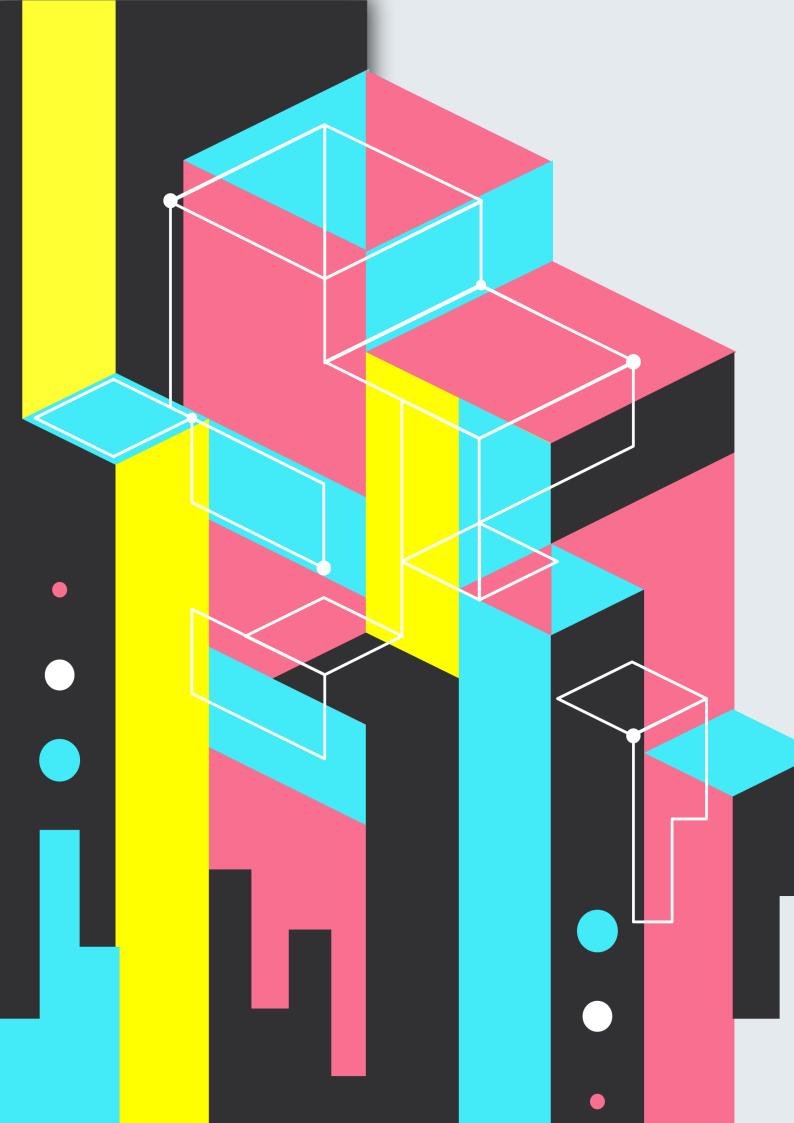


Guidelines for Super Moderators in U_CODE project

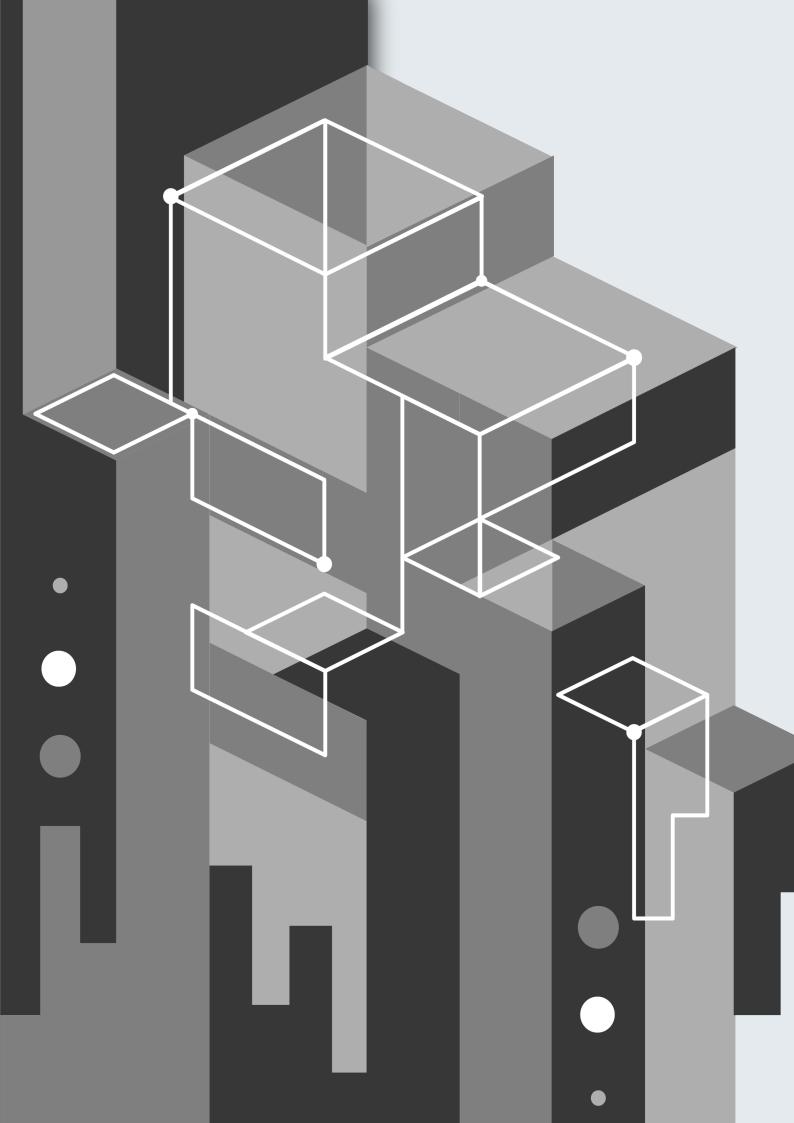
Nasibeh Soltani Ramezanzadeh 2019



Culture driven co-creation

Guidelines for Super Moderators in U_CODE project

Master thesis by Nasibeh Soltani Ramezanzadeh 4622464



Culture driven co-creation

Guidelines for Super Moderators in U_CODE project

Graduation Date 18 March 2019
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Finally, I wish to thank my husband and my family for their support and encouragement throughout my study.



The U_CODE (Urban Collective Design Environment) project started to create an environment for urban co-creation with citizen. To achieve this, U_ CODE has designed and developed a new kind of participatory platform for different European countries. To have an effective co-creation session, U_CODE facilitators need to have a good knowledge and understanding of different culture and values that can affect the co-creation sessions. The purpose of this project is to design guidelines for Super Moderators (SuMo) in U CODE project to facilitate the co-creation sessions in the Netherlands, Germany, and France. First, I reviewed the literature to find the cultural differences in three countries based on available cultural dimensions models. Then, I made a blueprint for co-creation sessions using U_CODE documents and interview I had with U_CODE specialist. Adding the cultural differences to the blueprint, I made guidelines for each of three countries, which was validated by professional facilitators. Then, I ideated some concepts to find the most effective interaction between the guidelines and facilitators. I tested the concepts with interaction designers who had an experience in facilitating co-creation sessions. Based on the feedbacks and the company's priority, I designed an app for the guidelines. Finally, I evaluated the final design with a culture professional, an international facilitator and a corporate facilitator. This report is concluded with a discussion and a list of limitations and recommendations for this project.

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Introduction

U_CODE
Problem statement
Design goal

This chapter introduces the U_CODE project and its goals. It also explains the need for a cross-culture study in U_CODE project and the scope of such a project. Finally I outline the design objectives and approach for this research project.

U_CODE

1.1.1 U_CODE goals

The name U_CODE stands for "Urban Collective Design Environment". Its objective is to create an environment for urban co-design. U_CODE aims to provide a set of methods and tools for "user centered design and co-creation in urban planning". To achieve this, U_CODE is designing and developing a new kind of participatory platform that will enable urban designers, architects, and developers to co-design and communicate their projects with the larger public (U_CODE, June 2018).

U CODE aims to address the following two main user groups:

- Professional creatives such as urban designers, architects, and project developers
- •Non-professional public such as the general citizenship including non-professional stakeholders

For more information on U_CODE and its stakeholders, please refer to U_CODE website: http://www.u-code.eu/about.

In partnership with U_CODE, an EU Horizon 2020 project is defined. This project has received funding from the European Union's Horizon 2020 research and innovation program to focus on the digital citizen participation in urban projects. This project has started since February 2016 and will end on July 2019.

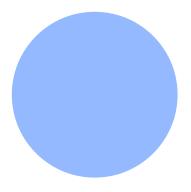
1.1.2 U_CODE meeting Luxembourg

On October 25, 2018 a review session took place with the European Commission in Luxembourg. The teams presented the progress of work done within the whole U_CODE partnership since the last year. They also demonstrated the latest version of the U_CODE tools.

During this meeting, I had a chance to get informed about the development of the projects from the beginning and see the need for a cross-cultural comparison study as a missing component in this project. In particular, what was left to work on was to identify relevant cultural dimensions in participatory design and co-creation sessions in order to enhance the engagement of the participants in the session with the topic of this project.



Figure 1: Annual review session of U CODE in Luxembourg at European Commission



Problem statement lack of cultural study in U_CODE

In the project U_CODE, many tools have been developed, however it was never assessed to what extent these tools would perform in different European cultural contexts. After the October 2018 meeting in Luxembourg, it was clear that a special focus is needed for a cross-cultural comparison of co-design processes. It was shown in the past that the success and effectiveness of co-design sessions depends quite on the cultural values of participants as well as on the context and the tools used in the sessions (Kaner, 2007). Sometimes the conventional values do not create the effective participatory decision-making. For example, in a more feminine culture like the Dutch, the "ego-less" actions tend to be more common than in a more masculine culture such as the German (Hofstede, 2001). A cross-cultural comparison provides the necessary information on how facilitators can engage with the participants in a co-creation session to bring the best out of the participants.

Design goal scope and the approach of the project

Design objective

The purpose of this project is to make guidelines for U_CODE facilitators to be able to moderate the sessions and better involve the participants. This will be beneficial to the U_CODE project as it will help to improve the outcome of co-creation sessions in the different European countries.

To make the guidelines, it was necessary to gain a deep understanding of the cultural differences of three countries in the scope (i.e. the Netherlands and Germany, France) during the co-creation sessions. These specific countries are selected because they have been involved in the U_CODE project.

Research questions:

- What cultural differences (values and practices) can be identified in The Netherlands, France and Germany?
- How do facilitators practice the cultural values and norms in different contexts to enhance and promote the engagement of participants?
- What is the most effective way for facilitators in U_CODE (i.e. SuMo) to adjust to the culture differences in the U_CODE context?

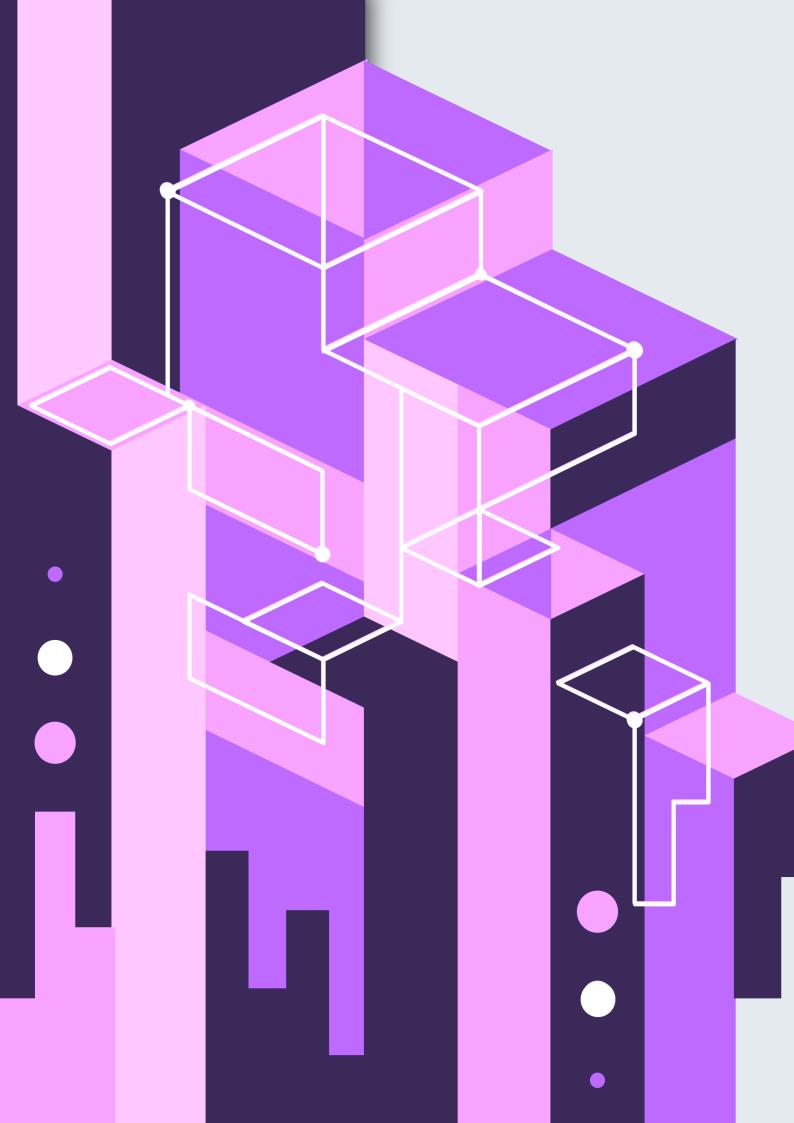
Design Scope

In this research, we focus on three countries and make a comparison between Germany, France and the Netherlands. The reason for this choice was that the actual OTD's (O-stage Testbeds Descriptions) of U_CODE are the cities of Valkenburg (the Netherlands), Hamburg (Germany), and Marseille (France).

Design Approach

(e.g. definition of UCODESIGN, SuMo). To understand the cultural dimension and difthe project from etic (not emic) perspective, concept, the guidelines were converted into

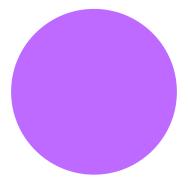
1. The attended workshops were "Co-creation Navigator workshop: attitude" on 15-Nov-2018; "Co-creation Navigator workshop: facilitation" on 22-Nov-2018; and "The value of hosting in a co-creation" on 7-Feb-2019.



Analysis

Culture
Co-creation
Facilitation
Conclusion

This chapter provides an overview of the existing literature about three main aspects of this research, namely co-creation, facilitation, and culture in the context of U_CODE project. At the end of this chapter, I will outline my takeaways and definitions about these aspects.



Culture How to understand the culture

People around the world are not just randomly different from one another; they differ in very specific ways based on their background culture, which would make them to a good extent predictable. Each culture brings its own values, beliefs and way of thinking. According to Hofstede, the cultural dimensions represent the state of affairs that help distinguish countries, rather than individuals, from each other (Hofstede insight, 2019). Comparing different cultural aspects in different countries against each other, a relative score can be assigned to each for any of the cultural dimensions.

For this project, I used the data of two comprehensive studies about culture: one by Hofstede and one by Trompenaars-Hampden-Turner. Geert Hofstede is well-known for having developed the first national cultural dimensions and created a framework of cultural elements in international economics, communication and cooperation. The reason to use Hofstede's model is because it is the oldest and most comprehensive study. Also its data resource for countries is one of the most comprehensive ones which contain data for most of the countries in the world; therefore, the comparison will be more reliable.

The "cultural dimensions of Trompenaars-Hampden-Turner" focuses on the cross-cultural communication in the business and management context. Based on The Trompenaars Culture Dimensions, THT Consulting B.V. made the "Culture for business" app, which includes practical information suitable for real-life business contexts. They also included detailed information for each country. THT business app uses the cultural dimension in the business context and brought the knowledge into practice by giving the tips in three different categories: meeting, managing and negotiating.

Another eligible reference for culture dimensions is the famous book "The culture Map" written by Erin Meyer (2015). Erin Meyer was selected as one of the 50 most influential business thinkers of 2017. She has introduced a new model of culture dimensions in business contexts accompanied with a country mapping tool on her website (Meyer,2019). The country mapping tool of Meyer contains the new scaling of each country and her book contains the practical aspects in culture with everyday life example happening in the global world. I used the dimensions and measuring of these three models for the Netherlands and Germany and France to get the best overview of all countries.

Finally, I looked at the socio-cultural dimensions of van Boeijen. Her research is focused on the influence of culture in design processes. She has proposed tools to support designers to make culture-conscious decisions in their design projects. This model is customized for designers as the other existing cultural models lacked the relevance for design projects (van Boeijen, 2013).

Other related studies on cultural dimensions that are – because of limited time – not incorporated are: The Globe Project (House et al., 2004), Cultural Intelligence (Peterson, 2004), and the studies of universal values of Schwarz (1994).



2.1.1 The cultural dimensions of Hofstede

Hofstede introduced six dimensions to describe and compare different cultures against each other (Hofstede insight, 2019). These six dimensions are as following. See Appendix 1 for the details and explanation of each dimension.

Figure 2 shows how Germany, the Netherlands, and France score on the cultural dimensions proposed by Hofstede.

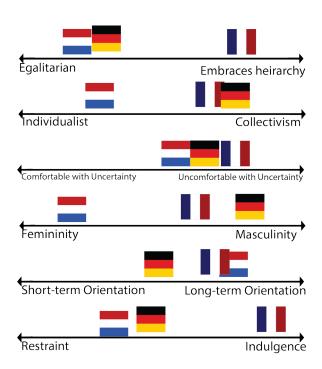


Figure 2: Comparison of Germany, France, and the Netherlands on the cultural dimensions of Hofstede

By comparing the scores, the following observations can be made on three countries in the scope of this thesis:

- MAS (Masculinity versus Femininity) symbolize a tendency in society for individual achievement, assertiveness, and material success. However it is not clear from which aspect Germany has scored high and the Netherlands scored the lowest among three countries.
- PDI (Power Distance Index) shows a notable difference between France, and The Netherlands. Based on that, we can say that in France hierarchical order is more accepted, which means everybody has a place without further justification and in the Netherlands and Germany and people believe more in an equal distribution of power.
- The score of France is higher than the other countries in UAI (Uncertainty Avoidance Index) which means they tend to show a rigidity regarding their beliefs and behaviors and less tolerate unconventional ideas.
- Germany has a higher rate in LTO (Longterm orientation versus short-term normative orientation) than the Netherlands and France. Thus, German takes a more pragmatic approach, compare to France and the Netherlands that prefer to maintain time honored traditions.
- IND (Indulgence versus Restraint) in the Netherlands is higher than Germany and France, which means freedom of speech and personal control is more important than personal destiny.

2.1.2 The cultural dimensions of Trompenaars-

Hampden-Turner

The Seven Dimensions of Culture were identified by management consultants Fons Trompenaars and Charles Hampden-Turner. This model was initially published in their book "Riding the Waves of Culture". Refer to Appendix 2 for the details of cultural dimensions proposed Trompenaars-Hampden-Turner.

Based on The Trompenaars Culture Dimensions, THT Consulting B.V. made the "Culture for business" app. In their app, instead of using seven dimensions of value orientations, they used eight factors customized to practical real-life business situations. Table 1 shows the relation between the factors introduced in the App versus the ones in their initial model [personal correspondence between my chair and THT consultancy]. In the app, there is an extra dimension introduced to cove "Monochronic" Versus "Polychronic" factor.

For each cultural dimension, the app provides a list of tips for meeting, management and negotiation based on the countries. See Appendix 3 for an example of tips for German, Dutch and French meetings. Figure 3 shows where the three countries in the scope of this project rank each of the THT app.

The Seven Dimensions Of Culture (THT)	Culture Business App THT
Achievement / Egalitarian versus ascription/	What people are / What people do
Hierarchy	
Individualism / Communitarianism	Individual-focused / Group-focused
Universalism / Consistency versus	Rules-standards / Exception-relationships
Particularism / Flexibility	
Neutral / Emotional	Emotionally reserved / Emotionally expressed
Sequential Time / Synchronous Time	Single-tasking / Multi-tasking
Specific / Analytical versus Diffuse / Synthesis	Low involvement / High involvement
Internal direction / Outer direction	Take control / Go with the flow
Monochronic / Polychronic	Past / present / future

Table 1: Comparison of dimensions used in original THT model and Culture Business app

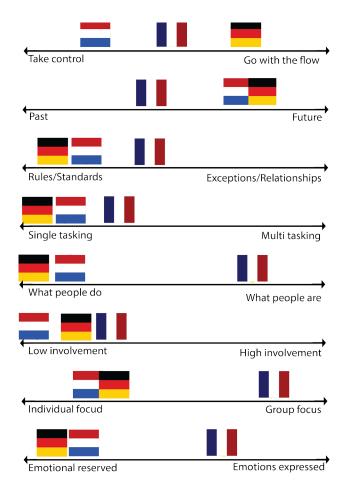


Figure 3: Scoring of countries Germany, France, and the Netherlands on Culture Business app based on THT cultural dimensions

By comparing the position of countries against each other, the following observations can be made:

- All three countries have almost the same attitudes for rules and standards; they are more attitude towards single-tasking and have low involvment in the project.
- Compared to Dutch and German people, French are more emotionally expressed, group focused, care more about "what people are" instead of looking at what they do.
- Dutch people tend to have a higher control compared to French people. Germans can go with the flow easier than Dutch and Frence people.
- Dutch and German people are more future-oriented than French people.

2.1.3 The country mapping tool of Meyer

In her book, Erin Meyer shows the importance of being conscious about cultural differences in the modern world. She introduces a new model with eight culture dimensions (Meyer, 2015). See Appendix 4 for the details of each cultural dimension proposed by Meyer. Figure 4 shows the comparison between the Netherlands, Germany and France for each dimension of Meyer.

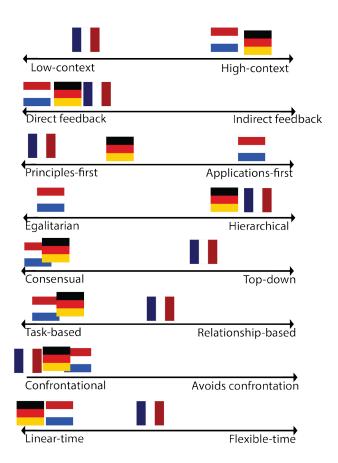


Figure 4: Comparison of Germany, France, and the Netherlands on the cultural dimensions of Meyer

The following main observations can be made on the way Germany, France and the Netherlands are spread across these cultural dimensions:

- France is quite high-context compared to the other two countries.
- The Netherlands is more applications-based compared to France which is more principles-based. Germany is more application-based than France and more principle-first compare to the Netherlands.
- The Netherlands is more egalitarian compare to Germany and France.
- Decision making in France is more topdown compared to the other two countries.
- French people trust more, based on relationships rather that work.
- All three countries are quite confrontational in expressing their disagreement.
- Compared to the Netherlands and Germany, France shows a more flexible time in their scheduling.

2.1.4 The socio-cultural dimensions of van Boeijen

There are several models of cultural researches developed in different fields, such as sociology, business and management, which specify how people relate to each other in those contexts. However, according to van Boeijen (2013), the current models for culture do not meet the designers' requirements. As a result, she studied these models, compared them to each other, and constructed a new model of Socio-cultural dimensions with 9 dimensions suitable for design projects with cross cultural approach. See Appendix 5 for the detailed information of each dimension.

Most of the dimensions proposed in this model have an overlap with other models. However, I decided to take the dimensions "Time" and "Space" from this model because they will add aspects that would enrich the cultural comparison of the countries in this project. These two dimensions have a direct impact on the co-creation session setup.

- Dimension Time includes hidden aspects such as action, focus and orientation. It also includes elements of past, present, and future.
- The dimension Space includes aspects such as personal space and sound. It also includes elements of private versus public space. Figure 5 shows the socio-cultural dimensions proposed by van Boeijen as well as the positioning of France, Germany, and the Netherlands on each of these dimensions. Some cultural models, such as "The 6-D model", use the scoring system for introducing cultures, however scoring cultures has several pitfalls (Van Boeijen, 2013):
 - 1. The scores are not applied in a correct way. The scores are used without critic, leading to stereotyping and limiting the designers' view
 - 2. The definitions and names are not fully understood and sometimes even misleading.
 - 3. Some dimensions are difficult to explain with products.
 - 4. The dimensions are thoroughly explained and underpinned but described in text only.

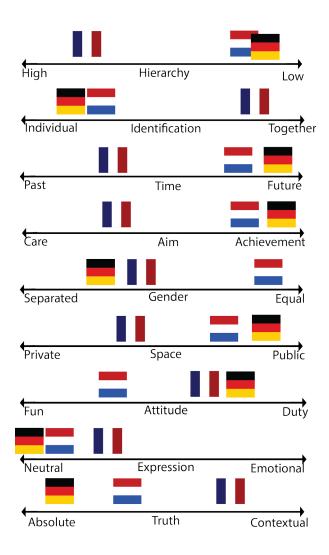


Figure 5: Comparison of Germany, France, and the Netherlands on the cultural dimensions of van Boeijen

The following observations can be made on the socio-cultural dimensions proposed by van Boeijen, 2013:

- French tend to do many things at ones, but Germans and Dutch prefer to do only one thing at a time.
- On average French people can easily be distracted, however Germans and Dutch people on average are more successful at concentrating on the job at hand.
- French usually think more about what will be achieved, however German and Dutch people mainly focus on when things must be achieved.
- Past-orientation cultures such as in France tend to address achievements from the past, while the future-orientated cultures such as in Germany and the Netherlands address the possibilities for the future.
- French people usually show more confidence in small rooms compare to their German and Dutch peers who feel more relaxed in big room with enough space to move around.
- Compare to the Germans and Dutch, French tend to have a wider private space which makes them feel uncomfortable to sit alone and far from each other. On the other hand, Germans and Dutch prefer more personal space and may not like to receive personal questions in a group.
- For German and Dutch, a lot of noise can be experienced as disturbing; however French may feel weird being in a totally quiet space.
- French are polychromic meaning that they may show up late in a meeting. While French may not be too bothered about it, Germans can be quite annoyed by someone showing up late.

After comparing all the models for cultural dimensions (i.e. Hofstede, THT culture business app, the culture map book, and van Boeijen), I find similarities and common factor among them.

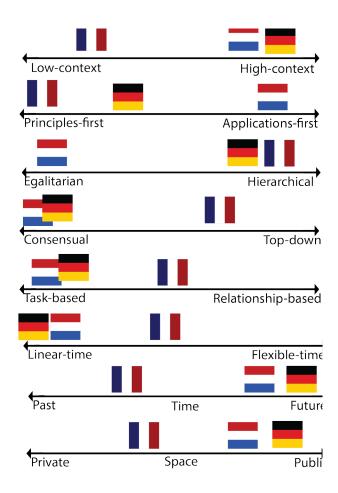
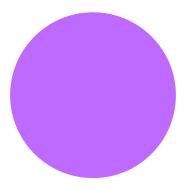


Figure 6: Comparison of Germany, France, and the Netherlands on the cultural dimensions chosen for co-creation context



2.1.5 The cultural dimensions selected for co-creation

I used 6 dimensions out of Meyer's model as they were in line with co-creations session setup and participatory decision-making process. One of the dimensions that Meyer introduced in her model is confrontational versus avoiding confrontation, which is normally used in confrontation; however, in co-creation sessions in general, it should not be any confrontation at all. Second, direct negative feedback versus indirect negative feedback, which will in principle, is unlikely to happen as it is not generally allowed for participants in the co-creation session to give negative feedback to each other. Therefore, I decided to remove these two dimensions. In particular, the countries of the Netherlands, Germany and France have almost the same scoring in these two dimensions, so it does not add value to my project. Instead I added two new dimensions of Time and Space inspired from van Boeijen model, which are more relative to the context of co-creation sessions, the so-cio-cultural model was built for design project, for example the personal space has an impact on designing a co-creation session, Also, different approach to the time, such as focusses and orientation can influence co-creation.

In particular dimensions communication, decision-making, trusting, scheduling, persuasion, and leading are used, as well as the dimensions time and space of van Boeijen. These eight cultural dimensions are shown in Figure 6. Moreover, I add some tips of THT Business app to improve the practicality of guidelines.

Co-creation

2.2.1 Co-design and co-creation

De Koning, Crul and Wever (2016) reviewed many different models of co-creation and provided the following definition for co-creation:

"Co-creation is the process of mutual firm-customer value creation. This facilitated (creative) process generates an active form of interaction and sharing between firm and end consumer, instead of the active firm, passive consumer interaction. One of the results of Co-creation is that the contact between firm and customer moves away from transactional and becomes an experience."

They also provide five principles which make it easier to understand the co-creation in general. Moreover, Sam Kaner (2007) believed there are four fundamental values to have a participatory session. Some of these principles have an overlap, so I made a model of five fundamental principles relevant to a co-creation session:

- Full participation: It is important for session that all members are encouraged to speak up (Kaner, 2007) and have an active interaction between participants (De Koning, Crul and Wever, 2016)
- Mutual understanding between firms and customers (De Koning, Crul and Wever,2016): participants need to understand and accept the accuracy of each other's needs and goal (Kaner,2007)
- 3. Ends with Inclusive solution and must create value for all involved parties. Bringing value and input into the session for all participants (De Koning, Crul and Wever, 2016) can make an Inclusive solution which is the most wise solutions due to integration of

- everybody's perspectives and demands (Kaner, 2007).
- Shared responsibility: In participatory groups, people do their best to give input before final decisions are made. They believe the responsibility for designing and managing is result of good decision (Kaner, 2007)
- Possibilities for multiple approaches or solutions, treating co-creation as something more than a transactional contact and seeing it as an innovation process where there are possibilities for multiple approaches or solutions (De Koning, Crul and Wever, 2016).

Mattelmäki and Sleeswijk Visser (2011) did not provide a definition for co-creation and instead tried to clarify the usage of the co-x in the context of design. They provide the following usages for co-design versus co-creation:

"Co-design is a process and the planning, adjusting tools and facilitation is built on a mindset based on collaboration. Co-creation can take place within co-design processes but focuses much more on the collective creativity of involved users and stakeholders".

According to Heijne et al (2018), co-design provides an environment to include the potential users who are normally not a part of design process. To them, co-design is about collaboration of potential users and stakeholders. On the other hand, "co-creation is about exchanging ideas, experiences and expertise" (Heijne et al, 2018). In this definition, co-creation can be considered as a part of co- design process (Mattelmäki & Sleeswijk Visser, 2011).

2.2.2. UCODESIGN: Participatory design and co-creation in U_CODE project

For the specific U_CODE context, there exist three types of professional-citizen interactions: User-Centered Design (UCD), Participatory Design (PD) and Co-Creation (CC). The U_CODE team has chosen to use the generic term "UCODESIGN when referring to any kinds of participatory design and/or co-creation activity" in order to prevent any confusion (Heijn et al, 2018).

For this project however, I would mainly focus on CC and not PD. In this project, we look for collaboration and solution-finding in CC, and not mere acceptance-finding in PD. In particular, the cultural differences and miscommunications can only appear within a CC situation.

The U_CODE team proposed a definition of co-creation based on the De Koning, Crul and Wever (2016) as the following:

"The process of mutual professional-citizen value creation. This facilitated (creative) process generates an active form of interaction and sharing between professionals and citizens (instead of an active professional / passive citizen interaction). One of the results of co-creation is that the contact between professionals and citizens moves away from transactional and becomes an experience" (Heijne et al, 2018).

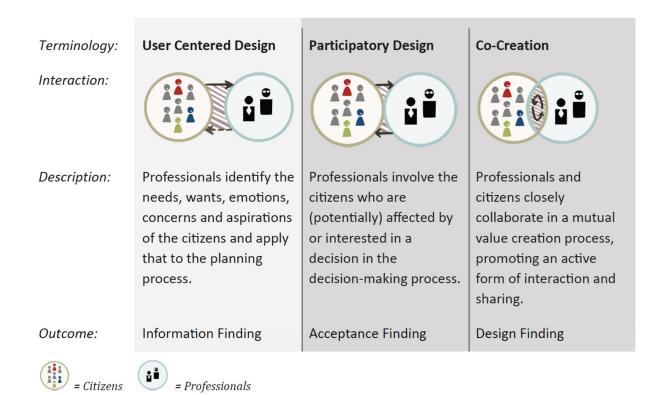


Figure 7: Three types of professional-citizen interactions in U CODE (extracted from U CODE website)

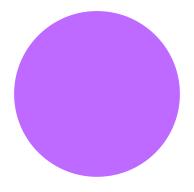
2.2.3 Co-creation navigator of WAAG

Co-creation navigator is an interactive tool designed and developed by "Waag technology and society organization" in Amsterdam. This tool can help facilitators to plan a co-creation session based on different context and users. It provides a set of activities for five stages of a co-creation session:

- 1. Foundation: Co-creation starts with a question or a problem, hence it requires preparation. Position, direction and team are the elements of the foundation. For the case of U CODE, the foundation of session is already given and set.
- 2. Context: Having a good understanding of context is necessary for facilitator. For example, the relevant context for U_CODE can be: who the stakeholders are and what the background culture of the participants is.
- 3. Community: Each co-creative session will require the involvement of various stakeholders that represent a variety of experts on specific topics, such as users, citizens, policy makers. In the U_CODE context, the stakeholders are divided into two groups: Citizens as the end users and Professionals as those involved in urban planning, urban design, or architectural design. In addition to citizens and professionals, problem owners are also among the important stakeholders in a U_CODE co-creation session. Problem owners are usually people from government or municipalities.
- 4. Workspace: The process of co-creation with a community happens in an enabling environment. It can be within open labs, events, or sessions. In U_CODE context, we mainly focus on the creative facilitation process in the setup of a session.
- 5. Assessment: At the end of project, there should be a time for reflection.



Figure 8: Co-creation navigator designed by Waag technology and society organization (taken from their website)



Facilitation

2.3.1 Creative facilitation process

One co-creation process that is integral to this project and should not go unmentioned is "Creative Facilitation". Creative Facilitation is the facilitation of creative problem solving (CPS) and has been taught at TU Delft for many years. A professional facilitator guides a group of participants to go through the steps creative facilitation process. Participants can be from a variety of backgrounds.

A core principle from the CPS process is the 'creative diamond' (see Figure 9). It includes three phases of diverging, reverging, and converging ideas. The divergence phase starts with a widening of the field of possibilities and generating as many options as possible. In the revergence phase, the ideas are clustered and categorized. And finally in the convergence phase, the ideas are narrowed down and selected based on their relevance and usefulness (Tassoul, 2008).

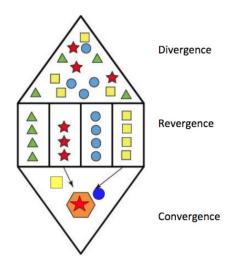


Figure 9: The 'creative diamonds' of the CPS Process (Tassoul, 2008)

2.3.2 Basic principles for facilitation

There are some principles with respect to a facilitated creative session:

1. Role rigidity: The roles and responsibilities should be clear throughout the facilitation session. In particular, a clear separation of the roles of Problem Owner and Facilitator is essential for good outcome of the session. Table below shows how the responsibilities of Problem Owner and Facilitator (Heijne & van der Meer, 2019).

Problem Owner	Facilitator	Resource Group
Characteristics:	Characteristics	Characteristics
Involved Motivated to find a solution	Capable of leading the processNeutral	DiverseMotivated
Competent and capable to implement results	FlexibleAlert	 Acknowledges importance of finding a solution
Responsibilities:	Responsibilities	Responsibilities
Initial question	Process	 Sharing Expertise
 Sharing background information Decisions about the content Follow-up 	 Choosing the right techniques Group dynamics and energy Ensuring output is being reported 	Content findingAcceptance-finding

Table 2: Characteristics and responsibilities of Problem Owner and Facilitator (extracted from Heijne & van der Meer, 2019)

- 2. Clear problem statement: A clear formulation of the problem is also a key in making results of the session valuable. A clear problem statement influences the approach adopted to solve the problem and hence a better solution. SPARK (i.e. Specific, Positive, Ambitious, Relevant, Keep it simple) is considered the right way to formulate the initial problem statement (Heijne & van der Meer, 2019).
- 3. Rules and Techniques for the creative diamond: There are many different techniques for a Creative session, but as a summary, the following golden rules are well known for the creative diamond (Heijne & van der Meer, 2019):

Diverging	Reverging	Converging
Postpone Judgment	use the Inquiring Mind	Use Affirmative Judgment
Quantity breeds QualityHitchhikeFreewheel	Be jointly activeListen ResponsivelyMove circular	 Protect originality Trust the Hedonic Response Have Action in mind

Table 3: Golden rules for every steps of creative diamond (Heijne & van der Meer, 2019).

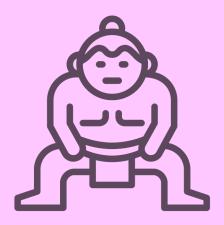
2.3.3 Facilitators in U_CODE: SuMo

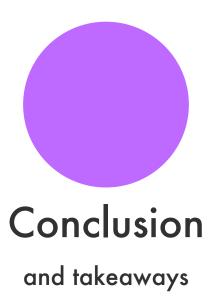
According to Mediation Center for Conflict Resolution of Hamline University Law, "A facilitator is a neutral third party who helps a group increase its effectiveness by improving its process. Facilitation is the art, craft and science of leading people through a process toward an agreed-upon outcome". Cambridge Dictionary gives a more general definition: "A Facilitator is someone who helps a person or an organization do something more easily or find the answer to a problem, by discussing things and suggesting ways of doing things". Kaner (2007) has introduced facilitator as an individual who enables groups to collaborate and achieve synergy. A facilitator can advocate for fair, open, and inclusive procedures to accomplish the group's work. A facilitator can be a learning guide to assist a group in thinking deeply about its assumptions, beliefs, and values and about its systemic processes and context.

A moderator's job however, is focused more on the communication part with the emphasis on keeping the information and communication flow clear such that it is accessible to all participants at all times. In other words, "a moderator is someone who tries to help other people come to an agreement." (Cambridge Dictionary). Therefore, monitoring the communication between participants and moving the discussion in the meeting is the main role of a moderator. Although the words facilitator and moderator may sometimes be used interchangeably, technically they have totally different roles in a meeting or session.

In the context of U_CODE, the facilitator for the U_CODE platform is called "Super Moderator", or in short, SuMo. According the Wiki U_CODE:

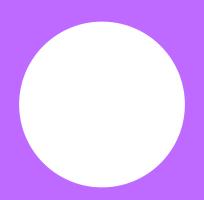
"SuMo is the key facilitator for urban co-design projects based on the U_CODE platform and tools. SuMo is the planner and process owner of a participation process, whose quality he ensures. SuMo is appointed by the project owners (private, public) to plan and execute a high quality public participation and co-design process. SuMo acts as trusted and independent agent, who mediates between all project stakeholders and commits himself to neutrality. SuMo's role and responsibilities may change according to the project at stake. SuMo's roles, ideally, are carried out by one person."





In this chapter, I reviewed different models proposed in the literature to understand the cultural differences. From different possibilities for cultural dimensions, I constructed eight dimensions suitable for a co-creation session (see Figure 6 in section 2.1.6). For the rest of this project, I will use these eight dimensions to compare and understand the cultural differences between the target countries (i.e. France, Germany, and the Netherlands) in this project.

The review of different definitions and interpretations common in the literature and among professionals for the concepts of co-creation and facilitation. Formulate the definition of co-creation proposed by U_CODE in this project (see Figure 8 in section 2.2.2). However, U_CODE is not clear about the exact steps happening throughout the co-creation session. To fill this gap, I used the co-creation steps introduced by the co-creation navigator. In particular, I decided to focus more on workspace element with an emphasis on creating a session for U_CODE, in which I used the creative diamond phases.

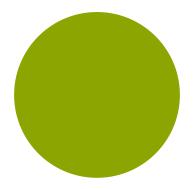




Conceptualization

Blueprint for U_CODE
Integration of culture
Validate the guidelines
Final guidelines

This chapter translates and interprets the knowledge collected during the chapter two into the scope of this project. At the end of this chapter, I propose a set of guidelines on how to organize a co-creation sessions for SuMo's. Not only these guidelines determine the steps in the co-creation sessions, but also they provide a list of tips on how each step should be executed based on the cultural differences in the target countries (i.e. Germany, France, and the Netherlands). The content of these guidelines will be used in the Design phase in the next chapter.



Blueprint for U_CODE

A blueprint for UCODESIGN session

In earlier chapters, I discussed the underlying principles of a facilitation process in a co-creation session. I also described the steps of a normal co-creation session that may take place in the U_CODE project. Combining these elements together and in close discussion with my company mentor (i.e. U_CODE), I have come up with a blueprint for the co-creation sessions in the U_CODE project. This blueprint serves as the foundation for the rest of this project to present the culture sensitivities in co-creation sessions. The proposed blueprint consists of several steps which need to be fulfilled during each co-creation session of the U_CODE project. At the core of such session, we have a CPS (creative problem solving) and hence the need for creative diamonds (i.e. divergence, revergence, and convergence). The other steps included in the blueprint are more general and hence their detail somehow depends on the facilitator's and participants' mood.

Based on the collected information I made an overview of the blueprint of co-creation session for the U-CODE project (see Figure 12).





Figure 10: The sessions with company mentor to agree on a blueprint for UCODESIGN session setup

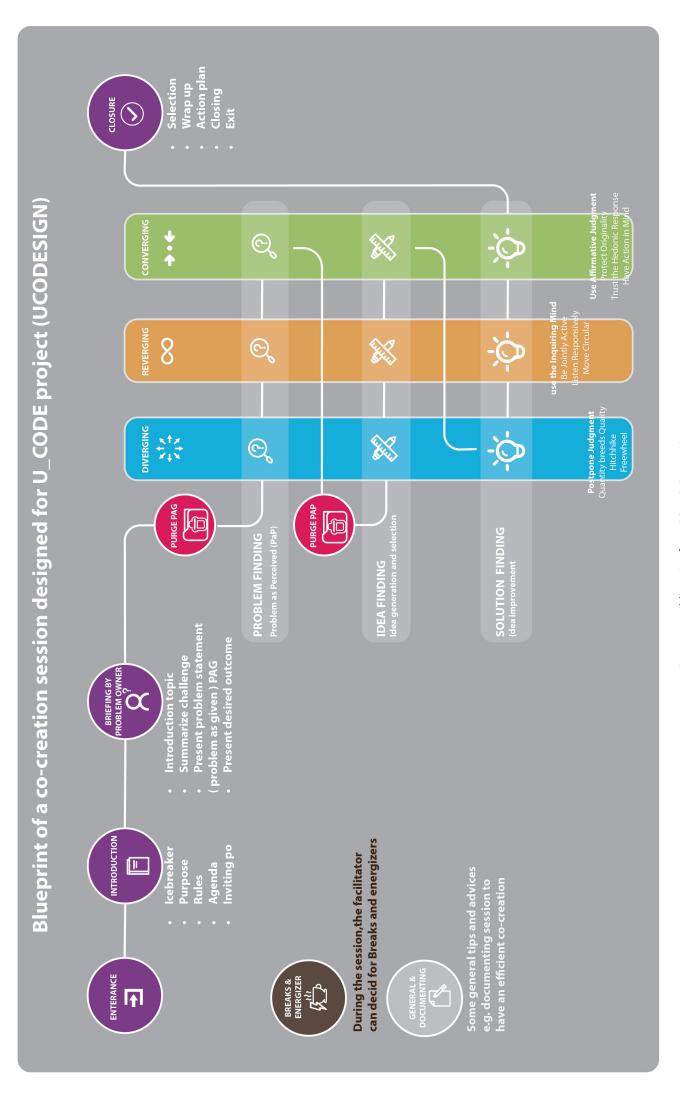


Figure 11: a blueprint for UCODESIGN session

Below, there are the explanation of each step in more details and their connection with the golden rules covered earlier in section 2.3.2.

Entrance & preparation

As soon as participants enter the room, the session starts. The main responsibility of the facilitator is to give everyone a welcoming feeling. Any preparation that helps to promote the openness and collaboration among the participants (i.e. users and stakeholders) and problem owners is helpful. Obviously feeling "welcomed" is deeply related to the culture of the participants meaning that for different, culture there are different ways for greeting and welcoming each other.

Introduction

Facilitators usually do a round of introduction or do an icebreaker. This would give the participants a feeling of ease and engagement. During the introduction, the facilitator can set the purpose and objectives of the session. Explaining the rules of the session although, participants have known about them (Tassoul,2008). Rules could be agreements such as "postpone judgment", "be open-mined", or "use affirmative judgment". Agenda is essential part of the session, it is good to share it (not detailed though) with the participant to manage their expectation. Introduction will ends with inviting the problem owner to do a briefing on the project.

Briefing by problem owner

For having an effective creative problem solving session, it is necessary to have a shared understanding of the problem. This can be achieved during the briefing step of the session. The briefing helps the participants to understand the importance of finding a solution. A problem owner introduces the topic and summarizes the problem to be solved. This can be done by presenting the problem statement as given as well presenting the desired outcome (Heijne & van der Meer, 2019).

Purging or "shedding the known"

It is quite common that the ideas come up even before the session or even before hearing the briefing of the problem owner. Therefore, it is better to free up the participants' mind by sharing and recording their existing ideas. Otherwise, the participants will continue to think about those initial ideas throughout the session which may prevent them to be fully engaged in any idea generation activities (Tassoul, 2008).

Diverging

Diverging is about generating as many options and alternatives as possible. Diverging usually happens in three rounds during the session: problem finding, idea finding, and solution finding. Achieving effective divergence depends on setting some rules beforehand. For example, the overarching rule important is to help participants avoid judging each other ideas. Everyone should be open to any idea others propose. Therefore they have to postpone their judgments at this stage. Another rule is "Quantity breeds Quality". Here the facilitator must try to encourage the participant to ideate as many ideas as possible, meaning more quantity. "Hitchhike" is the third rule. It means that

by developing ideas in different categories and merging them together, we can increase the number of rough ideas. The last rule for diverging is called "Freewheel". It is the ability to let the mind explore freely without focusing on wrong ideas.

Reverging / clustering

The diverging step is followed by a stage of recognition and clustering of all ideas collected during the diverging step. The most popular technique is called "spontaneous clustering", which contains all four rules of reverging. First, it requires keeping an open and curious mind of all participants. This is also called "inquiring mind" rule. The purpose of clustering is to have a shared understanding which can only be fulfilled with "being jointly active" in the reverging process. The other crucial rule-making reverging more effective is "listen responsively". Clustering is not a linear process, but iterative; so it must "move circularly" (Heijne & van der Meer, 2019).

Converging

Converging is the final step of the process that helps to agree on the desired solutions. "Affirmative judgment" is main principle for converging, which means instead of looking at the negative part of the ideas; the participants are encouraged to look at the possibilities and try to bring the positive parts to the solution. "Protecting originality" is essential to stimulate the participants to select strange and novel ideas. Also, participants need to trust their intuition (also called "trust the hedonic response") rather than logical and rational selection. The converging is not the end, there are still a lot of works to be done; therefore, it is necessary to select those ideas that participants like to work on further (Heijne & van der Meer, 2019).

Closure

Having a closure for each session is important. This helps to help the participants feel acknowledged and respected by the group, this feeling is key for reaching into a creative collaboration (Tassoul, 2008). Depending on the session, the facilitator may select ideas and wrap up to ensure follow-up on the outcomes of the session. Therefore, documenting the action plans in the presence of all participants can engage them more into the next steps.

• Break / Energizer / Ice-breaker energizers / warming up and cooling down

A warming up is anything that would force participants to do something out of ordinary and preferably with some creative touch included. It should be playful, active, mobile and stimulating to the imagination. Short breaks during the session are an integral part of the process. At the same time, the facilitator can pause and reflect on the process or decide on the specifics of next step of the session (Tassoul, 2008).

General advices & documenting

Planning in advance to documenting ideas or recorded footage of the session. There are some general tips as well as do's and don'ts; for example, how to address the participants in each context, or how to react in unexpected circumstances, etc. For such situations, there is no certain advice on how to resolve them and it is depend on the facilitators' experience.



Integration of cultural dimensions into co-creation blueprint

In chapter 2.1.6, the cultural dimensions relevant for a co-creation session are presented (see Figure 7). Literature provides there are many examples and tips about how one needs to behave in a business setting. However there are no clear tips on how cultural aspects can impact a co-creation session. In this project, I tried to understand how each of these cultural aspects can be important and influential in a co-creation session. For example, the cultural aspect of calling people by their first name can be an important factor in a co-creation session context, as it determines the quality of interaction between facilitator and participants.

In Appendix 7.6, I collected a list of cultural statements for each of the target countries (i.e. Germany, France, and the Netherlands) in each cultural dimension and proposed a set of tips that facilitators need to be mindful of during a co-creation session.

As the next step, I linked each of the proposed cultural tips to the co-creation sessions steps as outlined in the blueprint. For example, the tips in the "consensual versus top-down" dimension (which approaches for decision making process) is related in the diverging step, or "space" dimension is connected to the entrance and preparation stages of the co-creation session.

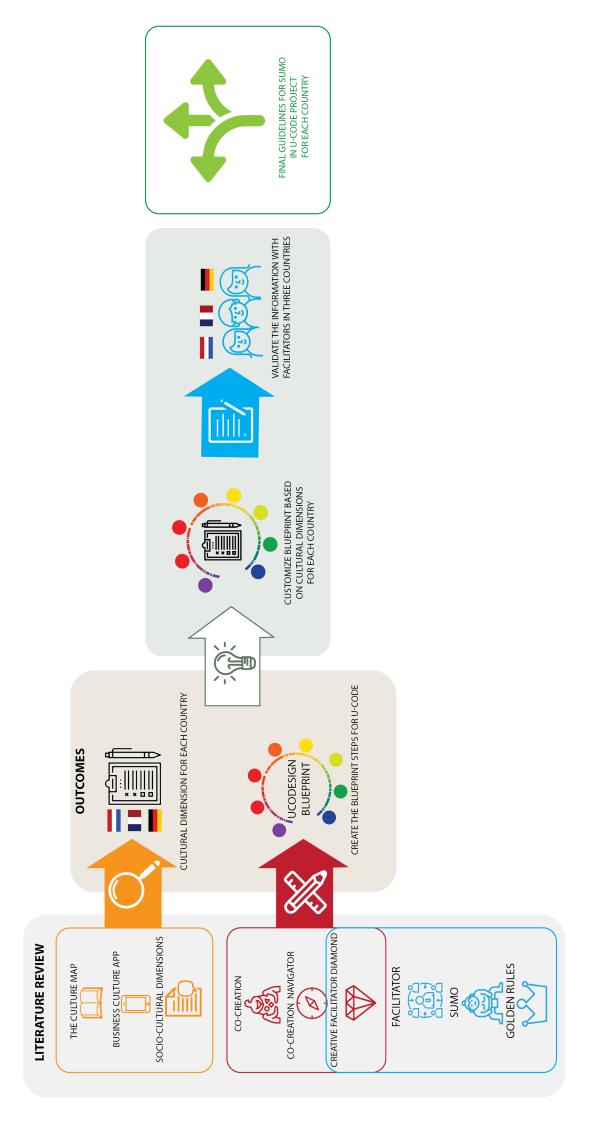


Figure 12 Process of making the guidelines

Validate the guideline

Validated guidelines with professional facilitators

This chapter validates the integration of cultural dimensions with professional facilitators and provides more practical knowledge of culture sensitivity in co-creation sessions. The cultural sensitivities are an additional layer added into the blueprint steps. To validate the integration of cultural dimensions with the co-creation steps, I asked six professional facilitators from the target three countries to validate the correctness of the cultural tips. Depending on the availability of the facilitators, I interviewed two facilitators in the Netherlands, for German and French facilitators, after giving a small briefing on the project, I shared the guidelines via email with them and asked them to tell me which tips make sense which on is totally non-sense. Then, I asked to rate the tips with "really important", "important" and "not important to know". I told them to not hesitate to add any comments on it. After I received their email, I collect their feedbacks and comments. Having professional facilitators to validate the cultural tips extracted from literature helped to add a more practical knowledge of the culture sensitivity in co-creation sessions.



Figure 13: Professional facilitators validating the initial guidelines

The following were the professional facilitators validated the initial guidelines:

From the Netherlands:



- 1- Katrina Heijne: She is a researcher and lecturer at the faculty of the Industrial Design Engineering. She teaches the master's course "creative facilitation". Also, she is the owner of "serious creativity" consultancy with a goal of improving the quality of creative process.
- 2- Dick van Dijk: He is the creative director and head of programme at Waag. As a concept developer, he has worked on many cultural heritage projects. Dick is co-author of several books including 'Connect, Design for an Emphatic Society' on age-driven design. Dick has a background in Business Economics and History of Art and is currently extending his creative skills in the context of Arts Academy. Dick is a part of the Fontys Media Lectorate/Fontys FutureMediaLab.

From France:

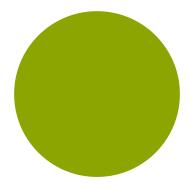
- 1- Marie Le Sourd: Marie holds a Diploma of Political Sciences and a Master of Law in International Cultural Exchange and Relations from the University of Lyon. From 1999 to 2006, she was in charge of a programme in the Cultural Exchange Department of the Asia-Europe Foundation based in Singapore (ASEF). In 2006w she joined the French Ministry of Foreign Affairs working as the director of the French Cultural Centre in Indonesia. Between 2012 and 2014, Marie was the Secretary General of On the Move, ensuring the daily management of the organization and the implementation of OTM's strategic plan.
- 2- Gaëlle Seznec: Gaëlle worked in global design for clients such as Unilever, Mattel and Fiat in China. In 2010, she obtained a Master's in Strategic Design from the University of TU Delft. She is the founder of Nine Tenth design thinking as an innovation consultant. Since 2018, she is working in Criteo, a French company located in Paris. One of her responsibilities is facilitating co-design workshops.

From Germany:

- 1- Birgit Schlag: She working at the botanical garden of University of Vienna. She is involved in Big Picnic in which co-creation sessions are organized.
- 2- Agnes Gunther: Agnes Guenther is a Ph.D. Fellow at the Department of Strategy and Innovation and the Department of Economics (ECON) at Copenhagen Business School. She works as a Research Assistant mainly in the fields of creativity, decision-making and reasoning at Delft University of Technology and University of Sydney since 2016. She is also a freelance researcher focused on creativity design thinking, decision-making and ideation.

In general, the feedbacks I received from facilitators about the concept of project were as following:

- All of them understood the blueprint, it seems it is clear.
- They all found the guidelines very valuable.
- They all requested to see the final outcome of the project.
- They were interested to see the comparison of the tips for other cultures compared to their home culture.
- Two of the facilitators mentioned the importance of avoiding stereotyping on these tips.



Final guidelines

Final validated guidelines for U_CODE

The guidelines per each of target countries are as follows. The guidelines basically show a set of cultural tips for each step in the co-creation blueprint:

3.4.1 The Netherlands

Entrance & preparation

- Pick a big room to create a shared space for the session. Make sure participants have enough space to move around.
- Participants may feel uncomfortable to sit close and next to each other in order to avoid unnecessary touch during the session.
- Shake hands with the participants when they enter. It is a good way to break the ice.
- A lot of noise and chatting can be experienced as disturbing. Try to organize the session in a rather quiet area.
- Participants tend to concentrate deeply on the job at hand. Use quotes or examples related to the topic on the wall, as immersion or inspiration in the topic.

Introduction

- Explaining every piece of logic behind an idea can be perceived as boring because participants are more interested in practicality.
- Feel free to invite managers to the session as one of the stakeholders.
- Ask the participants' opinion about the agenda and the objectives of the session.
- As a facilitator, make a clear agenda for the session.
- As a facilitator, make a plan with a little bit space for flexibility.
- Be punctual! Participants prefer to avoid the uncertainty and ambiguity as much as possible in order to have more control on the project.

Problem owner

- Participants can be easily engaged by examples and putting the ideas into practice. Prepare a lot of examples.
- Be mindful that managers are generally expected to agree on the objectives of a project with their subordinates.
- Pay attention that all stakeholders are involved in setting the objectives. This will consequently ensure greater cooperation throughout the process.

Diverging

- Do not worry if the manager's ideas are challenged by participants during the session.
- People tend to discuss topics much. You may need to stop the talkative ones because of time and ask others for their opinion.
- Age and gender does not mean experience or authority. Every single person has the right to speak their opinion in a meeting.
- Participants tend to concentrate deeply on the job at hand. Therefore, as a facilitator, you may need to guide them to explore other alternatives as well.
- As a facilitator, make sure you divide your attention to everyone in the session.

Converging

- One is expected to persuade others of one's standpoint rather than settle for a compromise.
 As a facilitator, you may need to balance this tendency and help the group to come to an agreement even though it requires some compromise.
- Decision-making process may take a long time and require many discussions.
- Make sure that everyone is involved. This helps them to not feel a decision is imposed to them.

Closure

- A decision is not assumed official unless it comes on paper (in the form of writing or visualizing). Having the agreements and conclusions in writing ensures transparency.
- When participants come to a solution, the session ends. It is then expected that everybody sticks to the decision.

Break / Energizer

- Feel free to do silly energizers and ice-breakers without being worried about the hierarchy of the participants.
- It is fine to have the lunch during the session. Participants may believe that meeting time should not be spent on relationship building.
- Planning a little bit of time in the agenda for participants to mingle during the session can add a value to team.

General tips & documenting

- As a facilitator, do not try to get to know your participants too much. Keep your focus more on the work.
- Giving praise or acknowledging achievements is not common. As a facilitator, watch out on the comments you given during the session.
- Displaying emotions openly is deemed inappropriate and unprofessional. As a facilitator, do not show your emotions during the session.
- Throughout the session, feel free to call Dutch participants by their first name.

3.4.2 Germany

Entrance & preparation

- Pick a bigger room to create a shared space for the session. Make sure participants have enough space to move around.
- Participants may feel uncomfortable to sit close and next to each other in order to avoid having a touch or eye contact during session.
- Shake hands with the participants when they enter to break the ice. Shake hands first with the boss.
- A lot of noise and chatting can be experienced as disturbing. Try to organize the session in a rather quiet area.
- Participants tends to concentrate deeply on the job at hand. Use quotes or examples related to the topic on the wall, as immersion or inspiration in the topic.

Introduction

- Having a manager or leader in the co-creation session could potentially be awkward and may influence the engagement of the participants during the formal session.
- Participants will not get involved much in a brainstorming/co-creation session as long as their boss is present in that session. Not inviting the boss to the session will help others to freely participate.
- Ask the participants' opinion about the agenda and the objectives of the session as well and make a 'concrete' agenda for the session.
- As a facilitator, stick to the agenda and finish every step before moving on to the next one.
- Preparation is the key to an efficient meeting. Having a structure is important to the participants.
- It is quite common to plan every single detail ahead of the session in order to reduce the uncertainty and anxiety.
- Participants tend to think more about when things must be achieved during the session.
- Be in time.
- Tell them the session is different than what they are used to and that the session depends on their active participation.

Problem owner

- It takes more time to explain the problem-as-given by the Problem Owner.
- In a session with Problem Owner, it would be easier for him/her to explain the logic behind the session in detail.
- The boss does not need to be invited into the brainstorming/co-creation session. Organize the session without them and later inform them of the outcome of the session.
- In the presentations, participants tend to present many facts and figures. Therefore, feel free to add numerous facts and figures to support your idea.

Diverging

- Do not worry if the manager's ideas are challenged by participants during the session.
- In Germany, it is generally expected from everyone to have their say in the decision making process. Therefore, make sure that everyone is involved. This helps them to not feel a decision is imposed to them.
- The participants tend to concentrate too deeply on the job at hand. Therefore, as a facilita-

- tor, you may need to help them explore other alternatives as well.
- Be careful sometimes participants tend to speak forcefully against each other during the session. This may harm the engagement of some other participants in the session.

Converging

- Participants tend to discuss topics too much. You may need to stop the talkative ones (overthinking) because of time and ask others for their opinion.
- Tell them that they can cluster the ideas later in smaller groups but that they need to start somewhere.
- Participants highly respect knowledge and skills. As a result, they tend to maintain an expert culture with a hands-on approach.
- In Germany, if the discussion is stuck with no way forward, use the democratic voting system to manage the time.

Closure

- When participants come to a solution, the session ends. It is then expected that everybody sticks to the decision.
- Despite the fact that negotiations are done by individual representatives, the final decisions tend to be discussed with the entire group who actually does the job.

Break / Energizer

- Meetings tend to be quite formal with limited small talk and jokes during business meeting.
- Be aware of making jokes (depending on the regional). Do not be sarcastic during session.
 Sometimes the jokes are not understood! Make the joke as explicit as possible or mention that you are joking.
- The seemingly harsh sound of German language does not necessarily mean harsh intentions or attitudes.
- As a facilitator, be aware that childish ice-breakers may not necessarily work as expected. Be careful for choosing the ice-breaker and energizer.

General tips & documenting

- Sometimes the sessions could run more efficiently if the facilitator leads the participants instead of facilitating the discussions.
- Participants wait for the facilitator to guide them how to start and finish the work. Only then, they would start working. The participants normally ask questions about how a task has to be done. The way of doing tasks is usually not intuitive to them.
- Ask the participants beforehand whether they prefer to be called by their first or last name. If they use the first name, offer them to call you the same way as well. However, it is common to call people by their title and last name during a session.

3.4.3 France

Entrance & preparation

- Participants feel less comfortable in a big room or space. They do not feel cozy. Make sure the room is not too big, but have enough shared space.
- Participants may feel uncomfortable to sit alone and far from each other. Make sure participants sit near each other.
- A quiet space may be experienced as uncomfortable. You may opt to play background music if you feel the space is too quiet.
- Shake hands with them when they enter to break their ice. Shake hands first with the boss.
- It is common to call the manager by their title and last name during a session.

Introduction

- Having a manager or leader in the co-creation session could potentially be awkward and may influence the engagement of the participants during the formal session.
- Participants will not get involved much in a brainstorming/co-creation session as long as their boss is present in that session. Not inviting the boss to the session will help others to freely participate.
- Participants wait for the facilitator to guide them how to start and finish the work. Only then, they would start working. The participants normally ask questions about how a task has to be done. The way of doing tasks is usually not intuitive to them.
- Avoid making a concrete plan and leave the agenda flexible. Announce upfront if you will be more flexible or linear with the scheduling of the session.
- Participants tend to think more about what will be achieved during the session. The time is
 of a less importance.

Problem owner

- It takes more time to explain the problem-as-given by the Problem Owner.
- It would be easier to explain the logic behind the session.
- Flashy presentations will not earn you any respect. Instead, a logical proposal that clearly states the benefits is highly appreciated.

Diverging

- The managers tend to receive full attention, and as a result, the participant may not feel welcomed to voice their opinion. Therefore, it might be a better solution to organize the creative meeting without the managers.
- Participants may need more pauses between the sentences before they respond. Proactively ask participants in the session to offer their opinion.
- Do not push every single person in the session to be involved in the decision making process.
- Ask the participants to say what they mean. Encourage them to not hesitate with giving extra explanations to make their idea more explicit for everyone.
- Be careful sometimes the participants tend to speak forcefully against each other during the session. This may harm the engagement of some other participants in the session
- It would be annoying to have things repeated in the session. It may give them a feeling that they are children.
- Participants tend to listen to what is meant instead of what others say. Ask clarification from your audience. Open ended questions can help

Converging

- The decision-making power is shared among a few managers and executives.
- Make sure you know which people at what authority level attend the session. This will help
 you to know to what extend the participants have the authority to make the decisions during
 the session.
- Participants tend to multi-task, and as a result, they may easily get distracted. Therefore, make sure they do not lose their focus during the converging step of the session.
- The boss usually gets more recognition than others. However, as a facilitator be aware that during a session you may need to share the talking time and credit among all your participants rather than just giving the full attention to a few high-rankings persons in the session.
- Be careful sometimes participants tend to speak forcefully against each other. Make sure that no one talks to others forcefully, to convince them to select an idea

Closure

 There is a need for someone to orally recap the key points and conclusion at the end of the session so that participants confirm the takeaways. Only after everyone agreed, put the recap in writing/visual.

Break / Energizer

- As a facilitator, spend enough time before the session to get to know people. Make sure to use some ice-breakers before starting the session.
- The best way to build a relationship would be to have the 'long' lunch outside the session. Therefore, social settings such as breakfasts and dinners are part of the co-creation session.
- Breaks and timeouts are norms. Do not forget to add enough breaks in your agenda planning

General tips & documenting

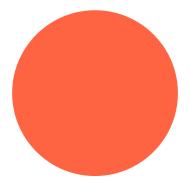
- Do not worry if participants like to talk about social news around topic other than the objective of the session. This is a part of their process.
- As a facilitator, be ready to be flexible and willing to adapt to the changing circumstances (e.g. let them continue if they started with the next parts without finishing the earlier parts).
- Agendas are considered flexible. Do not get frustrated if the agenda was not followed step by step.
- Make sure to document all the steps and conclusions.



Ideation and design

Ideate for the interaction Evaluate the prototypes Final concept

This chapter provides the design concepts and the ideas for interaction between the facilitators and the content of the guidelines. I evaluate the interaction of designed idea with facilitators and designers.



Ideation for the interaction

A blueprint for UCODESIGN session

In chapter 3, I collected a list of cultural tips for co-creation sessions in different cultures (i.e. the Netherlands, Germany and France). However, the way of interaction between the guidelines and the facilitators was not defined yet. In fact, there are different ways that these tips could be introduced to the facilitators and the content is transferred to them. Therefore, as a designer for interaction, I ideated different forms of interactions that facilitators could have with the guideline contents. In the sections below, five different interaction concepts are proposed.

I ideated five different concepts for the interaction between the content of guidelines with SuMo as the facilitators in co-creation sessions. The ideated concepts are as following:

1. A set of cards: For each country we have different boxes. The cards in each box show different steps of blueprint. The face of card shows the description of each step. On the back of the card, it shows the cultural tips relevant for that culture. On the back of box there is a simplified visual of blueprint for guidance.



Figure 14: Set of cards

2. A rotating guideline: The user can rotate the top of the wheel and see only the cultural tips relate to that blueprint step. Same as "A set of card" on the back of box there is a simplified visual of blueprint for guidance.





Figure 15: Rotating guideline

3. A booklet: A booklet with multiple pockets in it. In each pocket, there are cards explaining the cultural tips related to all three countries of France, Germany, and the Netherlands. In the notebook, there are also white sheets for "Tips & reflections" which are an opportunity for SuMo to write their observations, tips, and lessons learned for their next session. At the end of the session, SuMo will return the booklet back to U_CODE, so that the written tips could also be passed on to a next facilitator.





Figure 16: Booklet

4. Guideline game: This game should be played with at least three participants, ideally one facilitator from each target country. The game is played before organizing the co-creation sessions by the facilitators. Each player roles a dice. Based on the number on the dice, a cultural question is picked from a deck of questions.



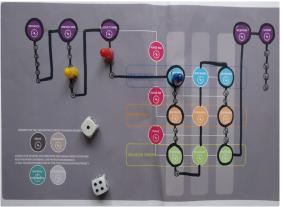


Figure 17: Guideline game

5. Guideline game: This game should be played with at least three participants, ideally one facilitator from each target country. The game is played before organizing the co-creation sessions by the facilitators. Each player roles a dice. Based on the number on the dice, a cultural question is picked from a deck of questions.

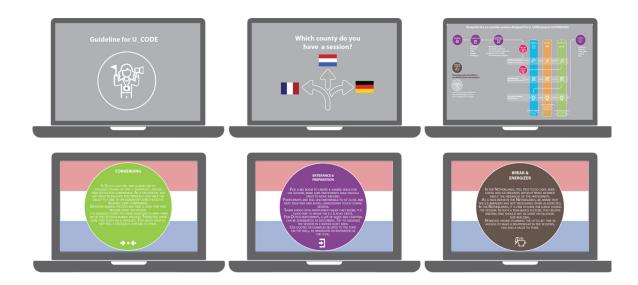


Figure 18 Digital Platform website



Evaluate the prototypes

Testing and evaluation of the prototypes

In order to choose a concept, I tested the prototype of the concepts with six users. Users were mainly designers who had an experience to facilitate a co-creation session before. Because the content had already validated with different professional facilitators, it was time to design the interaction; therefore I asked them to validate only the interaction of each concept. First, I explained the general goal of the project. Then I showed them the concepts one by one and observed how each user interacts with the concept. Meanwhile I asked the users to "talk through" the testing process. After hearing and observing the users' feelings and feedbacks on all concepts, I put all the prototypes on the table and asked them the question "if you have a co-creation session and you want to learn more about cultural tips, which product you would like to choose?" The entire testing process took between 25-40 minutes per person. I documented all the comments and opinions by writing them down on my booklet which I used later for analysis. Below, it is the feedback received from user on each concept prototype. Based on their comments and recommendations, the final concept was selected, which was improved in iterations.



Figure 19: Users testing different concept prototypes for the interaction of facilitators with the guidelines

Based on the comments received from the users on different concept prototypes (see Appendix 7), here are lessons learned and takeaways:

- Present the tips one-by-one and not altogether.
- Provide extra information about each step of the blueprint.
- Provide an opportunity for the facilitators to provide their feedback and reflection after each session.
- Provide a possibility for the users to compare the tips with other countries.
- Avoid using uppercase for the texts.
- As much as possible, try to use visuals in presenting the information to the users.
- Put the blueprint as well as the usage instruction clearly and noticeable.



Final concept

Selection and improvement of the final concept

Based on the takeaways, I decided that the final concept should have three interaction qualities:

- Intuitive: Simple and easy to use without the need for the presence of an instructor
- Reflective: Possibility to reflect on or share the experience
- Accessible: Easy access to the guidelines from anywhere in the world

Table below shows to what extent the concept prototypes tested satisfy these three interaction qualities:

Concepts	Intuitive	Reflective	Accessible
A set of cards	Yes	No	No
Rotating guidelines	No	No	No
Booklet	No	Yes	No
Guideline game	No	No	No
Guideline app	Yes	No	Yes

Table 4: Comparison of concept prototypes on interaction qualities

Based on the comments received from the users and the interaction qualities that I aim for, I chose the guideline app as my final concept. Digital guideline is also one the U_CODE priorities.

For next iteration I will use the simple version of blueprint for U_CODE to make it clearer that old version (See Figure 20).

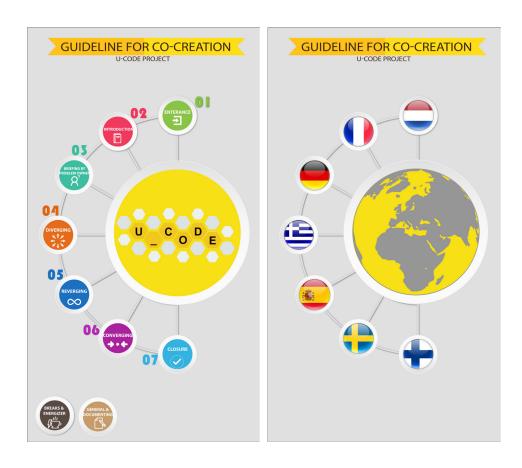


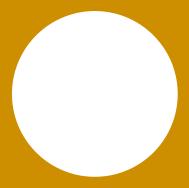
Figure 20: Simple version of Blueprint for U_CODE



Discussion

Evaluation of the final concept Limitation Recommendations

This chapter provides the evaluation results of the professional facilitators, the limitations of this project, and recommendations for future follow-up step.



Evaluation of the final concept

Evaluation of the final concept with professionals

In order to evaluate the final concept and make an in-depth analysis of the final proposed solution, I met with professionals with different backgrounds. At the end, the final solution of this project would be used by facilitators from different cultures and backgrounds. In sections below I introduce the reason each professional was selected for the final phase of testing and their comments on the final product.

A culture professional

On 27th February 2019, I met Fons Trompenaars in his office in Amsterdam. He is a world-famous expert in the field of cultural studies and the founder of a consultancy firm. I started the conversation with explaining to him the process and showing the concepts. In his opinion, applying cultural dimensions (theory) into a real-life situation of co-creation sessions is the main added value of my project. He thought that only a person who has a good understanding of both co-creation and culture can combine the elements and extract cultural tips for a practical problem. He also found it interesting that I had asked facilitators from different countries to validate the cultural tips that I had extracted from theory. He also liked the guideline game that I had designed, as in his opinion the game is an effective way to increase people's awareness about culture. At the end, he signed and gifted one of his books to me.



Figure 21: Meeting with Fons Trompenaars, a culture expert

A corporate facilitator

On 28th February, I met Derk van den Bos, a facilitator and Agile coach in ING Bank in Amsterdam. I chose him for a few reasons: he is experienced working in an international corporation with a multicultural office environment. Although he has facilitated many brainstorming sessions for an international audience, he has never done a co-creation session. Therefore I could test whether the final concept could be helpful to facilitators with general experience in facilitation, but no direct background in the context of co-creation.

After my introduction of the project, he was eager to immediately use the app. As a Dutch facilitator, he found some of the tips for the Netherlands obvious, but also intriguing. He was also interested in reading the tips for Germany and France as he had sessions upcoming in the next month in Germany and France. He found those cultural tips could help him to better prepare for those sessions.

Due to his background, he was not familiar with the creative sessions. Therefore, he was wondering if he could find any information about the creative diamond in the app. While reading the golden rules for the each steps, he seemed a little bit confused. At the end of testing, he asked me if he can download the app online from an app store, which implicitly meant that the prototype app had accomplished its goal of informing facilitators for a co-creation session.



Figure 22: Meeting with Derk van den Bos, a general facilitator and Agile coach from ING Bank

A facilitator with community management background

On March 2, 2019, I met Mohamed Machbouâa in a café in Amsterdam. He is a professional facilitator with experience in community management and digital marketing. I chose him because of his direct experience in facilitating co-creation sessions. After explaining him my project, he directly went through the tips. He was not quite sure how the app works. In his opinion, the tips were too straightforward and confining. As a facilitator, he felt pressured to follow the guideline steps. He believed that everyone is unique and it is hard to categorize people in the groups as it would mean that we have to simplify humans (they are not a product). He considered the personal touch of an experienced facilitator more important than strict guidelines, tips and labeling participants. Instead he believed that it would be much more helpful to teach facilitators "social skills" in order to improve their "emotional intelligence".

He also wondered whether the guidelines were strategic guidelines or they meant to be a list of recommendations and tips to improve the quality of a co-creation session. In his opinion, having a strategy for a co-creation session highly depends on the group, topic, and the experience of the facilitator; there-

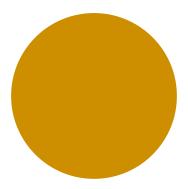
fore it does not make sense to teach these things in an App.

After reading the tips for each step, he was specifically happy with the tips for diverging and converging steps as he felt those tips have left some flexibility and room for personal interpretation. He also was more interested in tangible products. He preferred a set of cards more than an app because he found it easier to check and play with the cards during the session as a remembrance.



Figure 23: Meeting with Mohamed Machbouâa, a co-creation facilitator

It is worth mentioning that Mohamed is from a Moroccan background, and on some aspects he may culturally behave differently from a Dutch facilitator. It could have been that due to his cultural background, he had reacted to the app different from a Dutch facilitator (e.g. Derk). For example, Mohamed mentioned that he is more from a relationship-based culture and therefore he prefers to talk directly with people to understand them. As a result, he does not see the need for an app to discover the culture of his participants. In the contrast, Derk who was more from a task-based culture, showed tremendous enthusiasm for using the app. For him, getting the information for different cultures as quickly and efficiently as possible was the biggest advantage of such an app. This simply made Derk happy.



Limitation

Addressing the limitation of the project

After going deep into the topic of this project, I have realized that the co-creation is not the best solution for a creative session in all different cultures as sometimes some cultural values are not in line with co-creation principles. In this section, I will substantiate this observation of mine.

In section 2.2.1, I listed five principles that a co-creation session should have. In section 2.1.5, I also selected eight cultural dimensions that are relevant to a co-creation session. Below are some examples of contradictions that may occur when the co-creation principles and cultural dimensions are put together:

- It is easier to have "full participation" in an egalitarian community more than a hierarchical one. In an egalitarian culture, the participant give each other room to think and talk; however in a hierarchical group, the most important persons, determined based on their ranking, get most of the speaking time.
- "Mutual understanding" can happen easier in a low-context culture than a in a high-context one. In a high-context culture, people talk between the lines, therefore there is always a chance for misunderstanding. However, being a high-context culture can have an advantage during the diverging step, as it can increase the quantity of the ideas.
- In order to come up with an "inclusive idea" through value exchange, it is important to rely on consensual decision making process rather than on a top-down decision making process. In a consensual group, people are encouraged to stand up for their beliefs and speak out if they disagree.
- "Sharing the responbility" is another co-creation principle which is deeply related to a consensual culture. In a consensual group, a problem is not considered solved until everyone affected by the solution understands the reasoning. In such a culture, since everyone agrees with the final solution, they also feel responsible for the follow-up actions and steps. In a top-down culture however, a problem is considered solved as soon as the manager or a highly ranked participant reaches to an answer. In such situation, others are expected to "get on board" regardless of their understanding about the logic of the made decision.
- Creating "possibilities for multiple approaches or solutions" in a co-creation session works better in an applications-first culture; this is because in such a culture, people are more interested in "how to do" more than "why to do". In other words, in an applications-first culture, people usually focus more on the practicality of statements, rather than understanding the whys. In principles-first cultures however, people have a tendency to first understand the en-

tire logic behind each stage of co-creation. As an example, after debriefing the problem in the beginning of a creative session, participants from a principles-first culture need to understand the logic behind the session and problem, while people from an applications-first culture can directly jump into how to solve the problem.

- There are specific steps that should be done in a certain order in a co-creation session. Therefore, by design, a co-creation session can be organized more successfully in a linear-time culture compared to flexible-time culture. In a linear-time culture, project steps are approached in a sequential fashion by completing one task before beginning the next. In a linear-time cultures things are done one at a time with no interruptions. The focus is on the deadline and sticking to the schedule (Mayer, 2015). All these features are also requirements for having a good co-creation session. Having said that, it is usually considered helpful to have some flexibility during the co-creation session in order to adapt the session to participants' needs.
- Co-creation session is more useful in a task-based culture; during a co-creation session, there is a goal to be achieved within a limited time. In a relationship-based culture however, people need to spend time to get to know each other before they build trust needed for working together. In reality, a co-creation session is too short to build the relationship needed in a relationship-based culture. As a result, the outcome of a co-creation session held in a relationship-based culture might not be as satisfying as session held in a task-based culture.

These were the situations where the co-creation principles cannot fundamentally be reconciled with certain features of some cultures. This simply means that co-creation sessions may not be capable of providing the best results in all sorts of cultures.

To conclude, it seems like an "egalitarian, consensual, task-based, liner-time, low-context and applications-first" culture (see Figure 24) can get the best outcome from a co-creation session. This implies that if a culture does not naturally have one of these cultural characteristics, it would be the responsibility of the facilitator to adjust the co-creation session based on the culture of the participants. For example, in a hierarchical culture, it might not be a bad idea for a facilitator to hold the session without the presence of the manager; or in a relationship-based culture, before the actual co-creation session, the facilitator can plan a pre-gathering for the participants to help them get to know each other and build the mutual trust. In cultures with "hierarchical, top-down, relationship-based, flexible time, high-context and principles-first" characteristics, it might be better to look for other alternatives to get participants involved in a participatory session, rather than insisting on blindly following the exact same co-creation method and forcing the participants to behave a certain way in conflict with their natural cultural tendencies.

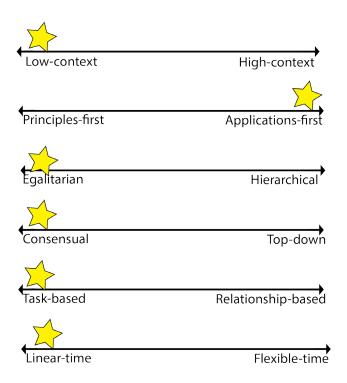
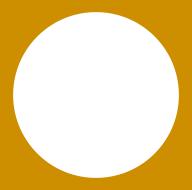


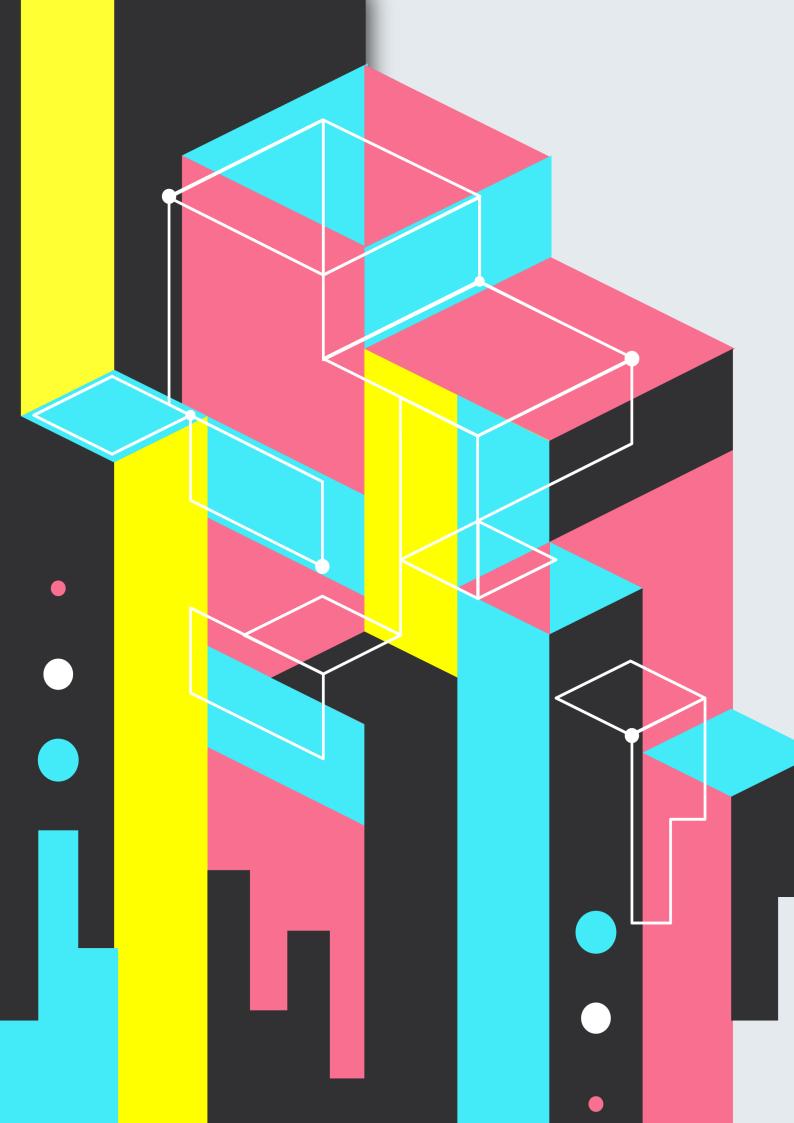
Figure 24: The Ideal culture for having an effective co-creation



Recomendation Recommendations for the next steps

In this section, I provide some recommendations on how this project can be further developed in future. In the paragraphs below, I list existing shortcomings of this project and possible recommendations to overcome these shortcomings:

- The scope of this project included Germany, France, and the Netherlands. These three countries are quite similar in many of the cultural dimensions. It would have been much more interesting to conduct the same study on those countries with more distinctive cultural characteristic, such as Spain or Finland.
- In the initial definition of this project, it was requested to make guidelines for facilitators coming from the same cultural background as the participants, e.g. guidelines for a German facilitator organizing a co-creation session in Germany with German participants. One could argue that giving cultural tips to a German facilitator on how to deal with German participants might be redundant and useless as the facilitator is naturally aware of the cultural characteristics of participants. It would have been much more interesting to provide the cultural guidelines to facilitators with a different cultural background from the participants of the co-creation session.
- In anthropology and sociology, the cultures can be studied from two different perspectives: emic and etic. The cultural dimensions of the countries in the scope of this project were studied and analyzed from an etic perspective. It is usually accepted that the richest cultural and anthropological studies are those that take advantage of both etic and emic perspectives. Therefore, it is interesting to enhance the results of this project from an emic perspective as well.
- Although I tried to test the final concept with professionals from different backgrounds, the background culture of the testers probably influenced their judgment about the app something that could not be avoided. It is recommended that the app to be tested in a real-life U_CODE context in three different countries with the real user.
- In the next iterations of this app, a forum can be added as a medium for exchanging the experiences and tips among the facilitators. However, for the purpose of this project, I chose to not build it in the app since simplicity is one of the interaction qualities I aim for.



References

Guidelines for Super Moderators in U_CODE project

References

Cottle, T. (1967). The Circle Test; an investigation of perception of temporal relatedness and dominance. Journal of Projective Technique and Personality Assessments, 31, 58-71.

Co-creation navigator. (2019). Retrieved from https://waag.org/en/project/co-creation-navigator/

Crossing cultural chasm: towards a culture-conscious approach to design. (2019). Retrieved from https://designandculture.info /

Hall, E.T. (1966). The Hidden Dimension. New York: Anchor Books.

Heijne, K., van der Meer, H., et al (2018). Survey on co-design methodologies in urban design. TU Delft.

Heijne, K., van der Meer, H. (2019). Road Map for Creative Problem Solving Techniques: Organizing and Facilitating Group Sessions. Under publication.

Hofstede, G.H., Hofstede, G.J., Minkov, M. (2010). Cultures and organizations, software of the mind (3rd ed.). New York: McGraw-Hill USA.

Hofstede Insights. (2019). Retrieved from https://www.hofstede-insights.com/models/national-culture/

House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W., Gupta, V. (2004). Culture, leadership and organizations: The GLOBE study of 62 Societies. London: Sage Publications Inc.

Kaner, S. Facilitator's Guide to Participatory Decision-Making. 2007.

Kluckhohn, F., Strodtbeck, F.L. (1961). Variations in Value Orientations. Westport, Connecticut: Greenwood Press.

Levine, R. (2006). A geography of time; the temporal misadventures of a social psychologist. Oxford: Oneworld Publications.

Mattelmäki, T., & Sleeswijk Visser, F. (2011, October). Lost in Co-X: Interpretations of Co-design and Co-creation. In Proceedings of the 4th Conference on Design Research (pp. 1-12).

Meyer, E. (2015). The Culture Map (INTL ED): Decoding How People Think, Lead, and Get Things Done Across Cultures. PublicAffairs.

Meyer, E. (2019). The Personal Bundle Solution - Erin Meyer. Retrieved from https://www.erin-meyer.com/tools/the-personal-bundle-solution/?r=595

Peterson, B. (2004). Cultural Intelligence. London: Intercultural Press.

Schwartz, S.H. (1994a). Beyond individualism/collectivism: New dimensions of values. In U. Kim, H.C. Triandis, C. Kagitcibasi, S.C. Choi and G. Yoon (Eds.), Individualism and Collectivism: Theory Application and Methods. NewburyPark: Sage.

Tassoul, M. (2009). Creative facilitation. VSSD

THT Consulting B.V. (2019). Culture for Business app [APP]. THT Consulting B.V.

Trompenaars F., Hampden-Turner, C. (1998). Riding the waves of culture; understanding diversity on global business. New York: McGraw-Hill.

U_CODE (Urban Collective Design Environment). (2019). Retrieved from http://www.u-code.eu/about/

van Boeijen, A. (2013). Socio-cultural dimensions to sharpen designer's cultural eyeglasses. In DS 76: Proceedings of E&PDE 2013, the 15th International Conference on Engineering and Product Design Education, Dublin, Ireland, 05-06.09. 2013 (pp. 556-561).

van Boeijen, A.G.C. (2013). Socio-cultural dimensions to sharpen designer's cultural eyeglasses. Proceedings of Engineering and Product Design Education Conference, 5-6 September 2013, Dublin, Ireland.

