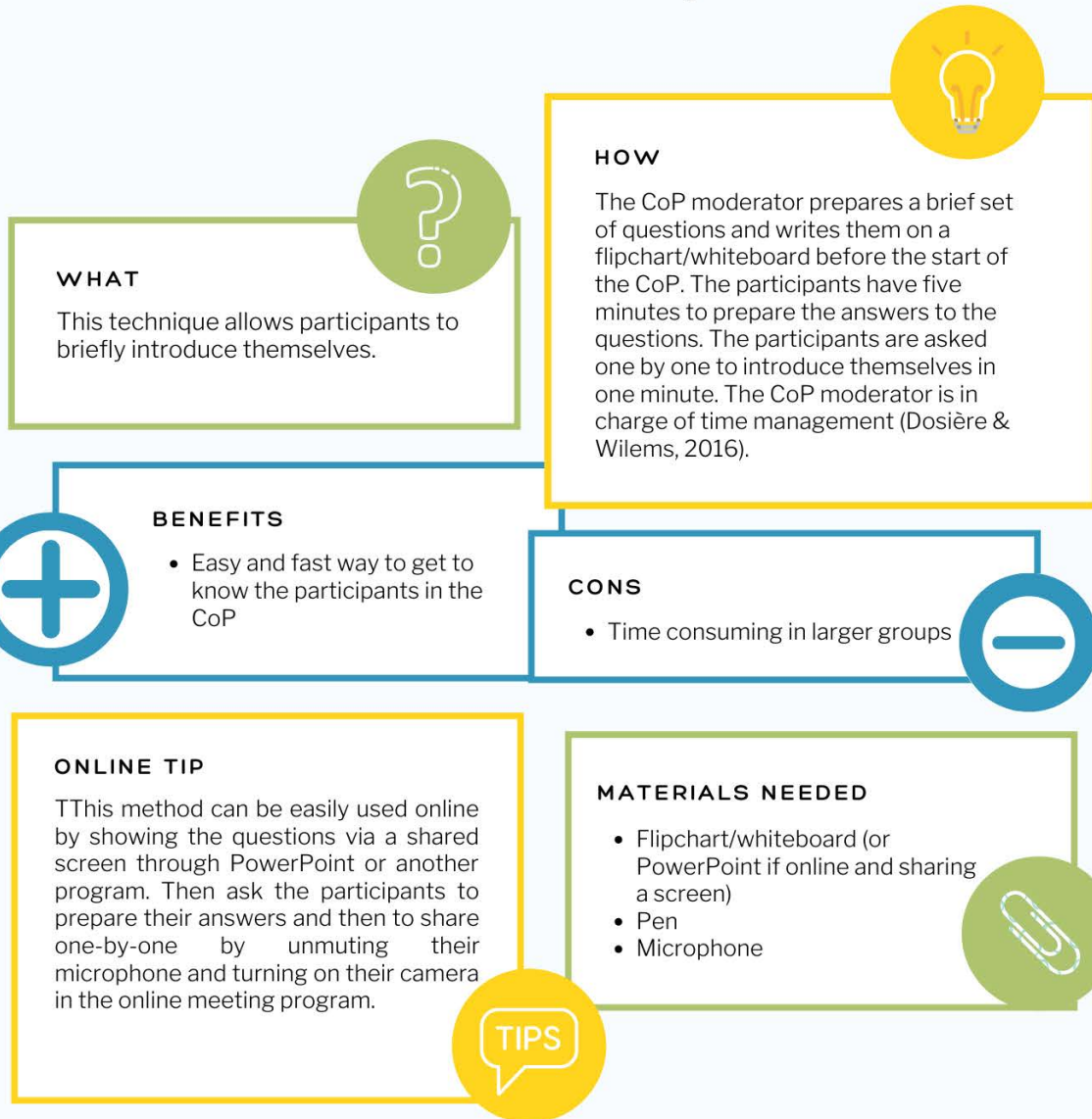




c. The Elevator Pitch

MODERATION TECHNIQUE

The elevator pitch





d. Single word introductions

MODERATION TECHNIQUE

Single word introductions

**WHAT**

The single word introduction is an ice-breaker technique which can be done in small groups or with all the CoP participants (Freitas et al., 2018).

**HOW**

The participants choose from a pile of cards a card with a single word on it and are asked to tell a story about themselves involving the selected word.

**BENEFITS**

- Fun and creative ice-breaker
- Keeps introductions brief
- Stimulates participation and discussion

**MATERIALS NEEDED**

- Paper cards with one word
- Or words displayed on a screen to all participants and they are asked to choose one

ONLINE TIP

This introduction technique can also be used in online CoPs. This requires the CoP moderator to display multiple words via a shared screen and to ask or assign a word to all the participants.

TIPS



e. Picture introductions

MODERATION TECHNIQUE

Picture introductions

WHAT

Choosing a picture to introduce yourself and/or to illustrate your current mood as an ice-breaker introduction activity.



HOW

The CoP moderator prepares a set of thematically and locally relevant pictures. There should be more pictures than participants, so each participant has the option to select a picture that speaks most to them. When all the participants are present, the CoP moderator asks the participants to introduce themselves and the reason for choosing the specific picture (Freitas et al., 2018).



BENEFITS

- Allows everyone to introduce themselves
- Engaging and creative



CONS

- Time consuming in larger groups



ONLINE TIP

This activity can also be recreated online. The CoP moderator can display a number of images on screen and ask the participants to pick one and to introduce themselves by unmuting and turning on their camera.

TIPS

MATERIALS NEEDED

- Thematically relevant pictures on paper or displayed via a shared screen



f. **Checking-in****MODERATION TECHNIQUE****Checking-in****WHAT**

This method makes the participants feel present in the group and raise group commitment.

**HOW**

The goal is to check-in with participants at the beginning of a meeting, and to do so at each subsequent meeting through the duration of the project. By checking-in, the CoP moderator poses questions that keep people engaged and develop a sense of openness among the participants. Examples of checking-in questions are:

- What are you planning to do today
- How are you feeling today?
- Would you like to share something that made you happy in the last week?

The moderator can start by answering the question and giving an example to make people feel comfortable.

**BENEFITS**

- Helps facilitating a sense of community in between the meetings
- Fun and engaging way to break up the working day
- Facilitates communication between the members of a CoP

**ONLINE TIP**

This method has been designed for ease of use during online meetings. Simply display the questions via a shared screen and ask participants to unmute and turn on their camera when it is their turn to speak. The moderator can facilitate and ensure everyone has answered.

In case this method is used in between meetings, people can answer by writing in the channel chat.

MATERIALS NEEDED

- To prepare the questions and display them on a flipchart or on screen
- Create a channel on an online meeting platform

**TIPS**

g. **Campfire****MODERATION TECHNIQUE****Campfire****WHAT**

This method stimulates the participants to get to know each other and learn from each other through storytelling.

BENEFITS

- Facilitates social engagement and team building
- Can be used as informal training game
- Fun and creative
- Helps to make the diversity in peoples experience visible

CONS

- Takes a bit of time to warm up the participants to this storytelling approach – the moderator must ensure everyone feels comfortable and willing to share a fun story

ONLINE TIP

This method has been designed for ease of use during online meetings. Simply display the words via a shared screen and ask participants to unmute and turn on their camera when it is their turn to speak. The moderator can facilitate and ensure everyone has answered.

HOW

The CoP moderator instructs all the participants before/during the meeting to think of words or phrases that can start the storytelling session. The words can be related to the project, or unrelated – they can be fun and engaging to have an exciting story. Then the moderator collects these words and displays them to the participants in a random order.

The CoP moderator then allows participants to view the words selected for a few seconds so that the participants have the time to associate potential stories with the words. The CoP moderator can then start the storytelling by choosing 1 word from the words displayed. The participants are asked to listen carefully and to think of ideas of how to follow on the storyline with another new word.

The CoP moderator then asks for a volunteer to go next. The next person chooses their own new word and to adds on to the story. This process continues until a full story thread exists and all the words have been exhausted. The moderator encourages the participants to be creative, and to take their time in telling a story. The moderator also tracks which words are being used and in which order to demonstrate the storyline that emerges.

MATERIALS NEEDED

- Paper and post-its
- Pens
- PowerPoint (if online)
- Online meeting program

TIPS



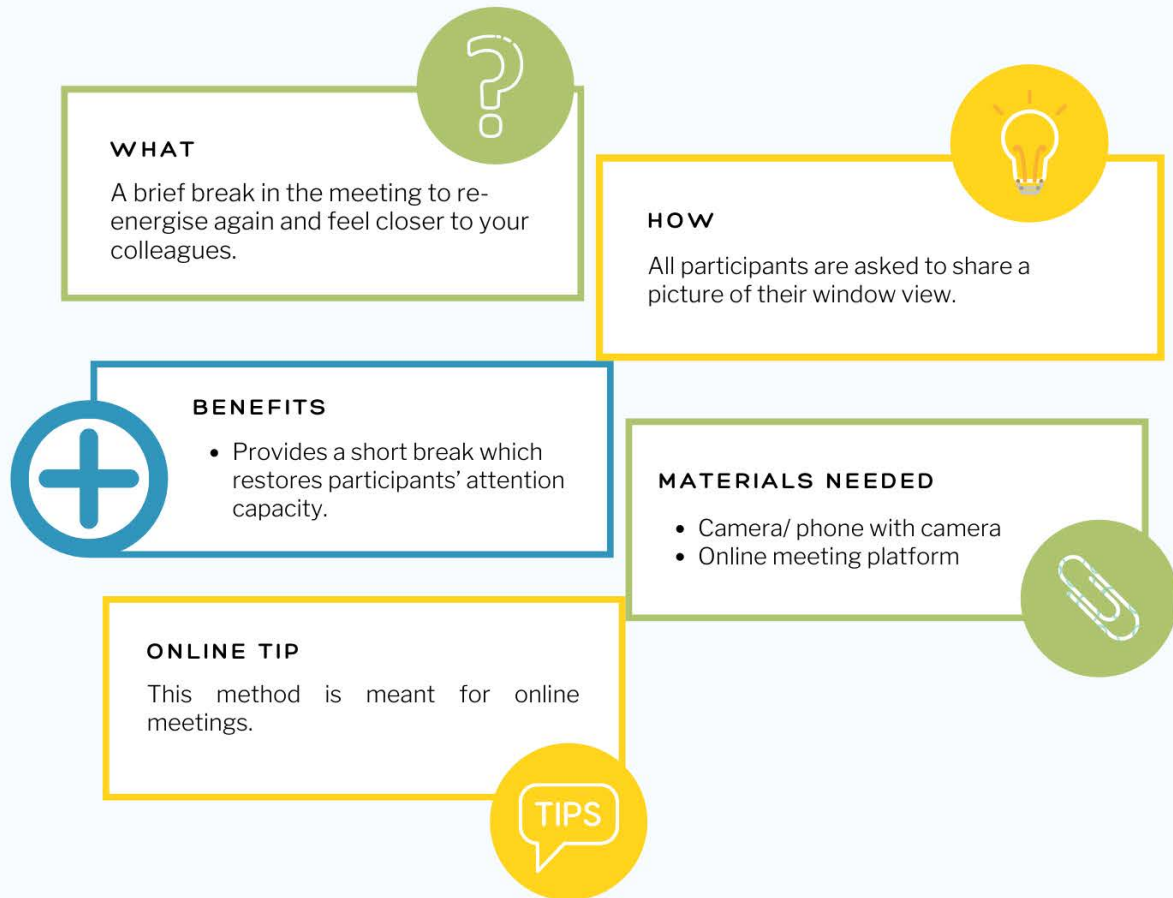
Moderation techniques to energise

These techniques help to restore the energy during long meetings and to keep everybody engaged and active.

Overview

- [Picture sharing](#)
- [Meme theme](#)

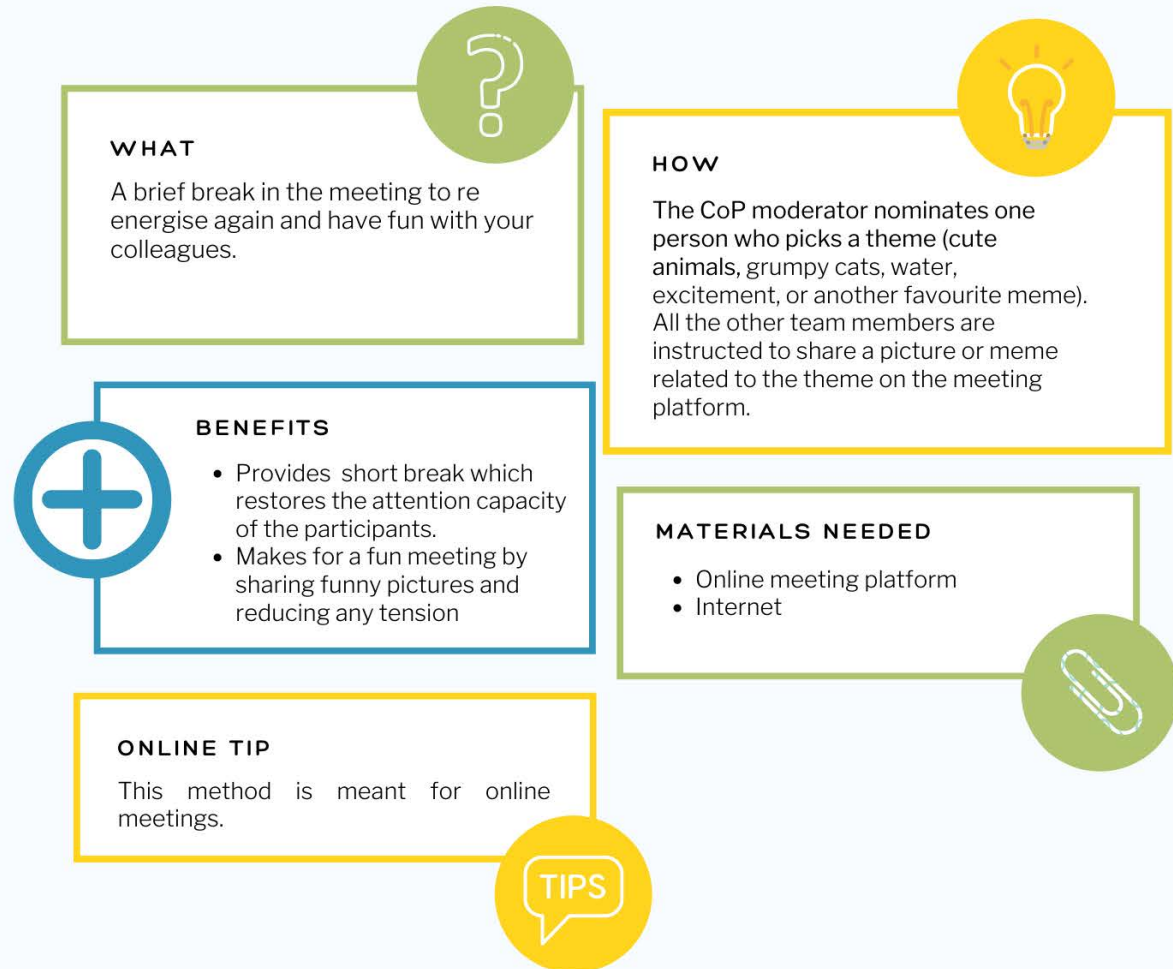


a. **Picture sharing****MODERATION TECHNIQUE****Picture sharing**



b. Meme theme

MODERATION TECHNIQUE

Meme theme



Moderation techniques for setting the scene

These methods are good to use at the beginning of a CoP (i.e. the first CoP meeting). Some of the techniques as seen in the overview below are suitable for the first CoP meetings, others can be used throughout the project at the start of any CoP meeting. These techniques help creating common ground and understanding between the participants.

Overview

- [Team purpose and culture](#)
- [CoP point of departure](#)
- [Project news so far/ News](#)
- [Asking the right questions](#)
- [LEGO PIECES with PESTLE bias](#)
- [Mapping spots](#)
- [SWOT world café](#)
- [Influence and motivation matrix](#)
- [“Futuribles” storytelling role play](#)





a. Team purpose and culture

MODERATION TECHNIQUE

Team purpose and culture

**WHAT**

This exercise helps CoPs to jointly define why (purpose) and how (culture) they will work together

BENEFITS

- Lays the foundation for good collaboration
- Creates common ground and shared expectations
- Defines the purpose of the CoP

**TIPS****ONLINE TIP**

This method can be easily used online with an online meeting platform like Zoom or GoToMeetings. The moderator can use an online program like Mural or GroupMap for 2nd and 3rd steps

MATERIALS NEEDED

- Online meeting platform
- Poster
- Post-its
- Pen

**HOW**

The 1st step is for the CoP moderator to pose the following questions to the group and ask them to reflect on it:

- What is our task as a group?
- What is the goal of our CoP?
- How do we know that we have been successful? What added value are we bringing to the project and to the world?

This reflection can be done in a group discussion.

In the 2nd step, the CoP moderator asks the participants to individually reflect and write down their idea of the CoPs purpose in one sentence. Then, once individual reflection is done, the group can come together and by using the 20x20 rule, the participants will collectively create a CoP purpose of max 20 words in a discussion of 20 minutes. The CoP moderator warns the participants when they have 10, 5 and 2 minutes left. It is important to take time to acknowledge and celebrate the created CoP purpose.

The 3rd step is to jointly define the CoP culture. The CoP moderator will present an example of a good company culture. After presenting, the CoP moderator will ask the participants to write down as many words which they associate with a good working culture. Then the CoP moderator will instruct the participants to remove half of the words, leaving only the most important ones. Then the participants are asked to remove every word until each participant only has the three most important group culture elements (words) left. The participants are then invited to post/share these three words on the group map so they are visible for all participants. As a group, the participants will cluster all words based on any overlaps and meaning. The CoP moderator will ask the participants if there are elements missing once the clustering is done. If so, they can be added. Now the culture elements are complete. The participants have to jointly define what type of behaviour fits with these cultural elements. This has to be done for each identified element. Now the CoP purpose and culture are complete.





b. CoP point of departure

MODERATION TECHNIQUE

CoP point of departure





c. Project so far / News

MODERATION TECHNIQUE

Project news so far**WHAT**

A brief update to keep all the CoP participants informed about the progress of the rest of the project (Freitas et al., 2018).

**BENEFITS**

- Keep the CoP and participants connected and aware
- Allows for continuous synthesis
- Stimulates researchers to reflect on the progress and developments in the project
- Supports knowledge sharing across the project

**ONLINE TIP**

This method can be easily used online with discussion and an online meeting platform.

TIPS

HOW

At the beginning of a CoP, the researchers of the project share the most important developments of the project. This could be done per work package. The updates should be short and not methodological or technical in depth, but provide a general overview. The updates could be presented in a “news updates” style in PowerPoint or solely an oral presentation. The CoP moderator should ask each participant to have maximum 10 words per slide for a maximum of 3-5 slides and 1 slide per minute of talking (i.e. 5 slides = 5 minutes presentation) and to use more pictures or illustrations. After the brief update there is time for a short discussion on the developments. It should be noted that this method is just to keep the participants updated on the progress of the projects and should not take too much time of the meeting.

**MATERIALS NEEDED**

- PowerPoint
- Information on the project





d. Asking the right questions

MODERATION TECHNIQUE

Asking the right questions

WHAT

Asking the right questions is a way to identify the key issues that need to be addressed in the project (Dosière & Wilems, 2016).

**BENEFITS**

- Interactive way to identify potential obstacles in the project
- Facilitates learning and knowledge exchange
- Team building, respect and trust

**ONLINE TIP**

Can be easily done online through an online meeting platform, as well as by sharing the questions via shared screen through PowerPoint, Google Slides or a simple word document. The CoP moderator can also consider using a tool such as Mural or other so that the participants can also have access and write in their responses in real-time.

TIPS

HOW

The CoP moderator prepares a project related issue or asks one of the participants to prepare an issue to share with the group. Then the other participants are asked to think of a set of questions that need to be answered to tackle the problem. The CoP moderator will write the issue and the questions on a flipchart or online program and a discussion will follow in which the group discusses the issue and tries to answer the questions identified. The discussion will end with a brief reflection in which the moderator asks the group for their main conclusions and looks ahead by trying to answer the questions:

- 1) who is needed to address these problems?
- 2) what obstacles are expected?
- 3) how the participants can support each other? (Dosière & Wilems, 2016). The moderator must also ensure that all participants can share freely and in a respectful way by creating a safe space and environment

**MATERIALS NEEDED**

- Flipchart
- Pen
- Online meetingplatform





e. LEGO with PESTLE bias

MODERATION TECHNIQUE

Lego with Pestle bias

WHAT

This method aims to sort the challenges, risks and solutions into two categories that can be categorised even further. This method is the first step to do so.



HOW

The CoP moderator prepares a table with Lego blocks and in the centre of the table a piece of paper with a statement, question or topic of relevance within the case study. The CoP participants are asked to write down the risks and the solutions to manage these risks on post-its in two different colours. The post-its should be attached to the Lego pieces (Freitas et al., 2018).



BENEFITS

- Method supports active participation of all participants
- Find solutions/ideas for tackling the issues
- Supports out of the box thinking
- Fun method
- Helps visualising challenges and potential solutions
- Facilitates uncovering assumptions and positions
- Supports discussion and learning from other perspectives.



TIPS

ONLINE TIP

This method could be converted online, whereby the CoP moderator can set up via an online program such as Mural or Google Slides a virtual lego table (i.e. draw it or design it with elements within these online tools), where participants can click, drag and type on online post-its/text boxes. The discussion can be carried out within the online meeting platform and also via the chat function and notes and outcomes can be taken simultaneously, and screenshots saved of the outcome.

MATERIALS NEEDED

- Flipchart
- Pen
- Online meeting platform





f. Mapping spots

MODERATION TECHNIQUE

Mapping spots

**WHAT**

This method allows the CoP participants to identify critical places/points in the case studies.

**BENEFITS**

- Generates a quick overview of the risk and different opinions
- Fun exercise
- Creates a visual overview
- Supports discussion and prioritisation


**HOW**

A big map of the case study can be placed on a wall/ table/online program. The participants are asked to write down the most urgent risks for specific locations on red post-its, and places with almost no risks on green post-its, and places that they use a lot on yellow post-its and place them on the map. This gives a visual overview of where the main risks lie according to the participants. Then the participants are invited to discuss the various identified risks as the participants might have different opinions and to find solutions and ways forward (Freitas et al., 2018).

ONLINE TIP

This exercise can be done online as well using an online tool such as Mural, Whiteboard or Google Slides, and using a picture of the area as background. Then the participants can use pre-defined text boxes to add in their high, low, frequently used coloured post-its and discussion can ensue via an online meeting program.

MATERIALS NEEDED

- Map in A0 size
 - Green, yellow and red post-its
 - Pens
 - Mural/groupmap
- 

**TIPS**



g. SWOT world café

MODERATION TECHNIQUE

SWOT world café

**WHAT**

The SWOT world café allows participants to jointly map the strengths, weaknesses, opportunities and threats with regards to a specific project, which can be used as a basis foundation for more in depth discussion and action planning (Freitas et al.,2018).

**BENEFITS**

- Supports participation of all participants
- Allows
- for a relatively fast SWOT analysis
- Supports informal knowledge exchange
- Supports reflection
- Allows for different perspectives

TIPS**ONLINE TIP**

This method can be done online as well using a meeting platform which offers breakout sessions such as Zoom, in combination with an online program such as Mural, Padlet, GroupMap or Google Slides.

**HOW**

There are four different tables placed in a room. Each of the tables is dedicated to one category of the SWOT analysis; the strengths, weaknesses, opportunities and threats.

On each table, there is a A0 paper. The CoP participants are divided in equal groups around each table and have 15 minutes for discussion on the specific SWOT dimension of the table. Each table has a table moderator which can take notes on the post-its and put them on the paper and cluster the post-its as needed.

After 15 minutes, the participants move to the next table, so that each group has visited each table. The posters are put on the wall so that the participants can review the posters and there can be a brief open discussion.

Then, the participants are invited to select the 5 most important points in each dimension. They are invited to put a sticker on these post-its as a vote. After everyone has done so, there will be a more in-depth public discussion on the selected points per dimension to enable further planning and coordination.

MATERIALS NEEDED

- Tables
- A0 paper
- Pens
- Post-its
- Online meeting platform





h. Influence and motivation matrix

MODERATION TECHNIQUE

Influence and motivation matrix

**WHAT**

The influence and motivation matrix is an icebreaker exercise and aims to understand how participants view themselves and others (Freitas et al., 2018).

**BENEFITS**

- Allows the participants to introduce themselves and to get to know power dynamics and interests

**ONLINE TIP**

This method can be used online as well using an online tool such as Mural, Whiteboard or Google Slides.

MATERIALS NEEDED

- A0 paper
- Pens
- Post-its
- Online meeting platform

**HOW**

The CoP moderator prepares a poster (A0 size) on which a stakeholder matrix is drawn. On the x-axis is the level of motivation of the participants and on the y-axis is their influence. The participants all receive a post-it and are asked to write their name on it. Then the participants are asked to put their post-it on the motivation matrix where they perceive themselves. The other participants can give feedback on the placement of names. This can be done for various thematic topics. The CoP moderator is in charge of analysing the motivation/influence matrix (Freitas et al., 2018).

CONS

- Time consuming in larger groups





i. “Futuribles” storytelling role play

MODERATION TECHNIQUE

“Futuribles” storytelling role play**WHAT**

This method aims to map the expectations of the project outcomes and to create understanding for each other's point of view.

**BENEFITS**

- Fun and interactive
- Helps the creation of common ground between the participants
- Facilitates expectation management

**ONLINE TIP**

This activity can be done online with an online meeting tool that enables breakout rooms..

TIPS

MATERIALS NEEDED

- Enough time and space to perform the sketches
- Online meeting tool with breakout rooms

**HOW**

The participants are divided into groups and are asked to collaboratively envision the outcomes of the project. The groups are asked to role play situations and to plan performances to play out to the other participants: a TV interview after the project has ended OR a project meeting of a new project after this project has ended. The participants in the groups have to prepare their story and roles (Freitas et al., 2018).

In the TV-interview scenario the participants have to prepare the questions that the interviewer will ask and their answers to it. This is all done jointly, once the group agrees on the answers and questions the roles to play are divided. The two groups both perform their sketches. After the performances the group can discuss the differences and overlap between the expected outcomes of the project and try to come to a joint agreement.





Moderation techniques for defining the scope and direction

These moderation techniques help the participants plan and define their course of action.

Overview

- [Backcasting](#)
- [Roadmap design](#)



a. **Backcasting****MODERATION TECHNIQUE****Backcasting**



b. Roadmap Design

MODERATION TECHNIQUE

Roadmap design





Moderation techniques for brainstorming

These techniques facilitate discussion and brainstorming sessions.

Overview

- [Roundtables](#)
- [The other way around](#)
- [Quick scan ideas rope](#)
- [The wold café setting](#)

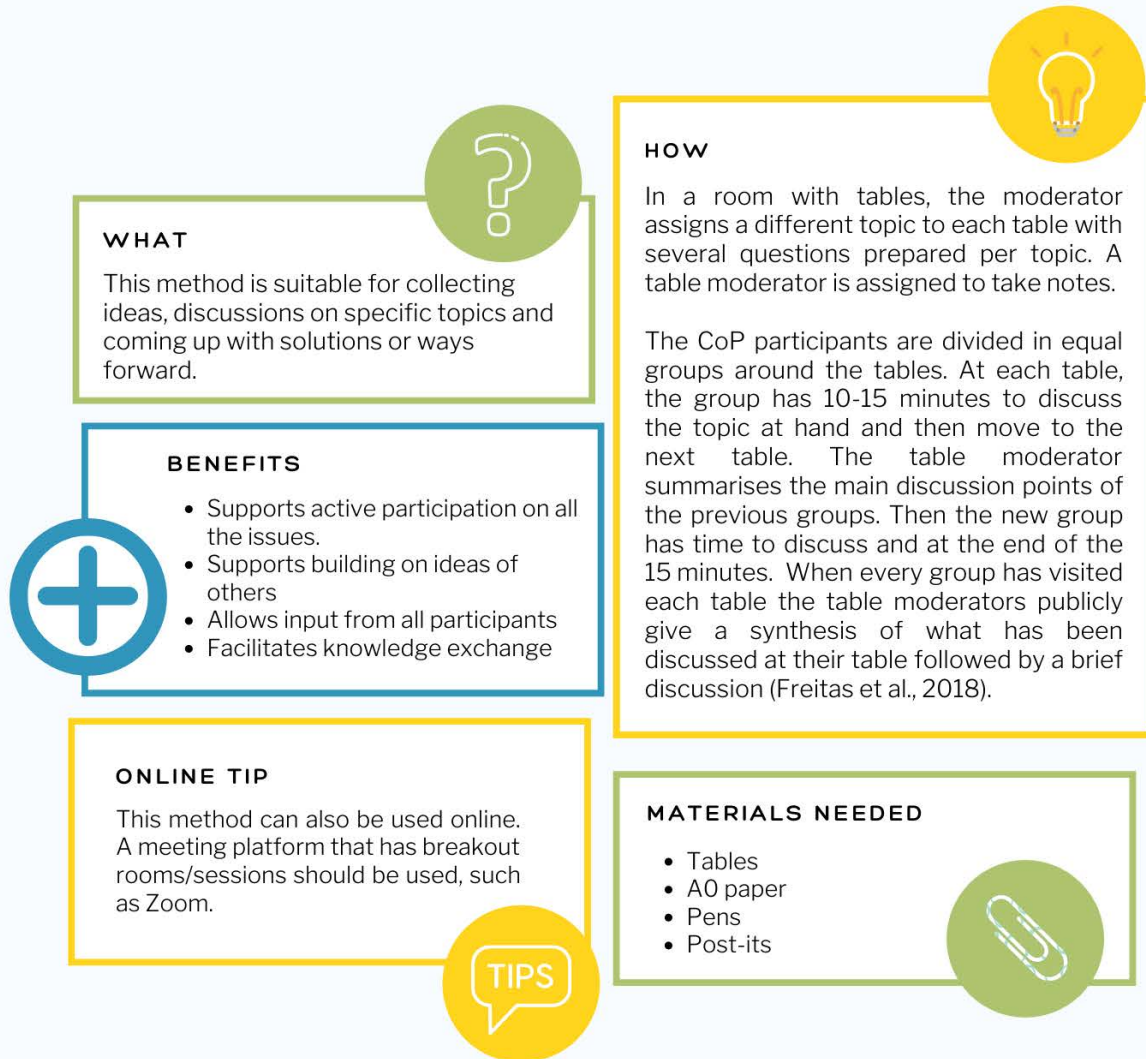




a. Roundtable

MODERATION TECHNIQUE

Roundtable

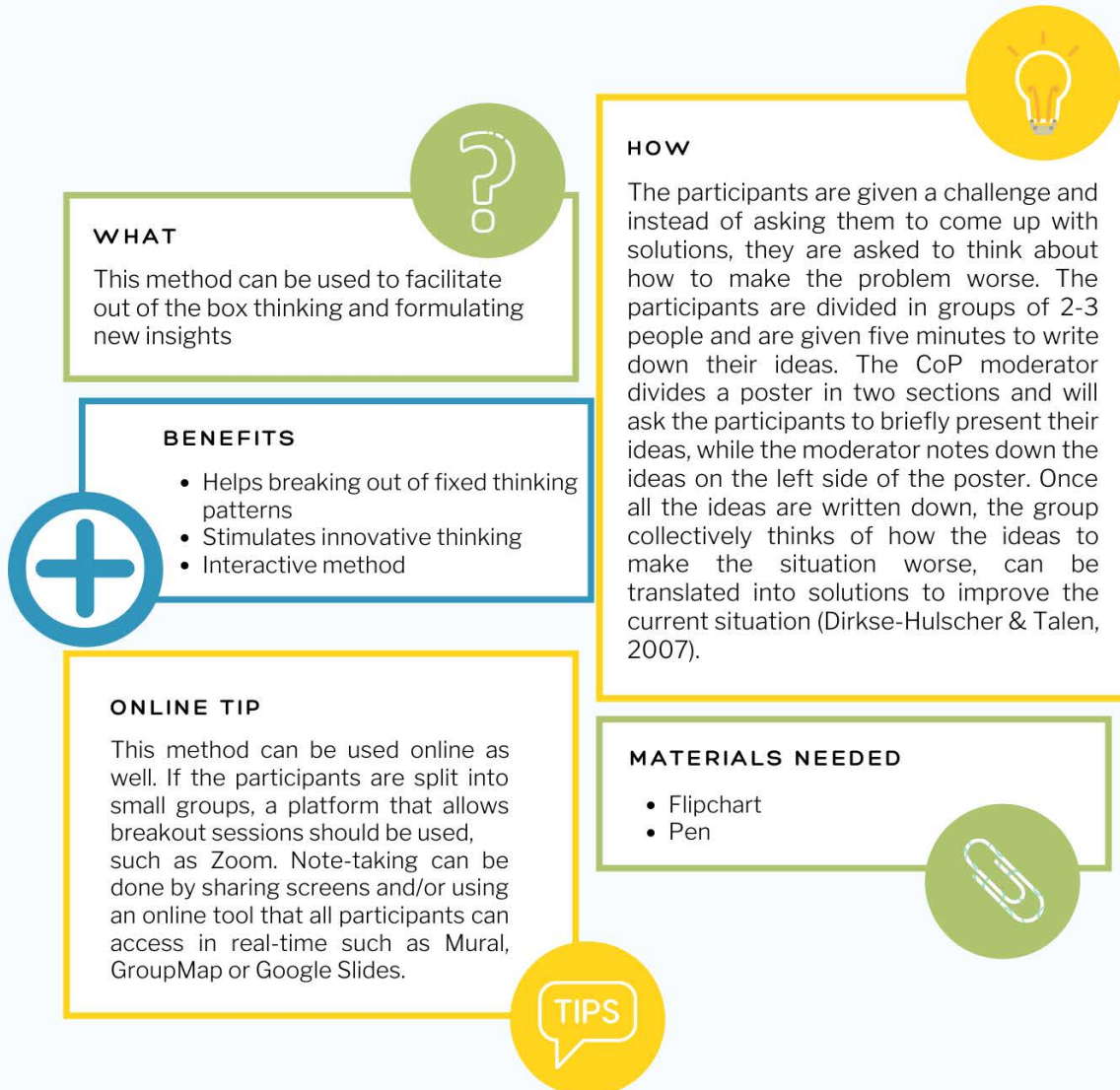




b. The other way around

MODERATION TECHNIQUE

The other way around

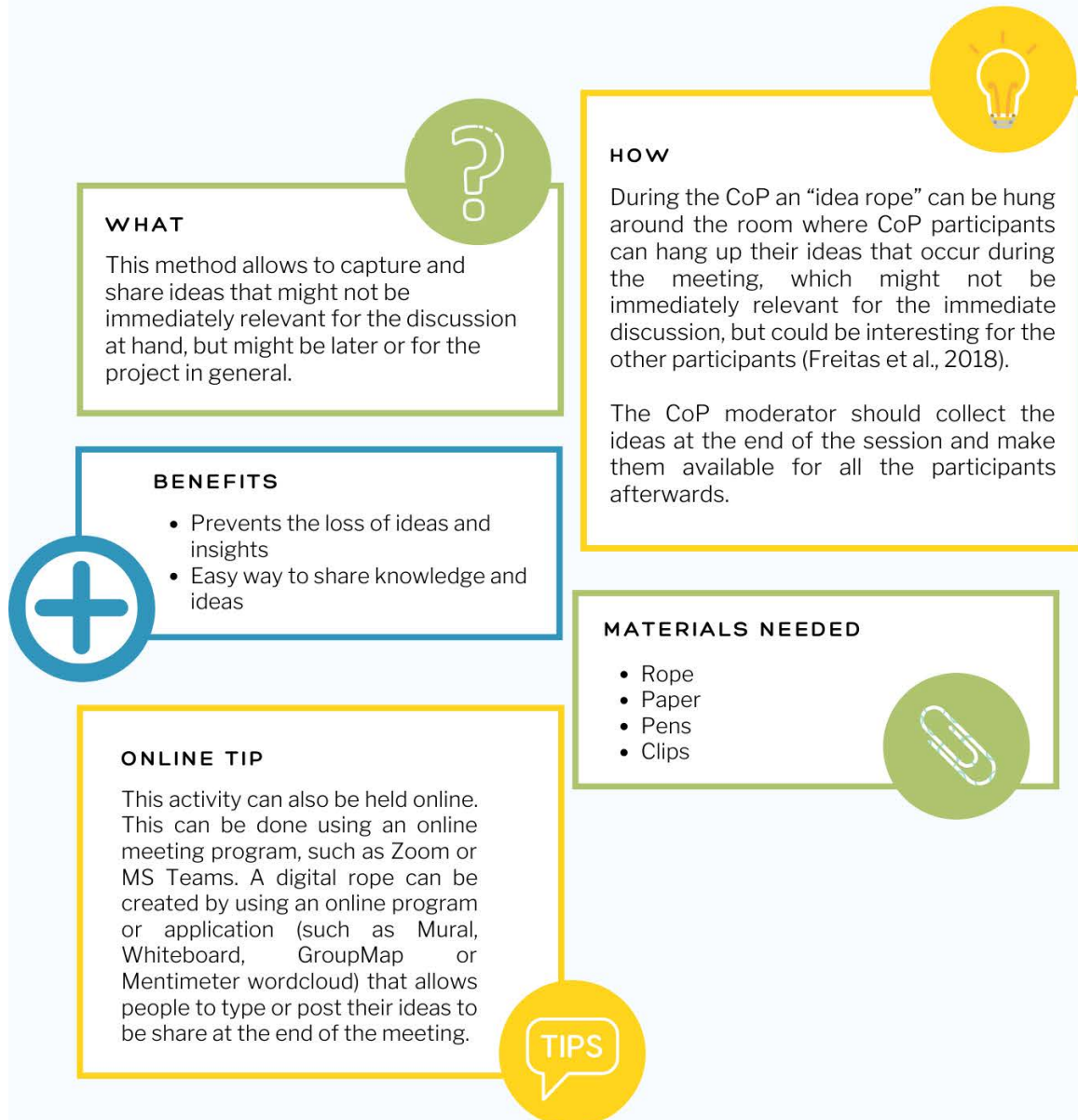




c. Quick-scan ideas rope

MODERATION TECHNIQUE

Quick-scan ideas rope





d. The world café setting

MODERATION TECHNIQUE

The world café setting

WHAT

This method can be used to discuss complex issues in larger groups (UNICEF, 2015), and can be adapted so it can be used for multiple purposes: e.g. SWOT.

BENEFITS

- Allows for discussing complex issues in larger groups
- Allows for all participants to participate even in bigger groups
- Facilitates knowledge exchange in an informal atmosphere
- Facilitates fast collection of knowledge
- Multiple issues/ topics can be discussed in the same session (UNICEF, 2015)

ONLINE TIP

This method can be used online using a platform that offers breakout sessions such as Zoom, and with an online note-taking tool.

TIPS

HOW

Before the CoP meeting, the CoP moderator selects a topic and designs 3-5 discussion topics/questions and selects a table host and a table reporter per topic. In the meeting room, a table per topic will be set up accompanied by a flipchart. During the session, the CoP participants are divided evenly over the various tables. The table hosts and reporters remain at their table the whole session of the world café. Each round starts with a brief explanation on the topic by the table host and a brief summary of the discussion of the previous group at that table.

After the introduction and the recap, the discussion of 20 minutes can begin in which the participants write down their ideas. Only the ideas that they shared with the group should be written down. When the 20 minutes are over, the groups switch tables. Once all groups have visited all tables, there will be a plenary reflection in which the table host summarises the findings from each table and a brief discussion will follow (UNICEF, 2015). The CoP moderator ends the session with a conclusion.

MATERIALS NEEDED

- Table host and reporter
- Flipchart
- Pens





Moderation techniques for making knowledge explicit

This method helps to make implicit knowledge explicit and facilitates exchange.

Overview

- [Expert knowledge](#)





a. Expert knowledge

MODERATION TECHNIQUE

Expert Knowledge



WHAT

Expert knowledge is a method to facilitate implicit knowledge exchange by making it explicit.

BENEFITS

- Interactive
- Allows to make implicit knowledge explicit

ONLINE TIP

Can be done through polling tool, such as Mentimeter or Slido, or through the integrate polling in Zoom.

MATERIALS NEEDED

- Room with enough space

HOW

To use this method, it is necessary that the CoP participants are familiar with the topic of discussion. If deemed necessary, the CoP moderator can ask the participants to prepare before the meeting.

The CoP moderator prepares questions for the group which match their knowledge on the topic. During the session the CoP moderator will introduce the topic and divide the room in two sections. One for true and one for false. The CoP moderator will provide statements and the participants have to answer to these statement by standing in either the true or false section.

Once everyone stands in their section, the CoP moderator will ask the participants to explain their answer. If the moderator notices that the explanation is not correct, they will interrupt the participant and give the right answer with explicit explanation.

This exercise is not about having a discussion, but about highlighting how implicit information can be made explicit with an activity, and helping people to retain information through active engagement.





Moderation techniques for decision making

These methods help the participants in a CoP to reach consensus and to make decisions.

Overview

- [Perspectives](#)
- [Personas](#)
- [Scenarios](#)

Towards the end of the project decisions must be made and thus consensus and agreement will be sought. The following moderation techniques can facilitate these decision making processes.





a. Perspectives

MODERATION TECHNIQUE

Perspectives

**WHAT**

This method aims at enhancing understanding of different stakeholders perspectives and coming to a decision or way-forward based on the different perspectives.

**BENEFITS**

- Creates more understanding of others perspectives
- Helps to reach decisions and consensus

ONLINE TIP

This exercise can also be done online a platform with breakout, such as through Zoom. Online note taking and voting can be done through an online program such as Mural, GroupMap or Whiteboard.


**TIPS****HOW**

The CoP moderator writes down all possible decisions on the flipchart and all stakeholder groups (which are participating in the CoP) on cards. The cards are then divided over the CoP participants to enable participants to take on each other's roles and perspectives. The CoP moderator makes sure that no one receives their own role.

The participants with the same cards form groups and brainstorm arguments for why a specific decision should be taken. After some time, everyone comes back to the main group and the participants must present their arguments for the decision with their assigned role.

After this discussion, everyone switches back to their own role and perspectives and a new discussion will start. During the discussions, the CoP moderator writes down the arguments and solutions that have come up to proceed with a specific decision. At the end of the discussion the CoP moderator will ask the participants to vote for one of the solutions (Dirkse-Hulscher & Talen, 2007).

MATERIALS NEEDED

- Cards with roles
 - Pens
 - Flipchart or whiteboard
- 

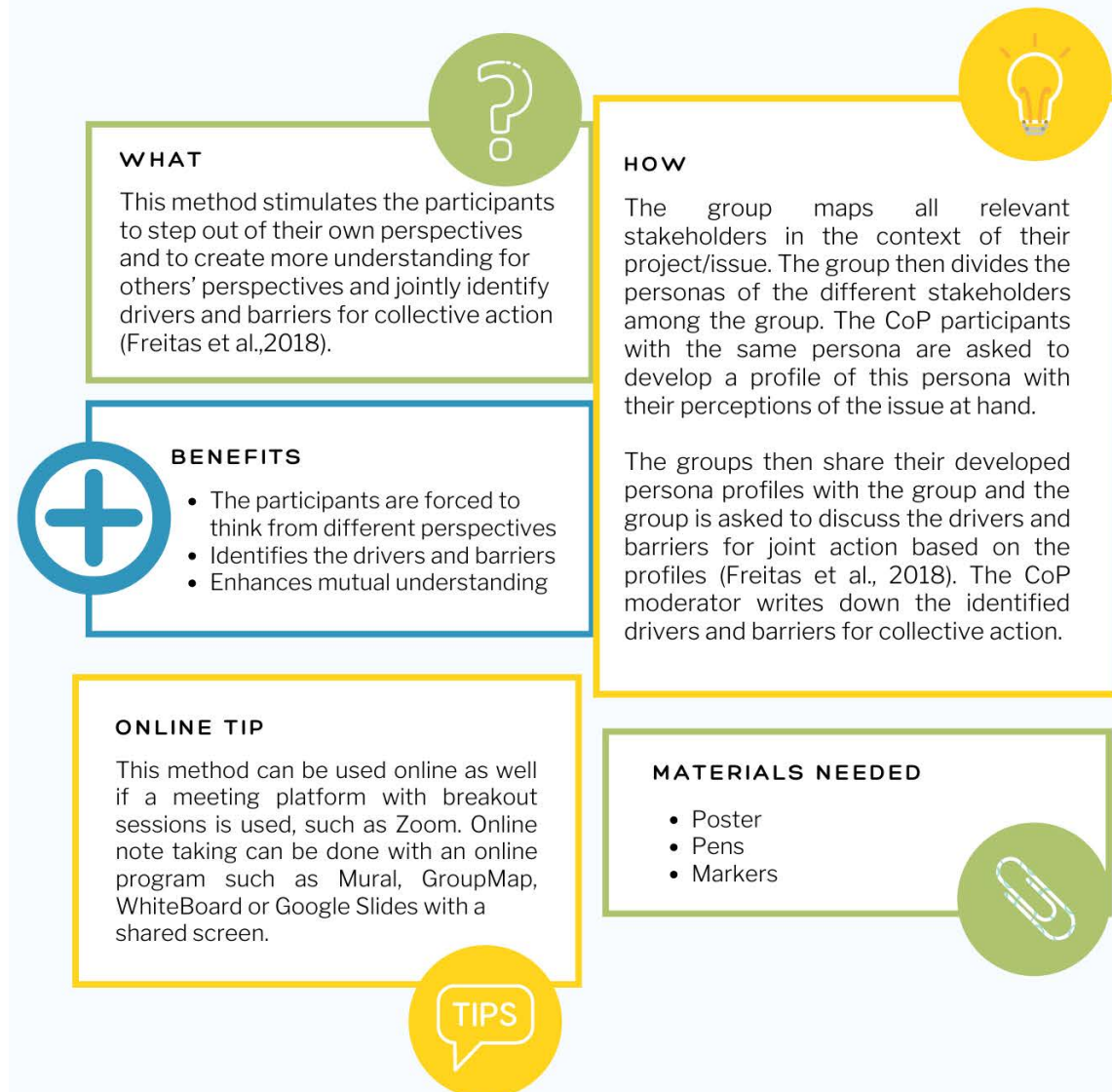




b. Personas

MODERATION TECHNIQUE

Personas





c. Scenarios

MODERATION TECHNIQUE

Scenarios

**WHAT**

The scenarios method is used to reach consensus between a wide range of stakeholders and to come to a well informed decision (Dirkse-Hulscher & Talen, 2007).

**BENEFITS**

- Quick overview of the consequences of solutions
- Helps to reach consensus between the CoP participants
- Helps to come to a joint decision

ONLINE TIP

This method can also be used online if a meeting platform which offers breakout sessions such as Zoom. Note-taking and presenting the ideas can be done via a PowerPoint on the shared screen, or with an online tool such as Mural, Whiteboard, Google Slides, etc.

**HOW**

During the CoP meeting there will be a discussion which aims to come up with a list of possible solutions or decisions.

The CoP moderator writes down the solutions/decisions on a flipchart or whiteboard. The group is divided into small groups. Each group is assigned a solution or decision. In these smaller groups the participants are asked to list the positive and negative consequences of each solution/decision and the effects on the involved stakeholders.

The groups are then asked to identify the consequences with the biggest impacts and are asked to think of ways to lower the impact. In this way, scenarios are formulated. The group comes together again and the CoP moderator will note down all the identified consequences of the solutions/decisions on a poster of flipchart. Based on this overview, the group can vote for a decision (Dirkse-Hulscher & Talen, 2007).

**MATERIALS NEEDED**

- Flipchart, whiteboard
- Pen





Annex 5: Evaluation form

This form will be slightly adjusted to the specificities of the project when made online.

Place: _____ Date: _____

It was a pleasure to have you in this meeting. We would like to know your opinion, so that we can improve future events and meet your expectations. Thank you for your collaboration!



Name (optional): _____

Organisation (optional): _____

**Please rate the extent to which you agree with each of the following statements:
(1=strongly disagree; 2=disagree 3=neutral; 4=agree; 5=strongly agree; N.A=not applicable)**

1. Meeting logistics and stakeholder engagement	
1.1 I received the information about the meeting and materials well in advance	
1.2 The venue was adequate for the purpose of the meeting	
1.3 The meeting had the right duration in time	
1.4 During the meeting I improved or made new connections for my professional network	
1.5 The presentations and speakers were clear and understandable	
1.6 During the meeting, I felt save to behave spontaneous and unfiltered	
1.7 I believe others were communicating openly with me	
Comments: (optional)	

2. Awareness and increased understanding	
2.1 I believe that all relevant stakeholders were present at the meeting	
2.2 I had sufficient opportunities to provide input to the discussion	
2.3 Differences and (potential) conflicts among us were addressed in a constructive manner	
2.4 All ideas/perspectives were included and respected during the discussion	
2.5 I feel that the right topics were discussed during the meeting	
2.6 I have a better understanding of the perspective of the stakeholders	
2.7 The way the discussion was facilitated and moderated supported the meeting objectives	





Comments: *(optional)*

3. Outcomes and conclusions

3.1 There was enough time to reflect on our collective experience and functioning as a group

3.2 I believe that clear conclusions were formulated at the end of the meeting

3.3 I believe that clear actions were formulated to improve solutions

3.4 The meeting inspired me to take follow-up actions in my own organisation

3.5 Participating in the meeting increased my knowledge on the solutions

3.6 My expectations on the outcomes of the meeting were met

3.7 I am aware of my own role in the project and how each of us can contribute to the projects goals

Comments: *(optional)*

Pros and cons of the local CoP

What is your overall rating of the CoP meeting (1 to 5)?

In your opinion, what were the most positive and less positive aspects of the meeting?

Most positive:

Less positive:

Suggestions for improvement

What suggestions for improvement do you have for future meetings?

Thank you!

Please give this questionnaire back to the workshop organiser before leaving.





Annex 6: Template for CoP meeting reporting

CoP Meeting Report

The CoP coordinator is responsible to prepare and share a CoP Meeting Report after each CoP meeting.

Title of CoP Meeting (key topic):

- Organizing partner:
- Moderator:
- Meeting Place:
- Date:
- Number of guests attending:

Agenda for the meeting

- Please insert the agenda from your meeting

Objectives

- Describe the CoP meeting objectives

Participants' characterisation

- The table below shows the number of participants, the respective sector of activity and the level of governance each stakeholder is active in.

Overview of stakeholders:

Institution / sector	No. of participants (registrations)			
	In total	Male	Female	Non-binary
Project members				
External stakeholders (outside of the project partners)				
Authorities				
Engineering companies				
Representatives of other sectors				
Research institute				
End-users				
Water industry				
Other: name				

Please, include a list of participants as annex to this form.

Description of meeting's activities





D3.4. Protocol and tools for business-to-business co-creation

- Provide a summary of activities carried out. Were there plenary or working group sessions? Presentations by whom on what? (Provide presentations as appendices).
- Describe the moderation technique and method for open dialogue applied.

Please, include all presentations given at the meeting as annex to this form.

Main achievements

- Describe briefly the main outcomes and results from the meeting, including the answers on the central questions such as outlined in Section 4.1 'Key topics of CoP meetings', as well as any actions to be taken by members, as agreed upon.
- Summarise the perspectives of the stakeholders (i.e., stories as anecdotal evidence).

Reflection notes

- Describe your observations on stakeholder engagement (e.g., do we need to add others?)
- Describe any relevant observations for further steps
- Questions such as below can be asked:
 - What did you enjoy most/less about this workshop?
 - Which methods/tools were successful/not successful?

In your opinion, what were the positive/negative aspects of the workshop?

Pros:

- xxx
- xxx
- xxx

Cons:

- xxx
- xxx
- xxx

What suggestions for improvement do you have for future workshops?

- xxx
- xxx
- xxx





Annex 7: Consent form

Title of Project: ULTIMATE: industry water-utility symbiosis for a smarter water society

Researcher in charge of meeting/interview: [Name/Affiliation]

Thank you for participating in this meeting/interview, which is intended for research purposes only, and aims at investigating <purpose>.

Please confirm whether you agree or not with the following statements by checking the respective boxes.

- | | | |
|--|--------------------------|--------------------------|
| 1. I confirm that I have read and understood the purposes of this meeting/interview. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I agree to allow researchers of the ULTIMATE project to record the meeting/interview and analyse an excerpt for internal reporting of the project, project deliverables, and to potential publishing of conference/journal papers. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I consent to verbatim quotations from my answers to be used in internal reporting of the project, project deliverables, and to potential publishing of conference/journal papers, after reviewing and approving it. The information will be anonymised. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I consent to my personal data being securely stored and retained for two years after the completion of the project (May 2024), before ULTIMATEly being deleted by the project partner that collected this data from me. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I give permission to the researchers to use the pictures taken during the meeting/interview for the purposes of disseminating the ULTIMATE project. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I understand that I am free to withdraw my consent at any time without the need to justify my decision. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I confirm that I have read and understood all the above and have been given adequate time to consider my participation. | Yes | No |
| | <input type="checkbox"/> | <input type="checkbox"/> |

Name & e-mail participant

Date

Signature

