

A supportive guide to boost creative confidence through the facilitation of a creative climate in an online environment.









#### **Master thesis**

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# **PREFACE**

Dear Reader.

Welcome, this is my final deliverable of my graduation thesis to accomplish the Design for Interaction Master programme of the Delft University of Technology. This thesis report is the documentation of 6 months' work in which I got the opportunity to meet and cooperate with many great and inspiring people whom I like to thank in advance.

To start with my supervisory team. I was lucky to be surrounded with some very strong and knowledged women. Despite the Coronacrises, which also impact their daily life and work, they stood by my side, kept interest in my work and together we explored different possibilities in video calling and using the online whiteboard tool Miro.

Rebecca, I want to thank you for the sharp and honest session we had. I've been swimming by abstraction for a long time, but because of your interventions leading to critical reflection, double iterations on my report and making bold but deliberate choices I finally got to something very interesting. It was because of you that I fought my insecurity, from which I learned a lot, thank you!

Katrina, I was extremely happy that you wanted to be my mentor. We have a shared interest in unleashing creativity, especially when people don't think they can be creative. While keeping a critical eye on my work, you kept inspiring and motivating me. I'm grateful for the moments that you really invested time in my project, for example when we explored the functionalities of Miro and when you reviewed my final concept. But above all I want to thank you for helping me recovering and reflecting on my own creative confidence during the project. I hope we can stay in contact to keep learning, inspiring and motivating each other.

Esther, first of all, thank you very much for believing in me and that you stayed involved in my graduation project. We almost worked together for a year, of which the last five months unfortunately from distance. You find opportunities in smallest things, which helped me breaking down my mental barriers. Your persistence in making the best of the current situation made me realise there are also great opportunities within times of drastic change. I wish you the best with all new projects going on and we keep in touch.

I also want to take this moment to thank all the people who have helped me exploring the opportunities for boosting creative confidence. Special thanks to Daan, Loeke and Linda; (case study project leads) for accepting me in your projects and exploring together how we can embed creativity in work-from-distance project meetings. Besides, many thanks to NextGenners, SeriousCreativity, Zeewaardig and We Are Reasonable People sharing their expertise and reviewing my final concept. Moreover, I like to thank Adinda, Maarten, Hans and Erik for the evaluations of my final concept.

A special thanks to Erik who kept supporting and motivating me despite everything. You were there when I needed a motivative hug, reflective sparring partner or drinking buddy to celebrate the successes.

Besides, I like to thank my family and friends for always being there, listen to my struggles and over enthusiasm for the topic. In extra, I like to thank Leona, Lotte, Tijmen and Sharon for their special help with structuring my thoughts and helping me writing this report. Wonderful how I felt always much better after talking or visiting one of you.

A final thanks to my former colleagues of Stichting RoboValley who made it possible to have a life graduation presentation at RoboHouse.

Please get yourself something to drink, a comfortable seat and a positive smile, because we are going to boost your creative confidence!

Enjoy the read!

Marieke Noordermeer



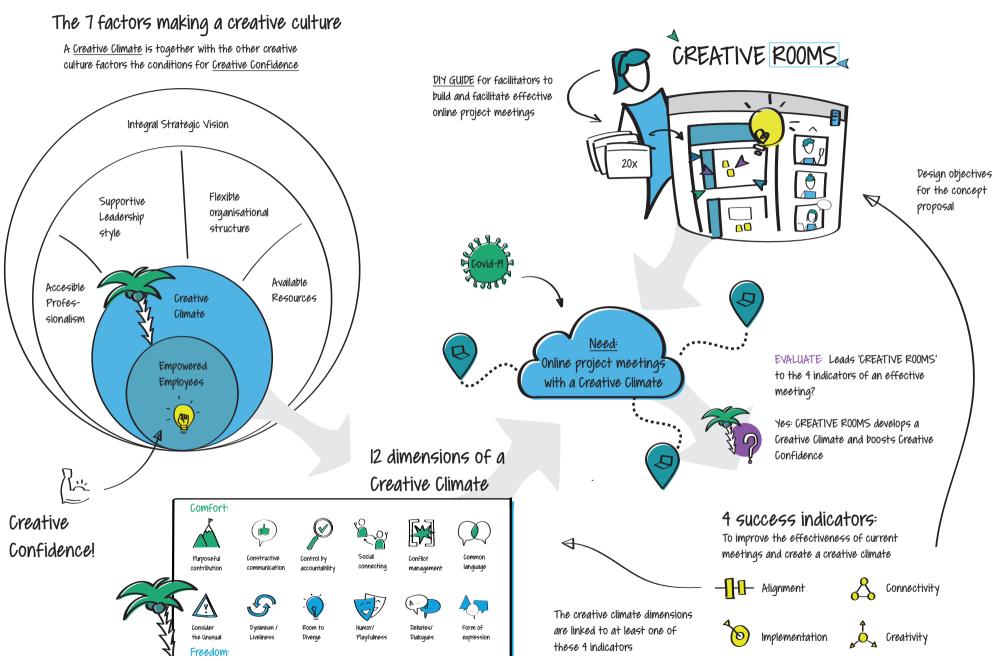


Fig. 1 Project overview - which factors determine how to boost Creative Confidence

# **EXECUTIVE SUMMARY**

The need for creativity has never been bigger. Technological changes, raised expectations in the area of sustainability and safety, increased focus on customer experience ask for pro-active innovation. On top of that has Covid-19 changed the world fast and radically the past half year. The world went in lockdown and because of that organisations have accepted work-from-distance as the new normal. In order to stay relevant and be adaptive to the rapidly changing landscape, organisations have recognised creativity as catalyst for innovation.

Organisations initiate innovation programs to evoke culture change by fostering experiential learning in creativity. Employees are expected to adopt a creative mindset by applying trained skills and knowledge into daily practice. However, uncertainty of learning something new and the ambiguity of creativity create resistance under employees making them fall back into their old routines. In order to make this cultural change stick, an employee-centered approach is necessary. To understand how employees can be guided/supported in learning experientially using creativity in their way of working, the central aim of this research is to define how creative confidence can be boosted.

An extensive literature study showed that there are seven creative culture factors to empower employees in their confidence to use creativity. The extent employees feel empowered is interdependent on the culture factor work climate (domain-specific). A creative climate has the ability to empower autonomy and thereby the confidence to use creativity. Therefore, the other five creative culture factors need to be established, namely: integral strategic vision, supportive leadership style, flexible organisational structure, accessible professionalism and available resources.

To develop a creative climate twelve dimensions are derived from insights of both literature and multiple exploratory research activities. These dimensions are either

comfort (stability and direction)- or freedom (exploration and own interpretation) orientated. To boost creative confidence a creative climate should be evolved in which these orientations are experienced in balance.

To be able to bring this balance into practice, a guide has been conceptualised focusing on online project meetings. Facilitators can use this guide to build-up an effective meeting flow for their weekly online progress meetings. This DIY-guide is called 'Creative Rooms', which includes a basis structure with different 'meeting rooms', a folder with extra templates and facilitating notes.

With Creative Rooms a facilitator can build-up a meeting flow regarding guidelines based on the creative climate dimensions. Each meeting room in this flow contains activities and features to enhance a creative climate relevant for position in the meeting flow. The facilitator navigates the meeting group through the flow in order to achieve alignment, connectivity, implementation and creativity. These are the four success indicators for effective meetings with a creative climate (the 12 dimensions).

The use of Creative Rooms has been evaluated with employees, faciliatory experts and a meeting group to test the clarity and effectiveness of the guide. These evaluations led to the revised design in the shape of a package containing: DIY guide, reference manual and implementation assistance from a customer support manager. Thereby the Creative Rooms package is a guide to boost creative confidence within and beyond online project meetings.

Figure 1. illustrates an overview of the defined factors on which the boosting creative confidence determines

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# **GLOSSARY**

#### Creative Climate

A creative climate can be described as a vibe that stimulates the people present to be free in exploring and differentiating within the comfort of certain guidelines.

#### Creative Confidence

The belief in you creative potential and ability to use this potential

#### Creative Culture

The culture of an organistion is the sum of values and beliefs which enforce norms of behaviour. An organisation has a creative culture when the way of how thing are done are in line with the 7 factors defining a creative culture. The organisaton has an integral purpose, supportive leadership styles (fitting the work domain characteristics), accessible resources and professionalism, cultures that stimulate creativity and empowered employees.

## Experiential learning

Learning from experience by reflecting on application in practice.

# Facilitator/facilitating role

This person navigates the meeting group through the meeting activities, draws out opinions and ideas of the group members and enables the group to diverge, debate, reflect and conclude.

## Integral training programme

A program initiated to operate between departments/silos to create a shared body of thought that supports both connecting and broadening in the organisation.

#### Meeting Journey

The development of interactions within the meeting caused by certain activities or behaviour

### Meeting flow

The course of the meeting, which is influenced by the interactions between participants and the available information.

# Meeting group

The people attending the meeting

# Meeting structure

The way information and participants are organised to achieve the aim(s) of the meeting.

# Organisational transformation

The process of changing the existing culture of an organisation to address a significant challenge, achieve competitive advantage or to remain relevant.





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# PROJECT INTRODUCTION

In this first chapter the topic and process of this graduation thesis are introduced. After an introduction to the motivation of this project the main character 'creative confidence' is defined and the questions, scope and approach are described.

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TAPES 384 CAMPE AINDSET OVER INTO ADULT LIVE In this chapter:

- 1.1 Motivation and research objective
- 1.2 Creative confidence a definition
- 1.3 Aim and approach
- 1.4 Project Layout

# 1.1 MOTIVATION AND RESEARCH OBJECTIVE

# **Need for change**

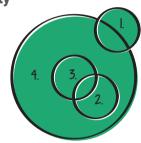
Now that we have reached the 'innovation era' (Jansen, 2014), the pace of technological change has accelerated, expectations in the area of sustainability and safety have risen and, as a result, the need to compete as a company within complex and dynamic circumstances have been intensified (Vaccaro et al., 2012). Besides, the last decade many companies started to focus on facilitating experiences in order to increase the customer engagement and satisfaction.

In order to be adaptive to the rapidly changing landscape in which services should enhance the customer experience, organisations are transforming in order to measure and optimise their service performances (Ostrom, et al., 2015). For such proactive innovation many companies have recognised the creative aspect of (service) design as flexible way of framing and solving problems as valuable business capability to advance their performances (Price et.al., 2018; Aricò, et al., 2017; McKinsey, 2018). However, only the tip of the iceberg embeds creativity as strategic lens for innovation (InVision, 2019). In other words, for many organisations/industries there lays a great opportunity to use design as an innovation catalyst to both remain relevant and outperform competition.

On top of this, the coronavirus pandemic has turned the entire economy upside down. As a hard reset button, Covid-19 caused that almost the whole world went in lock down. According to the report of McKinsey & Company (2020), governments worldwide have already allocated 12 trillion euros to stabilise economies. We are facing a heavy economical crisis, though European governments use the momentum to lay the foundations for the post-crisis era. State aid is granted under the strict conditions of structural change fostering shared, sustainable prosperity. The Covid-19 situation created an even bigger urge to change organisationally to implement creativity as means to adapt to the new circumstances.

## **Organisational transformation to embed creativity**

A design transformation can be seen as preparing the organisation to address the rapidly changing complex nature of today's societal and economic problems (Van der Bijl-Brouwer et.al, 2019). The traditional, more linear tools and approaches are limited when facing so called 'wicked problems' (Ostrom, et al., 2015, Dorst, 2015). Dorst defines these problems as open, complex, dynamic and networked, figure 3. Creative problem solving is only appropriate for projects coping with these kind of 'wicked problems'.



- 1. At the periphery (external)
- 2. In parts of the organisation
- 3. In the core of the organisation 4. In the whole organisation as a
- way of continous learning

Fig. 2 Four degrees of creativity

The introduction of more creative and intuitive problem solving techniques are required to cope with these kind of challenges. A good strategy

implementation

is to introduce an integral training programme leading to an organisational transformation which embeds design capability throughout the whole organisation (IBM, 2019). Figure 2 illustrates what is meant with this integral implementation of creativity.



Fuzzv or no Many interrelated boundaries elements



Constantly changing

Many interdependencies

between stakeholders

Fig. 3 Wicked problems

## **Experiential learning programme**

Recent studies conclude that embedding design practices is not just about workshops and trainings to learn certain sets of skills (Hager, 2011; Orlikowski, 2002; Van der Bijl-Brouwer, 2015). Instead, the implementation of solving problems creatively only benefits from a learning program when there are real work environments to embed and negotiate design practices in daily routines to foster experiential learning (Elkjaer, 2004). Hager (2011) stresses that the learning and performance of creativity is significantly shaped by social, organisational, cultural and other contextual factors. Another argument comes from Kolb (1984) whose experiential learning theory fosters the acceptance for the implementation of design through its engaging ability. The condition, however, is that design is adopted correctly under expert guidance. All great, but interfering in daily work patterns is taking away the comfort of well-understood routines (Ford, 1999). Changing the organisation requires an employee-centered approach. Initiation of a transformation into creative problem solving needs co-creation with employees in order to create support.

# Finding willingness among employees to change

Aricò et al. (2017) conclude that a experiential learning programme needs legitimacy, commitment and resources in order for employees to show willingness to embed creativity. Managing this poorly may aggravate the implementation of creativity (Calgren et. al., 2016). In other words, organisations have one chance to successfully introduce the value of creativity among their employees.

This is easier said than done, finding acceptance among employees for change is a challenging problem itself (Van der Bijl-Bouwer, et. al., 2019). This can only succeed when the employee's attitude towards the change is positive (Witold, 2013; Eisenhauer. n.d.). Though, 70% of all programmes aiming for a transformation fail due to resistance (Ashkenas, 2013; Elving, 2015). The uncertainty of learning something new and the ambiguity of creativity may lead to the fact employees decide to ignore the change (Gonçlaves, 2016; Davis, 1999; Thoring, 2019). The intuitive and affective aspects of creativity are in conflict with current rational thinking, resulting in employee discomfort (Calabretta et. al., 2017; Bason&Austin, 2019).

#### **Need for creative confidence**

For the sake of a positive attitude towards the use of creativity, emotions need to be effectively managed during the adaption of creative practices. Guidance and support in fulfilling the need of safety/security, fundamental to employee work experience, is required (Bason&Austin, 2019; Elias, 2007; Brown&Cregan, 2008).

According to Bandura (1997) this security is all about self-efficacy; people believing in their ability to create change. As a contribution, the Kelley brothers conclude: "This self-assurance - the belief in your creative capacity - lies at the heart of innovation" (2014). In short, learning how to adopt design practices within an organisational context requires employees to focus on both the understanding of design principles and developing a personal sense of *creative confidence*, of which the definition is described in section 1.2.

# Research objective

In contribution to the research agenda of understanding how organisations can support/guide their employees in the learning process of including creativity in work routines (Van der Bijl-Brouwer, et al., 2019; Klitsie, et. al., 2019), the following problem definition has been defined:

Problem statement: Organisations need to find a solution to boost the creative confidence of their employees, so that creativity can be anchored through experiential learning.

So, the aim of this thesis is to investigate how the creative potential of employees can be unleashed in order to understand how to boost (facilitate) the creative confidence needed to cope with wicked problems within the context of a large organisation. Thus, the main research question that guides this investigation is the following:

How can we boost creative confidence to cope with wicked problems within organisational context?

# 1.2 CREATIVE CONFIDENCE - A DEFINITION

The term creative confidence describes the phenomenon of believing in your creative ability to innovate (Kelley&Kelley, 2014). It consists of two parts "creative" and "confidence", which define the research area between *creativity* and the development of *self-confidence*, figure 4.

Just as Thoring (2019) describes it for 'Creative Spaces', refers 'Creative' to the use of creativity and the related design and innovation processes. The definition of creativity is further explained in the literature study, chapter 2. Despite the fact that Self-confidence relates to the individual, this study is about understanding how individual creativity can be unleashed for the team/organisation's need for innovation, chapter 5 provides a theoretical answer.

Self-confidence can be defined as the believe in one's abilities, qualities and judgement. The sense of trust and freedom strengthening this sense of certainty to use creativity are the experiences that can be facilitated. The influence of the factors of an organisational context on an employee's confidence and the impact of transforming these on the facilitation of this confidence are the focus points of this thesis research.

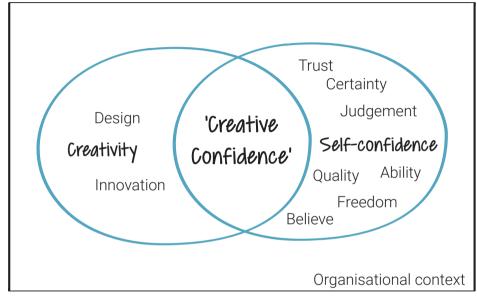


Fig. 4 Research area "Creative Confidence" covers the intersection of research to creativity and the development of self-confidence.

# 1.3 AIM & APPROACH

As the problem statement and topic of concern - creative confidence - have been introduced, it is now time to present the main research question of this thesis together with the sub-questions. These questions not only give focus to the research activities done to answer the main research questions, but they also provide guidance throughout the thesis.

# Scope

There are three factors that (eventually) determine the scope of this thesis: boosting creative confidence; the context of the determined case study and Covid-19.

## **Boosting Creative Confidence**

The topic investigated in the research is Creative Confidence, as described in the previous section. Although, the research and concepting will reveal many opportunities, the main goal of this project is to boost creative confidence.

# **Case study - Dutch Airline Company**

Although this project is conducted in general sense, the context characteristics of Dutch Airline Company are used as case study for the development of the eventual concept. The case study is introduced in chapter 3.

## Covid-19

During this research, the Coronacrisis changed the relevance for the project and thereby the scope. The context moved to an online environment and the focus lays at supporting teams in effective meetings while working from distance.

## **Research Question**

This thesis contributes to the existing research on understanding how support/guidance can enable employees to experientially learn what creativity values. In chapter two we dive into organisational transformation design literature and combine this with literature about empowerment of creativity. By approaching this strategic topic from the employees' perspective, insights are generated on the desirability of support and guidance in an organisational transformation. The aim of this project is to investigate how the creative potential of employees can be unleashed with confidence needed to have them cope with complex issues for innovation. Thus, the research question that guides the research in this thesis is:

How can we boost creative confidence to cope with wicked problems within organisational context?

To be able to answer this research question, it is divided into 3 sub-questions, each of which takes on a specific part of the study.

What involves empowering employees

1. What does an organisational transformation need to successfully embed creative mindset?

This sub-question focuses on the existing literature relevant to this topic. By understanding what an organisational transformation means, the conditions for a successful implementation are identified. It will be addressed in chapter 2. Literature study.

# 2. On what organizational level in the transformation is guidance/support needed the most?

For this sub-question the case study is investigated to understand the context. This investigation leads to the understanding of where in the organization an intervention can boost creative confidence most effectively. This will be addressed in chapter 2; Literature study and chapter 3; Exploratory research.

# 3. Which support/guidance helps employees in being empowered to confidently unleash their creativity?

With this sub-question we look deeper into the needs of the employees within the determined context of sub-question 2; Its answers will give practical insights in how to empower employees. This question is addressed in chapter 3; Exploratory research.

After these three sub-questions are answered, the key takeaways are used to create a design brief, presented in chapter 4; Synthesis. This is a starting point for the ideation phase, presented in chapter 5; Concepting. The final design is the answer to the main research question. This final design is presented in chapter 6; Creative Rooms - Final concept and evaluated in chapter 7; Evaluations. Chapter 8; Discussion and Conclusion, states if the concept Creative Rooms boosts creative confidence.

# Research significance

Large organisations struggle with the transformation to embed a creative mindset because it requires their employees to let go of old routines. However, with Covid-19 coming along the relevance to be able to flexible anticipate on changing circumstances has never been bigger. Creativity is what we need in times of radical change and crisis (webb, 2006). Employees had no choice than adapting to new circumstances, by exploring new possibilities and be flexible to further changes. Covid-19 creates momentum to make the difference and to be bold with decision for the future way of working.

Organisational transformation is often discussed from a viability or feasibility point of view, while the employees are the ones who should make the transformation. Therefore this research has a human-centered-approach considering the desirability in the initiation of an organisational change, figure 5. As discussed in the introduction this change will be triggered by experiential learning. However, how to support/guide experiential learning on using creativity for innovation is still on the research agenda (Van der Bijl-Brouwer, et al., 2019; Klitsie, et. al., 2019).

With an eye to the future, this project serves to investigate a solution that on the one hand responds to the increased volume of remote working and on the other hand takes the desires into account for support/guidance in learning the value of creativity experientially.

Having employees embed creativity in their way of working, the organisational transformation should be approached from a Human-Centered-Design perspective.

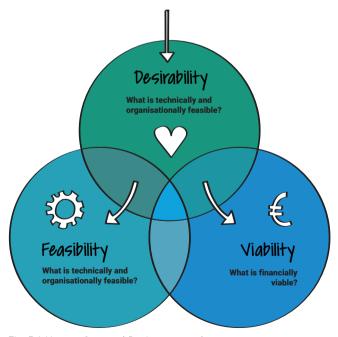


Fig. 5 A Human-Centered-Design approach

# **Project approach**

Since the Covid-19 outbreak, environment in which this research is executed changed drastically. Developments took and are taking place on all sides in order to shape 'the new way of working'. It is required to approach this research in a flexible manner, with allowance for a reflexive attitude towards the set-up of the project. This includes critically reflecting on the outcomes of the literature study and exploratory research and incorporating this into the following of the design process.

In the context of 'practice what you preach', this research follows a design process. To include the human-centered approach, a process based on the Design Thinking model by IDEO (2008-2018) is used.

The process is divided into three phases all starting with a clear starting point and resulting in a milestone, see figure 6. The three phases have a diverging or converging objective, to enable the designer to both go broad in the exploration and ideation and to deliberately narrow down to focus on distinct objectives.

# 1.4 PROJECT LAYOUT

The triple diamond process divides the project into three phases and eight chapters.

# Three phases set-up

In the first phase 'Inspiration', the challenge is explored by means of an extensive literature study and several exploratory research activities. The literature leads to a common understanding on the conditions for an organisational transformation. Together with the empathising activities of the exploratory research a design opportunity is defined.

A reflection on the first section leads to the design brief, which includes the design statement for the second phase: 'Ideation'.

An early ideation session leads to a concept direction from where several iteration sessions with experts and end-users leads to a final concept proposal, which is the milestone of this second phase.

The final phase focuses on the 'Implementation' of the concept. An elaborated version of the concept is evaluated with different end users (facilitator and employees). The results of this final test lead to the final milestone, which are future recommendations, final conclusions and the presentation of the final concept.

Although this process seems to have a linear progression, this doesn't mean the activities where presented in this same chronological order. Designing is an iterative process in which one moves back and forth between the different stages of design.

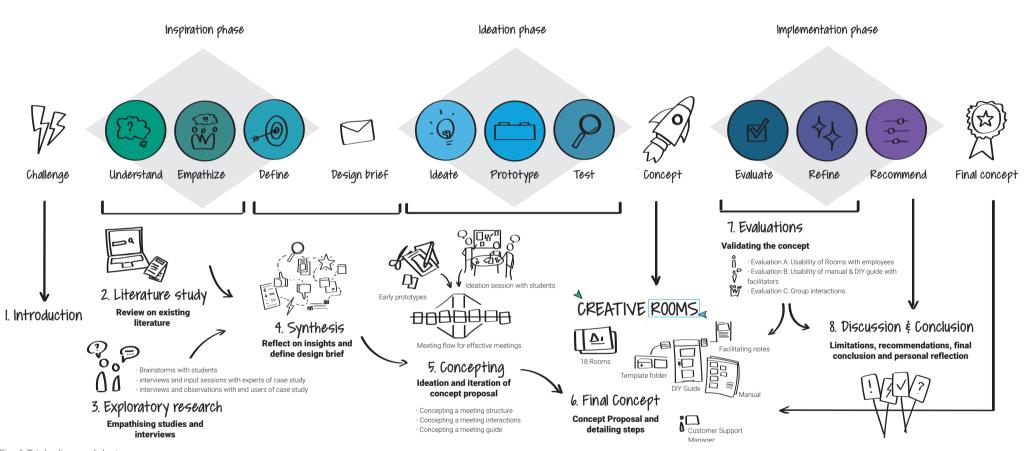


Fig. 6 Triple diamond design process





# 2 LITERATURE STUDY

In order to understand what is related to an organisational transformation and how this affects learning by doing, a literature study is performed. Existing literature is reviewed to get a clear picture of what is related to empowering employees and where additional research needs to be done. The study starts with defining 'creativity' and from there the factors affecting an organisational transformation to embed this creativity are discovered.

# In this chapter:

- 2.1 The definition of creativity
- 2.2 Organisational transformation
- 2.3 Empowering Employees
- 2.4 Creative Climate
- 2.5 Online work environments
- 2.6 Takeaways literature study

# 2.1 THE DEFINITION OF CREATIVITY

This section focuses on the definition of creativity in relation to organisational innovation. Through a comparative study about creativity the question 'For what to boost confidence?' is answered.

# Working definition of creativity

Although the eventual product, the innovation, is what counts for organisations, the interest of this study lays at the understanding of how to boost creativity in order to increase impact of these innovations. In other words, the final solution of this thesis is meant to facilitate individuals and teams to be creative within their work environment, figure 7.



Fig. 7 Schematic overview of creativity as process

Heijne and Van der meer (2019) state that when designing for creative facilitation the process viewpoint on creativity is most useful. For this research I therefore use the same definition on creativity by Amabile (1996): 'Creativity is the process that leads to novel and useful solutions to given problems'.

# **Comprehensive phenomenon**

The phenomenon of creativity is multifaceted and complex (Runco et. al., 1999; Rhodes 1961), causing there are numerous definitions (Amabile, 1998; Thoring, 2019; Heijne&Van der Meer; 2019). Most authors have based their definition on the 4P's-model of Rhodes (1961): Person, process, press (environment) and product. These facets cannot be used in isolation to describe creativity, but they do serve as a starting point in themselves.

# **Organisational interest in creativity**

With a capability programme, organisations like to see creativity as phenomenon in which an individual or team generates innovative products by means of (mental) processes within a certain environment. Amabile (1998) concludes in her literature review about the definition of innovation that innovative products are creative ideas being successfully implemented. For this, innovation will be defined as the acceptance, generation, development and implementation of creative ideas into products, processes or services (Van der Ven, 1986; Kanter, 1983). The difference between ideas and products is that ideas are still communicable thoughts and products are ideas embodied into a tangible form (Rhodes, 1961). In short, to innovate an individual or team should generate creative ideas. An idea is defined as creative when considered novel, appropriate(meaningful and useful) and unexpected (e.g. Stein, 1953; Sawyer, 2006; Amabile, 1996; Hennessey & Amabile, 2010; Gero, 1996; Gonçlaves; 2016).

## **Designing for creativity**

With the working definition of creativity focussing on the process to creative products, now the urge is to understand how creative confidence needs to be boosted within this process to get to these creative products.

# Hindrances in creativity

Creativity is very ambiguous and for that reason not easy to experientially learn. The change to creativity interferes in employees current working routines, causing a conflict between rational(financial and efficiency goals) and intuitive (nonfinancial and creativity goals) logics (Calabretta, et al., 2017; Aricò, et al., 2017). It is this conflict of rational versus intuitive thinking causing uncertainty and discomfort. According to Davis (1999), the art to design for creativity encompasses to understand, expect and be ready to cope with barriers to creativity from the work

environment and from inside oneself. The phenomenon of barriers is the absence or existence of something that blocks or impedes the successful adoption of cognitive abilities for successful creative activities (Smith, 2003; Gonçlaves, 2016; Davis, 1999). To cope with mental barriers, external blocks need to be minimised first

#### Interplay between organisational change and individual/team empowerment

This gets confirmed by the the componential model of creativity and innovation by Amabile and colleagues (2016), showing how creativity and innovation cannot be thought of as independent events, see figure 8. For this reason, transforming to an organisation tackling wicked problems creatively requires both work environment and individual/team creativity components to uniformiley change to an ideal situation for creativity to feed innovation.

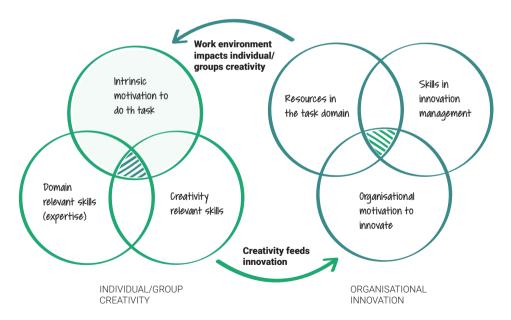


Fig. 8 Componential model of creativity and innovation by Amabile et. al. (2016)

Amabile (1988) stresses that the individual/team component is the most crucial to the expression of creativity, however the influence of the work environment cannot be overlooked due to its effect on how people will be encouraged in their ability to use creative activities in their daily work.

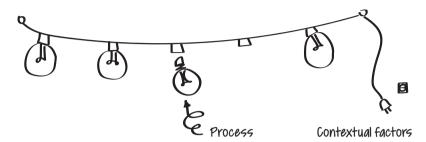


Fig. 9 methaphorical illustration of that creative confidence (the light bulb) can only be boosted when both the stimulative approach as the contextual factors are favourable.

In order for the creative light to be lit in every employee, a clear process has to guide the employee to create light and the contextual aspects will have to stimulate the ignition, figure 9. In other words, both context and process factors influence creative confidence.

# 2.2 ORGANISATIONAL TRANSFORMATION

In the previous section, meaning has been given to what confidence is needed for. This section maps out where this self-confidence can be influenced by. The question is answered; what is an organisational transformation and how does it influence the way employees act?

In this section, it will become clear that making a change in how employees act depends on factors in different layers of the organisation. The layers are ordered from impact on the broader organisation to the impact on the employees. Since this thesis approaches the organisational transformation from the employee perspective the layers will be addressed as how they influence the creative confidence of an employee.

# **Organisational context**

The context of this research focuses on large organisations. According to the dictionary of Cambridge (2020), organisations can be defined as "a group of people who work together in an organized way for shared purpose".

The purpose is the core attribute of an organisation's identity (Margolis&Hansen, 2002). As figure 10 illustrates, identity is expressed by it is cultural understanding, which leaves an impression (image) organisations want to keep positive. In other words, the organisational culture is the character and personality, giving understanding to the organisational identity. So, when an organisation takes a different course, the organisational culture has to change with it, in order to

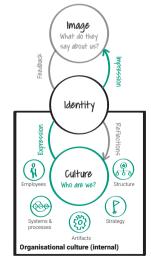


Fig. 10 Organisation culture

give uniformly meaning to the new purpose.

## **Organisational culture**

The culture of an organisation is explained as shared meanings/interpretations (assumptions, beliefs, expectations, values, etc.) about how people should think, behave and interact (Ford, 1999). Besides, how decisions should be made and how work activities should be carried out (CMI, 2015). The shared interpretations that characterise a culture help direct and coordinate collective effort. Ford stresses that organisational culture is the primary factor influencing a single employee to choose for creativity or stick to time-tested routines. In other words, fostering creativity is a group effort.

#### **Culture dimensions**

The way cultures differentiate can be discussed in three dimensions: content, intensity and degree of integration (Ford, 1999).

Content is the dimension that refers to the specific ideas comprising a culture. The ideas form the phrase "the way things are done around here" including beliefs, expectations and values. Having a shared interpretation about these leads to shared experiences, which is the base of the socialization process: agreeing to what is appropriate. The extent of variation in these ideas depends on how much risk an organisation dares to take.

Intensity entails to the expected consequences associated with conforming
to or violating shared understandings. The level of intensity can have major
influence on individuals' motivation and actions. Within organisations
especially expected consequences in relation to budget-, team- or assignment
allocation have contemplating influence on how things go.

- The degree of integration refers to the extent to which meanings are shared. Cultures which are highly integrated value consensus, consistency and low levels of ambiguity. Decision making is based on rational thinking. By means of these characteristics alignment between actors is more likely to occur. Unfortunately, routine patterns of thought and action promoted by these high integrated cultures have disappointing effect on creativity. On the other side, more differentiated cultures deal with inconsistency. Within differentiated cultures the different viewpoints, ideas and experiences lead to variation which advances creativity. These different perspectives can create conflict and ambiguity on organisational level, but also clarity and unity in a specific domain. Applying a method such as sense-making or visualisation allow differentiated cultures to create shared meanings despite the presence of varying ideas, perspectives and experiences.
- The interpretation of these dimensions indicate the extent to which an
  organisation's culture is ready for the usage of creativity. Only when employees
  perceive creativity as accepted in their work domain, employees are willing to
  unleash their creativity. This creativity can be encouraged when employees
  mutually agree on certain culture determinants, which communicate an intense
  shared understanding of the legitimacy and necessity of creative activity.

# **Creative culture determinants**

An organisation has a 'creative culture' when certain determinants influencing a creative culture are present in the right dimensions. Cultures vary from one organisation to another (Hellgriel et al., 1998), therefore, the dimensions favourable for a large service-oriented organisation are investigated through a comparative study of culture determinants.

The research of Ekvall(1996), Martins (2000), Ford (1999), Van der Meer (2007), Amabile (1988), Bason&Austin (2019), and Kelley&Kelly (2014) all point out that there are several determinants of an organisational culture influencing creativity and innovation

By categorising the different findings, 7 representing determinants are defined.

An overview of the determinants is presented in table 1. In an organisational transformation toward a creative culture, the organisation should focus on all determinants. If any of them is absent or when a shared interpretation about the involving ideas is missing, employees are likely to retreat to presumed safety of their old routines (Ford, 1999).

#### **Interdependency of determinants**

The studies of Ekvall, Martins and Amabile mentioned already overlap and relations between factors. It was not a surprise to uncover connections between the factors in the process of the comparative study. Categorising the findings (factors influencing creativity and innovation) of the literature review lead to one big cloud of seven interrelated categories. A pattern was revealed in terms of interdependency. Like Ekvall (1996) points out there are factors influencing the development or deterioration of other factors. By approaching the comparative study from the employee's perspective four layers of independency are identified influencing the creative confidence of an individual, see figure 11.

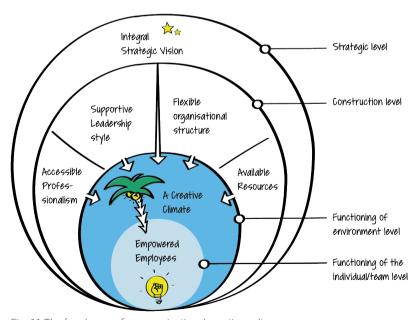


Fig. 11 The four layers of an organisational creative culture

	Determinants of a creative culture						
Organisational level	Strategy Culture construction				Context functioning	Individual functioning	
Determinant	1.A strategic vision	2. Supportive leadership style	3. Accessibility of professionalism	4. Flexible organisational structure	5. Availability of resources	6. A creative climate	7. Empowered employees
Literature review	Ford (1999); Martins&Martins (2002); Van der meer (2007); Bason&Austin (2019); Nonaka and Takeuchi (1995); Ekvall and Amabile (1996)	Bason&Austin (2019); Ekvall (1996); Amabile (1988; 1998); Martins&Martins (2002); Ford (1999)	Ekvall (1996); Amabile (1988); Bason&Austin (2019)	Van der Meer (2007); Martins&Martins(2002); Kelley & Kelley (2014); Corkindale (2011); Ekvall(1996); Jacob Morgan (2015);	Amabile (1988); Ekvall (1996); Sawyer et al. (1993); Leonard-Barton (1995); Nonaka and Takeuchi(1995)	Amabile (1988); Ravas (2019); Ekvall (1996); Bason&Austin (2019); Kelley&Kelley (2014)	Ford (1999); Martins&Martins (2002); Bason&Austin (2019); Kelley&Kelley(2014); Amabile (1998); Lee et. al., (2018); Carson, (1999); Bandura, (1997); Turnipseed (1994)
Each determinant exist of several orientations:	- communicable purpose - alignment on strategic vision for individual empowerment - future- orientated - customer orientated - proactive change	- top down support for change & development  - acknowledgement for creativity  - tolerance for mistakes  - open communication  - make resources available  - adoption of rules and regulations	- accessible expertise, design skills and knowledge - opportunity for creative support / coaching	- (external) collaboration - constructive conflict handling - participation - active - Integral organisation - facilitate sensemaking - empowered to empathize with customer	- availability of people, buildings, machinery, know-how, patents, funds, material, products and concepts - enough time and money needed for a creative process	- feel Collective Social-Trust  - experience a safe environment (comfort)  - Manifests the sense of freedom	- be confident  - intrinsically motivated  - skilled  - facilitated empowerment- oriented culture  - autonomous in value discovery  - encouraged in idea generating, risk taking and decision making

Table 1: Seven determinants of a creative climate

## The four layers of a creative culture

Ford (1999) stresses that an transformation to creativity starts with having a clear strategic vision which empowers employees to use creativity by aligning them with desired business goals. Ekvall (1999) compliments that the facets of the organisation's construction like structures, policies and strategies influences the organisation's climate. In other words, the layers addressing the organization's overall strategy and the organisational construction are more preconditions to the layers focussing on the employee and its work environment. So, only when

the strategic vision, leadership style, accessibility of professionalism, availability of resources and the organisational structure are favourable for creativity and innovation, a work environment with a creative climate can be developed. A creative climate is important to the extent individuals and teams feel encouraged to act and think creatively.

The way the five outer culture factors can influence creativity and innovation in an organisation as favourable pre-conditions are discussed in this section. Although

a creative climate determines the extent an employee will be empowered for creativity, in section 3.3 first the seventh culture factor empowered employee will be discussed. When it is clear when an employee is empowered, in section 3.4 the favourable dimensions of the sixth culture factor creative climate are defined.

# The five fundamental culture factors to develop a creative climate in order to empower employees for creativity

# Strategic level

#### 1. A Strategic Vision

Organisations should see embedding creativity as a strategic move to foster innovation. Such a strategy is described in the vision and mission of an organisation and should be clear for communication and integration in the activities and results of projects(Martins&Martins, 2002). A Strategy on creativity manifests itself in the way employees interact, create knowledge, anticipate on certain change and the way knowledge is (or not) shared. A sophisticated, unitary and intens understanding of the organisation's goals is required for work domains to assess the value of particular business solutions(Amabile, 1998). Such a shared interpretations is the strategic vision which can be translated into a framework and shared language facilitating creative actions (Ford, 1999). To ensure the interpretations are correct, leadership should provide goal clarity. In short, aligning with the desired business objectives enables individuals to assess the value of their own creative actions.

The involvement of stakeholders and in particular the (end-)user is considered imperative to creativity and innovation(Nonaka and Takeuchi, 1995; Amabile 1996; Ekvall, 1996). Therefore, a strategic vision with a customer-orientation is required. Furthermore, pro-active innovation can only be realised when the strategic vision is future-oriented (Bason&Austin 2019) with a prospect that allows for planning regarding opportunities (Van der Meer, 2007). Leadership has to ensure that the bar should be periodically raised. This reminds individuals that there is always room for improvement.

## Construction and functioning level

#### 2. Supportive Leadership style

Due to reward systems, budget-, team or assignment allocations and other leverage, employees act regarding their expectations of how their superiors would react(Ford,1999). For this reason outspoken commitment on the use of creativity is of big importance.

This manifests itself in the provision of resources, professionalism and a creativity stimulating organisational structure (Amabile, 1998). But also in an innovative management style, since this has big influence on the extent factors of a creative climate occur. According Ekvall there are two leadership styles advancing creativity and innovation.

- 1) Pull-tactic focussing on people and relationships: a style that is participative, democratic and supported innovation initiatives. The style stimulates freedom, idea support and trust by really focussing on bringing different viewpoints together.
- 2) Push-tactic focussing on change and development: a more entrepreneurial style involving risk-taking, debates and conflicts to manage. This more radical approach can be very innovative, but can also lead to hasty, aggressive and power-based decisions and actions(Ekvall, 1996).

Moreover, leaders have a supporting role concerning the navigation through the unfamiliar landscape of creativity (Bason&Austin, 2019; Amabile, 1998), including tolerance of mistakes, open communication and stimulation of the adoption of rules and regulations regarding creative actions (Martins&Martins, 2002). This difficult task requires a delicate balance between allowing and guiding individuals/teams in order to stimulate both autonomy and successful results. Autonomous individuals/teams are able to choose the appropriate way to address a task.

## 3. Presence of professionalism

On its own professionalism has no major impact on the embedding of creative activity, but it does influence the development of a creative climate (Ekvall, 1996). The presence of professionalism is about the level of expertise and knowledge available in a certain work domain. Bloom's taxonomy framework indicates

that 'remembering' and 'understanding' certain theory is fundamental to the implementation of the information in new situations. The accessibility of the required knowledge about creative problem solving is the necessary precondition for employees to put design skills and abilities into practice (Amabile, 1988).

#### 4. Flexible organisational structure

The way activities are directed to the strategic vision of an organisation is captured in the organisational structure. The design of the structure influences the way employees operate. Just as Van der Meer (2007) advocates for open innovation, it is also for creative problem solving to be open to external collaborations. Besides, to include different perspectives innovation should be organised integrally. According Martins&Martines and Kelley&Kelley an organisational structure stimulating the use of creativity enables employees to cooperate cross-divisional, make decisions in participation, involvement of stakeholders, proactively experiment and reflect continuously. Though, legitimacy and willingness for such creative activities need to be established through a creative climate.

To be able to proactively adapt to fast changing external factors like customer satisfaction, an organisation should be able to flexibly anticipate on these unexpected events. When the design of an organisational poorly fits the strategic vision it is hard for employees to get aligned. Confusion within roles, a lack of coordination and direction, failure to share ideas and difficult decision making bring employees in unnecessary stress, complexity, and conflict (Corkindale, 2011). Changing the structure on the other hand really interferes with the way things are always done in an organisation; the routines.

In order to change and be flexible an organisation should try to stay away as much as possible of a structure based on bureaucratic principles(Ekvall, 1996). On the other hand it should maintain stability and direction to keep sensing control (Ravas, 2019).

The introduction of an integrally organised innovation programme provides the adaptability required for proactive innovation through creativity. Jacob Morgan (2015) describes an organisational structure with such integral programme a

'flatarchy', which provides a great middle ground in which employees can operate in existing structures while being supported to generate and run with new ideas in separate, divers, non-hierarchical teams. Over time the organisation can grow towards a more permanent structure as 'flatter organisation', in which employees get the opportunity to create special teams when needed. As will be described in section 4 Creative climate, autonomous alignment is key to the success of these teams

## 5. Availability of resources

Another very important precondition for the opportunity to develop a creative climate and thereby the empowerment of employees for creativity is the availability of resources. The creativity-enhancing value of certain resources is underestimated by many organisations. Ekvall (1996) and Sawyer et al. (1993) mention idea time as often misconstrued and Amabile (1996) adds facilities, funds, patents, material and expertise. These resources for the generation of ideas, testing and experimenting to validate these ideas are critical enablers for successful innovation stories (Leonard-Barton, 1995).

Resources or creativity should also include the availability of the right people, professionalism and a financial basis to address potentially valuable projects. Having these preconditions set empowers employees to autonomously tackle projects in a creative and innovative way. Moreover, mechanisms to store and distribute knowledge belongs to creativity support (Nonaka and Takeuchi, 1995). This kind of process information is valuable for reflection and thereby experiential learning of the creative process (Kolb, 1984).

# Summary determinants of an organisational transformation to creativity

This section points out that boosting an employee's creative confidence cannot be done without taking into account the whole culture in which this self-assurance must come into its own. In fact, all determinants of the creative culture must be taken into account, their interrelatedness makes that absence of a single factor can lead to resistance, resulting in the failure of the organisational transformation to creative problem solving.

The interdependency of the factors, especially for the development of a creative climate makes an organisational transformation complex. First of all the organisational context plays a role; the culture characteristics as the structure, availability of resources an professionalism determine the possibility for creativity. Besides, top down support from leadership/management has a great deal of influence on how creativity can be used and with that how a creative climate is formed. Without a creative climate, the lack of legitimacy and willingness will keep employees from doing things differently. On the other hand empowered employees influence the embedment of a creative climate in the work domain. Because of this interdependency these factors need to be addressed at the same time. The other factors can be seen as preconditions for a creative climate with empowered employees.

# 2.3 EMPOWERING EMPLOYEE

This third section focuses on the center point of this thesis, the empowered employee. An employee is creatively empowered when it's creative confidence is boosted. In order to understand what creative confidence is actually based on, a literature review on both definition and approach to empowered employees is done. This chapter starts with defining this empowerment and concludes with the qualities a creative climate should stimulate.

# What defines empowered employees?

Empowered employees are more likely to be powerful(activated) and confident in the use of creativity (Lee et. al., 2018). Both Ford (1999) and Amabile(1988) stress that empowerment is a product of knowledge, skills and motivation. In addition, Amabile concludes that specifically for creative purposes intrinsic motivation determines the extent to which knowledge and skills will be engaged. So, boosting creative confidence is actually empowering employees' intrinsic motivation for the use of creativity.

An intrinsically motivated employee, means that the person is capable of self-efficacy, has a sense of working on something important (meaningfulness), is enthusiastic and enjoys challenge. During the process the person shows commitment and learns from experiences, while remaining open for new information. (Amabile, 1998; Carson, 1999; Bandura, 1997)

The presence of intrinsic motivation depends on four elements, see figure 12. With all these elements of intrinsic motivation present employees will be able to use the appropriate creative skills and knowledge in their projects (Amabile, 1998). In other words to boost creative confidence these four elements needs to be taken into account when asking employees to experientially learn the value of using creativity in their project.

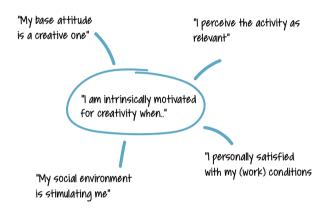


Fig. 12 description of when someone is intrinsically motivated

## Element 1: The individual's baseline attitude towards a creative activity.

When the baseline attitude of an individual is 'creative', the person's ability to perform creative activities is enhanced (Russ, 1993).

# Adopting creative attitudes

The ability to do something creatively depends largely on getting in the right mindset, or in other words by adopting the required creative attitudes. Creative attitudes are often described as part of a person's personality (Rhodes, 1961; Amabile, 1988). Although having certain personality traits is beneficial, in this thesis creative attitudes are approached as qualities someone can engage in when feeling able or allowed to. The latter is interrelated to the characteristics of the climate the individual is in. To understand what qualities this climate should allow, a comparative literature study about the required creative attitudes for creative cognitive abilities is conducted.

By understanding which abilities an employee needs for the different subprocesses within the creative process, see element 2, the necessary attitudes for these abilities are determined

Figure 13 shows the 12 creative attitudes which should be fostered as baseline to empower intrinsic motivation for creativity. Each attitude is provided with a short explanation of how it affects the cognitive abilities of the creative process. The attitudes are based on research of the emotion/affect model of Russ (1993), input of the creative minor learning objective by Heijne (2020), the book creative confidence by Kelley&Kelley (2014), and research of Ford (1999), Dyer, Gregersen&Christensen's (2009), Buijs et. al., (2009), Williams's (1972).

The 12 creative attitudes is a conclusion of a process in which literature findings are conjoined with the findings of what designers and employee's of the case study describe as creative confidence, presented in chapter 3.3. This analysis process can be splitt-up in three phases, based on the model of Russ, (1993):

- 1) The creative process is analysed. From all different models one generic module is developed (appendix B); the creative innovation process (CIP). The module is strongly based on the Creative Product Solving-module.
- 2) The skills/required abilities within a this CIP-module are plotted. Per subprocess of the module the skills are determined, in this way a all skills for a complete creative process are tackled. Overlapping skills are combined and in this way 8 categories where created (figure 14 - orange post-its)
- 3) To understand which attitudes (personal qualities) are linked to these skills, for some abilities a skill focusing on the affective process (feeling in stead of thinking) was added (yellow post-its). From here it was easier to make the step to the 12 creative attitudes (pink-post-its).

# **Element 2: The perception of relevance of doing the activity.**

The perception of relevance or mentioned as personal view on innovation by



Fig. 13 The 12 creative attitudes to adopt for creative mindset

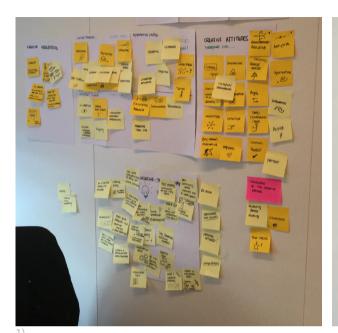








Fig. 14-4) snaps of the analysis in which from creative process related skills has been worked back to the required attitudes to get to these abilities.

- 1) combining findings from literature and exporative research
- 2) skills plot on CIP-module
- 3) first division of determined skills and attitudes
- 4) relationship anlysis between the abilities and attitudes.

Turnipseed (1994) can be achieved through knowledge and understanding of how creative activities contribute to the higher purpose of a project/task (Ford, 1999). In other words, understanding 'why' using creativity to innovate.

#### The relevance of creativity

Although creativity is described as a phenomenon for which you need to be flexible, a practice or artifact for sensemaking is needed to avoid confusion and provide direction and stability (Ravas, 2019). A team must be able to interpret the abstract values and principles of the creative process in a way that helps them finding acceptance for the use of creativity in their project (Ford, 1999; Buijs, 2012). Only when the values and principles of creativity have a shared meaning individual employees can make their creative activities relevant. For example, when a team collectively acknowledges that quantity produces quality, an individual can bring understanding to spending time in generating more than one idea.

The literature review (appendix B) about different creative process models uncovered some important principles which should definitely be touched in the facilitation of relevance for creativity.

Creativity exist of four simultaneous sub-processes. Belief this process to creatively succeed.

- 1. Acceptance finding
- 2. Content finding
- 3. Information finding
- 4. Project management

Creativity can be applied for different phases of a project, like problem finding, idea finding or solution finding for which the principles all apply. The principles are captured in figure 15. Task appraisal: A good start is half the work Divergent thinking: Quantity breeds quality, hitchhike, freewheel

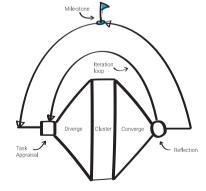


Fig. 15 Create process principles in CIP-module

Reverging: Be jointly active, listen responsively, move circularly
Converging: Protect originality, follow your intuition, think in terms of action
Continuous reflection: Learnings are successes
Iterative working: Kill your darlings, fail fast to succeed sooner

#### **Element 3: The personal job satisfaction.**

Turnipseed (1994) mentions that employees who are more satisfied about themselves, the organisation and their superiors will easier be motivated. He also stresses that low-discriminating cultures are linked to innovation. Since personal job satisfaction is very different for every and depends mainly on the settings of the social environment, this thesis will not focus on how to design for personal job satisfaction. Though, the need for social interaction and acceptance should be taken into account for the design direction.

#### **Element 4: The setting of the social environment.**

Social environment factors can be understood as the extent to which relationships have been formed, personal growth is stimulated and communication and control regarding innovation is managed (Moos, 1986). Research of Turnipseed points out that some of these social environment factors are related to the 10 creative climate dimensions of Ekvall. What at least can be concluded is that an employees' intrinsic motivation who determines the use of creativity, is affected by the involvement in the process, peer cohesion and supervisory support in terms of relationships; autonomy and task orientation to stimulate personal growth; and emphasis on divergent thinking and clarity in communication and control regarding innovation. The influence of the social environment is discussed in section 3.4 creative climate.

#### What about extrinsic motivation?

In order to truly embed the motivation for creativity, organisations need to be cautious about stimulating extrinsic motivation (e.g. being rewarded in the form of allocation of money or people). A focus on extrinsic motivation could be a strategy for the activation of the transformation in the way of working, but making a lasting, real difference requires having intrinsically motivated employees (Amabile, 1998)

#### **Empowering intrinsic motivation is complicated**

Creative actions can be very discomforting: focussing on one specific target group can feel subjective and connecting intimately can be overwhelmingly affecting(Bason&Austin, 2019). Mental barriers can be formed standing in the way to adopt creative attitudes (Gonçlaves, 2016; Davis, 1999). Research to these barriers and how they affect an individual's motivation for creativity can be read in appendix C.

The setting of an work environment can make the difference in how well employees can cope with these mental barriers. When the 'vibe' within a certain context is stimulating creativity employees will easier adopt a creative attitude (Ekvall, 1996) and thereby avoid mental barriers to creativity. In other words to understand how to boost creative confidence should be understood what a creative climate is and how this can be facilitated. This is done in the next section.

#### Summary of empowering employees

Empowered employees are employees who are intrinsically motivated to use their creative knowledge and skills. An individual's intrinsic motivation is influenced by four aspects: relevance, mindset, satisfaction and social environment. The principles of the creative process need to be communicated and adoption of the creative attitudes, social interaction and acceptance and factors of a social environment need to be developed through the settings of the creative climate.

# 2.4 CREATIVE CLIMATE

This section focuses on the organisational climate. As described has the climate an important role in intrinsically motivating employees in adopting creative attitudes. In this section is described how a creative climate can facilitate the enhancement of intrinsic motivation.

#### What is a creative work climate?

A work climate is defined as the confluence of attitudes, feelings and behaviours which characterise the way things are done within a work domain (Ekvall, 1996). Martins&Martins describe it more as integrated values that support behaviour encouraging certain activities. For example; providing brainstorm time to encourage idea generation.

The conceptualisation of climate implies that even when the preconditional culture factors are present (a clear strategic vision, supportive leadership style, flexible structure and broad accessibility of resources and expertise) employees can feel hesitant in using creativity due to a demotivating 'vibe' within the work domain. According Ekvall(1996) has a climate a strong effect on the quality, productivity, innovation rates, job satisfaction, well-being and profit rates. In other words the dimensions of the climate within a work domain have big impact on the degree a individual/team will be motivated for creativity. The dimensions of a climate must therefore afford qualities which enhance the adoption of creative attitudes, such a climate calls Ekvall a "creative climate".

A profession that facilitates a creative climate is creative facilitation (Heijne & van der Meer, 2019). Employees should experience such a creative climate as a safe space, or better described by Arao and Clemens (2013) as a brave space. They stress that instead of safety, bravery is required to have people diversify in their acting and thinking. Such a space focuses on opening-up instead of defending

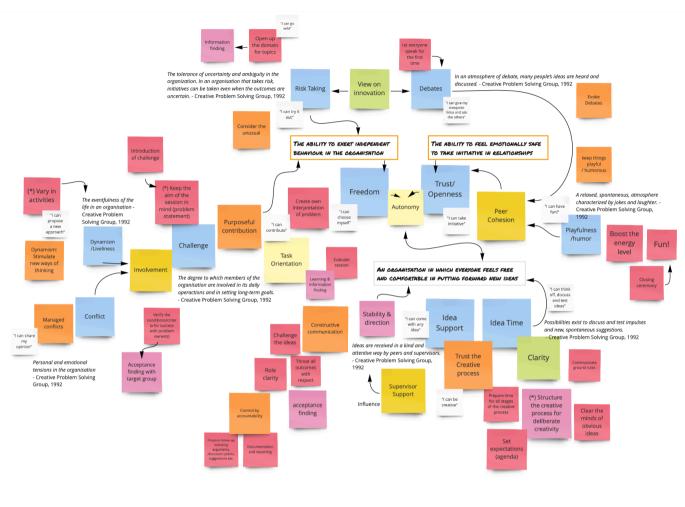
a viewpoint or idea. However, according to Ford (1999) the perception of what is appropriate to say or do determines how employees operate. Therefore, having employees diversify in their acting and thinking requires shared interpretations about the values and principles of creativity (Buijs et. al, 2009). Having such shared work commands provides stability and direction in what is appropriate to operate freely. Especially in complex and rapidly changing environments, a non-threatening climate built on trust, openness and sincerity leads to success stories of creativity (Martins&Martins, 2002; Barret, 1997). Next the dimensions forming this non-threatening climate are discussed.

#### The dimensions of a creative climate

The climate dimensions having stimulating effects on employees' possibilities and motivations to be creative in their work domain are based on the Climate for Innovation dimensions formulated by Ekvall&Arvonen(1983). In addition, Turnipseed (1994) shows that Climate for innovation dimensions are congruent with certain Social Environment variables developed by Moos(1986). These dimensions are described in appendix D

#### **Study to creative climate dimensions:**

To understand how creative confidence can be boosted through development of a creative climate, dimensions are formulated in a way they stimulate innovation by whole teams including process and social aspects. The creative climate dimensions of Ekvall & Arvonen are taken as starting point and are complemented by the insights of Turnipseed's(1994) research, the creative process activities(see p25) and insights of how to design a brave space for the facilitation of creative workshops (Heijne&Van der Meer, 2019). In this way we got to a complete theoretical list of dimensions with an empowering effect on intrinsic motivation for creativity (orange post-it).



Legenda | Study to the dimensions of a creative climate

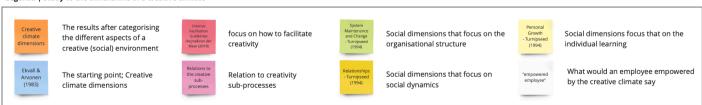


Fig. 16 Comparative study about creative climate dimensions

#### 9 creative climate dimensions

Figure 16. shows the result of the study of creative climate dimensions. This study reveals nine dimensions important for a climate to empower employees for creativity. A safe environment in which people feel empowered to autonomously continue putting forward new ideas provides stability and direction and on the other hand leaves room for exploration.

Ekvall (1996) takes Freedom and Trust as separate dimensions, where in this study these dimensions are deliberately chosen as meaning of a creative climate. Freedom and trust/openness are the building blocks for autonomy and the development of a safe space. According Amabile(1996) is autonomy a positive condition for creativity as long it is constrained and directed by guidance and control (Ekvall, 1993). With autonomy one has the ability to decide what work to do and how to do it, and in which team members have the freedom to define and reform work practices. Dimensions enabling this 'controlled autonomy' are dimensions empowering employees' intrinsic motivation for creativity. According to the study provide the following 9 dimensions a climate that stimulates controlled autonomy:



#### Purposeful contribution:

The first dimension is purposeful contribution. Ekvall&Arvonen(1983) called this dimension 'challenge', but when connecting this dimension to creative facilitation guideline 'keeping the aim of the session in mind' and social environment dimension Task orientation, purposeful contribution I found a better description. The purposeful contribution dimension is the degree employees are involved task appraisal and the ability to relate this to long term goals.



#### Dynamism:

A second dimension leading to involvement of employees is the variation in events. New ways of thinking will be stimulated triggering creative attitudes (Heine & Van der meer, 2019).



#### Conflict management

Diverge ideas, viewpoints, opinions and expresses can lead to tensions in the organisation. With the encouragement of variation this is inevitable and therefore it is important to manage conflict. Conflict stands in the way of alignment, but managing it leads to involvement. The verification of conditions and criteria of the problem owner(s) can ensure conflict avoidance.



#### Constructive communication

A combination of by Ekvall & Arvonen described 'ideas support' and 'openness' is constructive communication. Peers and supervisors should be able to challenge ideas or give feedback, but this is always kind and attentive to keep the positive forward spirit



#### Room to diverge

To create the possibility to generate and run new, impulsive suggestions all phases of a creative process need to be followed. Following this structure provides stability and direction, but most

importantly navigates teams through the diamond-shaped module including time to diverge. Exploration beyond the obvious is what teams often skip because of time efficiency, but when it comes to the quality of the final solution this is often a misconception.



#### Control by accountability

An important counterpart of autonomy is accountability. Through transparent boundary conditions and clear expectations teams know where they will be accountable for. Coordination and connectivity among teams should lead to overview in dependency. This also provides a compass which guides someone in the decision making when working autonomously.



#### Consider the unusual

The room for uncertainty and ambiguity within control and order. The consideration of the unusual asks for initiatives to be taken even when the outcomes are uncertain. Room for information finding is needed to open up for these new topics and continuous reflection is an important aspect to deliberately take a risks. The art lies in maintaining both consistency and seek for novelty.



#### **Evoke Debates**

In an atmosphere of debates many viewpoints, ideas and experiences are heard and discussed. Providing dialogues about different perspectives and ideas enriches the quality of the process. Important is that everyone feels free to speak.



#### Playfulness/humor

Comfort relates to stability and direction(Ford, 1999), but as important is a relaxed atmosphere. Such climate characterised by laughter and jokes cause the energy and fun needed to think out of the box. However, as Ekvall(1996) points out too much playfulness in some work domains can be limiting in regard to quality aims or productivity.

#### Influence of leadership/facilitator role

Although leadership style is positioned as pre-condition for developing a creative climate containing the above mentioned dimensions, the importance of the leadership role/facilitator in a creative climate cannot be ignored (Ekvall 1996; Ford, 1999). The leadership style decides in what extent people can form relationships, can grow personally and have a proactive mindset towards innovation. This reliance depends on how clear goals/problems are given, the degree resources and professionalism is made available and the degree leadership controls how activities are executed. Providing stability and direction is in many cases the role of the facilitating role.

#### A balanced creative climate for controlled autonomy

Having employees use creativity requires a base within the work domain fostering creativity. In order to achieve this the ambiguity and inefficiencies of creativity need to be directed through a balanced process of exploration and direction. Mankins&Garton (2017) emphasize that there are contradictory relationships related to the degree of radicality of the innovation. On one side the freer someone can be in applying creativity the more radical the ideas will be. Creative climate dimensions Considering the unusual, Dynamism/Liveliness, Debates and in some extent Humor/Playfulness seem to make the difference between a creative climate supporting radical innovation or incremental improvements (Ekvall, 1996). On the other side determines comfort the degree of initiative and application of the ideas. Creative climate dimensions Purposeful contribution, Constructive communication, Conflict management and Control by accountability determine the degree of stability and direction required for the willingness to choose for creativity. Because freedom and order may pull in opposite directions, conflict between the dimensions determining these aspects of autonomy need to be managed. Coordinating or rather facilitating a balance of the mutually reinforcing experience of freedom and comfort could be the role of the manager/leader. In short, forming a creative climate is actually balancing the conflicting exploratory and guiding factors to the desired degree of autonomy, figure 17.

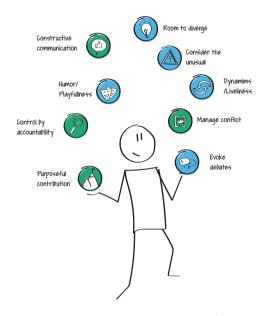


Fig. 17 a creative climate contains a balance between freedom and comfort orientated dimensions.

#### Characteristics of a well balanced creative climate

Characteristics of a culture with a creative climate are employees who can flourish, experiment and grow in their creativity depending the opportunities for autonomy within their work domain. According Martins&Martins these employees are like-minded about collaborating, handling conflicts constructively, sustaining a participative work environment and imply proactive change through early prototyping, testing and continuous reflecting. but also when management can harmlessly intervene and manage projects regarding the higher purpose of the organisation (Shaw, 1997).

By Covid-19, organisations started working massively from home. In order to be able to tackle projects creatively from a distance, it is necessary to be able to create a creative climate, also in online work environments, the next section addresses the some aspects of online collaboration.

# 2.5 ONLINE WORK ENVIRONMENTS

This section is added half way the project as a result of the Covid-19 pandemic. In this section the change to online working is addressed and how this affect the development of a creative climate and thereby the stimulation of creative confidence. Online team meetings are important gatherings for effective homeworking. By means of a short literature review we discover whereoff a meeting is composed and even more important what to take in consideration when designing for online team meetings

#### It is time to change

In addition to the major health and economic impact of the corona pandemic, it has led to an abrupt change in organisational work routines. For example, the corona measure "who can work from home, works from home", encouraged many companies and organisations to implement home working at a fast pace (Timmers, et. al., 2020). From a Dutch point of view, many changes still feel surreal, such as not shaking hands or wearing a mouth mask in public transport. However, Covid-19 has also created a momentum showing many organisations that radical change can lead to improvement and efficiency.

The national quantitative survey of Timmers, et. al. (2020) shows that at least 70% are satisfied with working from home at the moment. Due to the better work-life balance, more efficient use of time and positive impact on traffic and the environment, Initial studies and literature foresee that the demand for working from home will increase even after corona time.

#### Homeworking is online working

Working from home mainly affects the way work is controlled. Mutual trust and transparency are key to the 'new way of working'. Organisations move more towards self-managing teams/individuals, giving employees more autonomy

over their own planning and working hours. Assessment will be based on results instead of presence (Nicklin, Cerasoli, & Dydyn, 2016). This more autonomous way of working benefits creativity, but this also means that project team collaboration moves to online work environments. Regarding the 'new way of working' it is important that a creative climate can be created online. In order to stimulate autonomy, the planned team meetings are especially interesting to provide a creative climate.

#### **Team meetings**

According the 'team' and 'meeting' definitions of the Cambridge dictionary can a team meeting be described as a planned occasion where a number of people come together to discuss their shared 'something'. This definition indicates that a team meeting consists of several phases. It is similar to setting up a creative session (Heijne & van der Meer, 2019, p217-p233)), in which first the aim of the meeting is determined, accordingly, the organiser prepares the meeting set-up. Then, it is time to have the actual team meeting and at the end the outcomes and action-points get processed. If a follow-up is needed, a next meeting can be organised, in which of course the 'goal' must first be defined again, see figure 18 for an overview of these phases.

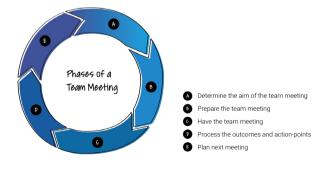


Fig. 18 Phases of a team meeting

#### What are the components of an online team meeting?

The phases describe what a team meeting is all about, however this does not determine how the meeting itself needs to be build-up. There are three components (Levko, 2016) that define the actual meeting. Each team meeting exists of 'content', a 'structure' and certain 'interactions'. Preparing these components with a careful integrating the creative climate dimensions can result in effective team meetings, see figure 19.

Team meetings are considered as 'effective' when individual employees are empowered to autonomously proceed their project activities beyond the team meetings. Meetings should serve as a food source for developing a sense of comfort on the one hand and freedom on the other. Only when the meeting content is discussed within a structure that affords interactions in both explorative and directive manner, individual employees will find the confidence to apply creativity also independent

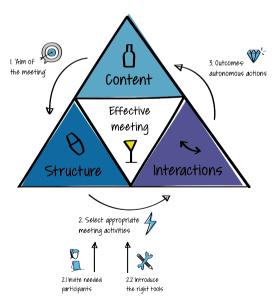


Fig. 19 Components to build-up an effective meeting

#### Variables influencing the component set-up of online team meetings

To define what activities need to be part of the meeting structure, defining the aim of the meeting is step 1 (Van Gassel, et. al., 2014). But then there are a number of other variables that influence how to structure the activities required to reach the aim of the meeting. It is up to the organiser of the meeting to determine how the variables are present and how they affect the set-up of the meeting. Based on the meeting variables selected by Van Gassel, et. al. (2014), variables for online team meetings are listed in table 2. These are variables on which the set-up of a meeting depends, regardless of the creative climate.

#### How to design for online team meetings?

The climate dimensions of section 2.4 need to be integrated in the components of the meeting, the interpretation of these components however are influenced by meeting variables. In other words the meeting organiser needs to be able to decide on the appropriate meeting composition by understanding how the variables are set for the to be facilitating meeting.

For effective meetings not only control is required for the organisation (step 1-2) of an online team meeting but also during and after the meeting (phase 3-5). An facilitating role should both guide the team through the structure of the meeting and establish and develop interpersonal relationships (Van Gassel, et. al., 2014).

To design for the ideal team meetings of the future the needs and requirements of employees should be gained. In the exploratory research we empathise with employees and facilitators to explore the current and desired online team meeting setup. This information is needed to properly understand how to enable team to create an online creative climate in their team meetings.

Meeting variables		
About	Variable	Description
Reason for certain activities	Aim of the meeting	The reason for having the meeting. The aim indicates what kind of outcomes the structure and interactions should result in. The aim therefore determines what meeting activities are included
	Stage in Project process	The stage of the process provides direction to where should be aimed for in the meeting. When still in the beginning of the project, the focus lays at reframing the problem and defining opportunities, while in the implementation stage the focus lays at how to introduce and integrate the solution. The meeting structure should suit the kind of content.
Meeting time	Frequency of meeting	The many times a team has a meeting. Most project activities are planned over weeks, therefore meetings are also expressed in times per week. Trust among team members grows, the more often they gather.
	Duration of meeting	The time a meeting takes. Meetings are often shorter if held more often per week.
Meeting group	Number of participants	The number of employees participating in the meeting. The more participants the complexer it gets to structure the meeting
	Composition of participants	The kind of employees, in terms of stakeholder position, that attend the meeting. The position of the stakeholder determines what content needs to be addressed
		Someone's position gets determined by someone's involvement and influence on the project. The involvement is expressed in time invested in the project and influence in how dependent the project is on one's expertise or resources.
	Role division	The extent employees know what is expected from them in the meeting, so what role they play in during the meeting. This affects the interactions.
	Social relationship	The presence of certain relationships influencing how people will interact. For example presence of hierarchical relationships with high dependencies can be a restraint to how people interaction.
Setting of the meeting	Online location	The application(s) via which the team meeting is held. The application determines the space for interaction and the possibility for certain tools and activities.
	Participant appearance	The extent to which the worker's appearance is involved. Most teams use a videoconferencing application as a means of communication during online meetings. The way you appear on the screen affects the interactions.
Knowledge	Experience with the tools	The extent employees understand how to use the tools. This impact the smoothness and efficiency of meetings and therefor how effective the meeting eventually is.

Table 2: Meeting variables

# 2.6 TAKEAWAYS LITERATURE STUDY

This summary contains the key insights and opportunities for the design solution.

Creativity is described as the process that leads to novel and useful solutions to given problems.

# Insight 1. Boosting creative confidence is empowering an employee's intrinsic motivation to use their creative skills and knowledge

Amabile (1988) stresses that the individual/team component is the most crucial to the expression of creativity. Intrinsic motivation is a result of however the influence of the work environment cannot be overlooked due to its effect on how people will be encouraged in their ability to use creative activities in their daily work. The work environment depends on the culture of the organisation and the climate within the specific work domain.

# Insight 2. The Culture factors of an organisation need to be favourable for creative purposes

From an organisational perspective there are 7 factors influencing creativity and innovation, figure 20. The first five are pre-conditional to the development of the final two factors.

Enhancing intrinsic motivation is a matter of strengthening a muscle, the more you practice the stronger it gets (Kelley&Kelley, 2014). Experiential learning is the ideal way to do it, but this is only possible when the first five culture factors are favourable to the development of a creative climate.

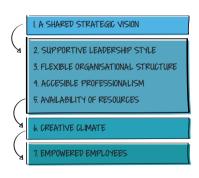


Fig. 20 Creative culture layer influence

#### Insight 3. A creative climate determines someone's creative confidence

There are 9 dimensions that make a climate stimulating employees to operate creatively.

- 1. Control by accountability
- 2. Constructive communication
- 3. Purposeful contribution
- 4. Room to diverge
- 5. Consider the unusual
- 6. Humor/playfulness
- 7. Dynamism/Liveliness
- 8. Evoke Debates
- 9. Manage conflict

The stimulation of believing in your creative capacity is called Creative Confidence. To generate this belief in oneself and willingness to differ a creative climate should be developed. Such atmosphere provides relevance, satisfaction, involvement, social cohesion and the desired proactive attitude towards change. The idea is to embed creativity by means of stimulating the development of creative climates 'locally' in the organisation. By establishing such a safe space in the work environment provides on the one hand the comfort of stability and direction to navigate through the ambiguity of creativity and on the other hand the freedom to experientially learn what value creativity can bring to the projects. A creative climate takes away uncertainties and enhances thereby a chance to successfully transform to an organisation who tackles problems with a creative mindset.

### Insight 4: A balance between freedom and comfort needs to be facilitated

Developing a creative climate is actually putting the contradictory explorative

and directive dimensions in proportion in order to both determine alignment and autonomy. This feeling of autonomy, or as Bandura calls 'self-efficacy' has a positive effect on someone's creativity in terms of being able to choose freely the way to address a problem. On the other side we have alignment. Forming a shared interpretation about the purpose and goals of the project enables employees to choose the appropriate way confidently. Having control over this interplay(figure 21) of freedom and comfort leads to stability and direction, important aspects for organisations to avoid ambiguity, inefficiencies or even organisational chaos (Ravas, 2019; Mankins&Garton, 2017).



Fig. 21 Control the interplay of freedom and comfort as a yin and yang

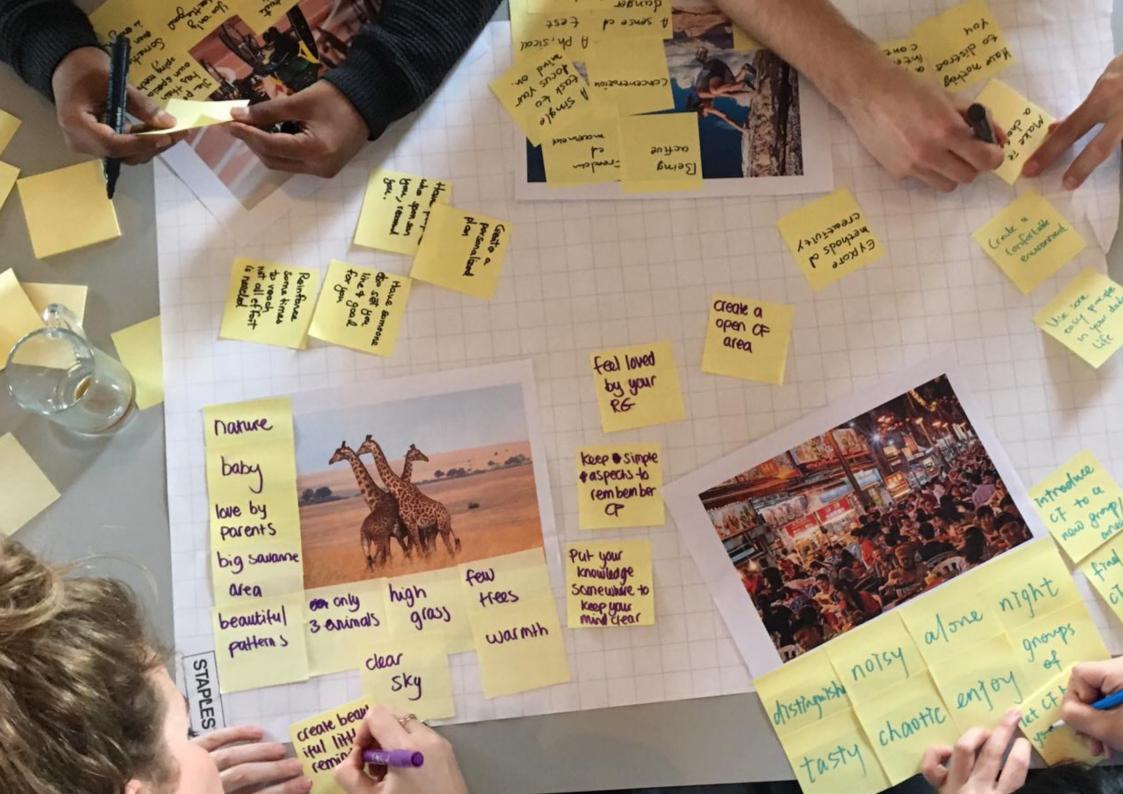
With regard to this coordination it is important to have someone in the team with a facilitating role. Management or leadership could be the obvious choice, but like a Scrum master this could also be a separate role within teams.

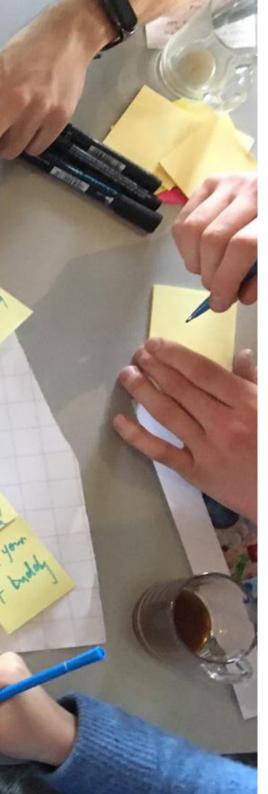
#### Insight 5: The future lays at online creative climates

Covid-19 has shown the benefits of homeworking and therefore the expectations are that many people will remain working from home. Due to the turbulent and unpredictable times, the demand for creativity is higher than ever before. Online creative climates during team meetings can help employees with empowering the adoption of a creative mindset and provide the comfort and freedom for autonomous working beyond the gatherings.

#### Key opportunity to boost creative confidence:

- 1. Enabling teams to establish an online creative climate within their work environment
- 2. The designation of a facilitating role and enabling this person to coordinate the interplay of comfort and freedom dimensions in order to achieve the experience of safety, trust and autonomy. Only then employees will feel empowered to confidently unleash and implement their creativity.





# 3 EXPLORATORY RESEARCH

This chapter explores the way how to boost creative confidence by means of several analysis with experts, stakeholders and end-users. For each analysis, the research goal and method are described followed by an overview of the key findings. The findings, together with the literature takeaways form the basis for the synthesis leading to a design opportunity.

#### In this chapter:

- 3.1 The exploratory research set-up
- 3.2 Creative facilitation brainstorms
- 3.3 Deep dive expectations of creative confidence in organisational context
- 3.4 Discover current situation online project meetings
- 3.5 Key takeaways of the explorative research activities

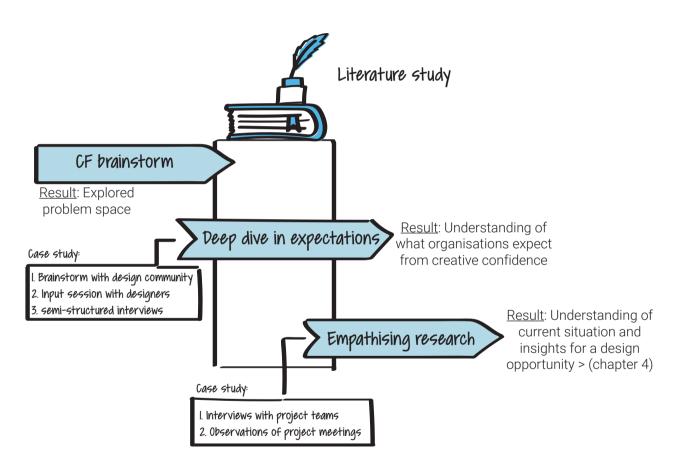


Fig. 22 Visual presentation of the exploratory research set-up

# 3.1 THE EXPLORATORY RESEARCH SET-UP

#### The raison d'être

The literature study performed in chapter two provided insights about how to tackle the research questions 'how to boost creative confidence?'. The conclusion states that the solution should both focus on contextual elements to enable a creative climate and procedural elements to provide knowledge and relevance about the creative process.

Explorative research is needed to deepen on one side what this solution should taken into account considering the expectations of creative confidence in organisational context and on the other hand to discover the current situation of online organisational team meetings.

#### The researh set-up

In the first explorative research activity the problem as stated in the introduction (p17) was explored. By means of two creative session within the course Creative Facilitation were held to define different research directions. The insights have given direction to the literature study.

The second part of the explorative research is a deep dive into the expectations of boosting creative confidence in organisational context. These activities were held before the Corona pandemic and are for this reason not focused on online working. However the insights of these activities should both apply for online and real-life projects work. For this deep dive first a description of the case study is given. This introduction is followed by three research activities of which the insights provide direction to the design opportunity, defined in chapter 4.

1. A brainstorm with the design community. The aim to discover what the designers within the case study experience as needed to have their fellow colleagues use creativity

- 2. An input session with the design community of the case study. The aim is to collect input on what can be improved regarding change to creativity and creative confidence.
- 3. Semi-structured interviews with several end-users. The aim is to understand on one hand what the current design capability programme already offers and on the other hand what is expected from creative confidence

The explorative research activities of the third phase are based on the literature study. In these activities we empathise with some project teams of the case study and discover how they deal with current Covid-19 situation regarding their project meetings. First the scope of project teams and their meetings is defined. The results of both activities form design objectives and requirements for the development of a concept, chapter 5.

Via three interviews with end-users the current situation is explored and opportunities for improvement are discovered. Accordingly the same project teams were observed online and by means of 'meeting journeys' the structure and interactions of the meeting were analysed.

The visual presentation of this chapter is illustrated in figure 22.

# 3.2 CREATIVE FACILITATION BRAINSTORMS

In the beginning of this thesis research, the opportunity was taken to give up the problem as a case study in the Master elective 'Creative Facilitation'.

#### Goal

This activity provides the chance to explore how the research question can also be perceived. The results of the brainstorms were analysed and the insights helped shape the content of the literature study. The following questions could provide this insight:

- How is the problem as given perceived?
- According to the research groups, which directions are worth extra exploration, and why?

#### Method

Two students build a creative session around two different parts of the research question:

- <u>Group 1:</u> How to bring back your childhood creativity? a question based on claim of Kelley&Kelley (2014) that creativity is something that needs to be rediscovered.
- <u>Group 2:</u> How to ensure that the Creative Facilitation students keep practicing creative facilitation also after the two-weeks course? Assuming people build a sense of confidence during a training, but how to you keep that feeling also after a course/training.

The two students facilitated separately a 2.5 hour session for five fellow Master students, see photo's in figure 23.. A discussion with the facilitators after their sessions and a thoughtful analysis of the session results, lead to some interesting insights. The key insights are described below and the raw results are in appendix E.

#### **Key findings of the CF-sessions results:**

- "How to feel confident to..." and "How to feel free to express yourself" are how the groups perceived the problem. In other words the groups both confirm that creativity is about believing in both the phenomenon and in yourself
- The ideas of 'creating an community', 'CF family', 'Network drinks' and 'Brave Social Space' all head into the direction that *creativity depends on the social environment (interactions with others)*
- The communities and social interactions also suggest that *people can motivate/influence each other in their creativity.*
- Create a reason or relevance for creativity. Both teams came with ideas about allocating opportunities to practice or discover creative practices, like 'practice with fake clients' or 'mentoring people who are new with creativity'.
- People can be motivated when resources or examples are available. By lowering the threshold and continuing to remind people, people will be more inclined to use creativity. People need to get the feeling they are able to be creative. This can be achieved by reminding them of their creative potential, creating a physical 'Space' in which people can experiment or literally provide case studies/scenarios and tools to apply creativity.

The discussion with the two facilitators about their session and facilitating also lead to two interesting insights:

- People judge easier when the target group of the creative process is them. Discussions within the research group of assignment 2 made them critical and thereby less free to think of creative ideas.

- People are more creative when they don't doubt the process. All present students had a creative background making them accepting the process easily. People with knowledge about the creative process surrender more easily to all the crazy activities in one session.

#### **Conclusion**

Boosting creative confidence..

- ..is an intervention involving more than just the individual, also the environment and the social interaction should be taken into account
- ..will not be effective when the reason for creativity is unclear. Relevance, knowledge and a clear opportunity need to be provided first.
- ..is about making people believe that they can be creative with regard to their abilities, offering the opportunity, but also in what their environment perceives as appropriate.



















Fig. 23 Impression of Creative Facilitation brainstorm sessions

# 3.3 DEEP DIVE INTO THE EXPECTATIONS OF ORGANISATIONAL CREATIVE CONFIDENCE

With this deep dive an understanding can be made of what experts, stakeholders and end-users expect of creative confidence in organisational context of case study Dutch Airline Company. Through a number of activities, this self-confidence in creativity is explored, but a description of the case study is given first.

#### **Introduction to Case Study DAC**

#### Why a case study?

As described in the literature study, an organisational transformation means changing the culture of an organisation. The culture of an organisation is unique and therefore the transformation of an organisation cannot be generalised. The characteristics of an organisational culture define how employees operate and therefore how these routines, habits and traditions can be changed. In other words, to understand how employees can be stimulated in the use of creativity, characteristics of a case study are needed to provide a framework of design objectives. Besides, practical scenarios of the case study provide the opportunity to apply theory and test assumption. The organisation commissioning is large airline operator and service provider 'Dutch Airline Company', from here on called DAC.

#### Goal

To determine the characteristics of DAC besides desk research some interviews were conducted. Their answers give insight on the following questions:

What distinguishes the airline industry from other businesses What are the opportunities and threats of the Airline industry and DAC's context?

#### Method

To be able to answer these question desk research together with five interviews were performed with employees of DAC. Some participants work as years (+15 years) at DAC where otherwise they have only just started working for a few years. This diversity gives a complete and honest picture of how the organisation and its employees are experienced.

During the interviews two templates are used to collect information in an engaging and semi-structured way. One template focussing on the opportunities and threats of the the airline industry and DAC organisation in general. The second template is an empathy map asking the participants to take the perspective of a DAC employee and reflect on the work context and how it stimulates change and creativity.

The interviews took one hour in duration and were recorded with consent. The preparations and transcriptions are readable appendix F. The data is analysed by combining findings of literature with answers of the interviews, see figure 24. An overview of the findings is presented in figure 25 and these are categorised to four key insights documented below.

#### **Key findings**

The key findings are a result of the analysis of the case study DAC. However, this does not exclude the possibility that these insights may also apply to other (corporate) organisations.



Fig. 24 Opportunities and threats analysis for the airline industry and case study DAC

#### 1. High standardized organisation

DAC is an established organisation with a good reputation and clear market proposition, however the competition is fiercely and therefore development and decision making goes extremely fast. There is little time for experimentation, unless time is made by management. Besides, the business model revolves around high-reliable services and products in which the customer takes a central position. With the many years DAC competes in this industry certain work processes and controls have been established and optimized. On top of this the employees are relatively old. Many employees have been in the same position for years, doing things the way they have always gone with success. As result these employees are skeptical in changing their routines. The shared mentality of "If it ain't broke, don't fix it", keep employees away from (radical) new ideas (Ford, 1999).

#### 2. Large multi-siloed organisation with a clear customer-oriented purpose

The airline operator grew to +30.000 employees divided over more than 18 divisions, (Klitsie et. al., 2019). Although the employees are well informed about the high-over customer-oriented strategy, vision and purpose of the company ('het Kompas'), the multi-siloed structure leads to differentiation. On the other hand, in recent years there has been more focus on tackling projects integrally. Integral departments in digitalisation and innovation are triggering a change in mindset. More and more employees start to see the organisation as one big ecosystem instead of separate entities. Although this change to integral approaches, hierarchical structures are still very present and determinant.

Despite the provision of creative opportunity, literature points out that providing the opportunity is just a precondition to the real implementation of creativity. For these projects lays an opportunity for interventions that enable individuals/teams to embed creativity in order to adopt a creative mindset. In this way the focus shifts to the functioning levels instead of the construction level (figure 11, p29).

#### 3. Innovation to stay future proof

The question, however, is how can DAC stay successful and future proof? Although the organisation digitizes rapidly and moves towards a data driven organisation, the image of the airline business being non-environmental friendly presses the industry. With the government's increased emphasis on sustainability (Price, 2016; IATA, 2019), DAC is strongly committed to innovation in order to achieve its sustainability goals. However, DAC should be careful in leading intens shared interpretations on innovation to avoid fixation and new routines having a counterproductive effect on creativity.

#### 4. Initiation of a design capability training programme

Over the past years many ways of working have been introduced at DAC, but also these changed over time fitting the business approach. As said DAC is moving towards a data driven organisation. In this way she can optimize and predict her operations and services. A well fitting approach is the Agile-way-of-working, it is flexible yet effective with expertise leading the way. But, this quit rational approach

is limited when facing complex challenges, such as sustainability, customer experience or employee engagement. A more intuitive approach would benefit such challenges in terms of progression and innovative results. Harnessing employee's creative potential by embedding design capability throughout the organisation gives DAC the opportunity to use tackling complex issues as source of competitive advantage. Recently, DAC initiated an integral design programma with the goal to scale up creativity and improve DAC's (radical) innovation ecosystem by maximising the learning of experiment that focus on (longer term) business goals. In other words DAC has been taken the first fundamental steps in the transformation to an organization that uses creativity as a means of innovation.

#### Conclusion

Two opportunities can be derived from this introduction to the case study.

#### 1. Strategic asset - how to transform to an design driven organisation.

According InVision's (2019) research report, the airline industry is still unfamiliar with a successful implementation of creativity throughout the whole organisation. DAC has started an organisational transformation some year ago to anticipate on changing circumstances with agility and to proactively outperform rivals. The knowledge on how to transform an airline into a proactive organisation with the ability to respond flexibly to change is a strategic asset for business.

#### 2. Build on creative climates - From macro to micro level

With the design capability programme, DAC aims to train teams/individual employees to develop the abilities to tackle problems creatively. With this programme DAC can form the right cultural pre-conditions on macro level. That is why DAC should now focus on developing a creative climate at the micro level (domain specific) to enable employees to use these trained skills in their projects.

The aspect missing in this design capability programme is the focus on the development of creative climates. Within the trainings a safe climate is created by professionals, however, the different work domains of DAC do not contain a creativity stimulating work climate. At this point it is hard to build on insights for

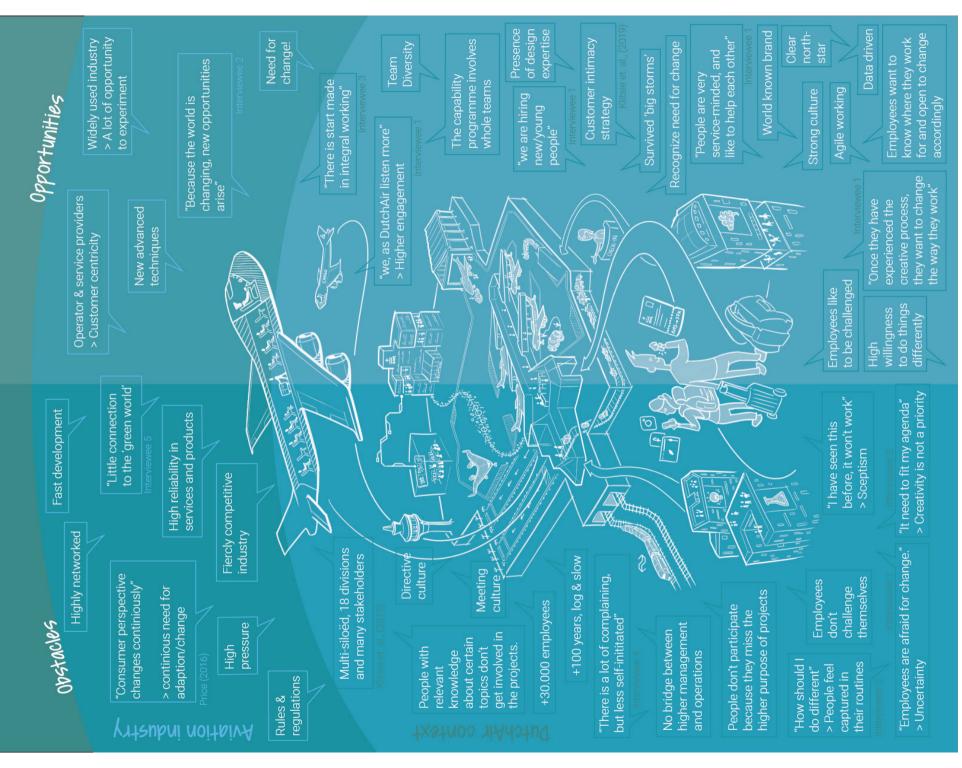
further transformation when employees do not feel confident in experientially learn what creativity can bring to their projects.

# Design objectives for boosting creative confidence in the context of DAC Boosting creative confidence within DAC..

- ..requires management and leadership to believe in the value of creative activities first
- ..asks for an integral programme to connect different silo's, departments and expertises.
- ..should be a result of creativity implementation in project specific work environments (micro level)
- ..asks for different approaches since some projects are determined by high regulations and compliance, where in other projects there is room for radical innovation. These differences lead to different ways-of-working and therefore the embedment of creativity should be tailored.
- ..should be a product of self-managing teams or breaking through hierarchical structures.
- ..will only take place if creativity is accepted by the strong culture within DAC. Only when employees perceive creativity as accepted in their social environment, employees are willing to unleash their creativity.

# Context description

The organisational context description of the airline industry and DutchAir in particular, based on literature, 5 interviews and personal experience.



#### **DAC Design Community brainstorm session**

#### Goal

To build a design community within the large organisation DAC, all design/innovation related employees were invited to take part in a creative session about setting up a design community. For this project the session with the designers is and extra opportunity to discover what the community experiences as needed interventions to have their fellow employees use creativity. The following questions could provide this insight:

- What role could the DAC design community fulfill in embedding creativity in the organisation?
- How can an organisational culture change contribute to increased use of creativity in the projects of DAC?
- What else is needed to promote creativity within DAC?

#### Method

In collaboration with two designers of DAC a brainstorm session was set-up and facilitated, see figure 26. Culture was one of the topics on the agenda to discuss and part of the brainstorm rounds. Besides was time scheduled to gain input from the community in how the use of creativity can be promoted in DAC projects. In groups of 3-4 designers/innovators they brainstormed on five different principles of what the community can be: Inspire and discover, Support, Initiate a culture change, Explore the unknowns and Having fun! The session plan and recap on the session are in appendix G.

#### **Key findings**

The main insights of the brainstorm session with the Design Community brainstorm session are:

- » Create an open (online) space to discover new approaches and get inspired by others
- » Enable that people can easily connect and support each other
- » Change the work culture by showing the value of creative ways of working, build on trust, provide design rules and actively explore what research can bring.

- » Explore the unknowns, stimulate proactive innovation. In which the design community see a role for themselves to bridge between theory and practice about creative methods, but also between operations and office work.
- » Using creativity should be fun!









Fig. 26 Design Community Brainstorm

#### Conclusion

Boosting creative confidence..

- ..is product of cooperation with a team, community etc.
- ..relies on relevance. The value of creativity needs to be clear.
- ..builds on mutual trust (e.g. create design rules)
- ..through accessibility of in-house expertise (the design community)
- ..because creativity is fun!

#### Input session with DAC Design Community

#### Goal

The opportunity came along to present this thesis research during the DAC Design Talks, see figure 27. To understand what creative confidence needs to be boosted in a large organisation, the session focussed on the creative process and the abilities of DAC employees. The following questions could provide this insight: What creative abilities need someone for an design process? Which do the non-designer DAC employees already have and which not? What are the obstacles standing in the way for adopting these abilities?

#### Method

After a short presentation the audience was asked to be part of an input session. As input the participants could paste sticky notes on a five diamond shaped process poster. Yellow sticky notes for the creative abilities non-designers should have, pink sticky notes for the obstacles standing in the way to adopt certain abilities and blue sticky notes for important events missing in process illustration. By discussing the post-ts the required attitudes for the abilities were mapped and obstacles discouraging someone in adopting these attitudes defined.

The participation in the DAC talks gave us the opportunity to be present at a reflecting presentation of a visual thinking workshop. After the presentation there was room for an interview with the initiators of the training about the approach and the impact. This case could be used to have in depth discussion about certain creative abilities and what confidence is lacking that employees don't adopt these abilities.

#### **Key findings**

#### Findings DAC Design Talks

- "figuratively speaking; we {design team} can talk about a future scenario on Mars, while our business counterpart is unable to get away from Earth."

Employees do not understand the principles of creativity (like; quantity breeds quality, fail fast succeed sooner, dream big etc.) and therefore do not adopt the

needed creative attitude. The lack of knowledge about the creative process make non-designer employees impatient. By not following the process correctly, the value of creativity gets misjudged.

- "Employees need to see that change can be something good" Employees are hesitant initiating change themselves.
- Not every project goes through the whole design process. The designers all focused on really different stages of the process. There are very little projects going through all stages of the creative process.
- DAC has several initiatives to make people understand the value of design activities. One of these is the Visual Thinking training for the IT-department.
- The designers liked the idea of gaining insights via a visual (the design process model). Visual representation of the creative process is engaging.

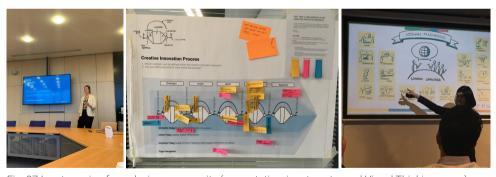


Fig. 27 Input session from design community (presentation, input poster and Visual Thinking recap)

#### Findings reflection with Visual Thinking workshop organisers

Quotes of trainers (during interview).

"They were hesitated to pick up a pen"

"The threshold to make them start needs to be very low, keep it simple and basic and provide examples they can copy"

"People were shy in sharing their work, they were comparing with their peers"

Quotes of participants (given by trainers)

"I can draw an icon!"

"We will most definitely hold on to our pencils and continue to our 'common language"

"It was nice we could always ask for help"

- Visual representations help to create an common language
- Explaining the theory visually helps in understanding it
- Guided mastery is very important to get people over 'the threshold': I am not creative, what do my fellow peers think, I do not know how to start, what if others are much better, is it really relevant that I can draw etc.

#### Conclusion

Boosting creative confidence..

- ..asks for a common language within a team to get on the same page in how creativity can be used.
- ..requires guided mastery, in other words creative activities need to be implemented incrementally depending the degree of comfort.

#### 3.3.4 Interviews with DAC end-users

#### Goal

To discover impact of the design capability programme of DAC on the growth in creative confidence information is gained by programme team members and programme participants. Their information give insights to answer the questions: What is this creative confidence that needs to be boosted in organisational context What influences an employee's creative confidence: in other words what works stimulating and what works counterproductive or stands in the way?

#### Method

#### **Participants**

To answer these questions five interviews were performed with end-users and stakeholders concerning the embedment of creativity in the organisation of DAC. Two participants are project managers and also part of DAC's design capability programme team. Besides, they manage one of the projects whose team members participate in the training programme. The other three participants are 'Builders', which are agents who work two week in the operation followed up with two weeks at the office. In the two weeks at the office they work on all kind of challenges from the operation with a creative approach They are supported by the project managers. What all participants have in common is their above average competence in performing creative activities. Therefore, they have the ability to evaluate the company, employees and the design capability programme regarding the boosting of creative confidence.

#### Tools

By means of an interview guide accompanied with two templates semi-structured interviews are conducted (appendix F). With one template the perceived definition of creative confidence is explored and the second template is a timeline to discover what of the current design capability programme influences the level of creative confidence. The participants were asked to speak about their fellow colleagues, in this way the interviewees were able to objectively discuss about boosting creative confidence.

For the second template the interviewees took their project teams as an example, specifying the required creative confidence for operational teams.

#### **Analysis**

For the analysis the insights of what is creative confidence (first template) and how these aspects get influenced over time by the programme (second template) are translated in 'needs' to boost creative confidence and structured in a mindmap, see figure 28. The corresponding quotes of the interview transcriptions are added next to the creative confidence requirements. As final step the culture and creative climate determinants were linked to the findings, this to understand in what extent there is overlap with the theoretical findings, but also to understand if the case study reveals new insights.



Fig. 28 Creative confidence 'needs' mindmap

#### **Key findings Interviews with DAC end-users**

When going through the creative confidence requirements and findings there are 7 interesting insights to define. These insights confirm the finding of the literature review, but clearly empathise on the need for stability and direction in order to facilitate comfort. Not unexpectedly given the fact DAC is a high standardized organisation with routinized control processes to assure reliability and compliance. The degree of radicality in the innovation depends on the operational objectives of a specific work domain(Ekvall, 1996).

#### Insight 1. Need for structure.

As mentioned by a participant: "People want to know how to get from A to B". Support is needed to explain, clarify and guide employees through the ambiguous creative process. This support should come in the form of coaching (professionalism), availability of resources and providing the opportunity to go through the stages of a creative process. An intervention that helps achieving this structure is creating a common language in terms of the use creativity.

#### Insight 2. Need for relevance

A second insight also mentioned in literature is the need to understand the relevance of the activities. The clarity of goals is needed to show the purpose and enhance the intrinsic motivation for creativity. This could also be seen as providing structure.

#### Insight 3. Need for learning

This insight relates to the ability to learn. One of the participants acknowledges that the experiential learning theory of Kolb is the right approach: "People only learn when they really apply the knowledge" and "I expect that understanding comes by experiencing it more often".

#### Insight 4. Need for controlled autonomy

This fourth insight focuses on the need for freedom and trust. According to a participant has confidence everything to do with feeling trusted in being creative,

and thereby "the feeling it is ok to make mistakes". To deviate from routines in a way employees must be enabled to explore other ways and discover if improvement is possible/needed.

#### Insight 5. Need for support in facilitating creativity

In order to become better coaches, management/leadership need a facilitative support enabling them to stimulate creativity. To be allowed to make mistakes has everything to do with the right support of management/leadership. Team members seem to prefer coaching from their own management/leadership, probably due to the trust relationships formed with fellow colleagues.

#### Insight 6. Take time for alignment

The sixth insight concerns having moment to align properly. A participant argued "Because everyone involved was in the same room, we really spoke the same language and we could make decisions". Alignment engages people in the process and facilitates acceptance finding process. By knowing what is appropriate enables people to operate autonomously while knowing their dependencies.

#### Insight 7. Need for roles

How to boost creative confidence is really depending on an employees involvement in the process and someone's function. Ideal projects teams are diverse in expertise and skills, but teams can be approach generically by defining certain roles within a team. Now organisations are aiming to use creativity in the organisational context, a successful process can only take place when there is sufficient support, direction and stability to hold on to.

The degree creative confidence needs to be boosted perhaps depends per role, but the engagement of all stakeholders in the process is important for the eventual implementation of creative outcomes.

#### Conclusion

According to this research study, the employees of DAC mainly needed a lot of clarity and stability. According to a number of clear 'rules' and 'preconditions', the employees must be guided through the ambiguity of the creative process. When they experience the comfort, they will become looser and look for freedom within the process.

# 3.4 EMPATHISING RESEARCH ABOUT ONLINE PROJECT MEETINGS

With Covid-19, working from home is a new trend that experts expect to continue after the lockdown. To understand how project teams of DAC cope with these circumstances and to find out how to set up an online team meeting based on the creative climate dimensions indicated in the literature study, chapter 2.4. The results of both activities form design objectives and requirements for the ideation phase, chapter 5. Before the research activities, the scope of the project teams and their meetings are define

#### Scoping - projects and teams of DAC

#### **Selection of the three DAC-teams**

Three project teams of DAC have been selected as research cases to design a solution that enables a creative climate in their online team meetings. These teams were also selected for the trainings of DAC's Design Capability programme and therefore can be assumed they have a base in design knowledge and skills. Besides, these teams are chosen because they work together intensely, allowing us to assume that the social connections between the members is good. Moreover, we can assume hierarchical and political influences are limited with regard to possible development of a creative climate.

In other words, these teams have been explicitly chosen on the basis that a creative climate can only be created if the team meets certain preconditions, namely:

- · The team members have healthy relationships with each other
- There is a role that can be made responsible for organising the meeting
- · A clear purpose defines the team's existence and connects their activities and

- meetings.
- The team members have a base in design knowledge and skills and therefore at least recognises the relevance for the development of a creative climate.

#### Description of teams:

- 1. Digital Team: Multi-divisional team working on a digital service. Five team members with clear roles. The team plans worksession flexibly depending the necessity.
- 2. Optimizer Team: Permanent team with daily meetings to keep track on several shared projects. When needed, stakeholders or experts join the meeting.
- 3. Innovation Team: Team of three members which all manage several projects. Insights from these projects are used to set up an innovation ecosystem, which is a joint project. For this ecosystem, they also work together with employees from other divisions.

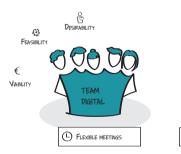






Fig. 29 Case study project teams

#### **Focus on progress meetings**

The teams have all kind of meetings spread over their entire project. Some teams work according a 'way-of-working', like Agile (Scrum Guide, 2017). Those teams have specific ceremonies with a clear purpose and structure. This research however focuses on so called 'progress meetings' in which a meeting group comes together in order to update and align on certain content. The frequency of these progression meetings differs per team: Team Data has daily meetings, Team Innovation has weekly meetings and Team Digital organises the meeting flexibly depending on the need for coordination, which on average amounts to 1 or 2 times a week.

#### (Intake) Interviews with end-users

#### Goal

To better understand how teams at DAC have online project meetings three intake interviews with team members are held. In the first place to discover whether the teams really meet the conditions set for the development of a creative climate. In addition, to understand how their team meetings have changed into an online environment since we have been working from home. Moreover, how we can improve this situation. The following questions could provide these insights:

How do project teams have meeting currently and in what way do these differ from before Corona?

How do the teams align online? And how do you avoid misalignment?

#### Method

The intake interviews are held in a semi-structured manner over a videoconference or phonecall. The question guide, together with the transcriptions of the interview answers are presented in appendix H. The analysis has been done via the method of 'insight cards'. Quotes or observations are interpreted in own words and tag by a representing key word. Then cards are categorised according the tags and in this way downsized to a few groups. The combination of categorizing based on interpretation and still accessibility to the raw information makes it easier to collect insights. Figure 30 presents an overview of the insight card analysis. Next, the key

insights are summed up. The needs are important design objectives for the final solution.

#### **Key findings**

#### Desire for effective meetings

Probably the main insight of the intake interviews is that all three teams have a desire for more effective online team meetings. Teams expect a balance in home and office working and therefore they a willing to improve their temporary solutions for remote meetings. One of the team facilitators admits "we are still discovering which online modus works best for us". According all three teams online meetings have the potential to make meetings more effective. One of the participants said now we have meetings online: "People get easier to the point" and someone else mentioned "Before I lost a lot time by travelling..". Most likely also due to the momentum created by the Covid-19 crisis, all teams are very open to change the way they held online meetings.

#### Low effort and high reward

Teams have tried interventions for effective meetings before: "We have tried many templates, an intern even made a game for our meetings". However the effort required for the solutions were not compensating the reward, leading to teams relapsing into old meeting routines. The final solution must have high rewarding outcomes for the effort it takes to have an effective meeting.

Also the structure and resulting interactions of the meetings can be improved to make the meeting effective. In the context of stability and direction the participants point out several needs:

#### Need for alignment

Because team members have less opportunity to check-in, discuss topics and communicate with each other there is a big need for moments of alignment: "We check-in much more and this helps in what everyone is doing and how we can help each other".

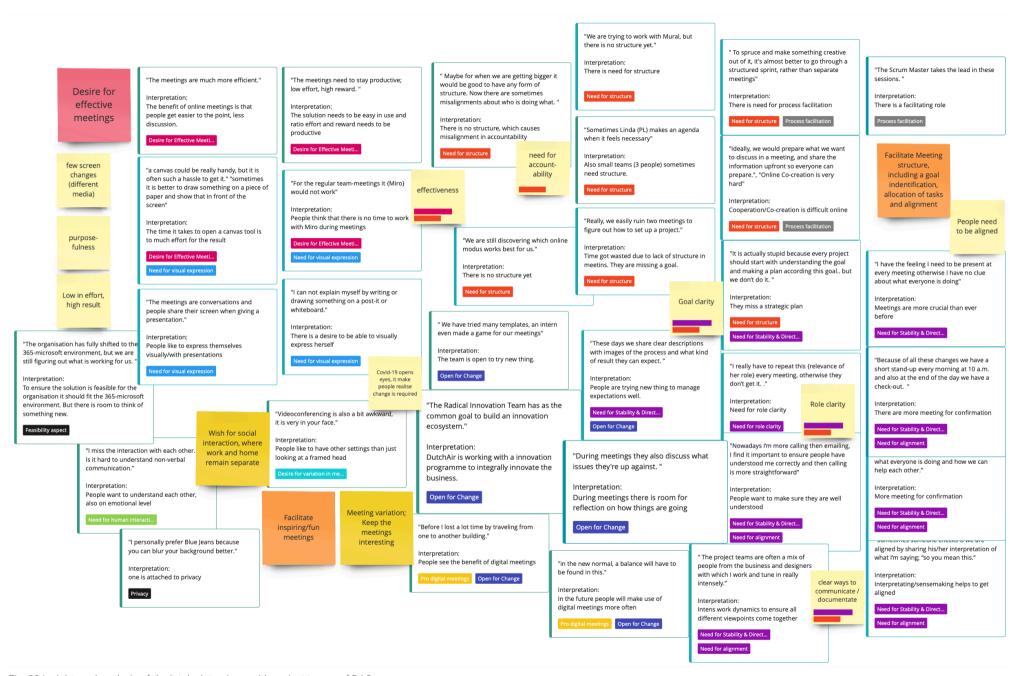


Fig. 30 Insight card analysis of the intake interviews with project teams of DAC

#### Need for clear roles and accountability

In order to know who to engage for certain issues or questions the different roles within a team need to be clear. Also for expectation management, accountability and trust it is important to clarify who is responsible and approachable for certain topics.

#### Need for goal clarity

The teams indicated that most of the time meetings include updates about the progression and activities planned. Due to the lack of clear meeting goals time can be spend really inefficient: "I have the feeling I need to be present at every meeting." and "we easily ruin two meetings to figure out how to set-up the meeting".

#### Need for smart ways to communicate

The team meetings are the moments where different opinions, viewpoints and experiences come together. Online meetings makes it harder to ensure everyone has understood you correctly. One of the interviewees explained to have changed her communication strategy: "Nowadays I'm more calling then emailing, I find it important to ensure people have understood me correctly and then calling is more straightforward"

On the other hand the interviewees pointed out some needs regarding freedom and how this has changed due to the change to online environments.

#### Need for variation

One of the team members explained to find a bit "awkward" to look at framed close-ups all the time. This is interpreted as the need for variation, like the freedom one has in a meeting room to use the whiteboard or have the meeting as a stand-up. Also the absence of hand gestures make online meetings very static.

#### Need for human-interaction

One of the interviewees raised that meetings are more efficient regarding time. The downside, however, is that people interact less with each other, which is at the expense of social connecting. One interviewee mentioned: "I miss the interaction with each other". Within meetings teams should also take time for team building and small talk. Team members miss the social interactions and non-verbal communication of face-to-face meetings. Besides a team member finds videoconferencing "awkward" and "..very in your face". With regard to privacy and professionalism participants are fond of the option to change or blur the background.

#### Need for visual expression

"A canvas could be really handy, but it is often such a hassle to get it" although this sceptic attitude towards the introduction of another (whiteboard) tool: , there is a solid need for the possibility of visual expression. Interviewees commented: "..draw something on a piece of paper and show that in front of the screen", "Now, I can not explain myself by writing or drawing something", "people share their screen when giving a presentation". Employees prefer visualisations to tell their story.

#### **Conclusion**

The project teams are open for change and all mentioned the desire for more effective meetings. A solution however will only work when the effort is low and reward high.

Probably due to homeworking team members feel more dependent on the online meetings. These online gatherings are thé moments to focus on alignment and team connectivity. The opportunity is to design meeting structures including interactions affording alignment and connectivity.

Most of the other findings are needs overlapping with the creative climate dimension indicated in chapter 2.4. Fulfilling these needs leads to effective meetings in both efficiency and creativity. The needs are translated into design objectives, see chapter 4.

#### Observing online project teams

#### Goal

In the intake interviews is discussed which meetings were best suited for this research. Eventually different project meetings were observed to explore the current meeting structures and interactions with which the project content is addressed and to discover room for improvement. Research questions that underlie these observations are:

In what structure gets content shared and discussed?

What is the role of the facilitator in this?

Which kind of interactions do occur? and are these a result of a creative climate?

#### Method

#### Participants:

In total six meetings have been observed. Three of these observations were of the Data team because of their daily meetings. By observing some of these meetings any changes over the week can be identified. Also two different meetings of the Innovation team have been observed. One observation of just the team meeting and another meeting about their shared project; innovation ecosystem. The Digital team was observed once.

#### Tools

The observations were performed by attending the online meeting just like any other participant. In this way the entire meeting can be followed without any necessary changes to the meeting. The meeting group had been informed of the observations in advance. From the moment the video conference was joined it was possible to stay in the background. The camera was off and the microphone on mute to avoid distraction.

Post-it notes were made on an empty template with a timeline in which the structure, the influence of the facilitating role and the resulting interactions with the meeting group were plotted. The content of the meetings were confidential and is therefore left out.

#### Analysis

For this explorative research activity two analyses have been conducted. Both analysis are based on the meeting journeys created to summarize the observations. In the first analysis the journeys are assessed on the presence of the creative climate dimensions and the second analysis is a comparison with an ideal meeting structure is done to understand what current meetings lack or how they need to change.

#### Meeting journeys

The observations and notes are processed in so called 'Meeting Journeys' (Figure 31-33), which serve as summaries of the observations making it easier to analyse how the current meetings are held. The meetings of the Optimizer team were having the same kind of meeting build-up, the insights of the different meetings are combined in one journey, see figure 36. The innovation ecosystem meeting was more a worksession and for that reason the Innovation meeting journey is based on the team meeting.

The Meeting Journeys exist of four horizontal lanes: 1. the meeting flow: the stages within the meeting, 2. the different activities in the meeting, 3. sayings and actions of the facilitator, 4. sayings and actions of the team. The observations notes of lanes 2-4 are as far as it was possible aligned with stage in which the information was observed (vertical lanes).

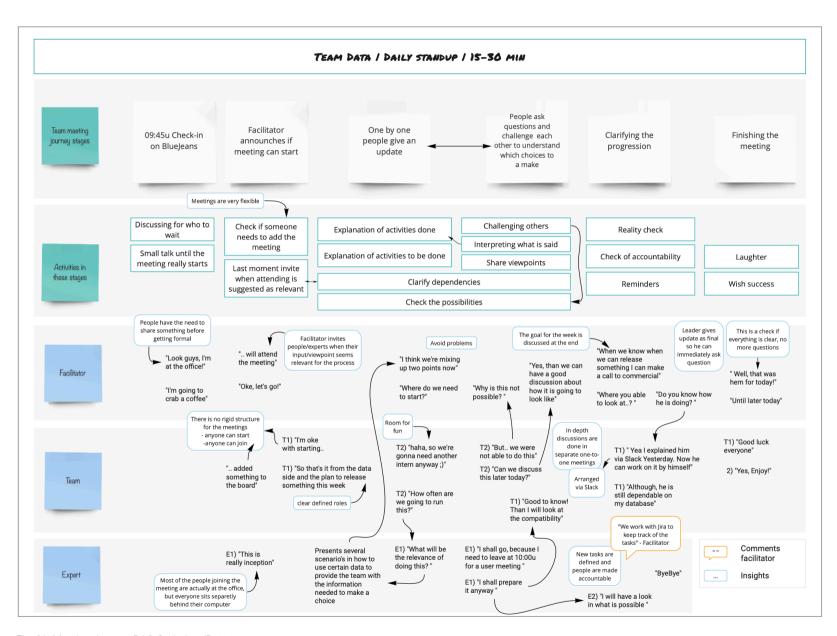


Fig. 31 Meeting Journey DAC-Optimizer/Data team

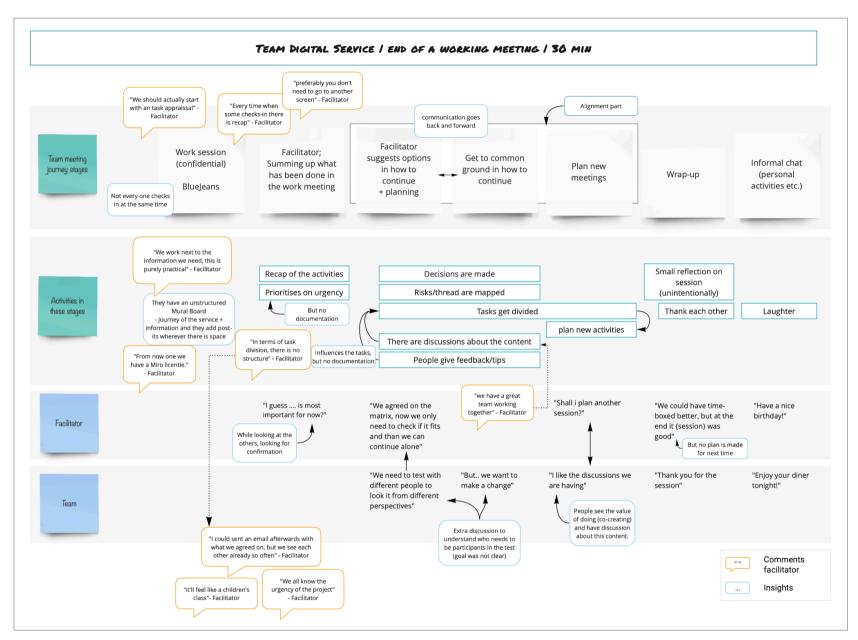


Fig. 32 Meeting Journey DAC-Digital Team

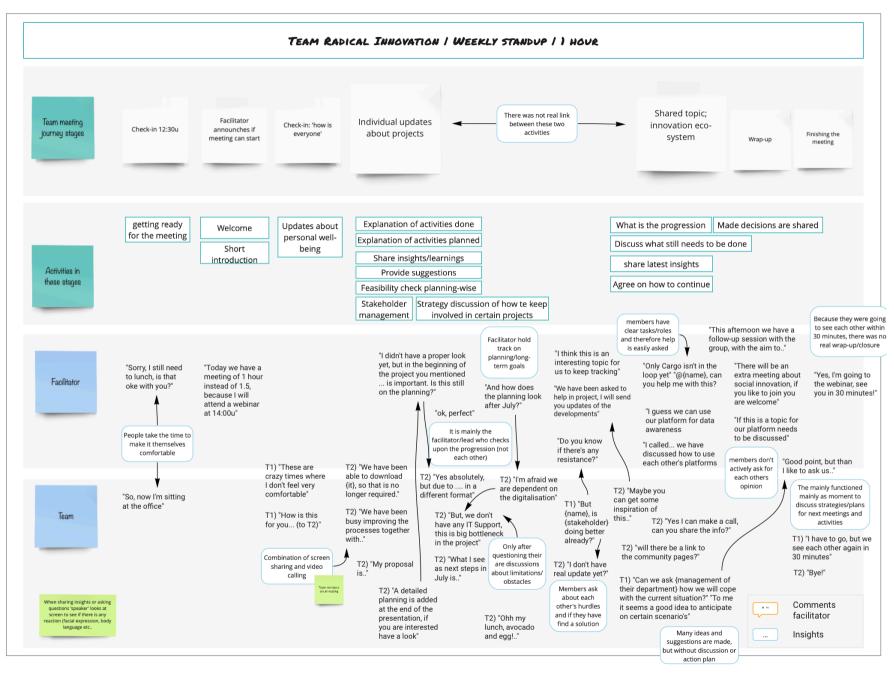
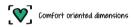


Fig. 33 Meeting Journey DAC-Innovation Team

#### Analysis 1: assessment of the creative climate dimensions

The eventual goal is to boost the creative confidence of employees. By assessing the likelihood of the creative climate dimensions to be developed, the effectiveness of the current meeting build-up to boost creative confidence can be discussed. The exploratory research activities have extended the 9 dimensions of the literature study to a final set of 12 creative climate dimensions, see the take-aways in section 44

The dimensions are assessed from -2 'very unlikely to evolve' to 2 very likely to evolve. Also the answers of the intake interviews are taken into account when assessing the dimensions. The results, see figure 34, of the assessment provide insight of how future meetings can improve in providing a creative climate.





The extent teams. know the purpose of the meeting / project - have personal objectives - create own interpretations

00000

Without the discussion of a meeting goal team members give their undates resulting nobody knows when the meeting is a success. "We easily ruin two meetings to figure out how to set up a project " With a clear purpose, much more can be gained from the meeting.



give feedback/commer through use of tins&tons have transparent communication listen to each other

0 0 0 0 -l 0 | 2

Due to the good mutual relationships within the observed teams the communication is constructive: "Good point, but than I like us to " Because of the lack of interaction and dehates it is unclear if feedback and comments are truly constructive.



Leaders sometimes zoom out and control aspects as nlanning and stakeholder management: "How does the planning look after July?" Team members don't hold each other accountable, due to lack of structure and task division

0 0 0 0

0 1 2



The teams observed already had good social relationships. Homeworking. however, limits the time to socially connect. Video Calling makes the meetings already more personal, but when homeworking becomes a more permanent phenomenon, greater attention to social connecting is important for trust relationships



#### Conflict management

The extent teams give attention to resolve nersonal and emotional tensions - set meeting rules



Online meetings are very one-sided. The mute-button is a good feature to avoid chaos and to have everyone listening, but stand in the way of hitch-hiking, giving direct feedback and spontaneous emergence of dehates /dialogues sometimes when obstacles come to light. conflict management is needed



- use the same words, express oneself
- can create the same expectations



Functions as screen share and in advance document sharing contributes to having the same content. But, when discussing about certain context and suggesting ideas or deciding on a certain direction this new content is not shared possibly leading to different interpretations (misalignment). By tracking facial expressions members try to get some indication of confirmation



The extent teams. activities and actions to



DAC is a idea-driven organisation. There are the time to consider the 'unusual' ideas



#### Freedom oriented dimensions



#### Consider the Unusual

The extent teams. - dare to take risks - Run new ideas and reflect don't commit to ideas directly



out-of-the-box ideas, however these are not considered as implementation worthy. The ideas stay concoctions and don't become actions for example an prototype or myn. The teams don't plan



#### Dynimism / Liveliness

The extent teams. - vary in activities

drawing ipy talking) - vary in setting

- vary in perspectives (e.g. including stakeholders in meeting etc.)



Sitting in front of a camera with a mute function make current online meetings very static and communication one-sided. The lack of interaction and variety in scene or position cause people get very tiring and bored in long meetings (+1 hour). Future online meetings must contain the liveliness of face-to-face meetings to make it an interesting replacement



00000 -2 -l 0 l 2

With the absence of a clear meeting goal members don't take the time to diverge on the topic in order to find the best outcome. While A member won't actively ask for input. If an issue does emerge during a discussion members give suggestions and find it very valuable.



use metanhors / analogies use artifacts/nictures etc. laugh/have fun!

00000 -I 0 I 2

The members make jokes. probably because of their well established social relationships. But as said before the meeting structure is very static and could use some playful elements to make members involve more with the content of the meeting



#### Debates/Dialogues

The extent teams nerspectives - Ask for each others opinion - Give each other the change to speak Challenge each other

00000 -2 -1 0 I 2

The members attending in a meeting often have their own perspective and expertise, often the reason for being invited. Currently the members don't minale in each others division, while the uncovering of different viewpoints could in fact bring new insights to light. Members don't challenge each other and therefore online meetings is more sharing then receiving



0 0 0 0 -2 -1 0 1 2

Because mainly video calling is used as way to communicate, employees are limited in ways to express themselves. Via screensharing any form drawing, presentation. schematic overview etc. - can be used. There is not much freedom in expressing new generated content during the online meeting. Despite spoken words or text in the chat function, members cannot easily build upon each other

Fig. 34 Assessment of presence creative climate in current project meetings of DAC

#### Analysis 2: Comparison of meeting journeys with ideal meeting structure

In order to perform the analysis first an 'ideal' meeting structure functioning as a base for a creative climate was developed, see figure 35; and for the development of the structure chapter 5.4. This meeting flow is based on knowledge of building-up a creative session (Heijne & Van der Meer, 2019) and key principles of a creative process, indicated in section 2.

The meeting journeys are compared with the ideal structure resulting in the analysis overview of figure 36. This overview contains one representing meeting structure, because all meeting journeys were having the same kind of meeting build-up. The insights (light yellow post-its) of the different journeys could in this way be combined into one overview. As result of the comparison with the ideal meeting structure, red post-its indicate the lack of certain aspects and the dark-yellow post-its point out the needs for certain aspects of an effective meeting with a creative climate.

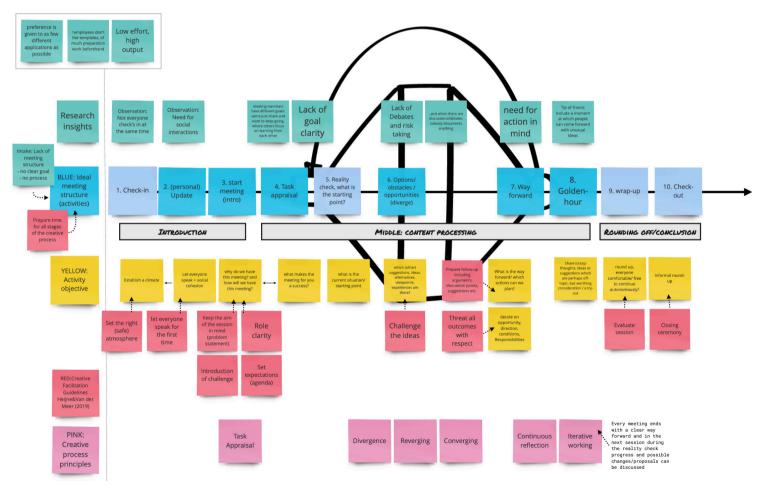


Fig. 35 The 'ideal' meeting flow for a creative climate

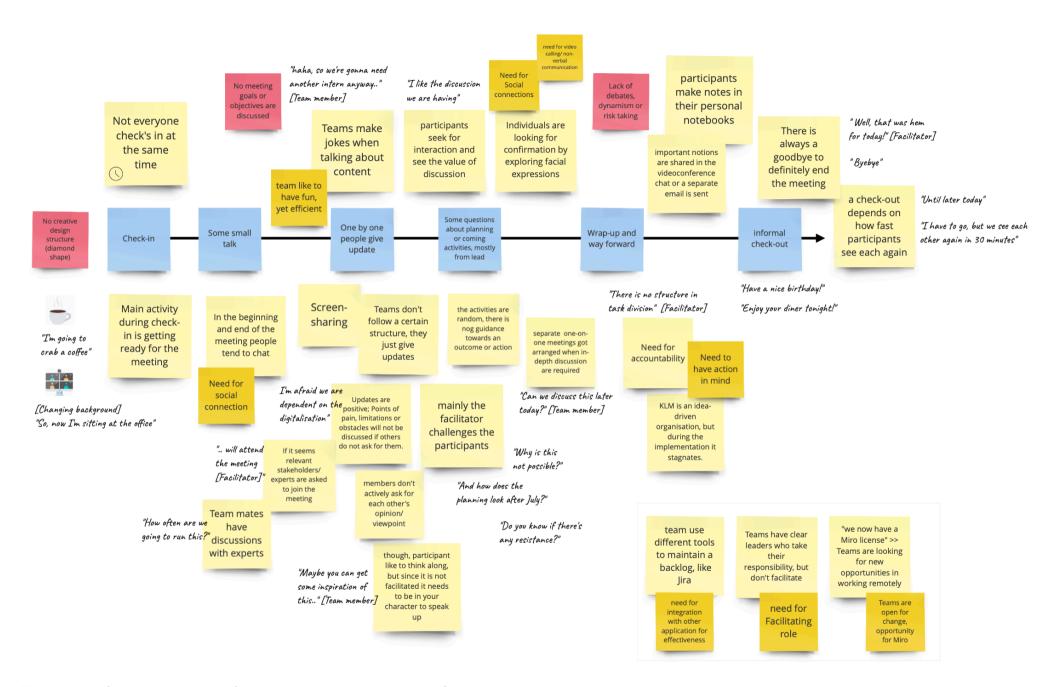


Fig. 36 Overview of the comparitive analysis of the meeting journeys and the ideal meeting flow

# 3.5 TAKEAWAYS EXPLORATIVE RESEARCH

All research activities have a common conclusion that social interactions with fellow peers is an important aspect to connect and motivate people for desired creative activities(e.g. doing user research). This supports the literature about the important of understand how a social environment influences how an individual acts and thinks. With the presence of a shared interpretation - 'common language' - about creative activities, like visualising, people seem to perceive their environment as safer to express oneself creatively. But, the sense of safety and social cohesiveness will only sustain when individuals perceive the time spend as fun, purposeful and feasible to one's abilities. Again, like the literature study the explorative research activities indicate the need for a balance in focus between showing the necessity of certain activities and developing this safe environment to create acceptance for the use of creativity.

#### Three extra creative climate dimensions

The research activities have revealed three more creative climate dimensions important for an environment to result in the use of creativity. Section 4 provides an overview of all dimension of a creative climate.



#### Tenth Creative climate dimension: Social Connecting

The deep dive points out that there is a tenth dimension making a creative climate, namly social connecting. This dimension concerns with social interactions part of a creative climate and influence someone's sense of comfort. Through social connecting employees get to know someone else better and understand each other's situation, this leads to trust relationships. As concluded in the literature study is trust a building block of a creative climate.

# Eleventh and twelfth climate dimensions: Common language and Form of expression





Two findings of the intake interviews contain needs about the way of communicating. Although there is a dimensions about constructive communication, there is nothing said yet about the form of communication. Getting to the same interpretation of certain information by means of common language contributes to the sense of comfort in a meeting. On the other hand enables having choice in how to express oneself to a sense of freedom. Since these recommendations are also given in the validation of the creative climate dimensions, 'common language' and 'form of expression' are added as eleventh and twelfth creative climate dimensions.

# How online project meetings can boost creative confidence

# 4 design objectives

Video calling already gives many possibilities, video connects people, allows for conversation with multiple people and with screen sharing the group can follow presentations by visual and textual support. However an analysis of current online team meetings indicates some opportunities regarding the evolvement of a creative climate in future online team meetings.

The meeting organiser balances the meeting structure
 The interviews and observations point out that there is a lack of structure, despite the need by teams for stability and direction. To support the evolvement of a creative climate the structure should

provide both comfort and freedom. In order to achieve this the structure must consist of an activity involving goal clarity, possibility for social connecting, time to diverge, considering the unusual and a clear wrap-up comforting everyone, but also allowing for action!

The meeting organiser should be enabled to create a structure that fits the aim of the meeting and which affords the desired interactions for a creative climate by balancing activities leading to either comfort or freedom.

#### 2. Interactive communication for alignment

According the different needs identified in the deconstruction research, lack current online team meetings in an engaging environment for effective communication and information sharing. Just video calling is not enough to reach the alignment enabling autonomy. Future online meetings must be held in an online environment allowing for better alignment through the facilitation of debates/dialogues. A more lively online environment needs to be created empowering employees to interact with others nonverbally in a form they can express themselves best.

#### 3. Facilitate group connectivity

A second argument for more interaction is an reaction on the need for human-interaction. A downside of homeworking is that employees have less moments of social interaction. Future online meetings must enable employees to also be colleagues again. Time must be invested in social connecting to build trust relationships and group cohesion. When someone feels comfortable in a group, this person is more likely to share thoughts, consider the unusual and open up for feedback and new (unusual) suggestions.

**4.** Focus on implementation, participants are action-minded.

DAC is an idea-drive organisation. The bottleneck, however, is the

translation into action points. For example in the Team Innovation meeting several ideas and suggestions were pitched, however no decisions were taken on the implementation of these ideas, apart from the plans made to discuss the idea in another meeting. Teams should be more action minded to learn from experiences instead of giving pointless updates or having endless discussions. Navigating teams towards action points also mets the need for indirect control for autonomy. Because preparing oneself for autonomous continuation, asks for coordination instead of control.

#### 3 Requirements

Besides the four design objectives there are three requirements to be met.

- 1. Next to facilitating effective meetings the preparations must be **efficient**. As mentioned by some of the team members the effort needs to be lower than the reward. Especially with the minimal preparations currently, the new way of organising online meetings need to be time-efficient
- The final solution must be **compatible** with existing applications that overview the backlog and progression of the project activities. Double work must be avoided.
- 3. The new way of online meetings is in combination with video calling. The added value of being able to see each other during a meeting should not be overlooked. In the ideation session with students it was raised that the value of face-to-face meetings is non-verbal communication. During interviews with DAC teams it was mentioned that seeing each other contributes to the social connection with colleagues and in observations it became clear that confirmation is sought through facial expressions and body language. Video calling is important for the comfort side of a creative climate.



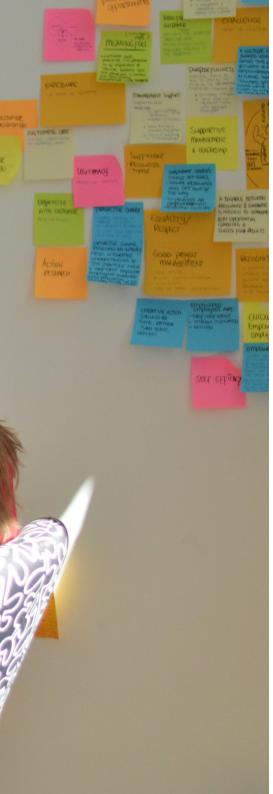
Fig. 37 the meeting organiser is responsible for the development of a creative climate

Meeting organisers need to able to use *creativity, alignment, implementation* and connectivity als building blocks for their online meetings in order to build an opportunity window for freedom and comfort.

# Takeaways in short:

- The meeting build-up is *efficient*, *video calling* and *compatible* with applications already in use.
- The meeting interactions should be fun, seem purposeful and feasible to one's abilities
- The meeting structure involves activities focussing on *connectivity, alignment, implementation* and *creativity* itself.
- The meeting is effective when employees feel *empowered in their autonomy* and thereby their creativity.
- Focus on meeting organisers who need to build-up an effective meeting according the first four takeaways.





# 4 SYNTHESIS

In this section the takeaways of sections 2.6 and 3.5 come to together to form a design opportunity. Therefore an overall reflection on the Inspiration phase is held, which concludes with a design brief. Also several choices are explained to scope the design solution space.

# In this chapter:

- 4.1 Reflection on inspiration phase
- 4.2 The Design opportunity
- 4.3 Concluding Phase 1 'Inspiration'

# 4.1 REFLECTION ON INSPIRATION PHASE

By reflecting on the first phase of this research project; inspiration phase (chapters 2 and 3), it will become clear which direction this project should take in terms of the design phase.

## Momentum for change

Partly due to the Covid-19 virus, organisations have gained momentum with regard to the need to be able to act flexibly. Creative problem solving provides this flexibility, but an organisational transformation is required to embed creativity as means for innovation in the culture of an organisation.

In current circumstances however, organisations are still recovering from the scare of the virus. For this reason we assume that organisations like DAC will unfreeze appropriate projects for innovation when the lock-down has been lifted and when the economy has stabilised somewhat. In order to create a working environment by that time which stimulates employees to use creativity as a catalyst for innovation, a transformation of the organisational culture is needed in seven different factors that influence creativity and innovation. For this reason the project solution will focus on a future scenario in which organisations feel the urge and possibility to transform themselves into innovation-stimulating cultures.

Notable in this scenario is the expected reduction in time spent together on the work floor. The influence of the work climate has no longer impact on how employees operate. A drawback for boosting creative self-confidence since the dimensions of a creative climate have big influence on the unleashing of an employee's creativity (Ekvall, 1996; Kelley&Kelly, 2014). Besides this limits the time for proper alignment and acceptance finding, which has been indicated as important to eventual implementation of new concepts (Buijs et. al., 2009). Due to this, the moments of online gatherings become even more important than before.

#### Future scenario

January 2021, the world has changed drastically the Covid-19 virus leaves a big mark on how we treat each other and how we continue to build our future. Organisations have a high sense of urgency to (re-) start innovation projects and align their products and services with the circumstances. After all, the need for creative- and innovative solutions has never been this big. There is a strong demand to unleash the creative capacity of employees in order to deal with the current situation in an innovative way.

But, we still live in a social distance society, causing project workspaces have largely shifted to online environments. On top of this has shown the surrealistic times of lockdown that radical change can lead to improvement and efficiency. As a result homeworking remains and a combination of office and online working is the 'new normal'. But, homeworking make teams have less possibility for informal agreement and coordination. For this reason the meetings planned are highly efficient and allow employees to autonomously work on innovation beyond these meetings. These meetings take place in permanent online workspaces in which different applications are linked and colleagues have the opportunity to connect.

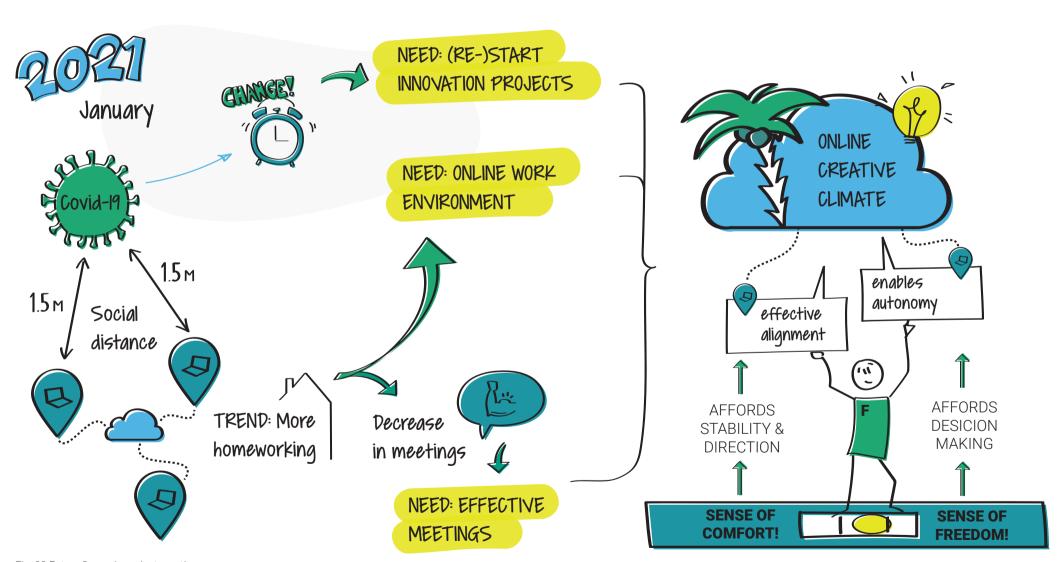


Fig. 38 Future Scenario project meetings

# 4.2 THE DESIGN OPPORTUNITY

The future scenario creates context for a design opportunity. In this section we navigate from a design question to a design statement. The design brief is the starting point for the ideation phase.

# The design brief

## **Design question**

A design opportunity arises to facilitate support in developing an online creative climate which empowers employees to act and think creatively. The shared meaning of such an online creative climate is mainly put to the test in moments when team members gather to discuss progression and next steps. Effective meetings including activities of alignment, connectivity, implementation and creativity benefit the presence of a creative climate. Such climate affords a sense of freedom and comfort which are the building blocks for autonomy and thereby the use creativity.

Organising meetings in a way it deliberately leads to a certain extent of autonomy is what we call from here controlled autonomy. This controlled autonomy enables employees to independently contribute to the process and trust others to make the right decisions, due to the known independencies, shared purpose and project goals(Rodrigues, 2015). The design question that rises;

How to facilitate controlled autonomy according an online creative climate?

## Scoping the design space

Designing a solution for the facilitation of controlled autonomy according an online creative climate requires some choices of the design space and thereby some assumptions are done.

- 1. The cultural factors fundamental to the development of a creative climate are established. This includes presence of a clear strategic purpose, innovation and creativity supporting leadership styles and organisational structures benefitting self-managing teams and cross-divisional collaborations. Besides the professionalism and resources are accessible to allow employees using a creative process to cope with wicked problems
- 2. The second assumption is that the target group of this research has a basis in knowledge and skills for creative thinking 'how to use creativity'. Employees with this basis see the relevance of an atmosphere triggering creativity. the focus of the product can therefore be on facilitating and experiential learning instead of persuasion and training. Because of these design trainings leadership and management is also better capable of choosing the appropriate leadership style for their projects.
- 3. Moments when employees benefit most from a creative climate are the moments when project teams meet to discuss or work on the project in order to be able to continue with individual tasks independently. Because of all different variables influencing a meeting the focus of this research lays at weekly progression meetings of 5-10 participants. The social relationships between the team members are established.

## **Design statement**

Within the defined scope and as reaction to the design question the following statement is defined for the ideation phase.

We want to enable the facilitating role to organise effective meetings with a creative climate in an online environment.

Facilitating effective online meetings includes having control over the meeting of the right people to go through certain activities that result in individuals being able to continue their work in a creative way after the meeting.

Figure 39, illustrates the design space blueprint. This overview provides a framework in which the solution should function.

# DESIGN SPACE BLUEPRINT autonomous alignmen WHAT: The solution is an supportive instrument for the facilitating role to facilitate a creative climate during online project meetings WHY: Meetings with a creative climate result in employees having greater trust in each other and feeling free and comfortable to choose their own way to tackle 'wicked' problems. This autonomy fosters creativity. WHO: The facilitating role of social coherent teams working on 'appropriate' shared projects for innovation. The employees of the team have a base of creative knowledge and skills. Online creative climate HOW: Developing an online creative climate by balancing different dimensions influencing this atmosphere based on freedom and comfort and trust. WHEN: Online project meetings in which teams collaborate, align and contribute to the pursuit of the project's strategic vision.

Fig. 39 Design space blueprint

# 4.3 CONCLUDING PHASE 1 'INSPIRATION'

This section is the final conclusion of the inspiration phase. In this first phase is determined what needs to be desigend. After this conclusion, this 'what' will take shape by means of an iterative design process (chapters 5 and 6).

# Boosting creative confidence by supporting facilitators in developing a creative climate

In order to boost creative confidence, the climate around the individual/team must tolerate the use of creativity. With the disappearance of a shared work environment by Covid-19, the project work has moved to an online environment. Effective online team meetings are therefore of great importance to develop an online creative

climate in which individuals feel comfortable to act freely. Therefore different dimensions of the climate need to be balanced so that teammates can align and individuals can act autonomously. Autonomy is a positive precondition for individual's to feel intrinsically motivated for creativity.

In other words, as figure 40 illustrates, individual creative confidence depends on the effectiveness of group interactions (alignment, connectivity, implementation and creativity) and visa versa the innovative results of a team depends on the creative mindset of an individual. Creativity can only be a catalyst for innovation, when a creative climate affords harmony between structure and freedom.

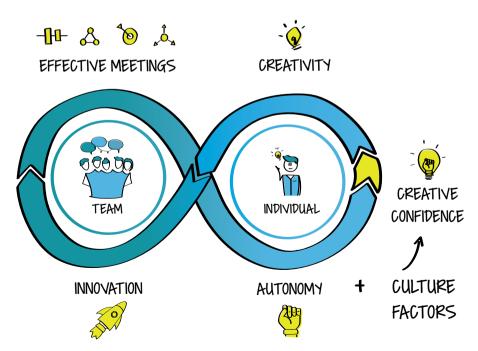


Fig. 40 Affective model illustrating how results of a creative climate reinforce each other and can lead to eventually innovation. With regard to the desire for pro-active innovation, this model is infinitive.

## The final 12 creative climate dimensions

According the literature study there are 9 dimensions determining a creative climate. The explorative research however showed three other dimensions regarding social connecting and communication. In total a set of 12 dimensions, six comfort oriented and six freedom oriented, determine the influence of an work environment on creativity and innovation.

In the iteration activities of the next chapter the dimensions have been validated by different creative experts and facilitators, see figure 41.

- Everyone agreed that a creative mindset is a combination of experiencing comfort and freedom.
- A discussion arose about the position of 'trust' in each other and in the process. Ekvall(1996) chose to address trust as a separate dimension, where this research sees trust as a combined result of having both comfort and freedom oriented dimensions present in an environment. In addition to the

- necessary support in management, knowledge and resources, this trust is very important for generating autonomy. In the overview trust and autonomy can get a clearer position to make clear where the dimensions are directing towards.
- In another discussion with some service designers was asked why creative process activities goal setting and diverging are having a seperate card, and for instance converging doesn't. Problem framing and proper ideation are the steps that are most often skipped in a process due to time efficiency or perception of relevance (Rao, 2019). Getting in the creative mindset to (re-) frame the problem and generate multiple ideas are important to even get to a proper reverging, converging and reflection. The other dimensions set the right conditions for these steps to be effective in terms of appropriate, novel and unexpected results.
- The validations have also led to a number of reformulations and additions to the descriptions to which a dimension leads.

"Constructive feedback" and "Ability to communicate" were mentioned in the ideation session with students. The DAC facilitators added the value of perceiving of people who listen to you.

The insurance of "good documentation" of important information is what the participants of the ideation session mention as important comfort factor. The meeting organisers of DAC added that this role should be assigned.



## Comfort oriented dimensions

Feedback from a Service designer of Zeewaardig point out to me to "having trust in the proces/facilitator". The idea is that this trust evolves through the stability and direction of the comfort dimensions and the freedom from the other 6 dimensions.

Service designer of Zeewaardig indicated that considering the

unusual should also be about

techniques, materials and

approaches. In this way a

creative climate doesn't only

affect the result, but also about

considering different

the process.



## Purposeful contribution

The extent teams...

- know the purpose of the meeting / project
- have personal objectives
- create own interpretations



# Constructive communication

The extent teams...

- give feedback/comment through use of tips&tops
- have transparent communication
- listen to each other



# Control by accountability

The extent teams..

- make use of roles
- assign tasks
- control deadlines



## Freedom oriented dimensions



#### Consider the Unusual

The extent teams..

- dare to take risks
- run new ideas and reflect
- dare to kill your darlings /
- don't commit to ideas directly - consider different work
- approaches



# Dynimism / Liveliness

The extent teams..

- vary in activities
- vary in approach (e.g. only drawing ipv talking)
- vary in setting
- vary in perspectives (e.g. including stakeholders in meeting etc.)



# Room to Diverge

The extent teams.

- take time to diverge
- are able to generate ideas
- can park ideas on a place where they will be addressed later on

A good point of one of the experts is that the most valuable ideas can come up at the most unexpected moments, there must be a location where they can be collected. This is added to the 'Room to diverge' card.

# Synthesis

Both interviews with the DAC teams and the ideation session with students pointed out the importance of social connecting for the sense of comfort. With Turnepseed (1984) stressing social interactions enhance the employee's well-being, this should certainly be an extra dimension to a creative climate.



#### Social connecting

The extent teams.

- build on (trust-) relationships
- have informal conversations



#### Conflict management

The extent teams...

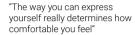
- give attention to resolve personal and emotional tensions
- set meeting rules



## Common language

The extent teams..

- use the same words, activities and actions to express oneself
- can create the same expectations



Service desinger of We are reasonable people indicated that the importance of language was missing in the first 10 dimensions in both freedom and comfort orientation.

Service designer of Zeewaardig also pointed on adding an factors about choosing the materials/techniques helping in the way you communicate best.

Since the expert interviews common language and form of expression are added to the creative climate balance.



# Humor/Playfullness

The extent teams..

- make jokes
- use metaphors / analogies
- use artifacts/pictures etc.
- use different techniques, like role play or Lego serious Play
- laugh/have fun!



# Debates/Dialogues

The extent teams..

- represent and illuminate different perspectives
- ask for each other's opinion
- give each other the change to speak
- challenge each other



# Form of expression

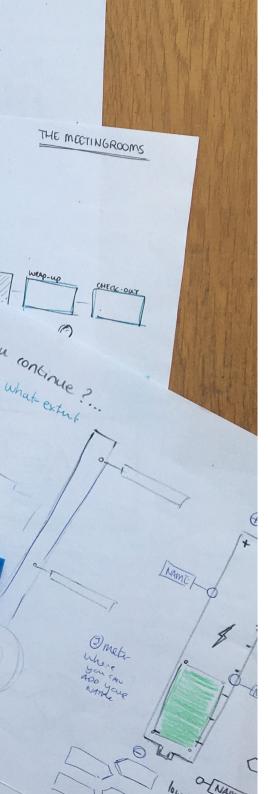
The extent teams.

- leave room for different styles of communications
- enable individuals to develop their personal communiation style
- stimulate visual expression

Someone's experience/skill with certain (online) tools can affect someone's freedom. As meeting organiser it is important to anticipate on differences. This can be in form of alternatives or extra (technical) support.

One of the experts mentioned the importance of having a co-facilitator, especially when developing a creative climate among larger groups.





# 5 CONCEPTING

This chapter is about designing the elements to facilitate an effective meeting. The result of this chapter is a concept proposal that supports a facilitator in building a meeting in a creative climate. The development process towards this proposal is described per meeting component.

# In this chapter:

- 5.1 Set-up concepting activities
- 5.2 Early prototyping
- 5.3 Early ideation session
- 5.4 Designing a meeting flow
- 5.5 Designing a meeting framework
- 5.6 Key takeaways for final concept

"Concepting is the bridge between strategy and tactics, taking you from gathering facts and getting organized to creating words and pictures." - DuFour (2004)

# 5.1 SET-UP CONCEPTING ACTIVITIES

This chapter presents an overview of all ideation activities leading to the final design presented in chapter 6. The activities are based knowledge of both literature study and exploratory research findings and within the defined solution space of the design brief.

The set-up consists of 4 activities of which first two are early ideations and the last two concepting iterations focused on a chosen design direction, see figure 42. The final section concludes this chapter with some key takeaways for the final concept.

The early ideation activities were not necessarily aimed at some kind of supportive

product or service or online environment. For this reason just the findings that influenced the process towards the final concept are presented.

From section 5.4 the activities are focussing on a supporting service for the facilitator to organise effective meetings with a creative climate as described in the design brief of section 4.2. Three aspects of a meeting are redesigned to improve the effectiveness of meetings; the structure, the interactions and understanding of how context characteristics (the meeting variables) affect the organistion of a meeting. The concepting leads to a meeting flow and guide to build-up this flow.

In the takeaways section a conclusion is drawn in the form of a concept proposal.

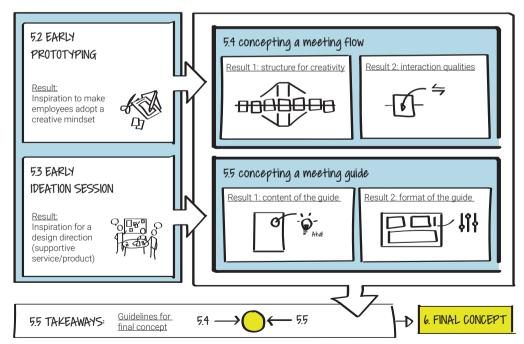


Fig. 42 Set-up of conceptualisaton.

# 5.2 EARLY PROTOTYPING

This section describes the insights taken from prototype ideas designed in a early stage of the design process.

During the literature study some first prototypes were created to overcome mental barriers and to allow someone adopting creative attitudes stimulating the intrinsic motivation for creativity, or in other words interventions that boost the confidence for creativity. The interventions were based on results of the creative facilitation brainstorm and the research to empowered employees (section 2.3). Figure 43 shows an presentations poster of one of the interventions, the other ideas can be found in appendix I.

Due to Covid-19 the intitial ideas have never been developed as interventions action research with employees on the work floor. On the other hand, concretinising abstract literature into these ideas for interventions gave insights in how to trigger someone adopting creative attitudes for the use of creativity.

#### Key underlying insights of the intervention ideas:

- To activate employees using the creativity, the solution stimulating this creativity should be creative itself
- As facilitating role needs to be able to facilitate in an online environment allowing for creativity.
- Remind employees of the creativity rules, like 'quantity breeds quality'.
- Remind employees they can be creative, for example through an reminder of an earlier workshop or by a simple warming-up.
- Indicate a specific place or time allowing employees to share their 'crazy', unusual ideas
- Make creativity accessible by presenting examples or providing tools to work with.
- · Include humorish interactive elements to lower the threshold of using creativity

- and get people in that 'let's do-it' mindset.
- Keep the positive spirit by enabling employees to learn from mistakes, and leave these 'failures' behind.

#### Conclusion

The insights form a good basis for the final concept proposal. By applying these principles an environment is created that stimulates the adoption of a creative mindset.

# 5.3 EARLY IDEATION SESSION

With an early ideation session concept directions are explored. This section describes the set-up of the ideation session and concludes with a direction for further conceptualisation.

An early 2,5 hour ideation session with 5 students is performed to discover different concept directions. The session focuses on how the dimensions of a creative climate can be integrated in activities of an online meeting. The materials of the ideations session are in appendix J.

#### Goal

To understand how the creative climate dimensions can be implemented, an ideation session with students was organised to gain inspiration on the ways the dimensions can be expressed in online meetings. The session objective was to get to different concept directions. In order to get to these directions first the creative climate dimensions and value of face-to-face meetings were discussed. The questions leading to the insights are:

What kind of dimensions lead to an atmosphere stimulating creativity? Compared to online meetings, what aspects of face-to-face meetings benefit creativity?

In which ways can we develop certain creative climate dimensions? How can we combine these ways into concepts?

#### Online session in Miro

Due to Covid-19 also all meetings and sessions for this graduation are conducted online. For this ideation session the application Miro was chosen. Miro can be described as a collaborative online whiteboard including creative facilitations features as post-its, a timer, dot-voting and video calling, ideal for an online creative session. Despite the zero experience with this online tool, an exploratory session

with a creative facilitation expert led to being able to facilitate an online creative session. Miro's intuitive environment allows you to quickly set up presentations, meetings and sessions.

#### Method

Because it could not be assumed that the participants were experienced with the online tool, a homework assignment was prepared. In this assignment one could gain experience with the most important actions for the session: adding post-its, editing text, (re)placing and transforming items. The assignment was used to prepare the personal introduction and to sensitise the participants to the meaning of freedom and trust. Figure 40 illustrates the result of this homework assignment.



Fig. 44 Result of homework assignment ideation session

After an introduction of the concept creative climate an brainstorm was held about the dimensions leading to this creative climate. Feedback on the dimensions has been included in the construction of the final twelve creative climate dimensions,

see section 4.3. A second brainstorm was about the value of face-to-face meetings compared to online meetings, which was input for the third activity.

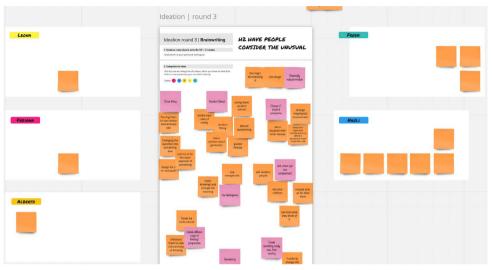


Fig. 45 Set-up of the brainstorm rounds (this is the third one)

The third activity exist of five rounds in which the participants brainstormed individually and clustered these ideas collectively, figure 45. The clusters were used in a morphological chart, see figure 46. The functions 'blue post-its' were the H2's ('How-to problem statements). These H2's exist of selected creative climate dimensions and an most important aspect of face-to-face meetings, determined in brainstorm 2. By combining one idea of each row (the functions), concepts for online meetings. Each participant has designed at least one concept, see figure 47.

# **Key findings of ideation session**

Both the concept ideas and the Miro ideation session itself brought some interesting insights for six concept directions.

#### Findings of the sessions results:

<u>Insights 1:</u> The absence of nonverbal communication makes the participants feel less involved. Besides, the static interaction of video calling stands in the way of comfort and freedom:

Concept direction 1: Designing online backgrounds for video calling which make people perceive there is no physical distance.

Concept direction 2: Online and physical prompts that stimulate common language and allow people to non verbally express themselves.

Concept direction 3: A product that allows people to have meetings anywhere they want. For instance have a brainstorm while cycling or have a sprint review while ironing etc.

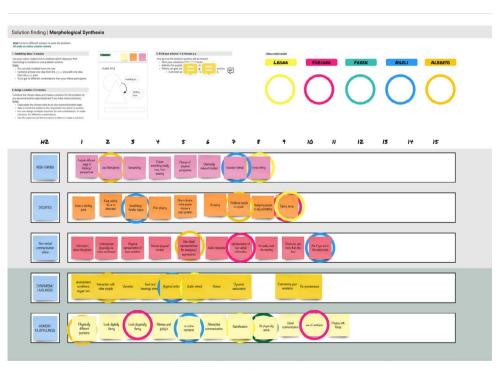


Fig. 46 Morphological chart with idea combinations for concept ideas

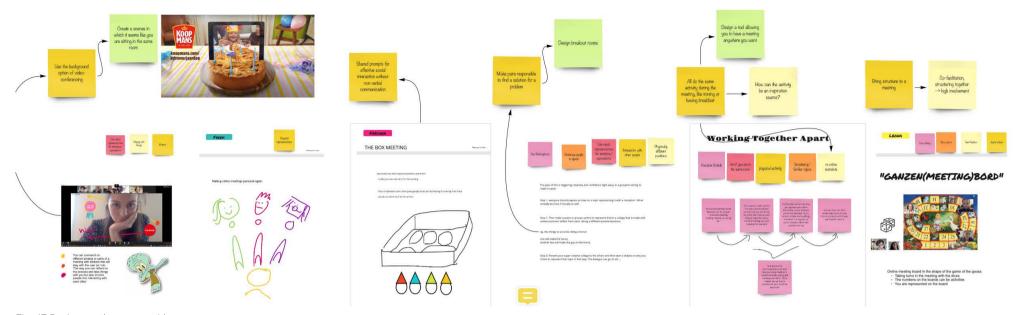


Fig. 47 Review on the concept ideas

<u>Insights 2</u>: Meetings need to have a clear goal, like the finish line of a board game. The structure with which the meeting organiser aims to achieve this goal needs to be logical and engaging for the participants.

Concept direction 4: Standard meeting flows helping the meeting organiser to structure meetings.

#### Four findings of the ideation session itself:

Insights 3: The variety of exercises on different Miro frames gave the participants the feeling that they were really going through a step-by-step process. In addition, they liked the interplay between the individual workstations and the boards that worked as common ground. The alternation keeps the group involved. *Concept direction 5:* An interactive work environment existing of different workspaces for each meeting activity.

Insights 4: The setup of the creative session worked very good because rules and aspects of real-life creative facilitation where translated to an online version. For example There were post-its present, each 'flip-over' (frame) contained a clear description of the activity, presence of a timer, visual stimulus etc. Having these elements online allows for an easy duplication for next sessions and meetings.

Concept direction 6: Creating a library of online meeting tools/elements that benefit the flow and communication of online team meetings.

<u>Insight 5</u>: In order for people to work in an online environment like Miro, it is important that participants have some feeling when using such a tool, otherwise all attention is focused too much on technical help.

<u>Insight 6:</u> preparing an online work environment takes quite some time. To have teams make use of an interactive whiteboard tool as Miro or Mural, it must be possible to make use of templates which can be adjusted, otherwise effort for preparing a meeting is too high.

#### **Conclusion:**

The use of Miro as tool for the ideation session actually provided the most insights. This very intuitive tool lead to interactions affording creativity, connectivity, alignment and implementation. It is actually one big meeting room for asynchronous or real-time team collaborations. Miro is a browser application accessible on almost all modern devices and compatible with 74 different apps, of which often used by organisations: MS Teams, Slack and Jira. Miro has the opportunity to both reach the design objectives and meet the requirements for an facilitating tool enhancing the effectiveness of online meetings.

#### Combination of concepts 4,5 and 6.

Preparing a Miro board for online project meetings is a very interesting direction for the final solution. Templates of different meeting flows (structure and interactions) can be designed and saved in an online folder. This folder can function as a kind of library including the templates and all kind of separate features to tailor the meeting depending on how the meeting variables, section 2.5.

# Inspiration of concepts 1,2 and 3

In Miro different frames can be designed. For the design objective 'connectivity' the perceivement of being in the same room is an interesting idea to apply on these frames. Perhaps, interacting at the same board has the same effect. Something for testing.

To address the design objective 'alignment', prompts with certain definition as mentioned in concept 2, can be introduced to replace non-verbal communciation in the online environment. This was also one of the early prototype interventions of section 5.2.

The idea of having meetings at any location to spark creativity and fun connects with the infinitive Miro canvas that can be used for all kind of online activities. Having separate frames for the different activities allows the facilitator to include a corresponding creative climate.

# 5.4 DESIGNING A MEETING FLOW

Knowing the focus of the final solution was laying at facilitating a creative climate for online project meetings a solution was designed for the biggest opportunity discovered; Designing a meeting flow that contains a creative climate by focussing on connectivity, creativity, alignment and implementation. To boost creative confidence this flow contains on one hand the creative process (the structure) and on the other hand a creative climate (the interactions).

# **Designing the structure**

#### **Concept: A structure with a design process**

The goal is to structure the current project meetings whilst stimulating the use of creativity by means of a creative climate. Based on research insights of the empathising research, section 3.4 (green post-its) and the roadmap of Heijne and Van der Meer (2019) to build-up a creative facilitation workshop (red post-its) an meeting flow is composed (blue post-its), see figure 48. In order to achieve creativity the motto 'practice what you preach' is applied by embedding the creative diamond like module including the design principles (pink post-its) as mentioned in section 2.3.

The GROW method steps are applied to give the middle part of the progression update meetings structure. GROW is an often used method in coaching to gradually think of what is needed next.

## Iteration 1 - Self-evaluation on meeting structure

- Six different 'aims' are discovered which give different interpretations to the content processing part of the meeting. How the aim affects the meeting is discussed in section 5.4.2 Designing the meeting interactions
- The GROW steps don't have a specific reverging step. In the literature study

- this step is defined as one of the principles of a good creative process, for this reason is suggested to add an analysis activity between 'Options' and 'Wayforward'.
- Depending on how much time the meeting organiser want to spend on personal updates, this activity can also be integrated in the check-in activity or content update (middle part)
- Goal clarity has come forward as an important aspect still missing in the current meetings. To get aligned on the aim of the meeting an expectation management activity should be added
- In current meetings the updates were mainly positive. Employees must be activated to also share their mistakes in order to learn from these. An extra activity allowing for this should be added
- Especially when expectations are managed the wrap-up should provide time to reflect if the meeting was successful. This is a way to check if employees can continue autonomously.
- For the golden hour, 'crazy' ideas should also be transformed into action points. Testing should make out when the 'Golden Hour' activity should take place, it is also possible to have it directly after the 'Options' activity since people are than still in a diverging mindset.

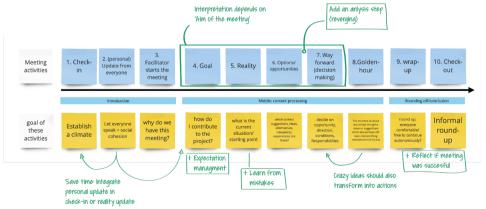


Fig. 48 Meeting structure concept 1 with iteration comments

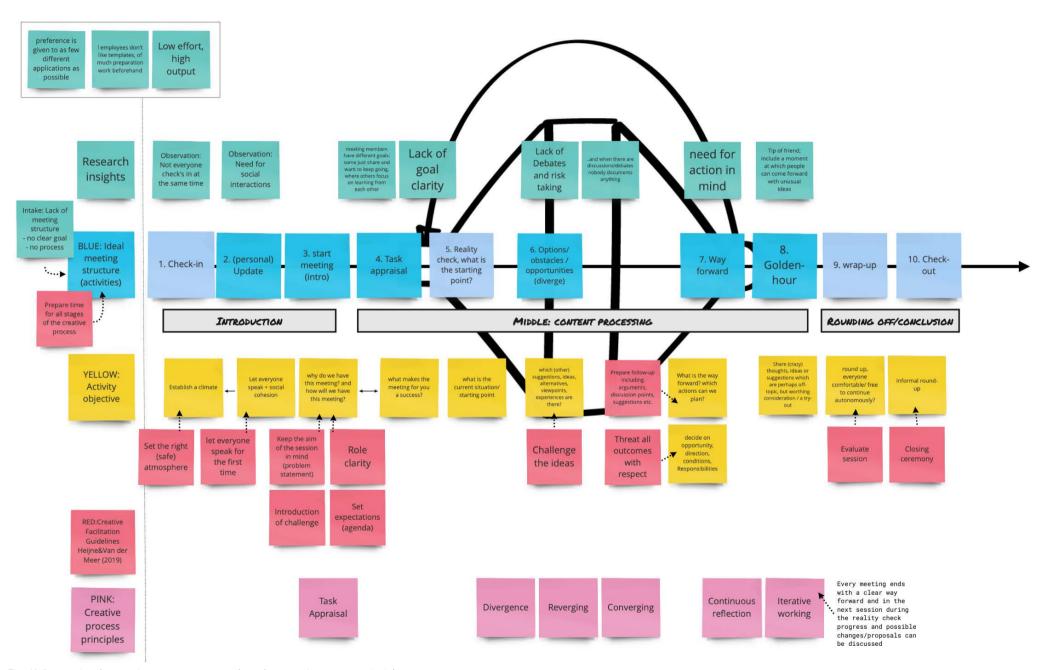


Fig. 49 Concepting the meeting structure concept based on creative process principles

#### Iteration 2 - Expert reviews on meeting structure

A second version of the meeting structure was evaluated with several experts in service design, creative facilitation and organisational meetings (figure 50). This evaluation is performed by means of expert reviews. The structure and activity objectives was presented and experts gave feedback according their expertise.

#### Katrina Heijne (Creative Facilitation expert, Teacher at TU Delft)

- See the post-its as separate 'rooms' which provide a certain atmosphere contributing to the activity goal
- Approach the structure as a tool for the facilitator which is also of use for the rest of the meeting group to get in the right mindset.
- Make sure there is a facilitator role, or that there are instructions for a team member to take that role
- Clarify the interplay with video calling

# Esther Zijtregtop (Strategic designer and organisational meeting expert, Founder NextGenners)

- If the personal update needs to be a separate activity really depends on the frequency of the meeting, the type of meeting and amount of people. The meeting variables influence also the structure.
- When it is clear 'why' someone needs to do certain preparation work, people will do it.
- Think clearly which kind of questions to ask, it is not like all team members can always help each other, some really have their own expertise
- DAC is really an idea-drive company, however the implementation (70%) is still really a problem. "There is still a lot to get here!"
- "Nice idea!" For the energy flow it is perhaps better to have the 'Golden Hour' before the way-forward.

## Bjørn van Raaij (Service Desinger and Creative facilitator at Zeewaardig)

- Discuss during the 'reality' updates what one find difficult or exiting to understand how to continue comfortably.
- Arranging a special moment to discuss obstacles enables people to express themselves.
- There are often different stakeholders in a meeting, it would be helpful if a personal attention is paid to this {note for interactions}.
- It would be nice if the team goal or objective of the meeting is presented in large above the activities achieving this goal
- When hierarchy is present in the meeting group, it is important when the facilitator
  gives equal chances to all meeting group members. In addition, rules opening up
  and sharing input should be discussed up front. {note for interactions}.
- Prevent technical delays by assigning a buddy to solve participants' technical problems behind the scenes (e.g. via whatsapp).

#### 4 strategic- and service designers of We Are Reasonable People

- · Have a plan B for when people are blocked in an activity
- Provide enough space for notes and off-topic information
- Think of the difference between a group topic and individual topics for discussion.

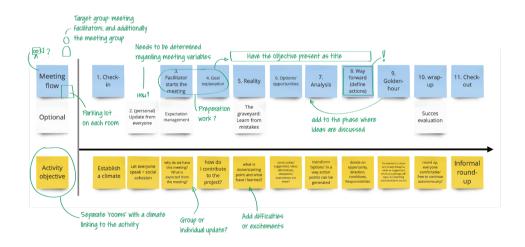


Fig. 50 Meeting structure concept 2 with iteration comments

#### Iteration 3 - Validation with 3 end-users on meeting structure

A third version is discussed with 3 meeting organisers/facilitators of DAC, see figure 51.. In Miro comments were given on the structure. This discussion was a part of a bigger co-creation session further discussed in section 5.5 ideating a meeting framework.

## 3 facilitators of case study

- · Providing a structure is already a good support
- Golden hour as optonal room
- Include rol-division at the introduction
- Create a space were employees can drop off-topic ideas
- At the round-off the aim of the next meeting should be determined
- Enable the facilitator to share information in advance of the meeting to prepare the meeting group.

## **Conclusion structuring the meeting flow**

These three iterations led to a final set of building blocks for an meeting structure including a design process and creative climate dimensions see table X.

For the design of an template in Miro, per activity the activity objectives need to be taken into account in order to meet the connected 'effective meeting objectives' and 'creative climate dimensions'. Besides, when the template exists of different frames or from here called 'rooms', the purpose of the meeting must be visible at each activity in order to be able to link back to it.

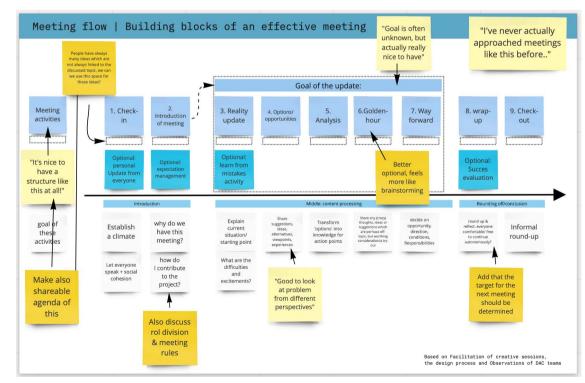


Fig. 51 Meeting structure concept 3 with iteration comments

Creative climate dimensions	Scota Firm of immer? Correctly agreed in Proprietes accountability	Purposeta Gorneron Haront contribution language Prayfabress	Common rem of Delatives Construction Industrial Construction Pulpages Construction Pulpages Construction Pulpages Construction Construction Accountability	From to Constitut Form of Pyramiens downers the united apprecian Likeliness Constitution	Connelor Delates Proposed Pagesciel the annual Delayase Lietlanes contribution Confect Confector Conferentes Confector Conferentes	Consider Construction accountability	Common Contraction Preposed insujuage Communication contribution Contribution Contribution Contribution Contribution Contribution Contribution Contribution Contributions Contributions	Harori Form of Soula Playfatures popression connecting
Contribution effective meeting	Connectivity Alignment	Connectivity Alignment Implementation	Aignment	Creativity	Connectivity Alignment Implementation	Algnment	Connectivity Alignment	Connectivity Alignment
Activity Objective	Create a comfortable atmosphere; a safe-space     Warming-up: let participants explore the freedom of Miro and let them add something personal     Ensure everyone is ready and at one place before starting the meeting     Optionally energise with a personal update activity	Clarify the goal(s) of the meeting     Agree on the agenda of the meeting     Divide meeting roles     Introduce extra invited people     Introduce parking lot     Optionally energise with a personal update activity     Optionally align on goal through an expectation management activity	Build a shared understanding of the to be discussed subject     Give room to share obstacles, difficulties and excitements (e.g. limitations or knowledge gaps)     Define the starting point for the 'options' step     Optionally learn from mistakes by adding a reflection on progress activity.	Activity set-up depends on the aim of the meeting  • Explore (other) suggestions, ideas, alternatives, viewpoints, experiences etc.  • Share rules for diverging	Activity set-up depends on the aim of the meeting  • Transform 'options' into knowledge to discuss action points in the next step (way forward).  • Share rules for reverging	Discuss the 'knowledge' created in the the analysis step and take action points out of it.  Depending on the aim of the meeting the discussion focusses on making a decision, agreeing on something, indicating a direction, verifying or determining opportunities or set expectations.  > Optionally combine with Golden Hour activity to also consider unusual/off-topic ideas.	Conclude on effectiveness of meeting: Reflect on meeting: everyone comfortable to continue autonomously? Discuss information on the parking-lot (if not already discussed in 'Golden Hour' activity) Decide on aim of next meeting Decide on the people that need to be invited Optionally reflect on succes of the meeting when personal expectations are managed before.	Informal round-up, provides clear end of the meeting     Moment where people can optionally catch-up and socially connect.
Meeting Activity	1. Check-in	2. Meeting Introduction	3. Progression update	4. Options	5. Analysis	6. Way forward	7. Wrap- up	8. Check- out

Optional meeting Activity	Activity Objective	Contribution effective meeting	Creative climate dimensions
A. Personal- update	Add a personal update when there is need to connect stronger or to energise the meeting.  • Choose an activity fitting the meeting group composition / size  • Let everyone share something personal to make a deeper connection.	Creativity Connectivity Alignment	Sould Firm of Humori connecting expression Playfaltees
B.1. Expectation management	Add as part of the introduction when it is good to know each others expectations by the meeting. Expectation management contributes to better alignment.  • Let everyone define a personal objective or expectation with regard to the aim of the meeting.  • Share these objectives to manage the expectations and the eventual succes of the meeting.	Connectivity Alignment Implementation	Paposetal Common Hamor/
B.2. Succes evaluation	Add activity as part of the wrap-up when expectations are managed or when it feels good to discuss if personal objectives are met.  Reflect on the the meeting itself  Discuss if the meeting has brought the outcomes as was expected	Alignment	Perposeral Commitment Commitment Commitment on Palacogues
C. Learn from mistakes	Add activity when an update is given, but when obstacles, difficulties and mistakes aren't discussed. Seeing failures as new learnings benefits creativity and make people faster experiment with ideas/concepts.  Reflect on the activities done to learn from what went wrong, what stood in the way or wasn't working.  Uncover mistakes and turn them into something positive  Motivate people to experiment and consider the unusual	Creativity Alignment Implementation	Constitutive Common Conflict Communication Implance management  Soor to Constant Avenge the unstant
D. Golden Hour	Add the golden hour activity when there is time to consider the unusual. If certain ideas are relevant to discuss during the content processing of the 'aim of the meeting' the golden hour can be introduced after the analysis of the 'option' activity. If the ideas are totally oftopic it is better to discuss them after the 'way forward' activity.  Discuss of topic, unusual ideas and transform them to action point as try-outs	Creativity Alignment Implementation	Consider Room to Behatred From of the universal deverge Dalagues expression of control by Control by Control by Control by Dalagues

Table 3: The building blocks for an effective meeting structure including a design process. Per room certain creative climate dimension should be addressed to stimulate the confidence for creativity

Next to a structure the interactions determine in what way the content is handled. First the qualities are determined and after that some first ideas for the interactions are designed.

# Interaction vision

The interaction characteristics connecting to the statement of enabling the facilitating role to organise effective meetings in which comfort and freedom are balanced to have a creative climate are; servitising, balanced and effective.

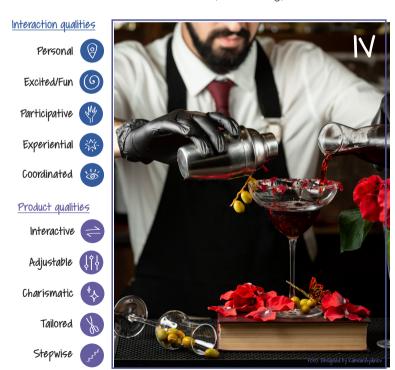


Fig. 52 Interaction vision - preparing a high-end cocktail

The analogy chosen based on these characteristics; The facilitating role can organise online team meetings as a bartender prepares high-end cocktails, see figure 52. The analysis of the properties of a bartender preparing a cocktail are in appendix K. Based on these properties the interaction qualities are determined. These qualities describe what kind of use, experiences, view or understanding the rooms should contain with which the objectives alignment, implementation, connectivity and creativity can be reached.

The features of each room should be interactive, adjustable, charismatic, tailored and stepwise. These room qualities lead to interactions that are experienced as coordinated, experiential, participative, exciting and personal. Only with these kind of interactions the four objectives of alignment, implementation, connectivity and creativity will be reached in an engaging and effective way.

The fact that Miro can achieve all these properties makes it - feasibility wise - a suitable tool for future online progress meetings.

# **Designing the 'Rooms'**

By means of different idea stimulating technique (analogies, braindrawing, some scamper), the rooms have been designed. Some of the ideation steps are in appendix L.

To understand how the interactions contribute in reaching the effective meeting objectives and developing a creative climate several intermediate iterations have been performed.

#### Inspiration - Self-evaluation on meeting interactions

Since the lockdown, all research activities have taken place in Miro. During these meetings we experimented with different interactions, see figure 53.. By evaluating these interactions in terms of the functioning, comprehensibility and impact, a number of lessons were learned for a successful final concept.

# Learnings for designing online meeting interactions Instructions

- Indicate clearly when and how participants should interact with the different features in the rooms.
- Use one style to provide these instructions.
- Add self-explanatory titles.
- Make use of colour-coding or other character styles to show connections and make certain interactions personal, for example own colour post-it.
- Let the facilitator give good example.
- Add cues (arrows, numbers, a leitmotiv etc.) to help people navigate within one room and between rooms. Participants can get easily lost in the infinitive Miro board.

#### Functionalities

- Create a functionality cheatsheet for unexperienced Miro-users.
- Provide an icon-toolkit to motivate participants think visually.
- Participants cannot interact with the board when they joined a screen share of someone else, but presentations and movies cannot be played without screen sharing.

#### The set-up

- Prepare the tools with which people can interact, so provide empty sticky notes, frame the place where people need to give their input/feedback etc.
- Choose deliberately what to lock. Participants tend to click on everything.
- The same counts for grouping elements. When elements are grouped a participant needs to click double twice to adjust the feature.
- In the first room the expectations in terms of interaction is set. When nothing can be adjusted or transformed, people won't try this in the second room. The interactive elements need to be of the same level from start to end.

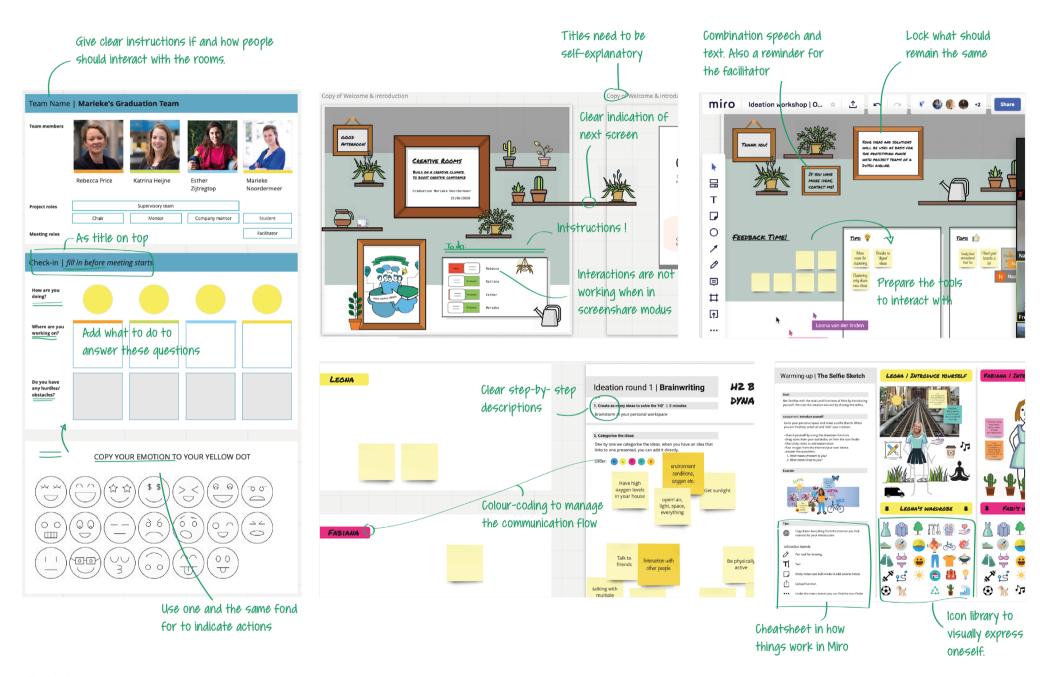


Fig. 53 Meeting room interactions - inspiration

#### Iteration - Testing with experts on meeting interactions

During a learning and development meeting with four strategic and service designers of We Are Reasonable People (WARP) there was some time to test a first prototype of several interactive rooms in Miro. Unfortunately, due to the short time available, only 2 rooms could really be tested (figure 54).

#### Goal

Before interacting with the rooms the creative climate dimensions and structure of the rooms were discussed with the four experts of WARP. The goal communicated with the experts is: Do the interactions contribute to the sense of freedom and comfort? Observing the interactions also provide insights to answer the guestions:

- Are the interactions functional
- Are the interactions comprehensible?
- Are the interactions as intended and reaching the activity objectives?

#### Method

The testing was done by means of expert reviews; collecting insights from their different expertises and experiences as creative facilitators. These insights were shared while interacting as a group (4 experts) with the different rooms, in this way also the functioning, comprehensibility and impact was tested.

# **Key findings:**

The first prototype of the interactive rooms was a success, but we have to keep in mind that the participants are all designers and experienced with the Miro tool. Incentives for interaction:

- One enters into interaction with the room as soon as they suggest a certain expectations. Such suggestions can be created by means of empty frames, supportive notes or navigating features as arrows.
- Less is more; as soon as the objective of the activity is clear, participants start to give their own interpretation.
- Give an example an others will follow
- People expect the same kind of interactions as the previous room when no other instructions are given.

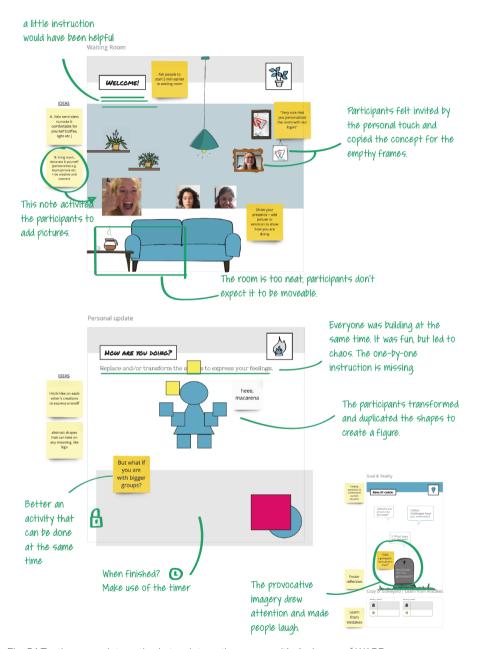


Fig. 54 Testing group interacties in two interactive rooms with designers of WARP

#### **Navigation**

• For now it is unclear when to move on to the next room. The facilitator needs to be clear in this, perhaps with use of the timer function.

#### Creative space

- Add a place to put all the unobvious ideas, something like a parking lot
- The square shape of the rooms limits the space a bit. Changing to a landscape 9:16 screen allows the participants to make full use of their screen. Besides give enough space around each room to allow the facilitator to expand the room when needed.

#### Meeting variables

- The size and composition of the group really influences how to deal with certain interactions. According the designers of WARP should a facilitator organise the meeting according these variables. For example, for big groups the personal update needs to be shorter and in divers group you want to pay attention to the different roles.
- It's better to have a template for each purpose of a meeting. The desired outcome determines too much the setup of a meeting and cannot be cast in 1 generic form.

## **Conclusion designing 'room' interactions**

# Qualities of the meeting rooms

Designing a Miro template that supports meeting organisers to effectively facilitate progression meetings asks for the following feature qualities and interaction qualities

Product qualities

Stepwise Interactive Charismatic Adjustable Tailored

Interaction qualities

Personal Excited/Fun Participative Experiential Coordinated

These qualities functions as guidelines when designing the activities of the meeting structure. Beyond the objectives per activity outcome-wise there are certain aspects to consider for designing the template experience-wise.



#### Deep Directions

Seek for direction and stability by means of clear instructions, navigation in- and between screens and incentives for intended interactions.



#### Finished Features

Good prepared materials will allow participants to fully engage in the meeting. The quality of the materials and tools should not stand in the way to explore



#### Construct on Creativity

Provide the creative space, tools and information to enable participants being creative.

# **Facilitating Creativity**

The meeting variables are influencing the interactions of the meeting. Preparing the meeting according these variables in advance of the meeting is of importance to the effectiveness of the meeting. The facilitating role needs to be able to set-up the meeting in a way the participants of the meeting can align, implement, connect and thereby unleash their creativity.

To have the organiser set-up a meeting effectively we first have to enable the facilitator to make the right choices in terms of structure and interactions build-up fitting the meeting variables. During the intake interviews one of the interviewees mentioned she could really use a framework with which the right meeting flow could be determined. In the next section such a framework is designed.

# 5.5 DESIGNING A MEETING FRAMEWORK

With this framework the meeting organiser will be able to build-up an appropriate meeting structure leading to the the desired interactions of alignment, implementation, connectivity and creativity. This guide consists of the meeting variables and how these affect either the structure (activity build-up) or the interactions afforded by these activities.

# Afffective meeting variables on meeting build-up

Of the influential variables discussed in section 2.5, some variables still apply after the design space has been determined.

The location of the meetings is in online environment Miro and thereby the appearance of the participants is on camera. However, how participants appear on screen can often be improved in terms of lighting, composition and background. Moreover, there is a chance that there is a difference in experience with Miro. For most employees, however, working from home is a new thing and so is the use of online tools. With increasing home working, we can assume that employees will become more skilled over time, however the template should be accessible for any user after a quick introduction to Miro.

# The effect of the meeting variable choices

As figure 55 already indicates have the variables influence on different components of a meetings. The aim of the meeting impacts the content and thereby other activities are needed to achieve the desired meeting results. The variables concerning the meeting group and the timing affect the kind of interactions to achieve the results effectively. The choices of these variables impact all four objectives of the interactions; connectivity, implementation, alignment and creativity.

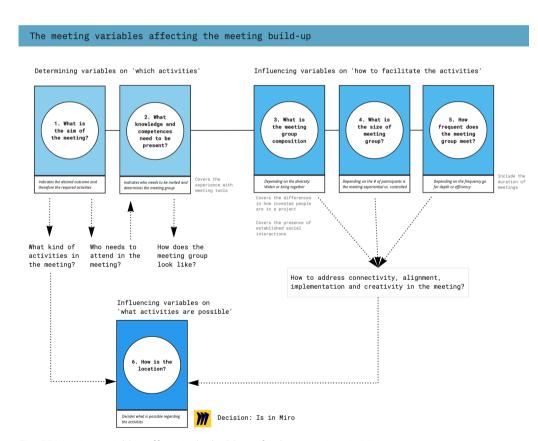


Fig. 55 Meeting variables affecting the build-up of online meetings in Miro

# Study to the options of affecting meeting variables

#### Goal and method

The variable choices and effect of each choice are validated with different experts and end-users of DAC, the input is in appendix M. In Miro, by means of an open discussion about the different variables input was given to answer the questions:

What are the different options/choices for each variable? How do these options/choices affect the way you facilitate a meeting/ session/ lesson etc.

# **Key findings**

The choices for each variable and a description of their effect on either the structure or interactions are presented in figure 56. After the validation, which was part of a bigger co-creation session, with three meeting organisers of DAC, three big changes are made:

- 1. A sixth aim regarding the gain of information is added. with the aim of creating an overview of all the elements in the project, how they relate to each other and where the possibilities still lie
- 2. A third choice for meeting group composition is added. A division between formal and informal divers meeting groups is made. According the meeting organisers is a meeting involving important stakeholders or someone from the management team much more coordinated than the meetings with some experts or others teams etc.
- 3. Frequency and duration of the meeting is left out. Meetings for which the meeting organisers would use a template in Miro should take at least one hour. On top of this was the suggestion to have one proper meeting once a week and use any daily team meetings as check of the freedom and comfort levels (presence of a creative climate).

#### Conclusion

The structure build-up of the meeting depends on the aim of the meeting. There are six different aims determining the kind of activities in the middle part of the meeting flow: receive feedback, find agreement, get inspired, gain information, make a decision and team building.

The variables about the meeting group influence the facilitation style, more loose or coordinated and thereby what kind of interactions will take place. These variables also influence if certain activities should even be included, like personal updates or expectation management. The framework should support the facilitator to make these decisions

Miro meeting template	Connectivity Working in the same wirtual space, Direct contact via non-verbal communication.	Alignment Use the features as 'Entig all to me' and screen- sharing to have everyone fecusing on the same aspect. Upload documents from your device or via a url needed to get to the same interpretation	Implementation Focus on documents along the Comment Focus on documents and 9° function to make people accountable and directly create action notes	Creativity Use the infinitely large whiteboard, stimulate visual thinking	Let the daily meeting for daily duties and focus on well-being
		6. How is the location?			Decides what is possible regarding the activities

	ואווס ווופבחווס רבוווטומרב	>	videocalling
	Connectivity Working in the same virtual space, Direct consect via non-verbal communication.	Connectivity The personal touch people, Ensure the participants is also	Connectivity The personal touch of video calling connects people. Ensure the visual appearance of the participants is also conforting others.
	Alligement. Use the features as thing all to me and screen. Use the features as thing all to me and screen. Sharing to have everyone focusiting on the sime aspect. Ushbaad documents from your device or via a un'invected or get to the same interpretation.	Alignment To check if people a facial expressions a everyone speaks ar	Alignment To check if people agree or have understood, use facial expressions and sign language, Coordinate everyone speaks and listens, Ask for condusions.
$\overline{}$	Implementation Focus on documentation by using the 'Comment' and '96' function to make people accountable and directly create action notes:	Implementation Speak up who is accountable Creativity	countable
	Creativity Use the infinitely large writeboard, stimulate visual brinking.	Make use of backgr make video calling	Make use of backgrounds or other prompts to make video calling more dynamic and exciting use
Bu	Let the daily meeting for daily duries and focus on well-being	Let the daily n	Let the daily meeting for daily duties and facus on well-heins

#### Designing a meeting framework

To support the facilitator in building-up a good meeting set-up a framework is designed to provide the meeting organiser an appropriate meeting structure regarding the choices for the variables. This designing is done by means of a cocreation activity.

#### Iteration - Co-creating with DAC meeting organisers

The co-creation existed of two parts. First as already discussed are the variables, choices and impact of these choices on the structure and interactions validated. With this knowledge in mind the three meeting organisers of DAC where asked to think along in designing a form with which he or she can decide on the appropriate meeting composition.

#### Goal

A condition that arose from the empathising research in section 3.4, is that the solution should be time efficient. On the other hand is the aim of the design capability programme to have employees experientially learn the value of finding the confidence to adopt a creative mindset, see introduction 1.1. This framework can play a theoretical role in understanding how to build on a creative climate and thereby the confidence to use creativity by indicating the effect of facilitating certain activities (structure set-up) in a certain way (the interactions evoked). Co-creating a form with which the facilitators can build a meeting flow should provide the answers on the questions:

At what level of information do facilitators want to be able to make a choice for generating a meeting flow?

What kind of framework would best match this information, considering time efficiency?

#### Method

The designing part of the co-creation with three meeting organisers of DAC existed of two steps. Step 1. different ideas for a format where discussed resulting in a concept, see figure 58; Step 2. An more elaborated version was discussed some

days after the co-creation workshop, see figure 59.

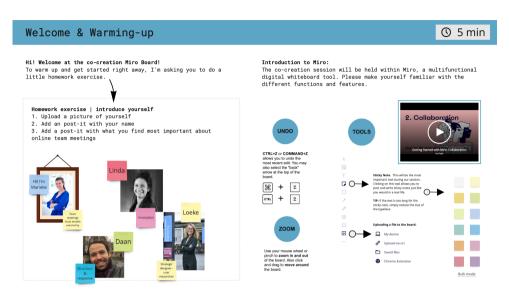


Fig. 57 Preperations for co-creation session in Miro

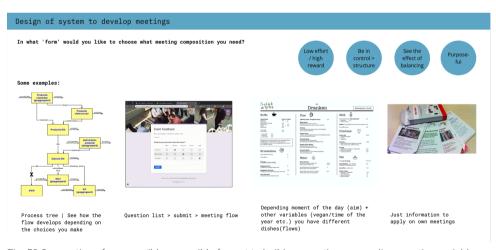


Fig. 58 Suggestions for a possible a possible format to build-up meetings according meeting variables. By discussing these suggestions desires and needs come to the fore and new ideas emerge.

#### Key findings - step 1

#### The Meeting Menu card

The facilitators all agreed on a format that comes close to an online menu card on which one can make choices and has an overview in 'the basket'. Changes can be made in this overview before completing the composition. "I want to have an overview over all the options in one interface and create my own composition"

#### Implementation focused

"I can plot all my meetings in the structure, but I'm curious what the difference in approach then has to be to have that creative climate" The facilitators want to know what kind of activities are needed and some tip and tricks in how to successfully facilitate this activity depending on the meeting. In other words they want to know the result of their choices, not where this result comes from (the reason for the activity/approach).

#### Support the facilitator to reach autonomy

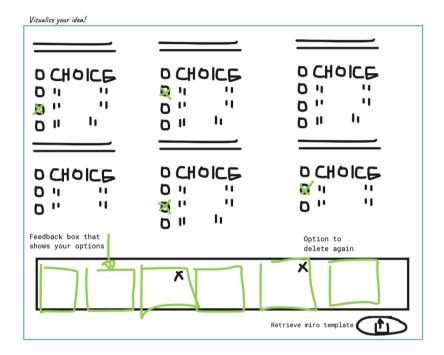
The facilitators already think how to set-up a meeting with regard to personalities, the need for experts and when close to a deadline (mile-stone). But because many meetings are still in the control & demand type of meeting style, meetings are mainly focussed on updates and sending information. The meeting organisers mentioned it would be good to have certain obligatory activities that stimulate self-directing teams. On the contrary they also recommended that activities as personal updates and golden hour should be optional activities.

#### Direct feedback on choices

The facilitators want to be in control of building up the meeting flow. Which is actually in conflict with time efficiency. For this reason the meeting organisers thought of the feedback box in which for each choice made the meeting flow gets adapted directly.

#### CANCEPT

#### The Meeting Menucard



#### Explanation of idea:

A menu card in which all possible information can be seen and can be chosen depending on the meeting.

At the bottom of the menu you can see what you have clicked.

Because you are reminded of the different activities that can take place you will start to consider what is important.

#### How much time may it take, and why?

Time: In a maximum of 10 minutes, the template must be loaded in

#### What is important for you as organiser?

- · Clear overview of the different activities
- · Have a grip on making the choices themselves, so can adapt

Fig. 59 result of the discussion - meeting menucard concept

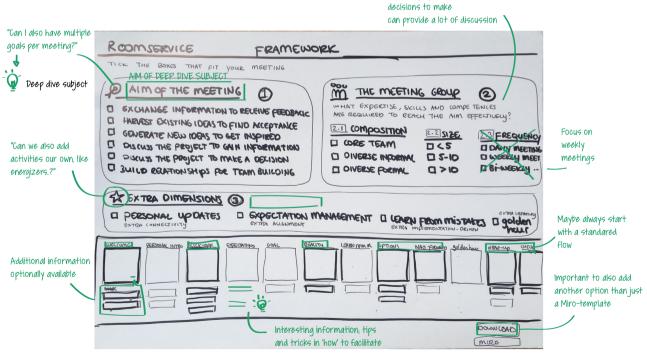
#### Key-findings - step 2

Shape instead of create a meeting flow

Preparing the meeting should be like plug and play, while having the freedom to tailor the meeting in way it fits your meeting group. So not first a list with options, but give a template that can be adjusted.

It would be good if there is a standard template in which you add the activities linked to your aim of the meeting. Activities that focus extra on a creative climate, but are not standing in the way of an effective meeting should be optional. Also should it be possible to add activities if a facilitator wants to.

After a while people understand there are different variables influencing their meeting, than they just want to make small adjustment to their Miro template depending the type of meeting. The a framework should be part of Miro, or it is matter of time and the framework won't be used any longer.



#### Deep dive on one subject

The progress meetings are characterised by providing updates. In order for meetings to be effective, it is stipulated that participants must set a goal and the desired outcome. Going through a complete creative diamond however is too much if there are several topics that need to be discussed. Focus on one subject would be more effective.

#### Information is optional

The notes on how the interactions regarding alignment, implementation, creativity and connectivity change depending on the chosen variable options should be optional to read, otherwise there is too much information accessible in first glance. Besides these notes should be available in form of tips and tricks, so people can actually do something with the information.

#### Beyond Miro

"I guess facilitators also want another format than Miro as output". Ensure the agenda can also be downloaded to share via email or to paste in a retrospective etc.

#### **Conclusion designing a framework**

The main conclusion is that facilitators should be enabled to build-up an effective meeting by adjusting the ideal meeting flow. The difference can be made by having facilitators consider whether or not to include certain activities in the meeting.

For each meeting, the aim of the meeting (at least one) will determine which activities is required for a deep dive on the subject.

The information that can help meeting organisers facilitating an effective meeting is added as option in form of tips and tricks.

112 Concepting

Fig. 60 More elaborated variables framework concept with iteration comments

Still many options and

## 5.6 KEY TAKEAWAYS FOR FINAL CONCEPT

The design direction most interesting for the current situation of Covid-19 and promising to enhance the effectiveness of progression meetings in terms of a creative climate is the design of a meeting guide enabling the organiser to build-up an effective meeting in an online environment.

#### Conclusion: Designing a meeting guide

Designing a meeting guide template in an online environment which evokes a creative climate requires to design three different elements:

- 1. The activities forming the structure of the an ideal meeting flow according creative climate dimensions.
- 2. The kind of interactions in these activities that afford autonomy and the motivation to be creative in order to boost creative confidence.
- 3. The way the facilitating role can build-up the meeting depending on the meeting variables

#### **Structure of the meeting:**

The ideal meeting structure exist of 11 activities of which 4 activities are optional to enrich the meeting in terms of alignment, implementation, connectivity and/ or creativity. The deep dive activities in which options are explored and analysed are depending on the aim of the meeting. Six types of meetings are defined and therefore there are 6 different deep dive activities.

#### Interactions of the meeting:

The interactions evoked by the design of the different activities must eventually lead to the feeling of autonomy and trigger a creative mindset. There are five product and interactions qualities providing a framework in how to design the different meeting activities. The qualities afford on one side the experience of

freedom and on the other side the sense of comfort. These are the building blocks for the desired autonomy and creativity.

#### **Support in Facilitating the meeting**

It is important to have the facilitator organising the meeting flow properly. If the facilitator does not understand the underlying idea of an effective meeting set-up, the meeting will not be effective in boosting creative confidence.

To support the facilitator the guide should contain directions for navigation, instructions in how to use the activities and clear defined objectives per activity. Secondly the features of the design should be finished and not standing in the way of facilitating the meeting. Finally the guide must allow for creativity, otherwise it becomes very hard for the meeting organiser to facilitate the freedom and comfort for this creativity.

The guide must be organised regarding the applying meeting variables. The variables affecting the structure is the 'aim of the meeting'. The facilitator must be able to adjust the flow regarding the type of the meeting. Variables around the meeting group affect the interactions, how to cope with these factors should be provided in the facilitating notes in the form of tips and tricks, see the overview in figure 61.

Since the focus is still on boosting creative confidence of the employees and not a meeting facilitation course, the preparatory framework and meeting flow setup will be combined into templates in which the facilitator and the group come to an effective meeting together. This concept is further explained in chapter 6, final concept.

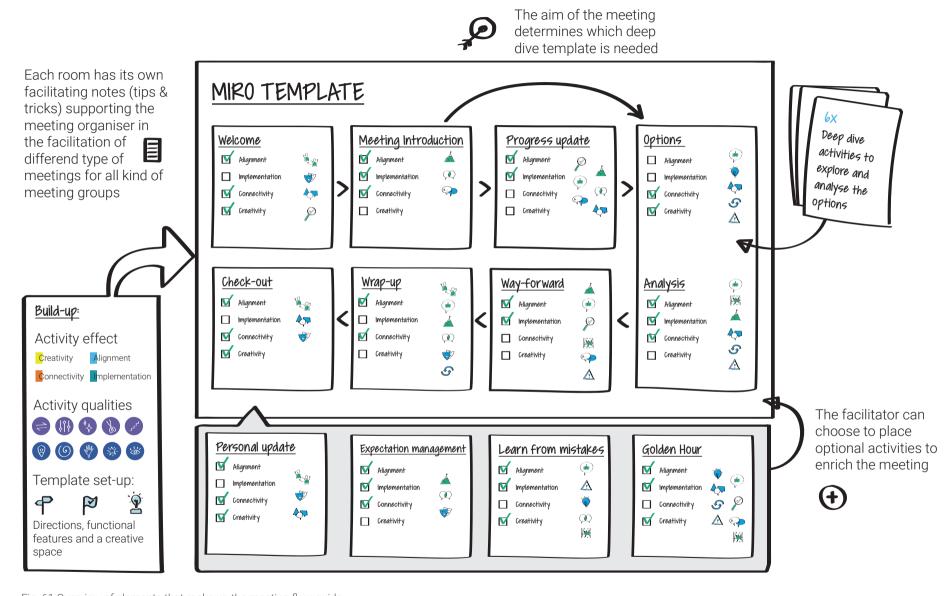
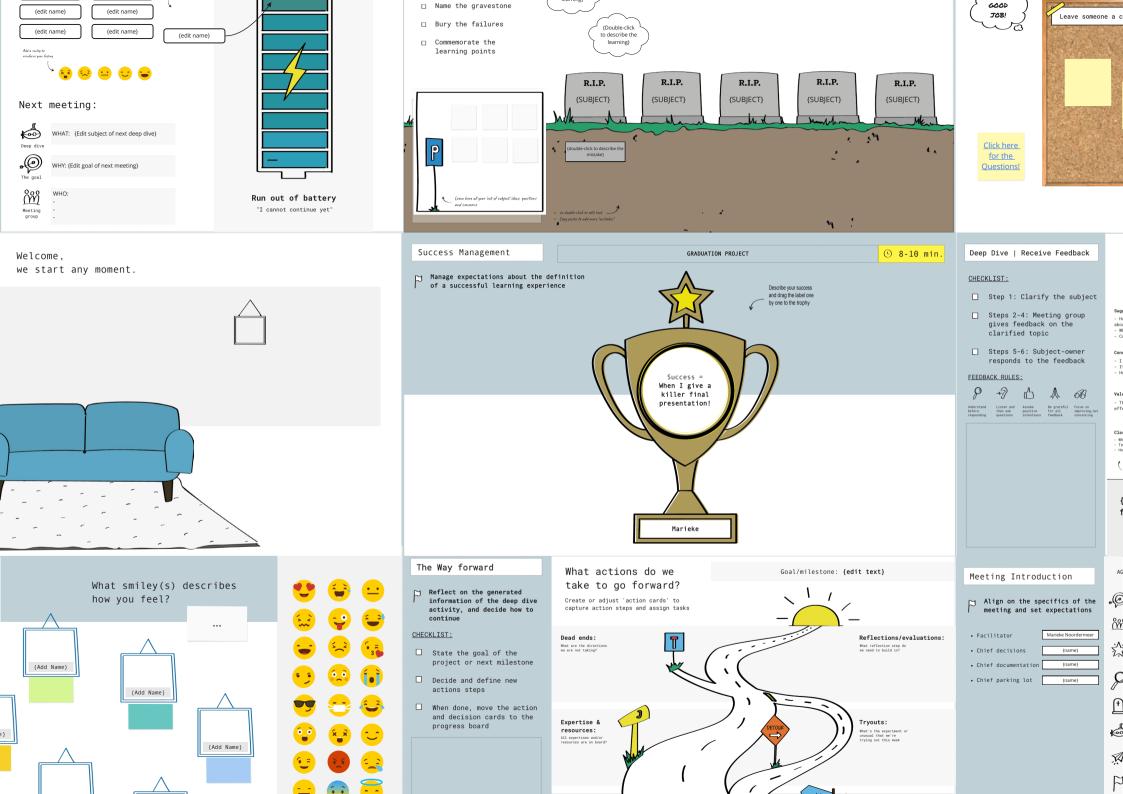
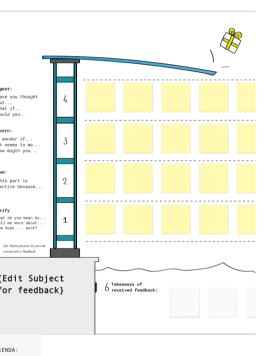


Fig. 61 Overview of elements that make up the meeting flow guide



# ompliment!



What is the aim

of the meeting?

Pin your subject on the desired

# 6 CREATIVE ROOMS - THE FINAL CONCEPT

In this sixth chapter the service to organise effective meetings is described. The decision of focusing on the facilitation of online meetings has led to the concept idea of a guide empowering the facilitating role to build-up and facilitate online meetings with a creative climate by means of templates, 'rooms', within the online environment of Miro.

#### In this chapter:

- 6.1 Design process to final concept
- 6.2 Concept guidlines
- 6.3 Concept elements overview
- 6.4 Element design development

# 6.1 DESIGN PROCESS TO FINAL DESIGN

To give understanding to the set-up of this chapter the design process to the final design is explained, see figure 62.

The final design is a result of an iterative design process. Through the concepting activities in chapter 5 guidelines have been retrieved for this final design. A description is given in section 6.2. In section 6.3 the different elements of the

final design are explained and section 6.4 shows the design elaboration of each element, the completeness, clarity and usability of each element has been evaluated, of which the documentation is in chapter 7. As result of the evaluations the designs have been refined. To show the development of the final design these detailing improvements have been combined with the initial concept elements in sections 6.3 and 6.4.

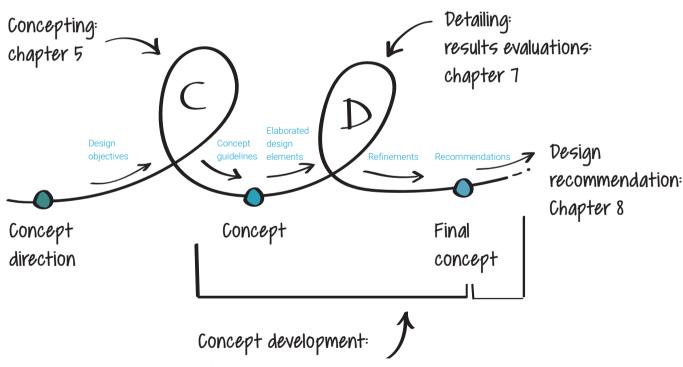


Fig. 62 iterative design process to the final concept

# 6.2 CONCEPT GUIDELINES

#### What.. should this guide do?

The guide exists of several templates (rooms) with which the meeting organiser can build-up a meeting structure bringing the conditions for a creative climate. To contribute to the eventual goal of autonomy, the rooms contain activities resulting in interactions with focus on alignment, connectivity, implementation and/or creativity. These desired interactions are created by the fact that the rooms contain features that make the users both feel free and comfortable.

It is up to the facilitator to take the meeting group through the rooms with emphasis on these characteristics. To support facilitators in their role the tool contains facilitating notes. Besides, an overview of the different rooms and their objectives should enable meeting organisers to build-up a meeting from the templates appropriate to the characteristics of their meeting.

#### Who..is going to use it?

The prime user is the meeting organiser of project team meetings, figure 63. The organiser uses the service to prepare the meeting flow and during the actual meeting this structure functions as facilitation guide. The preparations and the actual meeting take place in the same online environment, so also the invited meeting group will make use of the product. The goal of the research is to boost the creative confidence of the meeting group by enabling the meeting organiser to facilitate an effective online meeting.

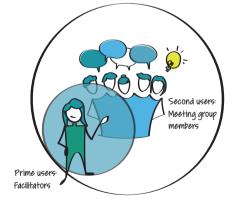


Fig. 63 End-users of Creative Rooms

#### When..would you use the this service?

As the storyline in figure 64 illustrates, the guide is used in preparation before an online meeting by the meeting organiser to build-up the meeting. During the meeting the prepared rooms function as structure to facilitate activities leading to autonomy. For the meeting group the rooms operate as supporting communication spaces next to the video conference.

The guide stimulates alignment, connectivity, implementation and creativity, which are activities advancing the eventual experience of autonomy and the motivation to use creativity.

#### How.. should the guide work

This is short overview of the different functionalities of the service. The explanation of the different activities in the rooms are explained in section 6.4

- It is a replacement of the 'share screen' function in video calling. The endless whiteboard can be used to share any content and to create new content.
- The interactive template invites members to participate in the meeting and to collaboratively bring content to a next level. In the different rooms one can express freely, give direct feedback/a response, document interesting ideas and suggestions and the template provides overview of all things said/ expressed.
- The facilitator indicates when it is time to move to next room. This provides clear structure to the meeting.
- The template elements can be adjusted and made personal
- The service is compatible with applications as MS Teams, Slack, Trello and Jira. Comments and action cards created during the meeting can directly be assigned to a team member and will be saved the backlog of the planning tool.
- When the meeting is finished the templates can be exported and saved for later documentation and reference.

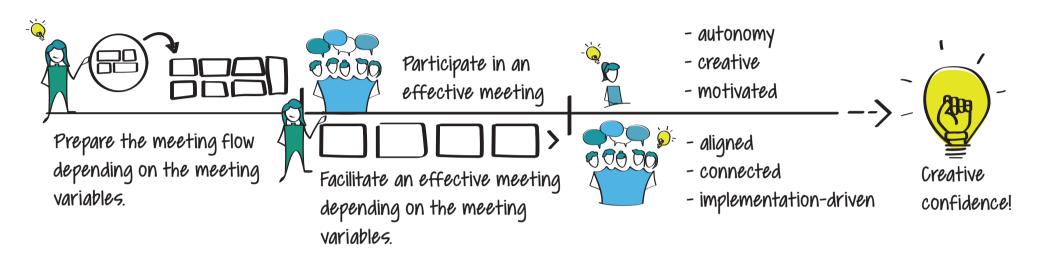


Fig. 64 usability storyline

# 6.3 CONCEPT ELEMENTS OVERVIEW

Creative Rooms is the do-it-yourself (DIY) guide to facilitate effective work-from-distance project meetings. In this section the elements of the guide are explained.

#### **Overview of concept elements**

A concept version of Creative Rooms is build in Miro. In this collaborative whitboard platform the concept is evaluated. These evaluations have led to design recommendations which, in combination with the takeaways of the conceptualisation chapter, lead to the refined concept: Creative Rooms. In basis this DIY-guide includes six elements, see figure 65. The basis structure, 17 'meeting rooms', a template folder and facilitating notes were part of the initial design. After the evaluations the elements were refined and enriched with 3 more rooms a reference manual and implementation assistance in the from of a customer support manager. Together these six elements form the package service 'Creative Rooms'. In the next section (6.4) the development of each elements is explained.

#### **Short description of each element**

#### 1. Basis meeting structure

The basis meeting structure provides a starting point for building-up a meeting and existis of 9 stages. To this structure a reflection moment to the overall progress and a recap of the meeting decisions are added. Evaluation B and C have shown that employees will feel more comfortable with rounding off the meeting by extra focus on control by accountability (creative climate dimension). Where the initial flow (structure with rooms) is shown in the overview (figure 65) the modified version is shown in its development overview (section 6.4).

#### 2. Meeting Rooms 20

A total of 20 different rooms have been considered. Each room is designed in a way that it represents a stage of the basis meeting structure. In their own turn, they contribute to an effective meeting.

- 9 Basis meeting rooms: these nine rooms are part of the basis meeting structure. This composition of rooms the basis for a good online meeting.
- 4 Optional meeting rooms: four meetings are determined as optional and have the ability to enricht the meeting in either alignment, connectivity, implementation or stimulation of creativity. These rooms can be added from the template folder.
- <u>6 deep dive rooms:</u> the conceptualisation phase has determined that there are 6 different aims for a meeting. For each aim a deep dive activity is available in the template folder.
- <u>1 blanco room</u>: to enable facilitators in creating their own activities a blanco room with guidelines is availble in the template folder.

#### 3. Template folder

Inspired by the functions of Miro a template folder is added to the concept. The facilitator can add one of the pre-designed rooms or save their own creations in this folder.

#### 4. Facilitating notes

The notes form a script supporting the facilitator to navigate the meeting group through the different rooms; the flow.

#### 5. Reference manual & 6. Implementation support (added after evaluation B)

The manual is added to support the organiser and faciliator of the meeting in understanding and using the guide effectively. The manual works as reference after Creative Rooms has been introduced in a training. This training is part of the implementation process which requires accessible expertise for support, as was stressed as pre-condition in the literature.

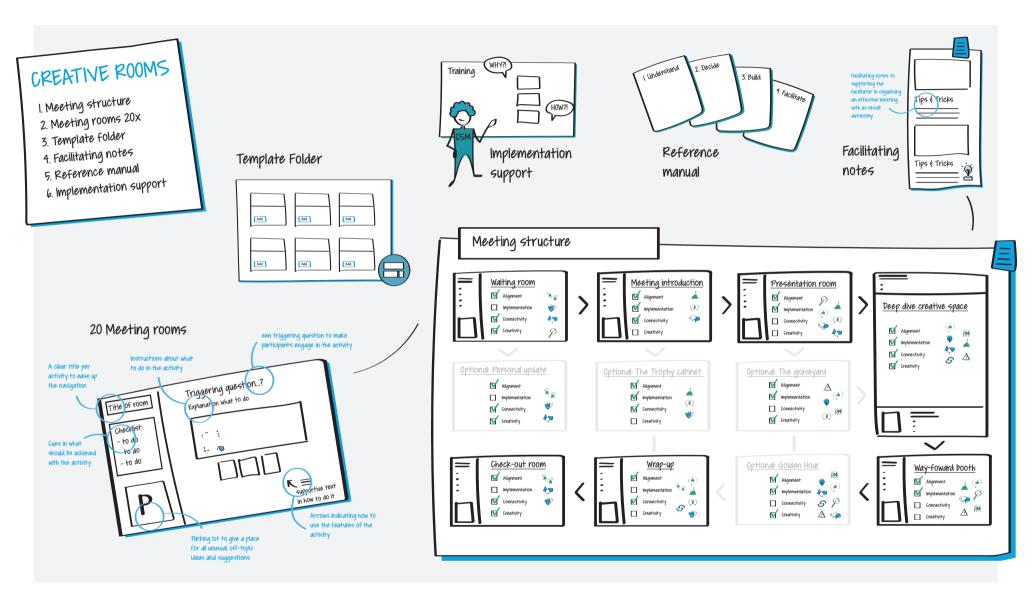


Fig. 65 Overview of elements Creative Rooms package

# 6.4 ELEMENT DESIGN DEVELOPMENT

#### **Decisions for development**

To evaluate the effectiveness of the concept it has been decided to focus mainly on the development of the structure and rooms. Because of this, only the Deep Dive activity 'Receive Feedback' is designed. The meeting observations revealed that many meeting exist of sending information instead of sharing and collecting. The focus on receiving feedback is therefore decided as most relevant to elaborate on.

Moreover, the template folder and meeting notes are functions of the online platform of Miro. For these elements the development lays more at the content, rather then the format. Input on the form are added as recommendations for a stand-alone platform or the software of Miro.

#### Presentation of elements

First the final meeting structure is shown and the way facilitators can adjust this flow according their meeting characteristics. In addition an impression of the template folder and facilitating notes are given. Then, all rooms except the recap room are explained. This step is added as a recommendation to the meeting flow after participants have missed a recap of the decisions taken in the meeting. Finally the manual is presented.

The implementation support is not designed or evaluated, and therefore not addresed in this section. However, implementation recommendations with regard to case study is done in chapter 8. Discussion & Conclusion.

#### Set-up showcase design development

The development of elements was iteratively. To provide insight about these developements this section shows both the initial concepts designs and final designs. To give understanding to these visuals, a description of the idea behind the design together with some element specific improvements and recommendations for further development are described. Figure 66 illustrates the set-up. The 'Blanco Room' indicates how the final design of each room, except the waiting room, should look like, this hasn't been adjusted for each room yet.

The improvements and recommendations refer to the relevant evaluation where the point comes from.

EvA = Evaluation A - Usability of the rooms

EvB = Evaluation B - Usability of the guide by facilitators

EvC= Evaluation C - Group interactions with meeting group

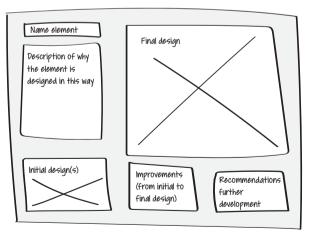


Fig. 66 set-up of showcase of design development to final design. For some elements the order of the elements is a bit different, but they all have these five items.

#### Final meeting structure

The meeting structure of Creative Rooms is a sequence of rooms based on seven phases of a facilitating a creative process, see figure 67. Creative Rooms gives the meeting organiser a basic meeting flow which reflects in 9 rooms the seven phases of an effective meeting set-up. Figure 68 illustrates how each phase is reflected.

The flow of rooms can be adjusted by the meeting organiser. From the template folder the facilitator can add 'optional rooms', 'Deep Dive activities' or a 'blanco room' to create own activities. Rooms can also be deleted or restructured in order.

When a meeting organiser makes changes to the basic meeting he/she must be aware that the room has to change/adopt a purpose that reflects the position it occupies in the flow. For example, when the facilitator decides to move the 'wrap-

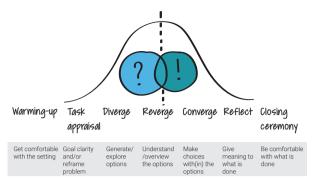


Fig. 67 Seven phases of creative facilitation for an effective flow

up room' to the beginning of the meeting the purpose of the room changes from reflecting on the effect of the meeting on the meeting group to introducing everyone's starting energy. If the participant does so, it should think of another activity to reflect back on the effect of the meeting with the meeting group, because all phases should be reflected to aim for an effective meeting.

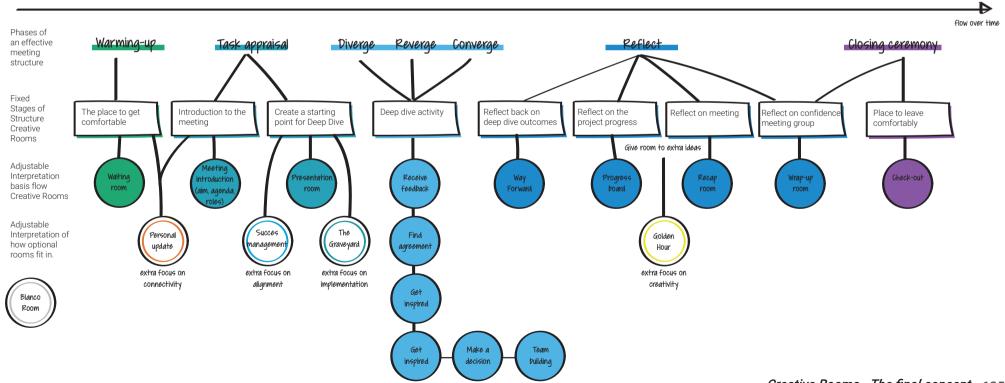


Fig. 68 Overview in how the designed rooms reflect the phases of an effective meeting flow

#### **MEETING STRUCTURE**

#### Description:

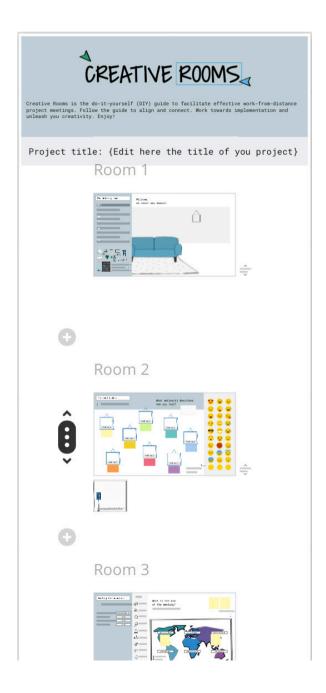
When the facilitators opens the weekly project meeting template (the online environment in which the meeting will take place) the basic structure is as starting point provided in a vertically orientated structure.

This vertical structure is a single grid column is ideal for adjusting the structure. The 'insert (plus)' and 'drag and drop of cells' functions allow for quick changes to the structure. The neutral background with frames behind the grid works as a placeholder for inserting new/extra rooms. Due to this the rooms are perfectly aligned, which helps navigating though the guide during the actual meeting.

Assumed is that meeting will not be longer than 12 pages, but this too can be adjusted.

#### *Improvements*

- » Extra room: Progress board
- » Vertical navigate as you scroll through a presentation or pdf (EvA)
- » Single column (of grid fuction) to structure the flow, but also make easy adjustments (adding/ restructering/deleting) + Navigation using arrow keys. In this way everyone sees same screen in same zoom-in (EvA)
- » Big title with description of Creative Rooms. And space for meeting title.
- » Parking lot outside the room



" I believe directly that meeting will become more effective because of the structure it provides."

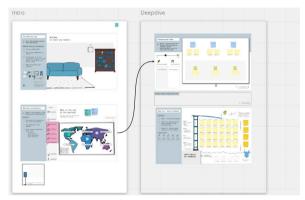


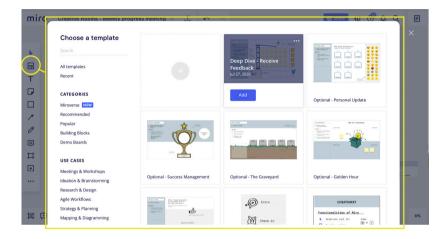
Fig. 69 Facilitator building-up her own structure during Evaluation

" Maybe I have an alternative 'waiting room' activity, then I want to be able to easily change it"

- » For Miro; enable users to lock elements within a grid. Because many users keep using the scroll function of their mouse, instead of the arrow keys, unlocked elements easily dislocate.
- » Otherwise, add locked space next to the grid where users can scroll.
- » Indicate that facilitators can also build-up their own structure; e.g. if they prefer a horizontal set-up.
- » Extra room: Recap room (recap of meeting)

#### **TEMPLATE FOLDER**

In the template folder all non-basic elements are stored. Besides, the facilitator can add own creation to it's 'personal' template folder.



#### **Improvements**

» Visuals are added to the templates to give a preview. Also a short description with the purpose has been added. However. the evaluations made it clear that the facilitators do not read this information in the template folder, but prefer to have it in the manual.

#### Recommendations

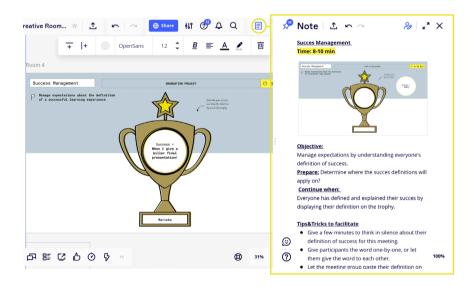
- » For Miro/future platform: Give the possibility to create sub-folders. In this way the deep dive activities can be collected in one map. Extra folders will provide more overview.
- » Create a folder where folders that are reused between meetings can be stored.
- » Add a visual library to the template folder
- » Have the weekly progress meeting board as 'board template' availble

#### **FACILITATING NOTES**

Under the button 'Note' is a meeting script with the time, the objective of the activity, minimal actions and tips & tricks to facilitate available for the facilitator.

#### **Improvements**

- » The checklist of each room has moved to the facilitation notes. It is to the facilitator to explain the activities of the rooms.
- » A time indication has been added to both rooms and notes. This support the facilitator in time-management.



- » The notes should be evaluated with different facilitators to understand whether the notes are comprehensible and complete enough to facilitate an effective meeting.
- » For Miro/future platform: Add a toggle function to the notes, so that the facilitator can only open the notes of the rooms used. Or link the notes to the room in question. If you are in a room, the linked notes will be presented in a separate box.

#### **BLANCO ROOM**

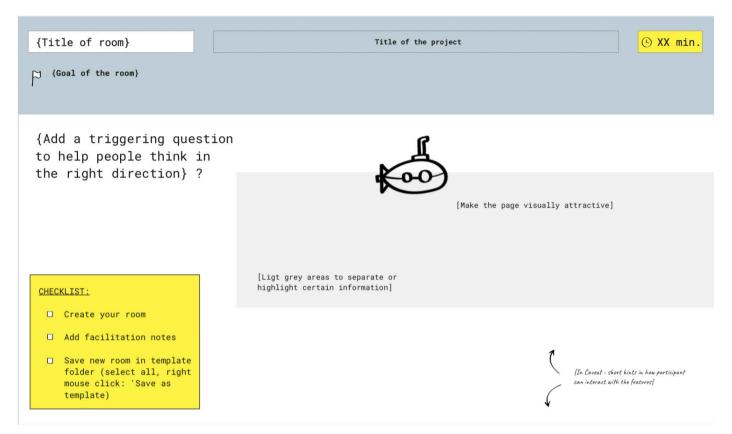
#### Description:

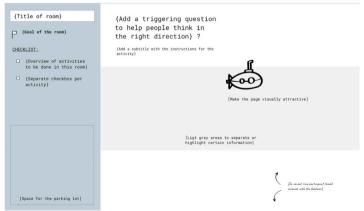
To show the general refinement points these are applied to the blanco room. (These refinements have not been done for all rooms due to limited time.)

The blanco room is available in the template folder to enable and support facilitators to think of own activities. Designing a room will make the facilitator more aware of the idea behind the Creative Rooms guide.

With help of the training an manual a facilitator should be able to design and insert a room which contributes to an effective meeting.

"I think it would be good if the goal and time of each room are communicated with the team."





#### Improvements:

- » Less text, more room for the activity. This brings a bigger responsible for the facilitator to explain the goal and activity of the room.
- » Indication of how much time the activity takes, this makes time-boxing easier (EvB).
- » The parking lot is placed to under the room. The square was confusing the participants (EvC).

- » To understand how long each activity takes several pilot-tests should be done to understand if the weekly meeting is do-able in +/- 1 hour.
- » Idealy the parking lot is a fixed item that updates itself in (now below) every next room. Copying and pasting the parking lot is not practical.
- » Create a visual library with visuals in the cartoonish drawing style to design rooms in the same cohesive style.

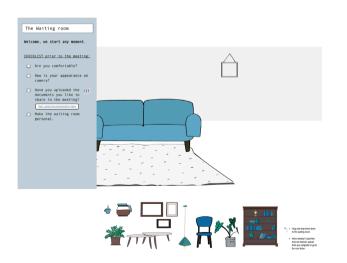
#### **WAITING ROOM**

#### Description:

The waiting room is a room in which the meeting group can gather and prepare for the meeting. This low threshold activity of decorating the waiting room allows participants to warm-up and get comfortable. Participant can drag and drop pre-designed items or upload new one to make the room personal. The result of this room is a collective effort affording connectivity. The checklist items trigger to start the meeting prepared and together.

The facilitator can add something personal to the room to engage the meeting group and set an example. To start collectively the facilitator can set a timer show when everyone should certainly be ready.

" I think you put down a good mindset with the ability to ceate a homy atmosphere "





#### **Improvements**

- » Add 'digital' in front of 'make waiting room personal', some participants thought they had to decorate their space at home.
- » Add a frame around the items to indicate they are part of the activitiy
- » Delete the button that refers to the presentation room. Make meeting members prepare their files for presentation, uploading not per se necessary. Only when meeting members are unprepared it disturbs the meeting

- » Check-boxes that can be ticked.
- » Use the waiting really as room to set the tone for the meeting. Challenge particpants to use their creativity, trigger particpants to interact, clarify the working of the navigation etc.

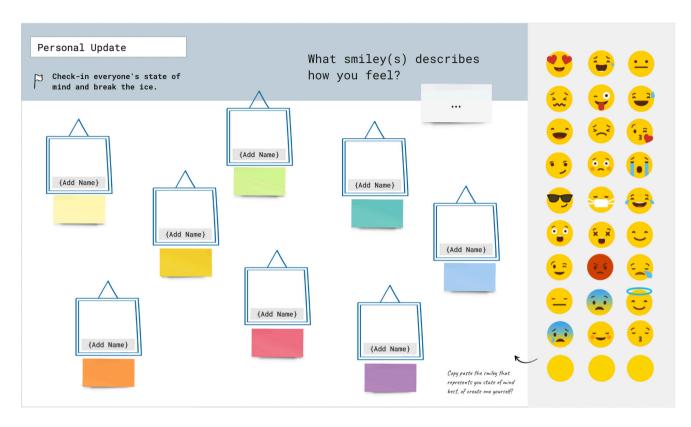
#### **PERSONAL UPDATE**

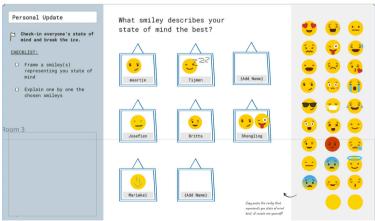
#### Description:

Sharing how you feel or what keeps you busy connects people and aligns them emotionally. Three different activities for the personal update have been designed, but due to its flexible use the 'Smiley gallery' is used in the evlauations. The other two personal updates are in the appendix N.

This personal update works for larger meeting groups in which you want to poll the participants state of mind. Some participants can clarify their smiley choice if they want to. A smiley is visual way of expressing oneself understood by everyone.

The facilitator can aks an extra question to let the participants tell a bit more about themselves.





#### **Improvements**

- » More freedom in designing you smiley, blanco smiley to draw your own face (EvB)
- » Adding a sticky note where participant can add their role in the project or something else funny (EvC). The colour of the sticky note can be used by this participant throughout the whole meeting, in this way it is clear who writes what.

#### Recommendations

» Different options of personal updates depending on how you like to warm-up the meeting.

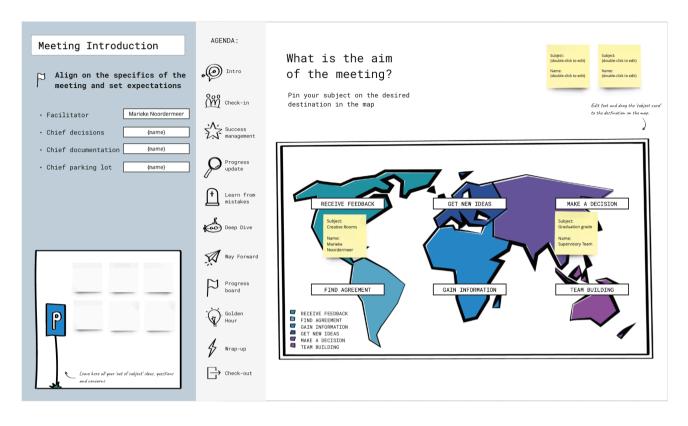
#### MEETING INTRODUCTION

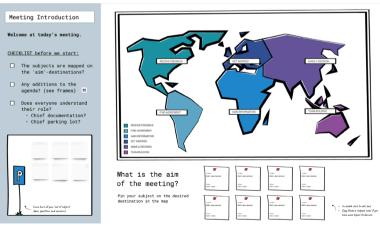
#### Description:

This room introduces the content of the meeting. The subject of the deep dive activity and the aim of the meeting are discussed transparently affording alignment about the form of meeting outcome.

The facilitator guides the group through the agenda and together they divide roles important for a smooth meeting. Besides the parking lot is introduced. The special attention to these items creates a shared starting point with the group.

If the personal update is not a part of the meeting agenda, special invitees can be introduced in this room.





#### **Improvements**

- » It is unclear who needs to perform the task, need for clearer instruction for facilitator (EvB & C)
- » Text in world map is too small, participant don't expect it to mean something (EvA)
- » There is a need for an actual agenda/ overview of meeting in this room (EvA & B)

- » Make the map in black and white so the aim of the meeting can be coloured during the meeting, this creates a bigger contrast between what will be done and what not.
- » Add text boxes behind roles. Facilitators liked to assign the roles by adding names (EvB)
- » Facilitator (EvB) likes to indicate time in the agenda. Now, the agenda looks very full, which is uninviting to add something.

#### SUCCESS MANAGEMENT

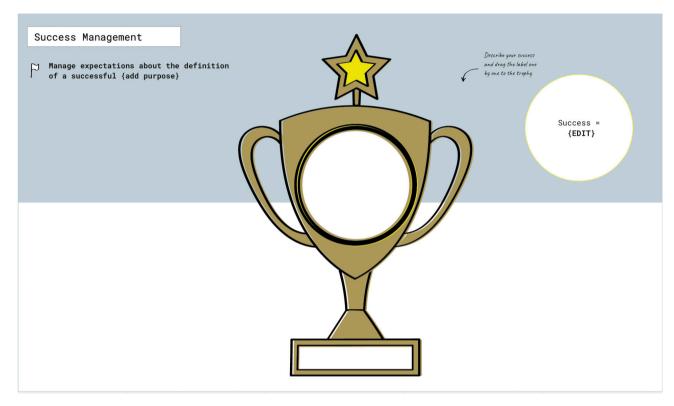
#### Description:

When it seems useful to manage the expectations of the different participants an optional activity of success management can be added to meeting set-up. In this activity all participants get the chance to describe their desired outcome of the meeting. Each participant can describe the success they want to achieve in a label, which will be sticked on the success trophy one-by-one to discuss the different definitions. In this way participants get the opportunity to align on different perspectives and ideologies and can conclude on the kind of result.

The facilitator has the important role to ensure participants describe their success abstractly as a desired kind of outcome instead of a concrete solution.

#### "Celebrating your success is good for team morale." - Employee DAC





#### **Improvements**

» Leave open for which reason the expectations are managed, could be for the meeting, deep dive activity but also whole project etc. (EvB)

#### Recommendations

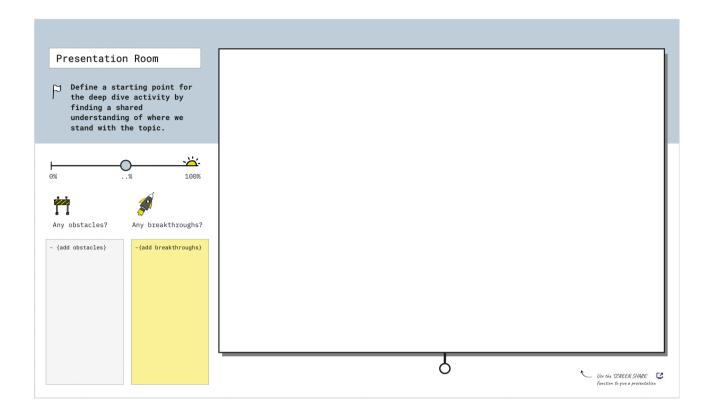
» To reflect back on the defined successes it would be recommended to do something with the trophies, like putting them on a 'Succes shelf' or in the cabinet in the waiting room etc. Celebrating successes motivates people.

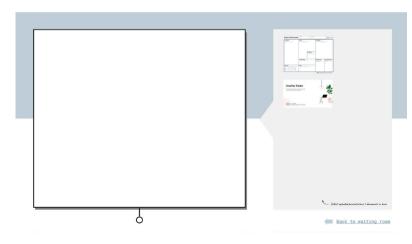
#### PRESENTATION ROOM

#### Description:

To share progression, new insights, background information or other information needed for the deep dive activity, a special presentation room is created. The big screen makes clear that it is time to share information and for the other members to be on mute. The information shared should be relevant for the deep dive activity. The presentations provides the information to appraise the task of the deep dive activity.

To trigger the presenter to share next to the breakthroughs and positives sides also the obstacles and potential pitfalls a first reflection takes place. Otherwise it can trigger a dialogue or debate in which the other meeting members can challenge the presenter.





#### **Improvements**

- » Grey box is misleading, participant (EvA) expect they need to add text.
- » Switch the obstacles and breakthroughs icons, it is better to end positive. Besides facilitator would like to have room to note these obstacles and breakthroughs (EvB).
- » Add to the facilitating notes that the room doesn't need to be used just for presentations

- » For Miro/platform: When participant drags presentation in the screen the size of the file should snap to the size of the presentation screen
- » For Miro/platform: Double click on uploaded file and it goes into presentation mode
- » For Miro/platform: Particpants want to be able to add comments during the presentation, is not possible when in screen share modus.

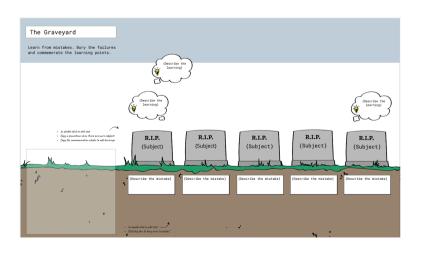
#### **THE GRAVEYARD**

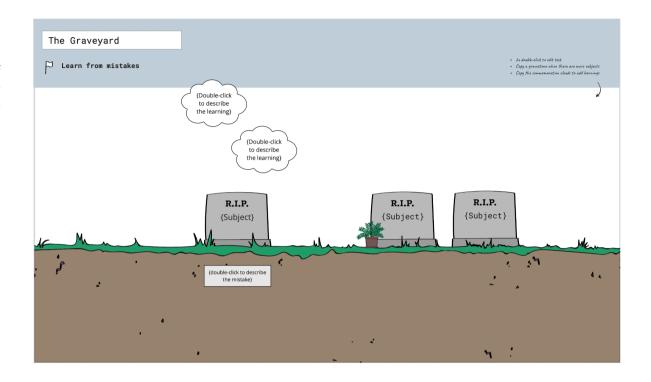
#### Description:

This optional room makes participants aware of the value of making (early) mistakes and that these mistakes are actually providing insight of how to continue. Many people using creativity as way of solving challenges stress that there is not such thing as a 'mistake', they call them 'learnings'. Obtaining this mindset is what this provocative room is triggering.

The meeting group is asked to leave their mistakes behind and continue with the retrieved learnings. The reason to go for something ironic and provocative is to break the stigma of mistakes are wrong. Assuming that this provocative room intrigues employees firstly, creates the time to learn quickly that speaking and debating about mistakes are valuable for progression. Eventually employees should feel comfortable to share both positive and negative developments in a progress update.

" It is always very annoying if the same mistakes are made all the time "





#### **Improvements**

- » Simplified features, the 2x double click stood in the way of the usability (EvA).
- » Add title of project; in this way the page can be shared with other project leads avoiding them to make the same mistakes.

#### Recommendations

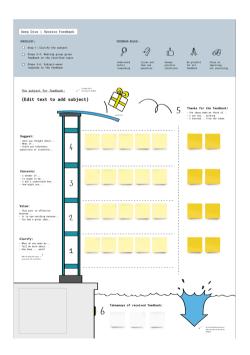
» To avoid people making the same mistakes within a project or in other projects it would be good if the content of this room can be archived or exported.

#### **DEEP DIVE | RECEIVE FEEDBACK**

#### Description:

Based on the 'Ladder of Feedback' technique by Wilson et. al. (2005) the springboard is designed to guide the group in providing and receiving constructive feedback stepwise. After the subject is clarified, feedback in terms of a postive, negative and suggestive note are given. The feedback receiver can respond and conclude in concert with the rest of the group to some takeaways.

The advantage of working in an online environment is that everyone can provide feedback at the same time. With help of the feedback rules and good facilitation, alternation of silent rounds and debates, both introvert and extrovert people should be able to express themselves.





" I like how we can give feedback at the same time "

#### **Improvements**

- » Landscape frame to have it nicely on screen.
- » feedback rules next to steps were the meeting group give feedback
- » 'Value' is misinterpretated, a better description is needed (help sentence) (EvA)

#### Recommendations

» Although the numbering and many post-its helped the participants to all give stepwise feedback, the springboard makes the room very rigid. A visual that evokes a more dynamism and thereby dialogues should be added. In this room a postive and diverging mindset should triggered, leading to constructive feedback and many great new suggestions/inspiration.

#### THE WAY FOWARD

#### Description:

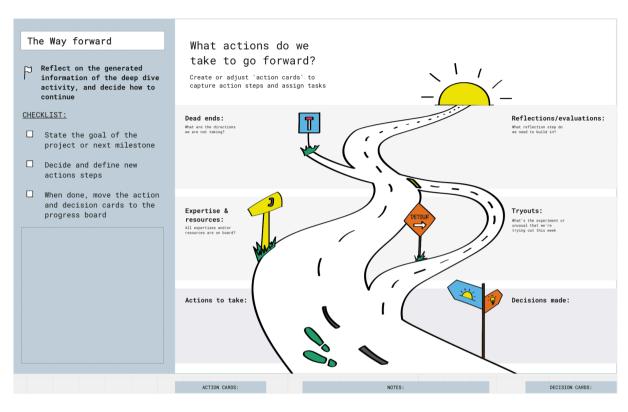
In the way forward the new knowledge get transformed into action steps. To help the meeting group in defining these actions a talking plate has been designed in which the meeting group is taken on a journey to the detained success/next milestone (the sun on the horizon).

The illustration challenges the members of the meeting to think critically about how they can proceed in a goal-oriented way. The various stops lead to debates in which a constructive attitude and conflict management will be put to the test.

A decision list provides insight into why certain action steps are cancelled or discarded and thus gives the entire project team the necessary insights on a weekly basis to work independently on his or her action points.

Due to 'Detour'; "Maybe we can do a design sprint later in the process"





#### **Improvements**

- » Goal/milestone should be typed down, helps to get aligned (EvB)
- » Participants (EvA) suggest the icons have a meaning and like a little hint to give it an interpretation. Otherwise the step is skipped
- » Participants (EvA) expect a link to an overview of the to do' (progress board)
- » A decission list should be added, during such conversations many decision are made an people always forget to document these
- » Add made after 'decisions' to avoid people are creating actioncards about decision making (not per se wrong) (EvA).

- » The action and decision cards created in this room need to be copy-pasted or dragged to the progress board. This is cumbersome, they should be added automatically
- » Explain the function of action cards and decision cards in advance. The widgets consists of a number of additional functions that can be linked to existing backlogs in other applications; such as assigning a responsible person, adding a tag and/or a date.

#### **PROGRESS BOARD**

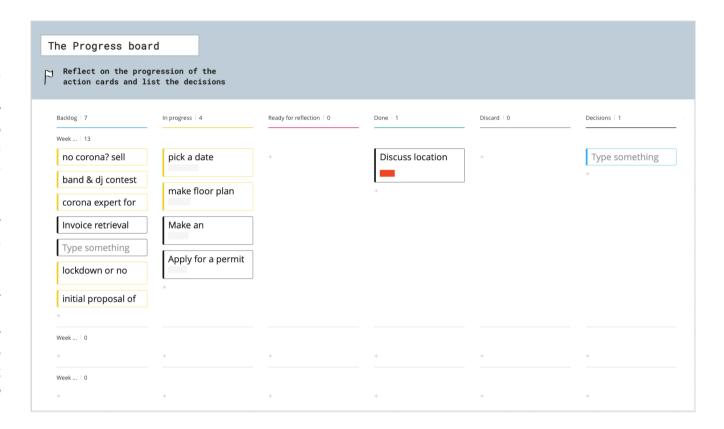
#### Description:

In addition to the way forward activity the progress board is added to the meeting flow. In this board not only the action steps of the deep dive activity are getting structured, but it is also the moment to evaluate on all other action cards. The action cards can be placed from left to right to different columns depending on the status of the action at that time. The board is based on a classic Kanban board, a technique within the Agile-way of-working. However two columns are added to stimulate the participants to reflect more on their activities.

The column 'ready for reflection' is focused on peer reviewing, collaboration and learning from each other. Before dragging the activity to the 'done' or 'discard' column a reflection on the activities take place with help of a another team member, expert or stakeholder. This activity stimulates acceptance finding and elevates the quality to a next level.

The column 'discard' allows people to also reject certain action steps when decided as irrelevant for achieving the goal/milestone. This continues reflection make that participants focus on actions that are purposeful, but also allow for tryouts since everyone knows the item will be evaluated eventually.

ah, these cards fit in here perfectly"



- » The familiarity of the progress board makes it very intuitve to use. Because of that participants expect they can link decision cards to action cards. An option that should be explored by Miro/own platform.
- » Besides, implementation support is required especially to link this progress board to existing applications. For optimal usage this room needs to be tailored to the wishes and needs of the project team, lead and/or scrummaster

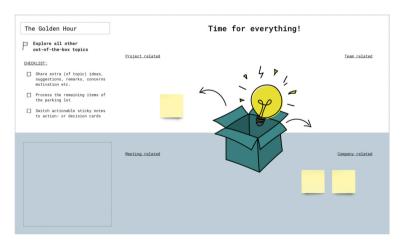
#### **GOLDEN HOUR**

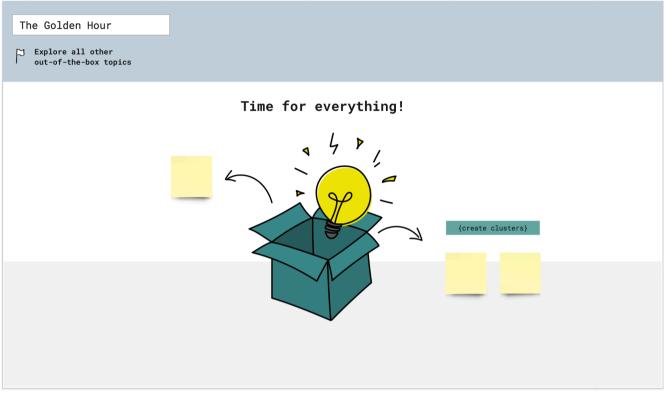
#### Description:

A golden hour activity can be added to the meeting when there is need to discover or discuss off-topic or unusual ideas. This activity allows participants to share all ideas, suggestions, concerns, opinions or other information on the table. Several categorisations are added to trigger participants, but also to stimulate them in categorising input to keep overview.

This room is more about facilitating the moment to be able to share everything that feels interesting. The format can be seen as a free brain-dump. The sticky notes can easily be transformed into action-or decision cards, which stimulates participants to describe their ideas specifically.

Due to 'Detour'; "Maybe we can do a design sprint later in the process"





#### *Improvements*

» The categories do not always apply and must therefore be self-created. In the evaluation C was discoverd that participants do cluster and hitch-hike on each other's ideas. (EvC)

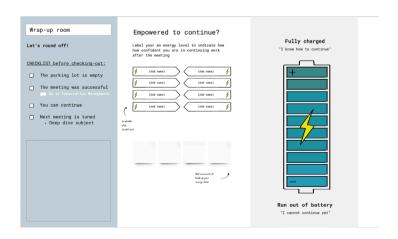
- » The stimulation of this space (in this case the light bulb that wants to go 'out-of-the-box') must be able to be replaced by something more representative of the subject of the meeting or the project. it that case it can be inspirational or as a reference point. (EvB)
- » Not only for this room, but in general would it be interesting to have a library with visual elements with which facilitator can build-up their own rooms. (EvB)

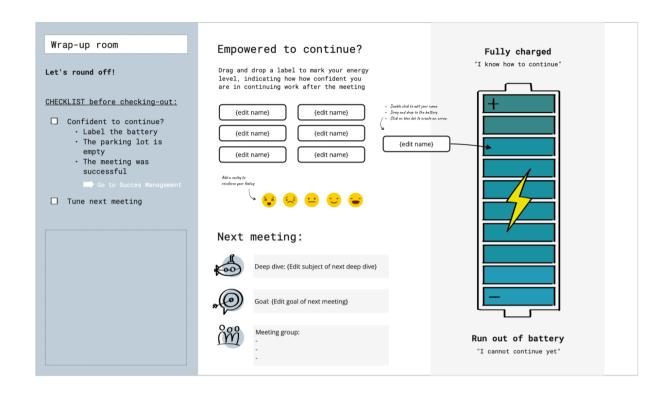
#### **WRAP-UP ROOM**

#### Description:

To conclude the meeting and check if everyone feels comfortable to continue autonomously, a room with a reflective activity on the meeting is added. Successes can be celebrated and unfulfilled expectations can be discussed and taken to the next meeting. At this point participants can determine the main subject and goal for next week's meeting. Knowing this can comfort and motivate an individual to accomplish certain tasks

Connecting on emotional level provides a better understanding of what can be expected from others after the meeting. For this reason the room contains a large battery in which the meeting group can annotate how much confidence the meeting has brought (combination of comfort and freedom) to continue autonomously. The assumption is that people find it easier to express their confidence as if they are a device that can be runned out of battery or fully charged. Insecurity for example can be associated with low self-motivation (low energy) to undertake activities and make choices.





#### *Improvements*

- » Add smileys, universal way of expressing your feeling (EvA)
- » Simplify the name labels
- » Make the labels fit the battery, people look for confirmation

- » Although the 'next meeting' is valuable in leaving people confident, it would better if this get a separate screen together with an overview of of the taken decisions and actions
- » Use the battery as discussion starter to reflect back on the meeting or redesign this room. Battery itself doesn't lead the participants in a reflective mindset.

#### **CHECK-OUT**

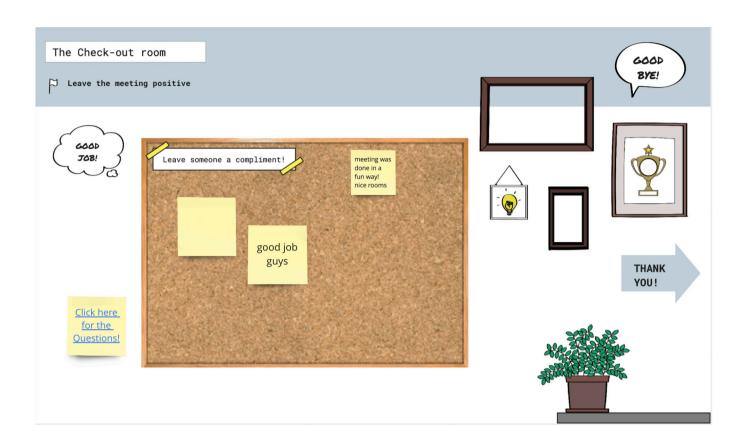
#### Description:

This final room should clearly indicate the end of the meeting, no extra discussions or questions should be triggered. The room can be seen as a pinboard where participants can leave a compliment, inspiring quotes, url's or other information, to inspire and motivate fellow meeting members.

Leaving the meeting with a positive mindset should confident participants to get inspired and keep a creative mindset.

#### Recommendations

» Participant miss a recap room, or something where they can find back what the big decission/defined action are



#### **Creative Rooms - Manual**

#### Description:

To enable the facilitator to build-up a meeting according the characteristics of his/her meeting, a reference manual is added to the guide. To introduce Creative Rooms facilitators will first get a training. If the participants doesn't understand the reasoning the guide, her or she won't be able to build-up an effective meeting by its own.

The manual exist of 5 pages. After an introduction page the other four are meant to support the facilitator. Inspired by the double diamond the manual let you first understand and decide 'how to guide the right meeting'. Followed up by the two pages build and facilitate to which explain 'how to use the meeting guide right', see figure 70.

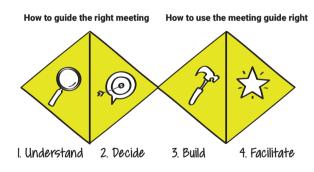


Fig. 70 Manual set-up

MANUAL AN INTRODUCTION TO THE INTERACTIVE DIGITAL MEETING ROOMS

# Creative Rooms

Creative Rooms is an interactive digital meeting structure to held high effective meetings focussing on alignment, implementation, connectivity and ingenuity in an online work-from-home environment

This manual provides the support to facilitate effective meetings using Creative Rooms

Understand what CREATIVE ROOMS is and how it contributes to an effective meeting

Follow 7 steps to build-up a meeting structure suiting your kind of meeting

3. FACTLITATE facilitate an effective meeting with help of CREATIVE ROOMS Within the time of this research project. the manual could not be completely redesigned. The first design is shown on the next page and an outline for the improvement is then shown.

#### **TNTRODUCTTON**

AN INTRODUCTION TO THE INTERACTIVE DIGITAL MEETING ROOMS

MANUAL

# CREATIVE ROOMS

Are you the organising of your project's next meeting online? Then use CREATIVE ROOMS to build up your meeting with impact!

Read through the 4 phases in this reference manual to use the guide with maximum effect.



I. Understand 2. Decide 3. Build 4. Facilitate

#### 1.UNDERSTAND

Learn 'why' usage of creative rooms makes your meeting more effective

#### 2.DECIDE

Learn 'why certain rooms are better for your meeting

#### 3.BUILD

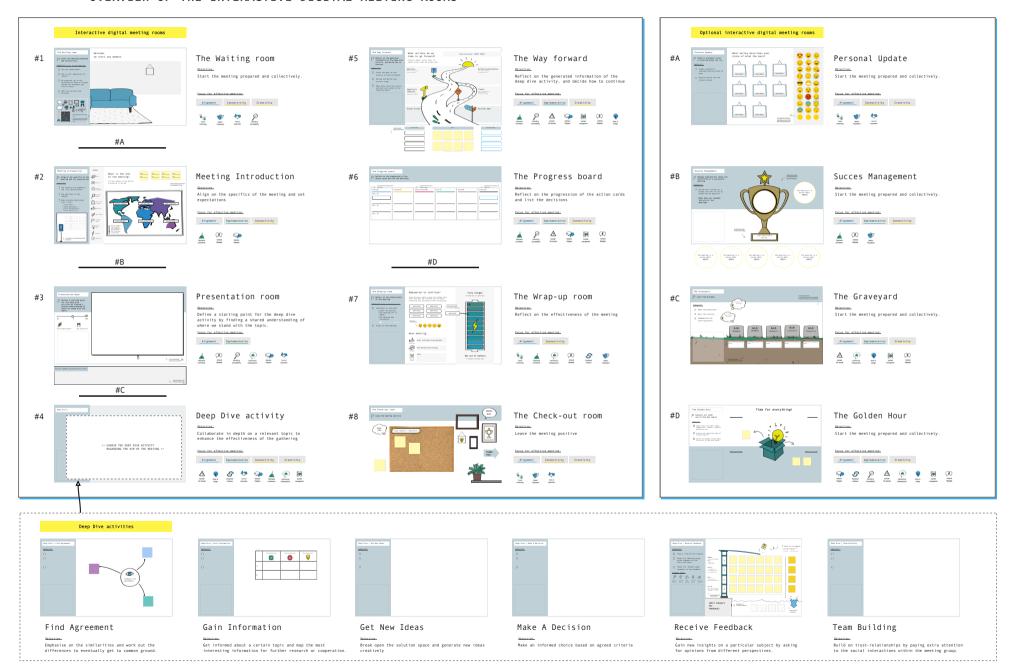
Learn 'how' to build up the DIYmeeting guide

#### 4.FACILITATE

Learn 'how' to facilitate this DIY-meeting

- » Simple appealing writing style, which invites people to use the manual like a friend.
- » Focus with the first pages on the 'why' of the product
- » Use colours and fonds with consistency, this will help users to navigate through the guide. Take the users on a journey.
- » Split-up the 'view' room in a 'why' using the guide and a 'why' deciding for certain rooms.
- » Make it as visual as possible and keep text very short

### **VIEW** OVERVIEW OF THE INTERACTIVE DIGITAL MEETING ROOMS



### BUILD COMPOSE AN INTERACTIVE DIGITAL MEETING ACCORDING THE VARIABLES OF THE MEETING

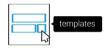
#### Start with a basic meeting structure.

An effective meeting should contain at least these eight interactive digital meeting rooms. These rooms help the meeting group to align, connect, work towards implementation and free a creative mindset. These are enhancing the quality of the project.

Keep certain rooms of the previous time (copy); The waiting room, The graveyard and the progress board.

#### Add the Deep Dive activity regarding the aim of the meeting

A deep dive activity allows the meeting group to handle a subject more in depth. The Deep Dive room navigates the meeting group trough a diverging and converging phase, resulting in shared interpretations and new knowledge for further progression.







template folder

Add the desired

Drag into the

#### Enrich the effectiveness of the meeting by adding optional rooms

Click on the 'plus' button 

to create space for an extra room in the meeting structure. Like step 2 go to the template folder to add any optional activity feeling needed to have an effective meeting:

- Personal Update: extra opportunity to connect and align emotionally • Succes Management: extra opportunity to align on the outcome of the meeting
- The Gravevard: Learning from mistakes provides the opportunity to open the mind for new directions and lowers the threshold to early
- The Golden Hour: This moment leads to the extra opportunity to diverge and unleash any thought or emotion. This room allows to think out-ofthe-box and let creativity flourish.

#### Structure the rooms regarding the meeting variables.

'VIEW' shows the natural flow of activities in a meeting structure. However, depending the variables of a meeting the construction of the structure could work more effectively with an adapted sequence.

Meeting variables influence the meeting structure in different ways:

- . The aim of the meeting determines the activity for the deep dive
- The meeting duration determines how extensive the meeting can be, for certain activities you definitely need to provide time to diverge or debate
- The <u>frequency</u> group members see each other determines the need for personal updates and the extensiveness of meeting updates.
- The timing certain participants/experts check-in or -out determines which activities need be done first or later.

#### Structure the meeting flow:

Use the 'scroller' to drag and drop rooms to another place in the meeting structure.

To delete a room click on the cell, grey space around the room, to send the activity to the 'bin'

 $\hfill \Box$  Add a 'blanco room' from the template folder to create your own meeting activity.

# **CREATIVE ROOMS** Creative Rooms is an interactive digital meeting structure to held high effective meetings focussing on alignment, implementation, connectivity and ingenuity in an online work-from-home environment {PROJECT TITLE} Deep Dive | Receive Feedba P 1 1 1 1 1 1 1 (Edit Subject Check-in everyone's state of mind and break the ice $\wedge$ 8 ∓ |+ ⊗ OperGans 14 \$ <u>B</u> ≡ <u>A</u> <u>/</u> <u>B</u>

#### Prepare the rooms regarding the meeting variables

#### CHECKLIST:

☐ Waiting Room:

Add a personal item representing the project, the meeting group or company to give the example

☐ Meeting Introduction

Prepare a sticky note with the subject for the Deep Dive, but don't pin it on the world map yet.

Adjust the agenda, order the agenda items as the meeting structure, delete items or add new.

□ Presentation Room

Upload the documents to give and update about the current state of the subject in advance, or let know the designated person

☐ Copy paste rooms of the previous meeting

Continue on the content of the previous meeting for the Waiting Room, The Graveyard and Progress board

☐ Provide sufficient tools

Make sure that all rooms with tools such as sticky notes or text boxes contain enough for the entire meeting group.

Lock the features that should stay in place

> When all rooms are adjusted and prepared for interactive usage, ensure that all supportive elements like the titles, illustrations and explanations are locked in the background.

{not possible within tables yet in Miro}

Prepare the meeting group for the digital interactive meeting

#### CHECKLIST:

☐ Invite the meeting group

Share the link of the meeting board and ask the meeting group to join the meeting on their laptop 5 minutes in advance (the time to get prepared).

□ Pré-expectation management

Bring the topic for the deep dive to the attention and let the meeting group think about other topics important for the meeting

Clarify the roles of specially invited people, like experts or stakeholders.

☐ Experience with digital interactive meetings Ensure all participants have a basic level of experience with digital interactive meetings. Ask inexperienced participants to prepare by means of tutorials and warming-up in the waiting room before the meeting starts.

#### **FACILITATE**

#### GUIDE THE MEETING GROUP THROUGH THE INTERACTIVE DIGITAL MEETING ROOMS

#### FACILITATING NOTES IN GENERAL



#### For every room:

Make sure everyone is in the same room. Use 'Bring all to me'

Check if the parking lot has been taken to the next room + "Note to leave all off-topic suggestions

Clarify 'why' this room is part of an effective meeting



#### Explain 'what' the activity is about also see CHECKLIST

- Guide the meeting group in 'how' they should
- interact . Little arrows are helming text
- · "Use post-its, icon-finder or copy paste anything from the internet"
- (A) Keen track on time!

#### Remember the facilitator is:



#### THE GUIDE

navigates the meeting group through the meeting while keeping track on the aim of the meeting and the time



#### THE MEDIATOR

draws out oninions and ideas of the group members and supports them to constructively bring these together. The facilitator remains neutral at all times



#### THE ENABLER

focuses besides on what gets achieved, on 'how' people participate in the process. Participants should be enabled with time to understand, diverge, debate reflect and conclude

#### FACTUITATING NOTES PER ROOM



#### Waiting Room

#### Continue when: 1 It is time to start

- 2. The meeting group is gathered in the waiting
- 3. Extra: all updates are collected in presentation
- 4. Extra: the waiting room is decorated

#### Tips & Tricks:

Set at timer to show when the meeting starts 
 Give an example of a personal contribution to the decoration of the waiting room

. 🕸 w 🛼



#### Personal Update

#### 1 Everyone has snoken (breaks-the-ice)

2. Everyone was able to drag and drop a smiley and to edit text (test if everyone can contribute to the meeting)

- . Set the tone to the kind of personal update by
- Set the tone to the kind of personal update by starting yourself
   It is not about the smiley, but about expressing your state of mind, no smiley or multiple smileys is allowed
   Give participants the word to have them speak
- one-by-one, or let them give the word to each



#### Meeting Introduction

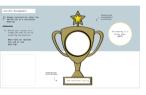
#### 1 The aim of the meeting and subject are clear to

- 1. The aim of the meeting and subject are clear teveryone
  2. A decision has been made about other subjects
  3. The agenda has been approved
  4. Roles have been divided and clear
  5. Parking lot has been explained

#### Tips & Tricks:

- Pin the post-it together on the world map by asking if the meeting group can bring their cursor to the same destination if the goal is clear and when they agree.

  The the build-up of the meeting, the agenda items can easily be adjusted.

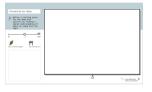


#### Success Management

1 Everyone has defined and explained their success

The serve of topic tree, experience, manufactures are

- Sive a few minutes to think in silence about their definition of success for this meeting.
   Give participants the word to have them speak one-by-one, or let them give the word to each



#### Presentation Room

#### 1. The undate has been presented

- 2. The progress has been expressed in percentages
  3. Breakthroughs and obstacles have been explained
  4. Questions have been asked, update is clear to everyone.

#### Tips & Tricks:

- Use the Screen Share function to show the presentation in the online environment of Miro Extract a page or Slide if extra clarification on this update part is required.
   Ask the participants to listen and walt with questions until the presenter says so
- about the mistake (after that only talk about about the mistake (after that only talk about the learnings)
  Let another person than who made the mistake fill in the text boxes (share the duty to learn) Give people the chance to commendate a learning; how did it help the person continuing? Sum-up all learning before going to the deep

The Gravevard

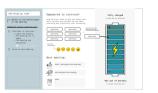
Tips & Tricks:

. Make a ceremony the activity: some last words

1 Learnings have been retrieved from the mistakes

2. Participants are positive (feel good to

- dive (remind neonle)



#### Wrap-up

1. All participants have marked their energy level The specifics of the next meeting have bee determined



#### Check-out

#### Deep Dive | Receive Feedback Continue when:

- 1. The subject of feedback has been clarified
- Feedback has been given the order of something positive, a concern followed by a suggestion
   At least one takeaways has been formulated
- (motivate people to do something with the feedback)

#### Tips & Tricks;

9010

- Empathise on the feedback rules
   Start with a clear notation of the subject
- Guide the meeting group through the steps by starting each step in silence(1 minute), before sharing their input. Let people write down their input on sticky notes, when not everyone get the
- chance to speak, the input is captured at least

  Help the subject owner categorise the feedback

# Method on the government tendentalism of the deep dis-activity, and deaths have to common

#### The Way Forward

- 1. Agreement on the goal, next milestone
- Agreement on the goal, next milestone
   Z-All illustrations have been <u>discussed</u> (help to
   see the big picture)
   The made decisions have been listed and action
   steps have been formulated.

#### Tine & Tricks:

- · Stimulate reflection with questions: can we
- continue with the new take aways/knowledge
- Continue with the new take aways/Knowledge/
  a. do we have the knowledge and resources?
  b. can we do a tryout/experiment?
  c. what evaluations/reflections are needed to
  make future decisions?
  d. directions we can reject?
   hief documentation writes the cards
- he team can use the sticky notes
   Make sure off-topic ideas go to the parking-lot

#### Progression Board

- 1. Cards of The Way Forward have been added
- 3. Participants are accountable for specific tasks

#### Tine & Tricks:

- You move the cards under agreement of the whole
- Tou move the Cards under agreement or the Monte team. First you let the action owner explain the progress and then decide if movement is needed.
   Chief documentation writes new cards
   Make sure the cards are written in a present perfect tense. (in this way able to check)

#### Tine & Tricks:

Continue when:

Golden hour

• Start in silence, let everyone write down offtopic suggestions.

The parking lot is empty
 Some out-of-the-box topics have been discussed
 Interesting input has been transformed to action steps or decisions cards

- Do a quick categorisation is needed
  Give some people the chance to explain their
  input.
  Decide with the whole meeting group is this

#### topic should be transformed to an action- of decision card.

#### Tins & Tricks:

- . If you are close the end of time, make sure to align first on the specifics of the next meeting if there is no proposal for a topic or goal suggest that one can submit a proposal via email (give people time to think)
- The group can create their label to mark their
- energy level

  Ask some people to explain their marker

#### Tins & Tricks:

· Thank everyone Explain that people can leave the meeting or leave a compliment for someone else

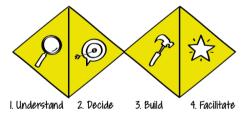


Are you the organising of your project's next meeting online? Then use CREATIVE ROOMS to build up your meeting with impact!

Read through the 4 phases in this reference manual to use the guide with maximum effect.



#### How to guide the right meeting How to use the meeting guide right



### 1.UNDERSTAND

Learn 'why' usage of creative rooms makes your meeting more effective

#### 2.DECIDE

Learn 'whv' certain rooms are better for your meeting

#### 3.BUILD

Learn 'how' to build up the DIYmeeting guide

#### 4.FACILITATE

Learn 'how' to facilitate this DIY-meeting

## **New design** of manual

#### Set-up impression for new design of manual, based on double diamond model

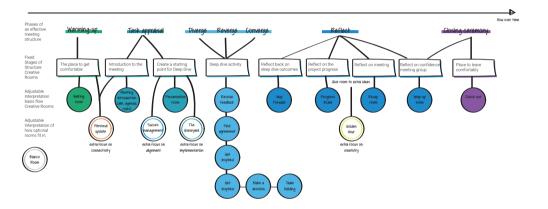
1.UNDERSTAND



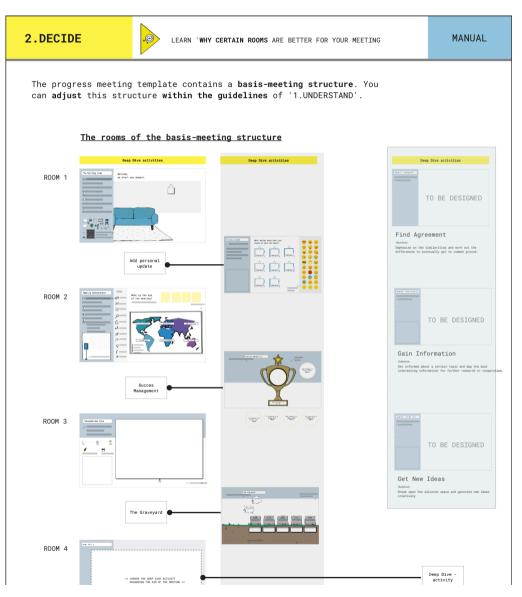
LEARN 'WHY" USAGE OF CREATIVE ROOMS MAKES YOUR MEETING MORE EFFECTIVE

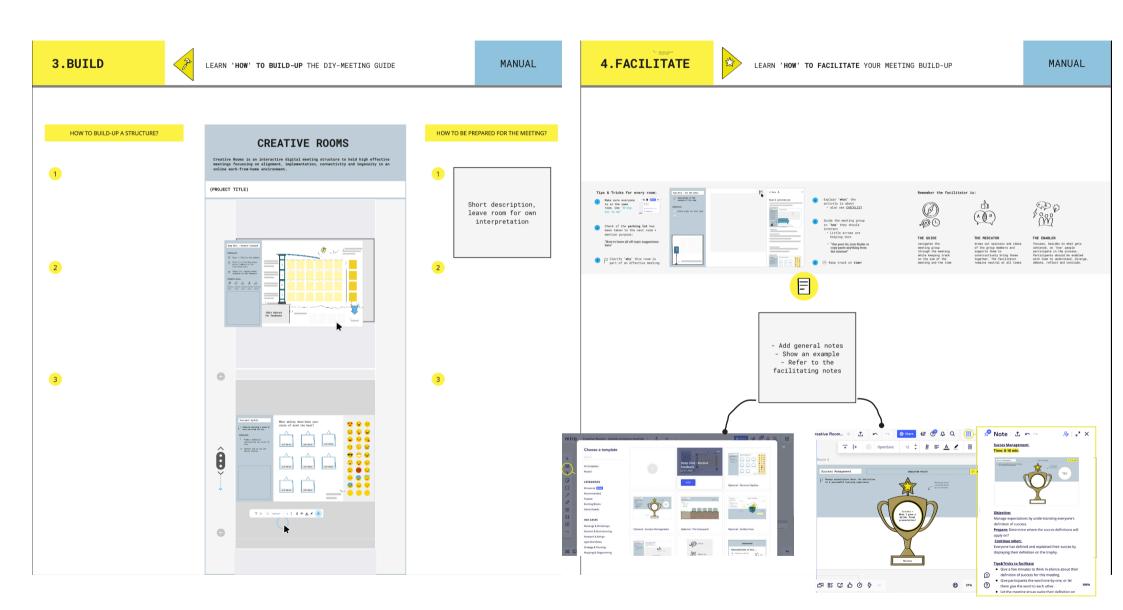
MANUAL

Behind every productive meeting, there is a smart 'flow'. Think of the flow of a meeting as the structure to get the right interactions and a fruitful outcome.



Explain how the basis structure works: within which guidelines can the facilitator make adjustment to the structure









# EVALUATION

In this chapter the elements of the concept design are evaluated. Three different evaluations determine the effectiveness of Creative Rooms. Detailing points are processed in chapter 6 to a final design.

#### In this chapter:

- 7.1 Evaluation set-up
- 7.2 Evaluation A: Usability of the project rooms with Individual project members.
- 7.3 Evaluation B: Usability of the service of digital meeting build-up with (creative) facilitation experts.
- 7.4 Evaluation C: Experience of effectiveness meeting interactions with meeting group members.

## 7.1 EVALUATION SET-UP

This chapter evaluates the concept on usability and effectiveness. The evaluation of the concept exist of three sequential parts, all having their own focus.. The findings of the evaluations are used to detail the concept. The final concept of this research is presented in chapter 6. Conclusions that couldn't be processed within this project or require more research are discussed in the chapter 8. Discussion & Conclusion.

#### **Three evaluation steps**

The first two evaluations (A&B) focus on the usability and clarity of the DIY guide for effective meetings when working from distance. Evaluation A, leads to detailed versions of the rooms. To have the facilitators evaluate the clarity of a more complete guide, the detailing is preferably finished before evaluating with the facilitators. The two usability evaluations form the basis for the third evaluation, in which the use must be virtually faultless in order to actually focus on the group interactions of the product.

#### Evaluation A: Usability of the project rooms with Individual project members.

This evaluation focuses on the usability of the interactive features and clarity of the directions per room. The evaluation will decide if the interactions contain participative, personal, fun/exciting, experiential and coordinated qualities.

#### Evaluation B: Usability of the meeting facilitation guide with facilitator experts

This evaluation is a follow-up on Evaluation A. In this part the usability of the facilitation guide is evaluated, including the manual, facilitation notes and adjustable meeting structure. With this evaluation we test if the service provides all tools to build-up a complete meeting set-up, besides if the reward is higher than the effort, and if the set-up provides enough guidelines to facilitate a meeting effectively.

#### Evaluation C: Effectiveness of the group interactions

The third evaluation is the final evaluation in which both the meeting structure and handling of content are evaluated. The meeting flow is evaluated on its effectiveness. For this evaluation the group interactions and experiences as a result of using Creative Rooms are evaluated on their effect regarding alignment, implementation, connectivity and creativity. The results give an indication of whether Creative Rooms leads to a creative climate and therefore whether participants in such a meeting will be stimulated in to use creativity confidently.

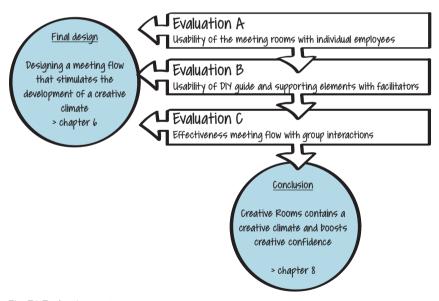


Fig. 71 Evaluations set-up

# 7.2 EVALUATION A. USABILITY OF SINGLE ROOMS WITH INDIVIDUAL EMPLOYEES

#### Goal

Before testing with a project team during a meeting, in which the valuable work time of employees is asked, the functionality of the interactions and some assumptions are verified. The questions that help providing insights are:

Are the interactive elements working?
Are the interactive elements used as intended?
Do people understand what is expected from them?

#### Method:

#### Participants:

3 participants are asked to test three to five rooms per test. The participants are all office workers who are involved in project work including progression meetings.

#### Set-up

The rooms are tested in Miro. After consent the interactions have been screen recorded. The tests were held online with use of Miro and Zoom. Via Zoom, the participant can share the screen, so that unlike sharing the screen in Miro, all interactions, including click and other mouse movements, can be followed. The participants were asked to make a Miro account, so they could test the rooms on their own computer with their own preferences.

Before starting the participants were briefed to speak their mind, to clarify their actions and reminded that there is no right or wrong in the evaluation, all input in welcome, see figure 72.

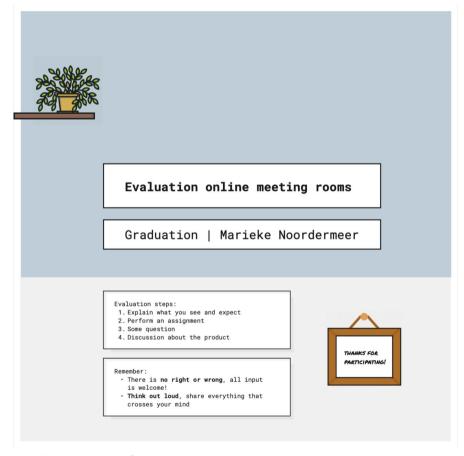


Fig. 72 'Waiting room' of the evaluation. Here the evaluation was explained

#### Warming-up

The first activity was an warming-up and ice-breaker. The participant is asked to answer some questions by filling in text, dragging an item or using a post-it. With this activity the participant has an introduction to Miro, while answering some background guestions, see figure 73. If there is something not working or unclear, the issues can be resolved without affecting the evaluation of the rooms.



Fig. 73 warming-up activity

#### **Fvaluation activities**

- 1. The participant is asked to simply observe the 'room' and explain (out loud) what he sees and expects to be done.
- 2. A short assignment asking the participant to get to certain results is given.
- When the participants seems finished the interactions are discussed
- Followed up by some questions about how the room contributes to certain objectives set for the room. The discussion helps to understand the 'why' behind certain interactions.
- Eventually the concept is explained and the participant is asked to provide suggestions, remarks or other feedback.

#### Observation guide

An observations and interview guide is created to guickly note if the intended interactions are performed. The intended interactions are listed in the form of checkboxes. This evaluation guide and results can be found in appendix O.

#### **Key findings**

The findings influencing the designs of the concept are processed and documented in chapter 6. final concept. The key findings of evaluation A regarding the usability of the product an the qualities of the interactions are summed up below

#### Findings regarding the usability of the rooms:

#### Relevant but experience needed

- Participants see the relevance of using the tool and all mentioned they would like to try it out with their colleagues. Though, they mention the lack of experience with Miro.
  - "I guess after using it more often the rooms will be used more effectively".
- After understanding the meaning of the parking-lot all participant found it extremely relevant. "there are always issues that come up in connection with the items on the agenda and you want to give them a place and not let them interrupt the meeting."

#### Engaging design

- The participant all found it very fun and exciting to use the tool. They all have daily meetings which could use some improvement and Creative Rooms could be interesting suggestion. Especially the cartoonish style and high finished character of the rooms is why the participants found the rooms inviting to participate and guided them to start interacting.
- Despite the visual stimulation, participants remained very textually. The provided tools, like sticky notes and shapes, were used to perform the activity. However, own visual input was not given (use pen tool, or upload illustrations).

#### Live up to expectations

Setting the tone in the waiting room is very important for the expected usability of Creative Rooms. Due to the kind of tool participants expect elements to be interactive and if these expectations aren't met in first participants become

hesitant in participating in the other rooms. "ow, this is not a real checkbox"

- The same counts for elements that should be placed in a grid of on top of something. If elements don't match or fit, participants start doubting their actions. In wrap-up room; "I expected this to fit perfectly, now I start to doubt", while in the Progress board; "Oe this fits perfectly, sweet!".
- Some of the functions are grouped together, requiring the participant to double-click twice to modify the text. This double-clicking should be avoided because double-clicking is also a shortcut for creating the last used shape. So when the participant clicks slightly next to the text, the element (despite the instruction) does not seem editable and unwanted shapes interrupt the interactivity. Especially in group sessions this can become messy.

#### Consistency of the instructions

- All participants really had a 'do' mindset. Participants first start interacting before reading all instructions. If it was unclear what was meant, participants started looking for cues. The consistency of showing icons and the little arrows giving hints about how to the use the activity where especially helpful. "..! figured out that all instructions are always presented at these little arrows"
- Another aspect concerning consistency is the build-up per room. Firstly, participant expect the mention of the project title in the header of each page. Besides, the participants stressed that when looking for information/instruction you look at size of the text and you scan from top to down and left to right. Important information should always be in the upper left corner and text which is meant to adjust should be readable in first glance.

#### Continuity in process

 One participant mentioned the importance of saving the information of certain rooms. The learnings from the mistakes and the action items in the progress board need also be available in the next meeting to guarantee efficiency and continuity.

#### Coordination of an effective meeting

- In some situations, participants were missing overview. To make good
  decisions and have a clear overview of who have been part of certain
  decisions, participants suggest to have a moment in the meeting to clarify who
  is part of the meeting group.
- Another feature lacking in the concept is an overview page of what the
  participant can expect from the meeting. For the participants every room was
  a new surprise. In real meeting they would like to know what is coming, so
  adding an agenda or an overview of the screens was suggested.
- A final general improvement on overview, mentioned by all participants, is
  the way of navigating from one to another room. Two of three participants
  expected that the next room would be reached by scrolling down, as in a
  powerpoint presentation or PDF-viewer. Besides, a navigation bar with arrows
  was prefered above free scrolling

#### Conclusion;

The usability of most rooms was working above expectations. Some rooms like the 'way forward' and 'presentation room' were, even after a first iteration, differently used than intended, however the objective of the activity got still achieved. Moreover, the participants were enthusiastic about the structure and finished features. Though, there is room for improvement in providing overview, systematic designs (clarity in room build-up) in terms of interactions and effective instructions and the stimulation of creativity in term of visual expression.

For this reason regarding the findings of evaluation A, the concept is detailed and with these new designs the Evaluation B, usability of the facilitating guide is prepared, see next section.

#### Re-considerations of Creative Rooms.

Under investigation; the readable instructions about 'what' to do in the room

The checklist was added to transparently show what needs to be done per room
and to create shared responsibility for doing these activities. With the exception

for the Waiting Room, the checklist seems to be irrelevant. When a facilitator gives the instructions orally and participants do not bother reading the checklist items, the textual instructions can be reduced and the interactive space increased. The evaluations with the facilitators should make if the checklist could be of value as guidance for facilitation, or if this needs a different place. Besides, the evaluation of the group interactions should make out if participants need the checklist for extra coordination or that it is just extra distraction from listing to the facilitator's instructions

#### Simplification of adjustable elements

To ensure certain interactive elements are used as intended and not neglected because of the complex adjustability, several elements are simplified to shapes and features of Miro itself. Unfortunately this come at a cost of the aesthetics, but in essence the the activity remains the same but then with easier working elements.



Fig. 74 example of simplification

#### Vertical flow with navigation

To design a more intuitive flow the rooms are ordered vertically. This vertical structure is created by means of the grid function in Miro. A singular column is used to align all the rooms, while allowing the meeting organiser to simply reorder, add and delete the structure.

Besides, to improve the flow between the different rooms a navigation bar is

added. This has three advantages; 1) participants cannot get lost on the infinitive whiteboard, 2) the size of the room fits perfectly on the screen, which means that the participant will not guickly miss information because of zooming in, and 3) participants do not have to scroll, which prevents items from being accidentally dragged from their place.

#### Stimulate free form expression

Although the rooms are visually attractive, participants minimally express themselves in other ways than text. Probably because of the availability of post-its, shapes and action-cards in which text can be edited, participants do not use other, more visual ways of communication. This is a pity, because visual communication enriches group communication. Inspired by one of the early prototypes a cheatsheet with the functionalities of Miro and some recurring icons (smart icons) is created. This sheet should work supportive more freedom in expressing oneself.

# 7.3 EVALUATION B. USABILITY DIY MEETING GUIDE WITH FACILITATION EXPERTS

This second evaluation focuses on the guidance in setting-up a meeting structure. The usability of the manual, adjustable meeting structure and facilitating notes are reviewed with some experts in facilitation. The final design of the manual, facilitating notes and meeting guide are presented in chapter 6. Final concept.

#### Goal

To understand if the facilitating role experiences support while using Creative Rooms, we evaluate on one hand the usability of the guide and on the other hand the clarity of the provided guidance. To gain the insights the following questions are formulated:

- What is minimally required to support the facilitator in using Miro as meeting builder?
- Is the DIY guide self-explanatory?
- How are the facilitating notes helping in setting up the meeting? Are they used?
- Does the facilitator feel prepared/in control to facilitate a meeting with this tool and why? If not, what else is needed?

#### Method

The evaluation of the facilitators was spread over two weeks and because of that some iterations took place in between. The main difference is that after the first facilitator evaluation the conclusion was drawn that their is a need for more instructions and explanation. A manual was designed and therefore the other three facilitator evaluations focused on both the review of manual and the weekly meeting structure.

#### **Participants**

- Adinda de Lange
   Medior Service Designer at Zeewaardig Service Design
- Esther Zijtregtop
   Founder of NextGennners
- Katrina Heijne Managing Partner SeriousCreativity & Lecturer Creative Facilitation at TU Delft
- Loeke Molenaar
   Service Designer/UX researcher KLM

#### Set-up

#### Warming-up

The evaluation took place in the online environment of Miro. For the participants who hadn't worked with Miro before a short warming-up activity was given, same as of evaluation A, to explore the functions and features of Miro. (see appendix P for all evaluation tools and guides).

With two of the faciliators the evaluation was held in person, but as applied for the online sessions, the observations where done via the screen share option in Zoom. In this way all movements/interactions could be followed, see figure 75.



Fig. 75 Evaluation with creative facilitator of Zeewaardig Service Design.

#### Scenario

To give some context for using the adjustable meeting structure a scenario was outlined;

'You are the product owner of the Design training programme at your company and you organise a meeting with 7 employees of different departments to receive feedback on the lastest training. In addition you like to use the moment to hear out what the employees expect of the next training and if they have alternative ideas/ suggestions instead of a training. How would you build-up your meeting? '

This scenario is meant to trigger the participant in choosing deliberately certain activities. The assumption is that participants choose optional activities as personal update and success management because of the diverse group and the question about the set-up of the next training. The usability of choosing these rooms in the template folder and adding them to the structure is what is evaluated in terms of usability.

#### Evaluation activities

1. The experts are asked to review the Miro boards for 15-20 minutes and speak out loud what they read, expect and should do.

- 2. If certain aspect are not mentioned (which would be a lack of guidance), certain features are explained.
- In addition the scenario is shared and the participant is asked to prepare the meeting.
- The interactions with the different features are discussed and a few predefined questions streamline the evaluation of the usability and supportiveness of the meeting templates.

#### **Key Findings:**

The findings influencing the designs of both the manual and the rooms are processed and documented in chapter 6. final concept. The key findings of evaluation B regarding the usability of the DIY guide are documented below. This includes insights about the clarity of the manual, meeting structure, facilitating notes and template folder.

#### Two separate boards and extra service

All facilitators indicated that they like to have one Miro-board with instruction and explanation and another board with a basic meeting structure which can be adjusted. Because the product and technology is so new, all participants recommended extra service in the form of support to implement this meeting structure part of the team's way of working.

#### From good to better meeting structure

"It is nice that everything is ready for usage, so I definitely wanted to try it out". The rooms are finished and attracting; "I really like the drawing style". The facilitators expect that their teams would definitely interact with the rooms. "I believe directly that meetings will become more effective because of the structure it provides."

On the other hand, the facilitators would expect less text on the different rooms. The information that could be interesting to share textually is the goal and duration of the activity in the room: "I think it would be good if the goal and time of each room are communicated with the team."

The navigation between the rooms was still not optimal. Due to Miro the buttons are unclear and the arrow key navigation should be explained. In addition, the 'cheatsheet' was indicated as too distracting for each page. To enhance the flow of the meeting and visually stimulate employees, the functionalities can perhaps be explained in the waiting room and icons can be hidden under a button.

#### A manual with more guidance

Although the facilitators of the second and third evaluation were happy with the manual, some improvement can be made to the readability of the manual. By means of visuals, colour coding, highlights and introductions to the guidelines the manual can provide half of the support. The other half of the support should come from the extra service, for example from a Customer Support Manager (CSM). The details of where to find this support should be described clearly in the manual.

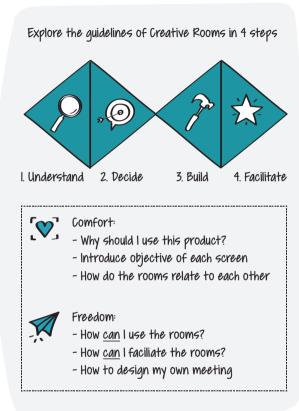
#### Facilitation guidelines focussing on the 'why'

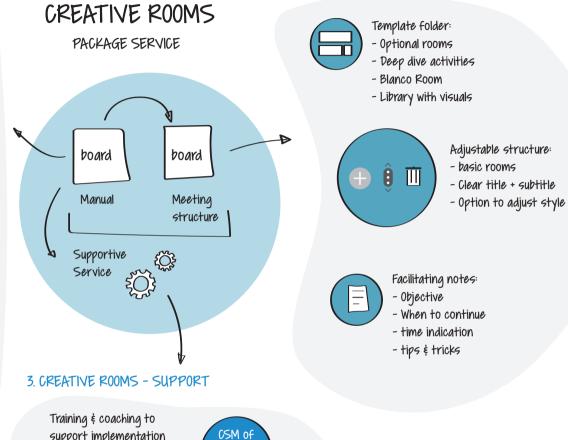
The first evaluation pointed that the facilitator was missing information about the product itself: "I think that an overview page with the different rooms and what you can do with the room would be helpful". As a result a manual was created, but the two subsequent evaluations showed that facilitators still need more information about the reasoning behind the different elements in order to use them wisely.

- 1. Provide clearly the conditions when this product can be used and explain why it is important to have these conditions: "It is unclear to me when you use this structure" and "don't you think that every meeting just need a facilitator".
- 2. Explain why Creative Rooms exists of all these different rooms and why certain are described as basis and others as optional. Besides, explain why is the facilitator able to build-up its own meeting structure. "Provide more clarity in how the different rooms are related to each other."
- 3. Empathise on the presence of a Blanco room and what participants can do with it (to stimulate freedom).
- 4. "Some basic principles of creative facilitation should perhaps be explained a bit

#### I. CREATIVE ROOMS - MANUAL

#### 2. CREATIVE ROOMS - DIY MEETING GUIDE





support implementation Creative Rooms IT- support (company) support

more." Explain shortly why you provide guidelines for the facilitation of Creative Rooms and enable the facilitator to explain the goal of each room. "You want to know when you can go to the next meeting"

#### Room for own interpretation

To give the meeting organisers the chance to experientially learn how to build-up effective rooms and meeting structures, the product should provide more room to tryout and give own interpretations to the designed elements. "I dislike that it seems like I need to use these eight rooms". The experts miss the option to personalise certain rooms or create their own activities. "maybe I have an alternative 'waiting room' activity, then I want to be able to easily change it."

The usability of adjusting the meeting structure required some explanation despite the description in the manual. Though, the facilitators were positively surprised with the feature and it made them understand why the product is constructed vertically.

#### Varying quality of mindsets per room

The facilitators were keen on the flow of the different rooms, however some rooms were not as intuitive as others and therefore it didn't trigger a certain mindset. Especially the Introduction Meeting room, Receive feedback deep dive activity, Golden hour activity and Wrap-up room were not directly understood.

"Now it seems like you bring the group in a diverging mindset when clarifying the the aim of the meeting. Why providing the option for different subjects, while you actually want to align on one goal?"

Besides, the progress board requires support in adjusting it to the specifics of the team. "We use a kanban board for our project, but that looks different than this one"

#### **Conclusion:**

The main conclusion is that asking meeting organisers to build-up meeting structures based on principles of creative confidence suiting their kind of meeting is actually asking the organisers to use their own creativity in organising an effective meeting.

The environment, which is in this case Miro, should for this reason also contain a creative climate; providing the meeting organiser both comfort to build-up an effective meeting and the freedom to explore alternatives fitting the specifics of the meeting. By providing guidelines focussing mainly on the reasoning behind the elements available (what mindset to achieve), eventually participants will understand the idea of the product and experientially learn how to create their own structure and rooms. In addition it would be good to provide a blanco room and a library/folder with all kind of items create your own activities.

Knowing the reasoning gives understanding and thereby a higher chance for intended usage. In addition, understanding what entails an effective meeting flow allows facilitators to create their own activities and build-up impactful. Only when the facilitator guides the meeting group through a logical setup including, the principles of a creative process and when the facilitator is able to clarify these, employees will experience the meeting as effective.

#### Re-considerations of Creative Rooms.

#### Package service - Creative Rooms

To support the facilitation of effective meetings just a meeting structure is not enough. Having meeting organisers build a meeting structure that fits their meeting variables, the organisers need to be able to adjust the structure and create their own activities containing the qualities for an effective meeting. To obtain the skill of building effective meetings with the service of Creative Rooms a manual and expert support should be part of the service. These elements focus on strongly on the 'why' behind all the aspects of the set-up and facilitation of the flow and the rooms. Being able to understand 'why' and 'how' to build-up an effective meeting, results in comfort when all guidelines and tools are available, and in freedom when it is possible to give your own interpretation on how to use the tools within these guidelines. In other words, Creative Rooms needs to be a package service, see figure 76..

#### Less text in DIY guide, more explanation in manual

All facilitator pointed out that having a facilitator should be a condition for an effective meeting. In the first concept the focus of the 'left banner' (grevish block at the left side) was to create a shared responsibility since leads mentioned to find it uncomfortable to tell others what they should do. Although shared responsibility remains important, it would be better if the facilitating role is clearly taken and when this person gives instructions to have the group decide themselves what needs to be done. In the next Evaluation, the group interactions will be decided if the 'checklist' and 'explaining titles/subtitles' add value or if it is better when the facilitator just gives verbal instructions.

#### Double diamond manual set-up

To empathise on the understanding of the product and besides to let facilitators deliberately think of what kind of build-up would fit their meeting, the overview page will be split-up in a page to understand, followed up with a page to make the right decisions. Understanding means getting a better view on the overall goal of the concept and the conditions that need to be present. in the decision page we zoom in on each room in terms of its objectives and contribution to the overall goal of the concept Creative Rooms. After the participants. Like the phases of an double diamond, after the meeting organiser know what an effective meeting defines(understand and decide), an effective meeting can be build-up and facilitated.

#### A template folder for all level of facilitators

Facilitation is a skill and therefore the desired extent of comfort (stability & direction) or freedom (room to explore) is different per facilitator. In order to give both novice and experienced facilitators the space to get started, the template folder should exist of finished rooms which, but also with rooms and elements that allow for more freedom in designing the meeting flow. The finished rooms can serve as an example, inspiration and basis to create own rooms.

## 7.4 EVALUATION C. GROUP INTERACTIONS

In the third evaluation the impact of Creative Rooms on the group interactions is evaluated. The materials of evaluation C are in appendix Q. Findings concerning the detailing of the final design are presented in chapter 6. Final concept.

#### Goal:

When the group interactions are leading to alignment, connectivity, implementation and creativity the concept is assumed as stimulating for autonomy and thereby creative confidence. The main questions of this evaluation is:

In what extent is the meeting leading to Alignment, Connectivity, Implementation and Creativity? Several sub-questions are defined to help the participants indicating their experiences.

#### Method:

#### **Participants**

The evaluation session was done with five young adolescent all having a technical background of which three in design. Some of the participants know each other, which is create the desired established social interactions.

#### Set-up

Creative Rooms should evoke certain interactions and experiences. The interactions are observed and by means of a checkmark system is decided of the room lead to the intended outcomes. To verify these observations and to understand if the interactions are also experienced positively, an online question list is shared with the participants. Answering these questions is part of the session. In this way the session concluded with a in depth discussion about the different objectives of the meeting. Everyone already thought about it for themselves and had the chance to explain their experiences.

The evaluation took place in the online environment of Miro, see figure 77. For the participants who had not worked with Miro before a short warming-up activity was given to explore the functions and features of Miro and to solve some technical problems beforehand, think of the navigation mode, hiding the changes made on the board and switching off the pop-ups of explanatory tutorials by Miro. Half of the participants had work with Miro before.

#### Scenario

To give the participants a common purpose for a progress meeting the participants got a fictive scenario about organising a corona proof festival in Delft and all a separate role with different interests. In advance this information was individually send per email.

#### **Key findings**

The findings are a combination of the observations and answers on the questions list.

Findings for the set-up of the the meeting guide:

- The participants were very excited about using the tool. Although it was not explained beforehand, they see the value of having online meetings with a guide as Creative Rooms: "Keeping all info in 1 place (visually) and no handwritten reports."
- Participants use the the scroll function to navigate despite the indication of the arrow keys. Because of this, unlocked items got pulled from their position causing chaos and caution (negative development for creativity)
- Participants started clicking on items before reading the instructions. Besides, they do exactly what the facilitator asked them to do. The facilitator has a very prominent role in guiding the participant through the process. Experienced was that the checklist did not contribute to anything, even not the facilitator.

#### Findings about the effectiveness of the meeting interactions Alignment:

In general the participants felt aligned. They were unanimous about the extent activities led to constructive discussions (scored 4 out of 5 by 100%) and almost all participants felt that their input was included in the discussion: "You can easily add input and get included in discussions"

About the extent conflicts were managed the participants are divided. Most gave a 3 because they did not feel there were not any conflicts to manage.

The main point for improvement lays at the clarity of who is involved in the meeting and who is saying what (scored <2 out of 5 by 60%): "It was hard for me to get a clear idea about how to refer my questions to other's"

Some suggestion are done to improve this connectivity for alignment: "Maybe make in the personal room a place where the roles are clarified". In the warming-up activity upfront the meeting session participants used a post-it for their name, another suggestions was to have all participants pick a colour and use that personal colour to give your input, in this way it is clear who is saying what.

#### Connectivity

Again the participants mentioned they would have liked to have more time to connect with each other and to understand each other's roles. Some participants suggested that it would it have been helpful when the one talking was on top of the video gallery.

Nevertheless, they felt like working as a team (>4 out of 5 by 80%). The same scores were notated for listening to each other and considering each other's perspectives was scored positively. It was the engaging structure/flow that connected the participants: "It was nice that we had a short presentation phase before the real discussion".

#### Implementation:

Although the participants were missing some background information/motives for organising the festival and having a meeting, this fictitious/unprepared strart was brought to some very concrete new action steps. One participant mentioned: "If we would not have the Miro we would not have come this far"

The objectives of each room were perceived as clear. Participants were stimulated to give ideas and make these concrete. Although the participants appreciate being able to see each other's ideas, they miss interactions between the ideas.

The extent of confidence to continue autonomously was experienced differently, two participants gave a 3 out of 5, but also two scored the meeting a 5 out of 5. According the participants who gave a lower score this experience could be improved by showing a summary of all the decision and actions planned for the next meeting at the end: "Maybe make a final to do list for the points that have to be done next week".

#### Creativity

Unfortunately Miro do not allow items to be locked within a grid (DIY- guide is a single column). Participants were a bit distracted by all the elements that were moving when they scrolled to the next room. Yet, participants scored the meeting high in the extent they were able to express themselves freely and visually. Interesting, because all input given was textual on post-its. Participants indicated that "the visual process really stimulated creativity in my opinion" and also that the intuitive functionalities of Miro were helping.

The fact that this team is not a real project team was addressed: "I think if this was a real meeting all participants would be equally enthusiastic and there would be more ideas and brainstorming"

#### **Conclusion**

Even though this evaluation was not with a real project team. The findings give a good indications to the extent the meeting leads to effective interactions. Apart from the question of conflict management, the participants were able to fill in the questionnaire about the effectiveness of the meeting properly.

Although the team indicated to lack some extra information about the fictional meeting subject the group felt well supported by the step-by-step activities in taking their subject further.

The meeting guide enables participants to align because all information is visible at one place. To improve the alignment interactions more attention should be paid to the introduction of the different members attending, especially when people are unfamiliar with each other and do not know each other's contribution to the meeting. For meetings with the core team this is less relevant. When a meeting has a divers meeting composition, the facilitator should be aware that special attention should be paid to both personal updates and introductions.

Even when participants do not feel socially connected, the structure enables connectivity on content level. Creative Rooms allows for online collaboration and brings people together.

However, in line with the improvements for alignment, connectivity can be increased when participants can find each other within each activity. The video gallery can contribute by showing the participants talking on top. Within each room connectivity can be enhanced when participants have the possibility to personally interact with other group members. As example, if someone wants to asks a nonverbal questions to an expert.

Due to the step-by-step activities participants are forced to converge and reflect in order to list action- and decision cards. According two participants would showing this list at the end of the meeting increase the focus on implementation even better.

Creative Rooms triggers a creative mindset. The participants were not per se creative in terms of expressing their ideas, but the ideas themselves were out-of-the box. Especially the visual process and the intuitive functionalities of Miro made that participants felt comfortable and free to engage in each activity. Unclear is if the visuals remain stimulative of time, it would be good if the facilitator has alternatives.

Based on this evaluation enables Creative Rooms teams to have effective meetings. On top of this does it stimulate creativity. To boost creative confidence, the product can improve on the alignment on social level and connectivity within each meeting activity. Show a final summary of all actions and decisions made and participants feel besides creatively stimulated, autonomy.

To test if this also applies for members of organisational project teams, validation session with different teams are required to determine if the guide leads to same experience of effectiveness. Besides, the experience depends strongly on the competences of the facilitator. The guide should therefore be provided with all the tips & tricks used by a competent facilitator.

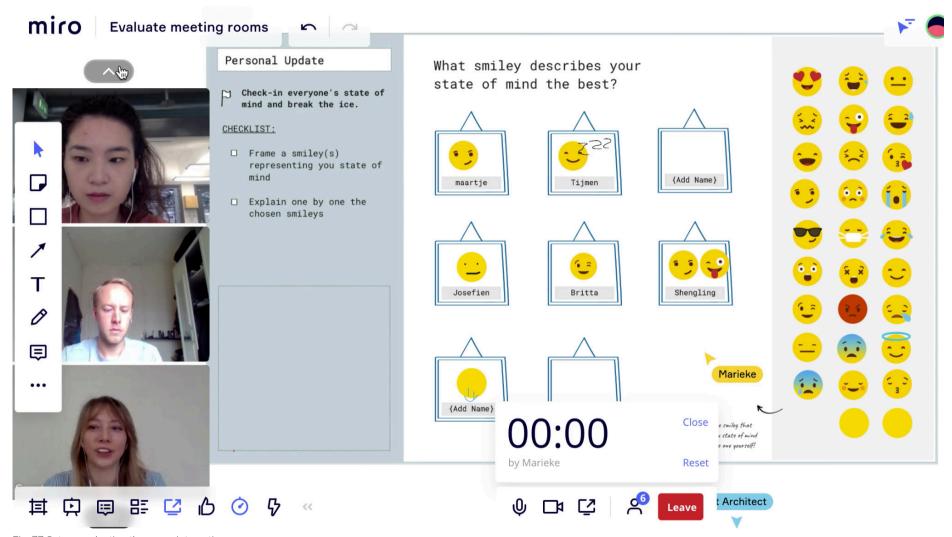
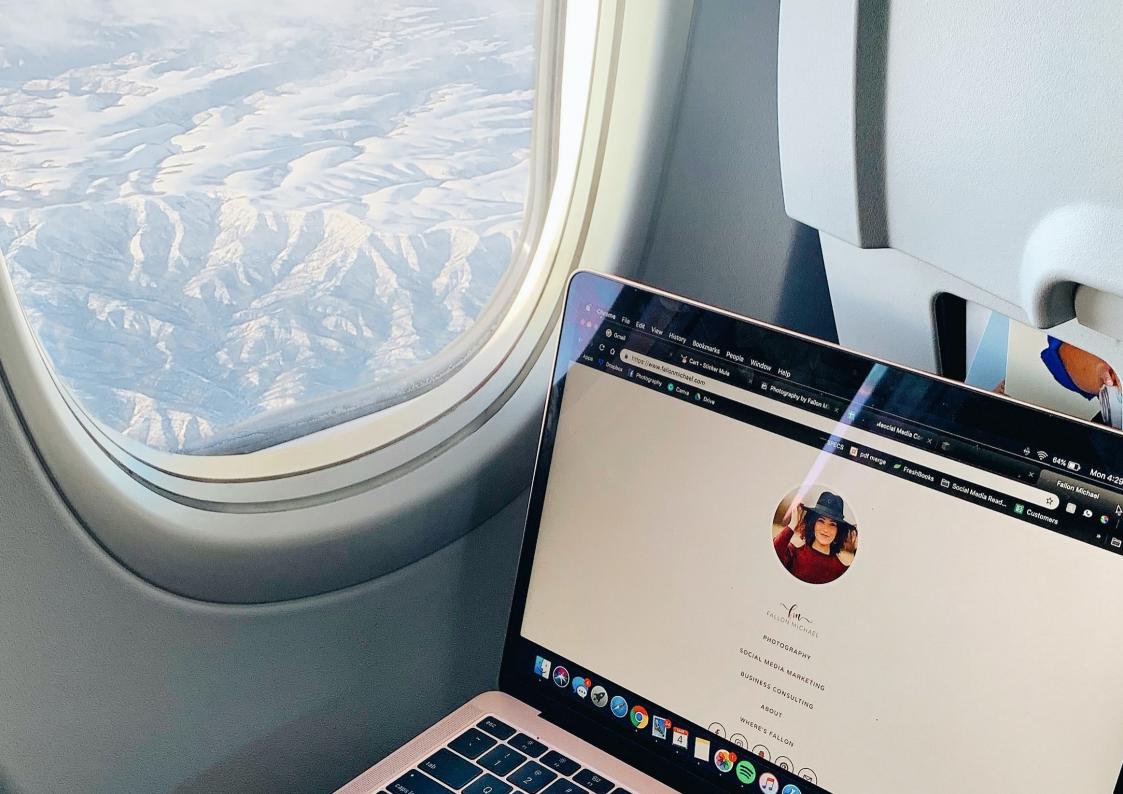


Fig. 77 Set-up evaluating the group interactions





# B DISCUSSION & CONCLUSION

In a final conclusion the research questions are answered. Limitations to the final concept and the research performed are discussed, as well as the recommendations for further development and implementation of Creative Rooms. In addition recommendations for further research are presented and eleborated upon. With a personal reflection the thesis is concluded.

#### In this chapter:

- 8.1 Final conclusion
- 8.2 Limitations
- 8.3 Recommendations
- 8.4 Personal reflection

## 8.1 FINAL CONCLUSION

This section concludes the research performed by answering the research questions.

Since creativity has proven itself as catalyst for innovation, the relevance for this research was to understand how employees can be supported/guided in their experiential learning to adopt creativity in their way of working. Since earlier research pointed out that unleashing creativity is all about finding your creative confidence the aim of this research is understand how to boost creative confidence to cope with wicked problems in organizational context. As result of a human-centered approach a set of guidelines has been defined to design a vibe, a creative climate, in which employees feel both comfortable and free to unleash creativity. In other words a stimulating environment which boosts creative confidence.

Because the world changed in the past half year due to Covid-19 the project took a leap in the direction of online meetings. Insights from end-users, experts and field of design about working-from-distance were converged and synthesized towards guidelines for the DIY guide; Creative Rooms. This concept has been developed to support facilitators in building-up and guiding effective meetings online.

#### **Answering the research questions**

The main research question of this project is: How to boost creative confidence to cope with wicked problems in organisational context.

To answer this main question three sub-question were formulated which navigated us through the design process. By answering these sub-questions the main question will be answered.

## What does an organisational transformation need to successfully embed creative mindset?

The literature study shows that transforming to a design-led-organisation, requires a culture change. The shared interpretations that characterize a culture help direct and coordinate collective effort. Ford (1999) stresses that organisational culture is the primary factor influencing a single employee to choose for creativity or stick to time-tested routines. In other words fostering creativity is a group effort.

As result of a comparative study **7 culture determinants** are defined, which need to be favourable in order to embed creativity successfully. These culture factors are 1) an integral strategic vision, 2) Supportive leadership styles, 3) flexible organizational structure, 4) Available resources, 5) Accessible professionalism, 6) a creative climate and 7) Empowered employees.

This thesis stresses that the culture determinants can be divided into 4 interdependent layers in which the functioning of the employee takes a central position. To have employees functioning creatively, their intrinsic motivation to use creative skills and knowledge needs to be empowered (Amabile, 1988).

Amabile, 1998; Carson, 1999; Bandura, 1997 stress that **intrinsically motivated** people can be considered as employees who are empowered in their confidence to use creativity. An individual's intrinsic motivation is influenced by four aspects: relevance, mindset, satisfaction and social environment. These four aspects are strongly influenced by a creative climate. This climate (perception of the work environment) is interdependent to individual/team functioning and is therefore the second layer. The other five culture factors are part of the outer two layers, which are preconditional to the presence of a creative climate and thereby the empowerment of employees. All seven determinants are key to a successful organisational transformation with the aim to embed creativity.

#### On what organizational level in the transformation is quidance/support needed the most?

Both literature and exploratory research point out that to address the organisational transformation from the employee's perspective extra support is required in building on creative climates per work domain (micro level). There are two main reasons for focussing on developing creative climates.

- 1. Exploratory research to the case study showed that departments can have different operational objectives. Therefore, embedding creativity should be tailored per work domain. Because as Ekvall (1996) indicates, the degree of radicality in innovation depends on the operational objectives of a specific work domain. This affects the style of leadership, but most of all the perceived space to differentiate
- 2. Training and coaching help employees in their ability to use creativity, but they also need to perceive a climate in which creativity is accepted to apply in order to learn experientially. In interviews with participants of the DAC's design capability programme (case study) was said that; "People only learn when they really apply the knowledge". Besides the importance of being together in one environment where on another can trust each other and feel comfortable was highlighted: "confidence has everything to do with feeling trusted in being creative, the feeling it is ok to make mistakes".

Through a comparative literature study nine creative climate dimensions were identified. Namely, purposeful contribution, constructive communication, control by accountability, conflict management, consider the unusual, dynamism/liveliness, room to diverge, humor/playfulness and debates/dialogues. After validation with experts and end-users three dimensions were added: Social connecting, common language and form of expression. This leads to a final set of twelve dimensions, which are either comfort- or freedom orientated. These orientations should be present in balance regarding the domain specific characteristics. Only then, a safe work environment with the stability and guidance to explore and differentiate can be developed.

Since the presence of the Coronavirus, work life has been drastically shifted to online work environments. Covid-19 has shown the benefits of work-from-distance and therefore initial studies and literature foresee that the demand for working from home will increase even after corona time (Timmers, et. al., 2020). Due to the turbulent and unpredictable times, the demand for creativity is higher than ever before.

Online creative climates during team meetings can help employees with empowering the adoption of a creative mindset and provide the comfort and freedom for autonomous working with a creative mindset beyond the gatherings.

According empathizing research with project teams of DAC, there lays a need for guidance and support in the **facilitation of online meetings**. "we easily ruin two meetings to figure out how to set-up the meeting".

In short there need for guidance and support in the facilitation of creative climates in online work environments.

#### Which support/guidance helps employees in being empowered to confidently unleash their creativity?

Observations of current online team meetings and interviews with team members of DAC reveals that facilitators need support in setting-up effective online meetings. The analysis of current online team meetings indicates five opportunities for guidance regarding the evolvement of a creative climate in these meetings.

- 1. Focus on a freedom/comfort balance: The meeting organiser should be enabled to create a structure that fits the aim of the meeting and which leads to the desired interactions for a creative climate.
- 2. Focus on alignment: Future online meetings must be held in an online environment allowing for better alignment through the facilitation of debates/ dialogues. A more lively online environment can be created by empowering employees to also interact with others non-verbally in a form they can express themselves best.
- 3. **Focus on connectivity**: A downside of working from distance is that employees

- have less moments of social interaction. Future online meetings must enable employees to also be colleagues again. Time must be invested in social connecting to build trust in relationships and group cohesion.
- 4. **Focus on Implementation:** DAC is an idea-driven organisation. The bottleneck, however, is the translation into action points. Teams should be more action minded to learn from experiences, in order to give purposeful updates and efficient discussions.
- 5. **Focus on creativity:** to have employees obtain a creative confidence as effect of the meeting, creativity should already be trigged within the meeting. Employees should be motivated to use their creativity within the meeting by providing the room to diverge, explore the unusual and by enjoying creative activities through humor and playful elements.

Meeting organisers have pointed out three requirements for support with a successful implementation: 1) There is an efficient effort-reward ratio, 2) when the product is compatible with the current applications used to overview planning an progress, and 3) when the product is in combination with video calling.

To support facilitators in organising effective meetings in an online environment Creative Rooms - a DIY meeting guide - has been concepted. This guide exist of a meeting structure accompanied with a manual, folder with extra templates and notes for facilitation. Evaluations of the concept showed that employees and facilitators are able use the product as intended and even better. Especially after refining the concept according the done recommendations the following final conclusion can be drawn:

Creative Rooms supports facilitators in creating effecting meetings in an online environment, by having them building-up a guide with a balanced focus on alignment, connectivity, implementation and creativity. The DIY meeting guide consists of an adjustable meeting structure and 19 interactive rooms of which 8 are basis, 4 optional, 6 deep dive activities and one blanco for own creations. A manual with explanation and instructions, a facilitation script and folder with extra rooms and other elements enable the facilitator to build with both comfort and freedom effective meeting rooms. Using the rooms as step-by-step process to facilitate the meeting group leads to the experience of alignment, connectivity, implementation and a stimulated creative mindset.

To conclude, the research performed delivered a concept which has the potential to boost creative confidence by guiding meeting organisers in evolving a creative climate through the build-up of an effective meeting.

## 8.2 LIMITATIONS

In this chapter the limitations of the research performed and final concept are discussed.

#### Limitation of the final concept

#### Design limitation:

The cartoonish illustrations which make the final concept attractive to use and inviting to contribute are not adjustable and really my personal style of drawing. If facilitators like to make an adjustment to one of the room they are dependent on my raw drawings or they need to be creative with making changes. Besides, the creation of new rooms can get different styles which breaks the cohesiveness of the guide.

#### Technology limitation

The concept is based on the functionalities of Miro, leading to several limitations:

- 1. Creative Rooms depends on the purchase of Miro licenses. But, with the continuing trend towards working from home, new online work environments will most likely be developed.
- 2. To adopt the Creative Rooms, as new way of having online meetings, facilitators and employees need to explore how the online environment of Miro works. The more experience with Miro the more effective the guide can be used. However, organisations often only invest in new software when its use is desired and its added value has been proven.
- People base the use of a new product on experiences with other products. Miro is in way the replacement of the powerpoint presentation, but does not contain the same features. The lack of some features such as 'Master page' and 'snap to placeholder', 'layers', hiding options and smart group and ungrouping functions, stand in the way of effective usage.

#### 4. Limitations of the research

#### Covered research areas

Boosting creative confidence to enable employees to experientially learn the value of design in order to transform to a design-led-organisation contains many aspects of which the research fields are broad. Although the extensive literature and many exploratory research activities, more research could be done to 'how' to implement creative climate dimensions in order to boost creative confidence. Research into (online) creative spaces and ways to experientially learn can extend the knowledge. Based on this research interventions can be developed to test is this lead to an aspect of a creative climate. The insights of such research can enrich the activities per room.

#### Representation of the knowledge

Exploratory research was performed by interviewing different employees of the case study. Although the interviewees came from different teams, not all departments of DAC were represented. The sketched picture of the current situation could therefore not be representative for the whole company

Experts from different fields were asked to review and test during the development and evaluation of the concept proposal. The participants of Evaluation A were all male and the experts in evaluation B were all female. The product tends to be gender neutral, but through this one-sided evaluation, the answers could be biased.

Due to the turbulent times in the airline industry their was limited time to test the concept with teams of the case study, while the concept, Creative Rooms, is mainly based on input of DAC employees. In order to be able to fully assess the effectiveness of Creative Rooms, validation sessions with different teams or DAC are required. These sessions could be a first introduction to the product.

#### **Limitation of the Covid-19 Circumstances**

The Covid-19 situation offered the opportunity to design a service for the current need for more effective ways of online meetings. This was preceded by losing my internship position and direct connection to the design capability programme of the case study. The planned action research was replaced by an extensive literature study. In one week the situation changed from co-creative research with employees to desk research in isolation.

Fortunately due to the major relevance, people were really willing to help, but doing research from distance was new to the researcher and several limitations came along with it.

- 1. To perform user-research time had to be invested to learn the working of online tools like Miro.
- 2. Besides, empathising with the end-user via video calling was hard and to understand each other properly meetings took easily a hour or longer.
- 3. Arranging meetings needed be done at least two weeks in advance. The absence of possibilities to perform quick prototyping, validate insights and gain inspiration from small coffee breaks with colleagues and fellow students came at the expense of the creative design

The benefit is that this graduation gave the opportunity to learn a lot about remote session, using online collaboration spaces for testing becoming an expert in the use of Miro and several video calling applications.

## 8.3 RECOMMENDATIONS

The recommendations are separated into four perspectives.

#### **Recommendations for further development of Creative Rooms**

With Creative Rooms a basis for guiding online meetings with as outcome empowered employees by alignment, connectivity, direction for implementation and stimulation of creativity is created.

The guidance, however, depends on the deliberate choices of the facilitator when building-up the meeting. To empower the facilitator to create meeting structures that contain the right flow, regarding the ideal transition of mindsets (combination of creative attitudes), the facilitator needs to be able to understand of which principles an ideal meeting flow exists. The main recommendation for further development of the creative rooms is to provide this knowledgle and make facilitators and employees experientially learn the value of it. When being able to understand the reasoning behind the set-up of Creative Rooms, one will also be able to effectively apply and adjust the knowledge (Bloom, 1984).

To support facilitators in building-up meetings regarding this knowledge the following recommendations give direction to further development:

- Creative Rooms should be sold as package deal in which a DIY meeting guide and manual are supported by human assistance; a Customer Support Manager. This support helps project teams by tailoring the DIY guide environment regarding their work domain characteristics and learns teams to use the guide by means of trainings.
- In line with the defined culture factors in the literature study, should this expertise stay accessible also after the training. A train the trainer programme

- should be set-up leading to more ambassadors within an organisation.
- The manual has been redesigned and a extra page about the reasoning for a certain structure with flow has been added. In this way the manual is both referencing and instructional. The comprehensiveness of the content must be validated with experts and the clarity of guidance with end-user facilitators.
- To stimulate experiential learning, freedom in building-up a meeting flow needs to be stimulated, but also the build-up of the rooms self. A visual library (folder with just the visuals of the rooms) should be added to the template folder to enable meeting organisers to design their own room activities. Providing the knowledge about an effective meeting flow and room build-up is preconditional.

#### Empowerment of employees:

To also have employees learn the value of a creative process (which is the meeting flow) the faciliator should be instructred with information about the reason for certain rooms and 'why' the activity in the room contributes to this reason. The facilitator should be able to explain each room by the sentence: "Now we are going to the next room to ... {reason for the room} by ... {actitivity contributing to this reason}"

To understand the longer term impact of using Creative Rooms on the implementation of creativity throughout an organsiation it is recommended to follow some teams for a longer time using Creative Rooms.

A final recommendation for Creative Rooms is to develop its own online collaborative platform. The platform will be broadly based on Miro, but its independence will allow for better processing of needs. An example would be to enable Master pages in which all rooms can be easily adapted depending on the work domain specific characteristics.

#### Recommendations for the implementation at DAC

Exploratory research to the current project meetings indicate that there is a significant need for structure and an online place where participants can easily connect, align and discuss progression. Even though there is a need, due to its novelty the willingness to adopt Creative Rooms requires an implementation process of experiential learning.

As an employee of DAC stressed in one of the evaluations: "this tool should not come as a surprise to people, it is very new"

Creative Rooms requires some experience/usage in order to understand the relevance and value of changing the way of having online meetings to this new flow and technology. Since organisations needs to be convinced of the desirability and value of the usability with regard to the performances of her employees, Creative Rooms needs to be implemented incrementally.

Based on the Service Design Maturity Model by Koos Service Design and input of three (former) employees of DAC a recommendation for implementation is desigend, see figure 78. Following these four phases, DAC can build on both desirability and evidence of value to make Creative Rooms available and usable for all project teams.

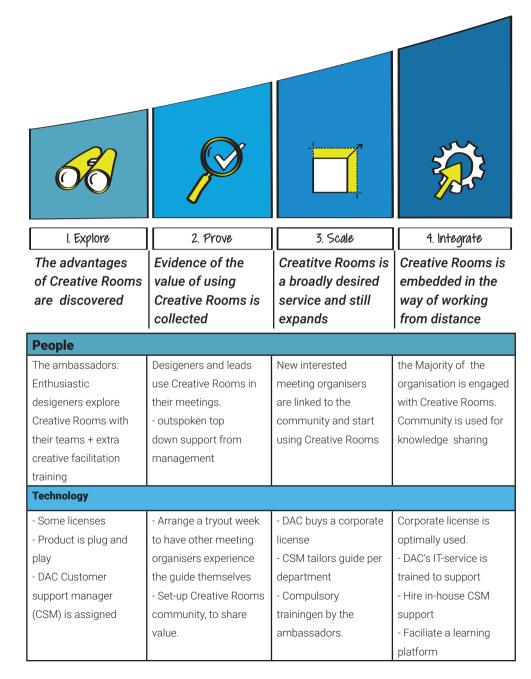


Fig. 78 Incremental implementation plan for Creative Rooms

#### Recommendations for the research field

This research project has contributed to the research field of organisational transforamtion design with the aim to embed creativity. The recommendation for the research field is to perform more research in co-creation with the employee to develop from bottom-up a strategy for the implementation of creativity. While developing this strategy it is important to keep the intrinsic motivation of the employees high. Researcher should keep reflecting on the perceived relevance. employee's satisfaction and mindset and stability of the social envrionment. A second recommendation for the field is more research into concretising the dimensions of a creative climate and evaluating successful implementation. For this research, four key performance indicators relating to effective meetings have been developed, namely alignment, connectivity, implementation and creativity. Further research should show whether these KPI's can also be used for other settings in which creative thinking could benefit, such as job interviews or emergency moments.

A third recommendation for the research field is to start investigating how the shift to online work environments affect organisational transformations and the adoption of creative mindsets. Creative Rooms could be a tool to evaluate the effects of digital stimulation of creativity.

#### **Recommendations for designers**

- 1. Be aware of the twelve creative climate dimensions when aiming for creative collaborations. Next to the availability of the right skills, knowledge and resources, the setting should be right. Always find a balance between creating comfort and leaving room for freedom.
- 2. Explore the possibilities of online work environments for creative practices. Since trust is an important factor in unleashing creativity, designers always prefer to meet in person. However, there lay many opportunities in online collaborative work environments and as employees remain working from distance research, creative sessions and trainings will be held more often remotly. As design community we should invest time to learn how we can improve digital creativity.

## 8.4 PERSONAL REFLECTION

Friday February the 7th was the day I started with this unbelievable adventure. After six months of hard work I can finally reflect back on this journey, or shall I say unpredictable high speed roller coaster.

By means of a sum-up of the lessons learned and a brief reflection on my personal learning objectives I conclude this project with some personal recommendations for my future me in personal and professional sense.

#### **Lessons learned**

#### No you got, yeah you can get

I really wanted to a graduation with focus on creative facilitation, however at the time I was looking for an opportunity no graduation topics linked to my interests. I learned that if you truly want something, everything is possible. From nature people are really open to help, so if you have a clear vision of what you aim for together we others you can create your own opportunities.

#### Be bold and brave

While I'm not a shy person, I have been hesitant in asking people for help, showing some intermediate work and do early prototyping. I want to be fully prepared and know where I am talking about, therefore doing evaluation test I found much easier to perform. However I learned that especially when not everything is fully finished, most valuable feedback can be retrieved. People can see through the unfinished elements and help co-developing a concept. From the concepting phase on I have been including many people in my development process, which helped me sharpening my story, developing a desirable solution and be connected.

#### The best issues and ideas fit on 1 post-it

Esther asked me many times to write down my questions, ideas or concerns on 1 post-it. Over time I started to see the value of this activity. I can be very indecisive, chaotic in my explanations or I dodge the issue, which makes it hard to follow my thoughts. That one post-it forces me to write down the point concisely, stimulating prioritisation and first iterations on my ideas. This lesson also helped me writing the report.

#### A simple bullet can be enough

Life should be easy, effective and crisp, like a simple dot. I learned to apply my perfectionism on the right things, like continuous reflection, connectivity with stakeholders, an holistic structure before an in depth introduction and filtering out the gems from quick and dirty research.

#### Reflective Iteration make the desired innovation

There is no text in this report I haven't revised. I learned that you shouldn't aim for first time perfection. Iteration on even good things can make them only better. I was surprised of my own capability of restructuring information into something more logical and readable.

#### KISS - keep it stupidly simple

The weekly reflections I intended to share with the team were eventually taking too much time and not giving me the reward of concluding and being more concise. After 7 weeks I stopped making these overviews. Later in the process to communicate with a study friend I used voice-memos, which also forced me to be concise, but didn't cost me as much effort as the weekly one pagers.

#### Don't let loneliness be a silent killer

From the Corona crisis I learned that taking some alone can be really good for zooming out, restructuring thoughts and documentation. However the creative process is not only about reviewing literature and documenting results. your retreat can guickly turn into insulation, which can be very hard to break open. In my case, it was necessary to keep making social connections with people to prevent loneliness from destroying my creativity, resulting in demotivation.

#### I'm a survivor

Learn from mistakes, kill your darlings, tryout (new) unusual things, keep talking about your topic, visualise complex information, take enough breaks, be impulsive (I bought a racing bike) and just ask for help, all things I definitely wanted to be or do before graduating, but never did. Because of Covid-19 I had the change my game plan, resulting in me reflecting more on my process and personal development. To be who you want to be starts with stopping deny you cannot be that person. I'm very proud that with help of great people I stayed positive and ambitious and found the guts to just do all things I wanted and come closer to my motto: "practice what you preach".

#### Reflection on my expectations

I want to dive deeper in how non-designers can be facilitated in applying design practices and understanding creative confidence and how to enrich others with this powerful characteristic

This project gave me all opportunities to dive deeper in the world of creative facilitation. I read the books 'Creative Confidence' by Kelley & Kelley (2014), 'Road map for creative problem solving techniques' by Heijne and Van der Meer' (2019) and almost the full 'Encyclopedia of creativity' by Runco et al. (1999). I can humbly say I became an little bit of an expert in the field of unleashing creativity by means of a creative climate. I look back on a great project in which I have learned a lot about the creative process, conditions stimulating this process and the awareness needed to change mental barriers and routines for opening up to a creative mindset. This project also made me a better designer and facilitator.

#### I want to experience how it is like to be part of a big organisation.

Unfortunately, after six weeks of graduation Covid-19 caused that the design capability programme, my graduation was linked to, got freezed for at least 9 months. Besides, the company had to stop my graduation internship and the design team I was working with had to leave the company. Fortunately, I had 6 months of experience as a normal intern and therefore the connections with different employees remained warm. I have experienced that having a good network within a company can open many doors. On the contrary large organisations are unwieldy and calendars are overfull with progress meetings. Planning sessions with employees needed to be done two or three weeks in advance.

#### Reflection on my personal learning objectives

#### I want to prove my organisational, analytical and empathic skills

Although I had to cancel the action research planned for the inspiration phase, I did a lot of explorative research and co-concepting activities with many stakeholders. The organisation of online sessions was new to me, so this proving objective became a learning experience in remote sessions. I expect that being comfortable with online tools is an advance in these new times and therefore I am happy that this graduation journey brought me this learning experience.

#### Improve my presentation skills; I want to share more of my graduation, be confident in meetings and share information in a visually attractive way.

I took every possibility to share my project in front of a crowd, however I still wasn't keen on asking my own audience. When the topic was still very abstract I felt lacking the skill to explain it understandably, eventually making visuals helped me structuring thoughts and connecting the dots. Also using Miro as communication tool helped me in presenting knowledge in visuals, which also helped me presenting my work. The past six months I have improved the clarity of my story and became more fiercefull in presenting it. I hope the graduation talk is the icing on the cake.

#### Learn to write text around a visual, instead the other way around.

I used to make drawing after writing the text, but I discovered that by making the drawing first text will just function as explanation and will therefore be shorter. Visuals also helped me making sense of complex literature and organising my thoughts. I'm happy that my team kept stimulating me making visuals, because now I feel much more confident about my drawing style (a bit cartoonish) and by having a kind of database of elements is easier to compose new drawings.

#### Recommendations for me

The biggest recommendation I have for myself is to take it easy. I always strive for more, while in most circumstances 'less' is more. I was so preoccupied with the subject of creative self-confidence that I forgot to boost my own self-confidence by keeping the scope of the study comfortably small.

Because I am easily overwhelmed, I feel really attracted to start at a smaller service design agency where I can work on my competences as a creative facilitator. Graduating has made it clear that I perform better when I am among people. I see myself doing explorative research in co-creation and participation, preferably in the care or social sector.

Although I did not see myself as a researcher, I did enjoy doing (desk) research. I hope I get the chance to keep learning and explore the field of creativity!

After a good holiday I am very curious where my new expertise of boosting creative confidence in an online environment can be applied!





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