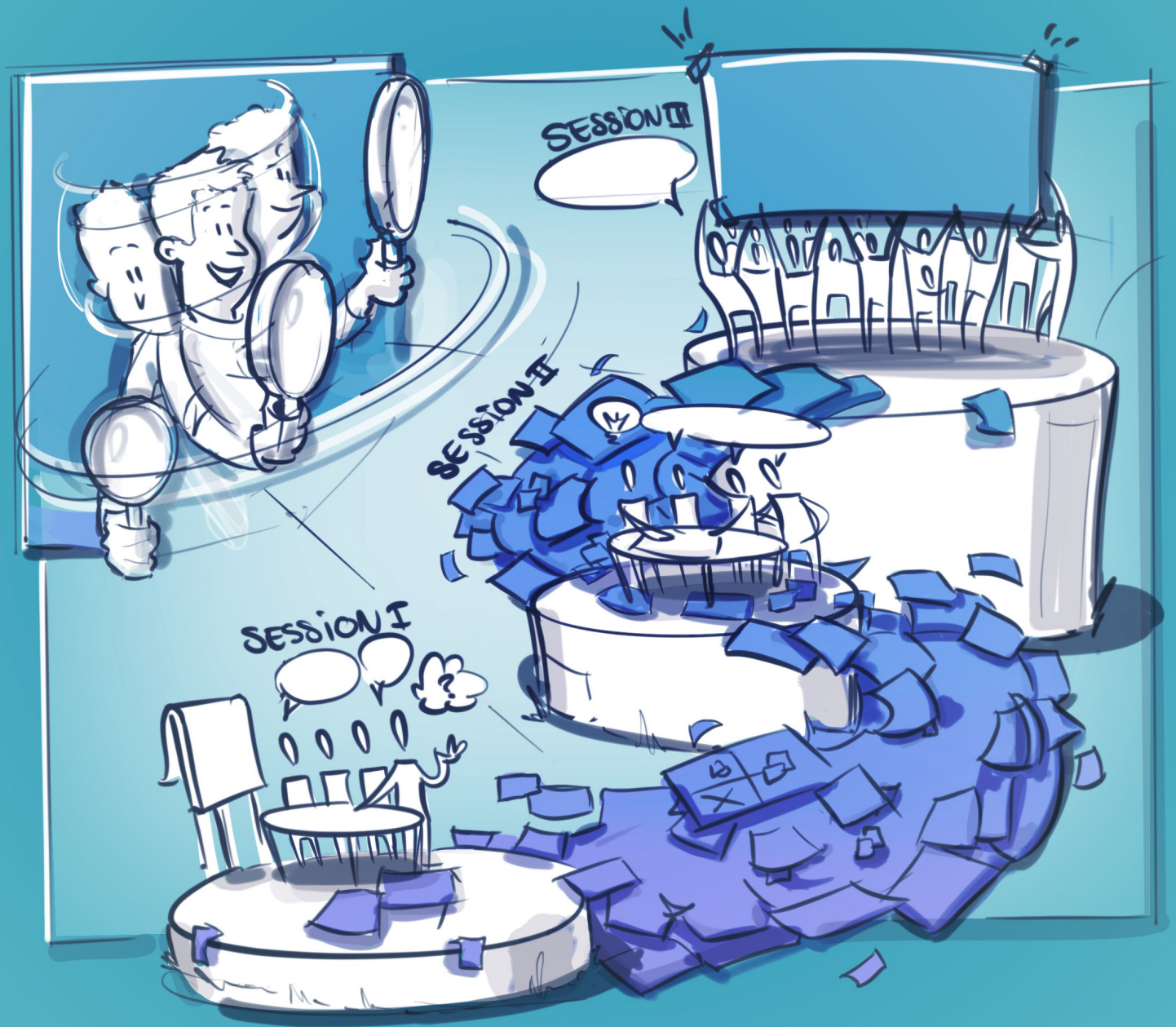


DESIGNING A STRUCTURED REFLECTION PROCESS FOR A VISUAL THINKING BUSINESS



SIEB POSTHUMA

MASTER THESIS

INDUSTRIAL DESIGN ENGINEERING - TU DELFT

STRATEGIC PRODUCT DESIGN

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REFLECTION PROCESS FOR A
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This project would not have been possible without the support of my supervisory team, Flatland, and my family and friends.

This thesis is the end of a six year-journey at the faculty of Industrial Design Engineering at the Delft University of Technology.

The submission of this thesis provided me with a master's degree in Strategic Product Design.

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reasons behind my design actions. This always boosted my design process.

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Figure 1: The supervisory team

EXECUTIVE SUMMARY

This thesis is the result of a graduation project that researched the field of Visual Thinking and facilitation in collaboration with Flatland Agency.

Flatland is a design consultancy that facilitates co-creation sessions to overcome complexity in groups. Flatland has existed for 9 years and their service has moved from graphic recording to facilitation of co-creation sessions to create and activate strategies visually. The professionalisation of Flatland's services has resulted in a need to redefine their service offering. However, Flatland's growth has resulted in an increased variety of projects and project outcomes. Flatland indicated that a more explicit and systematic approach to session design could help to support their methodology. Such a systematic approach could support Flatland's methods as proof of concept.

Thus, the initial aim of this project was to:

Develop guidelines to help Flatland design and facilitate their co-creation sessions more deliberately.

Qualitative research of the context of Flatland showed that Flatland's facilitators are designing every session anew and completely based on their own experiences and knowledge. Besides, Flatland's facilitators have different focus points when designing for the same context. Moreover, Flatland is not sharing knowledge structurally about the core of their business, facilitation, and session design. Thus, these insights identified a threat of knowledge scarcity for Flatland. This means a

potential loss of the company's capital will occur when facilitators leave the company without sharing their unique knowledge with other facilitators.

To overcome this threat sharing knowledge is crucial. A reframe is proposed to overcome this threat. Thus, the central aim of this project became:

Design a reflection process for Flatland in which their creative facilitators (and designers) can iterate on their visual thinking session design and tools, to enable a more deliberate design approach to Flatland's sessions.

A structured reflection process is designed based on literature on reflection and helps to overcome the threat of knowledge scarcity of Flatland. This reflection process supports the facilitators and designers of Flatland in creating tangible insights from their session in order to share this knowledge about facilitation with other colleagues. By doing so, the facilitators become aware of the variety of facilitation styles, and their benefits. The threat of knowledge scarcity can be resolved if all facilitators know the Flatland's different session design approaches.

The design of this thesis consists of three parts: the structured reflection process, an implementation strategy for this process and two reflection tools.

The implementation strategy is designed to ease the reflection process into the Flatland's way of working. It starts with an awareness campaign to make Flatland aware of their lack of sharing knowledge about facilitation.

The first tool is a reflection template that is designed to make Flatland go through a full reflection cycle.

The second tool is an explainer that is designed based on the literature of Visual thinking, facilitation, and co-creation. This explainer aims to create a shared language for Flatland's reflections.

The awareness campaign and the reflection tools are validated with facilitators and designers of Flatland.

00

INTRODUCTION

This thesis presents the process and outcomes of a 20 weeks graduation project.

The main aim of this project was to help Flatland design their co-creation sessions more deliberately. The thesis is divided into seven chapters each with a different aim and focus.

In the first chapter, the problem scope is introduced. This chapter describes both the context of Flatland, the problem definition and the design brief of this thesis.

The aim of chapter two is to describe the context of the Visual Thinking field based on the literature on facilitation and co-creation, Visual Thinking, and design thinking.

The third chapter explores the context of Flatland agency. It presents how Flatland is designing and facilitating their co-creation session at the moment. This chapter reveals insights from the qualitative research including semi-structured interviews, research-by-design templates, and observations. The results of the chapter are two fields of tension that need to be taken into account in this project.

Chapter four reframes the initial design brief based on threats that arise from chapter three. The aim of chapter also explains why this reframe was necessary before starting to design.

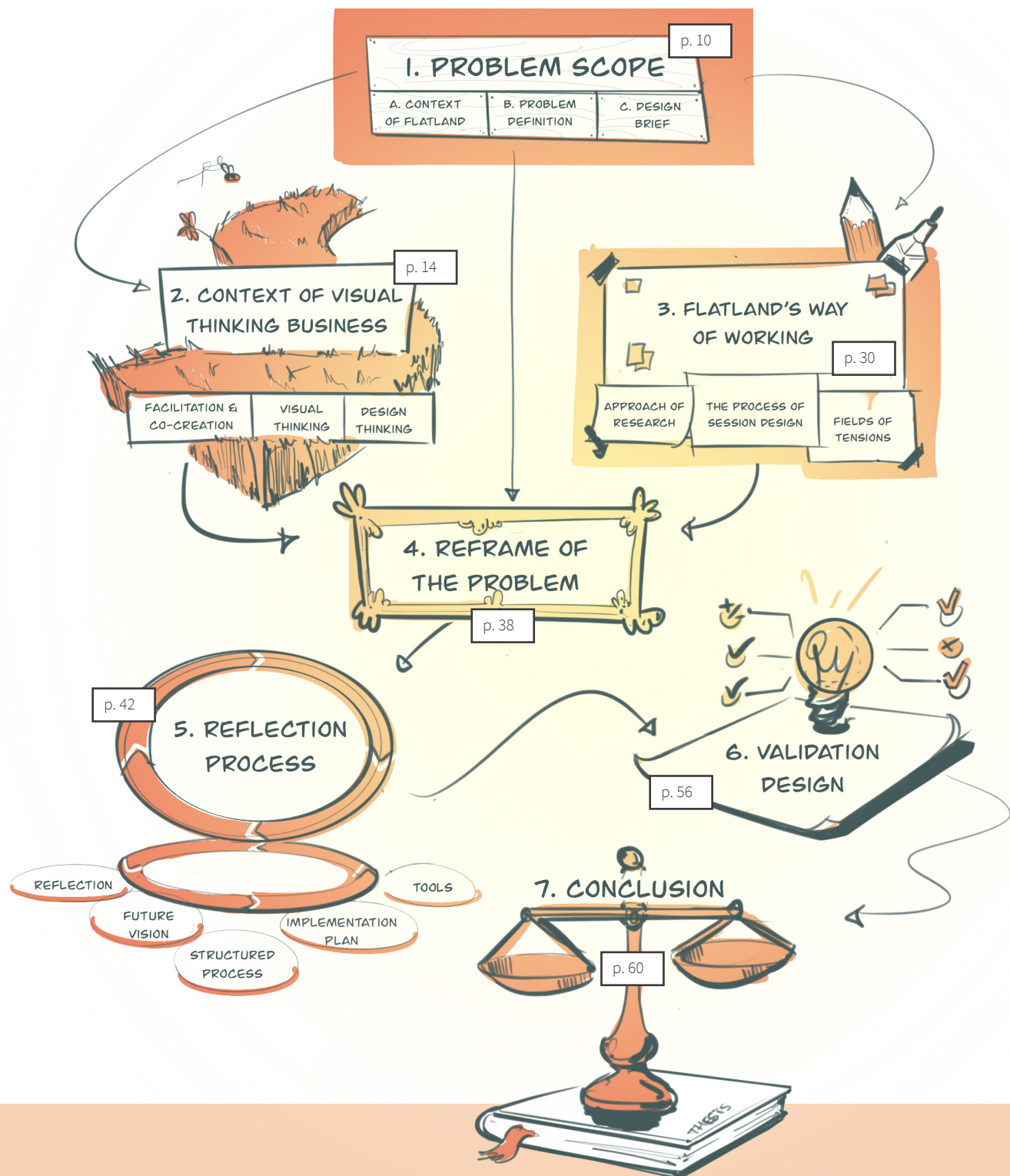
Chapter five describes the design of this thesis. It first explores what reflection is and how it should be done.

After which the design is presented. A reflection process, an implementation plan, and two reflection tools are suggested for Flatland.

Chapter six describes the validation of the design of this thesis. This chapter aims to validate the design and make a conclusion about its effectiveness.

The seventh and last chapter concludes this thesis. This includes a discussion about the limitations of this research and the next steps for further development of the design.

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01

PROBLEM SCOPE

In this chapter the context of Flatland, the problem definition and the initial design brief of this thesis are discussed.

1A) CONTEXT OF FLATLAND

Flatland is a strategic consultancy with a design origin. They are the largest Visual Thinking consultancy in The Netherlands and use Visual Thinking methods to help their clients to overcome complexity (Flatland Visual Thinking, 2019).

Flatland delivers three kinds of services to their clients (Flatland Visual Thinking, 2019): Design a strategy, a shared image and activate a strategy. These services are delivered through co-creation sessions that are facilitated by Flatland. Flatland has experienced facilitators who use visuals during these creative sessions to help their clients co-create understanding and a tangible story. At the end of a project, Flatland delivers a visual with which the client could tell their complex story in a simple and structured way. These visuals can have various forms, such as an animation, a pitching visual, a shared understanding, a filled-in template, an interactive image (like a website or an AR visual) or a slide deck

Flatland works for a wide variety of clients, like businesses, governments, and non-profit organisations. Beside the wide variety of clients, the variety of problems Flatlands tackles is considerable. For example, some problems deal with a highly complex subject, other problems have a target group that is difficult to address, or the participants of the co-creation session do not work together easily.

Considering the variety of problems Flatland deals with, they have a variety of expertise amongst their team.

Every employee has multiple roles that they could fulfill within a project. There are five roles in total and a of them are covered in one project. The roles are project lead, sales lead, facilitator, designer, and illustrator. It is possible to have multiple roles within one project, see figure 2. The roles are described below.

The project lead (PL) acts as a trusted advisor for clients. He or she ensures the successful supervision of the client through the project. The PL makes sure that the client knows what is expected of him/her and also for the project team of Flatland. The PL adjusts where necessary, to make sure the project is finished within time and budget and with a satisfied client.

The sales lead (SL) translates the question of the client towards a manageable project which fits the strategic focus. So, the right project type is linked to the client with the right focus and price. Besides, the SL is responsible for developing a relationship with the client.

The facilitator prepares the agenda and exercises for client-meetings and client-workshops. The facilitator ensures an effective meeting and a positive setting in which the meeting or workshop goals are met.

The designer draws live during the session/workshops and translates all information into suitable sketches. The designer provides order and overview and ensures that at the end of the workshop there is a sketch concept



Figure 2: The roles within Flatland within a project from, left to right: Facilitator, Sales Lead, Designer, Illustrator & Project Lead.

that has been tested and verified with the participants of the workshop before the sketch is developed in detail. The illustrator translates the concepts and sketches which were made in the co-creation session into a visual end product. The illustrator advises on the practical feasibility of the end product, for example with animations or interactives. He or she makes and presents a well-founded choice in style, color, layout, and typography which fits with the customer and target group.

During a session

During the co-creation sessions of Flatland and their clients, there are preferable two or more Flatland employees present. At least one facilitator and one designer are present. The roles explained above seem to be fixed, however, these roles are often interlinked. This means that it could happen that facilitators join the visual creation during a session and the designer/illustrator is guiding the group or facilitates through asking guiding questions. Thus, the division in roles is not completely fixed.

1B) PROBLEM DEFINITION

Current situation

Flatland is designing their co-creation sessions in various ways for various goals. Currently, Flatland employees are facilitating and designing their sessions

based on what they learned on the job, the experience collected through years and years of running workshops. It's based on intuition and experience.

Flatland can vary in their session design in multiple ways. For example, Flatland can facilitate a co-creation session where they let the participants of the session draw their own visuals, to increase engagement. Another option is to visually facilitate what the client says during a discussion without involving the clients in taking part in the drawing activity.

Moreover, Flatland can vary a lot more in their sessions through the use of different tools (templates/cards, materials) or group sizes and/or vary in deliverables and in between deliverables, etc.

These different variations influence the outcome and the value that Flatland delivers in their projects. However, Flatland does not know which of these ways of facilitation or session designs are is more effective for different moments/contexts or scenarios.

Problems

Some of Flatland's clients and/or potential clients find it difficult to understand what Flatland delivers as a service. Imagine if Flatland would design everything based on their intuition it would be really difficult to bring new clients in or to sell new projects.

A more systematic approach to design a co-creation session could support Flatland's methods, which

contributes to their trustworthiness as a strategic consultant. Clear reasoning and argumentation behind their session design could, therefore, strengthen Flatland's position as a Visual Thinking market leader.

Therefore, it is essential for Flatland to understand how they should design their co-creation sessions in combination with Visual Thinking. In addition, it is essential to understand how variations in these creative sessions affect the outcome of a session.

In short, Flatland is operating in a complex context, while designing co-creation sessions and projects many variables need to be taken into account. This leads to Flatland delivering a wide variety of services/deliverables/projects that are not always easy to understand for clients.

Through gaining a better understanding of the variables of session design and session design process, Flatland could design their sessions more deliberately, aiming for specific goals. This can contribute to more value creation in their services/sessions for their clients.

Moreover, with Flatland's aim to grow in the future, it will become easier to onboard new employees in their company.

1C) DEFINITION BRIEF

The following design brief was formulated based on the problem definition described in chapter 1b:

"Develop Guidelines to help Flatland design and facilitate their co-creation sessions more deliberately"

Research questions

To be able to answer this research question sub-questions are formulated:

- What is Visual Thinking and how is it used in practice?
- How does Flatland currently design their co-creation sessions?
- How does Flatland currently facilitate their co-creation sessions?
- Why and what for guidance/guidelines does Flatland need to design their sessions more deliberately?



Figure 3: Showing some initial questions at the start of this project

02

CONTEXT OF VISUAL THINKING BUSINESS

This chapter is divided into 4 parts: a) introduction, b) co-creation and facilitation, c) Visual Thinking, and d) design thinking

A) INTRODUCTION

This chapter explores the literature about co-creation, facilitation, Visual Thinking, and design thinking in order to obtain a better understanding of Flatland's services. Before being able to help Flatland design their co-creation sessions more deliberately, it is crucial to understand their current services. Flatland states that their services are based on co-creation, Visual Thinking and design thinking (Flatland Visual Thinking, 2019). These topics are described in this literature review. This literature is divided into four parts. Before each topic is explored in depth it is good to understand how these topics interact. The first part (the introduction of the literature review) provides an overview of how these 3 elements interact. The second part will explore co-creation and facilitation, followed up by the third part which will explain Visual Thinking, and lastly, design thinking will be described in the fourth part. Figure 4 shows the overview of 3 elements that describe the field in which Flatland operates.

INTERACTION OF KEY ELEMENTS

Design thinking is a problem-solving process. Often it starts with an open problem, which does not have a clear project or process to get to a solution. A design thinking process is an iterative process in which the

outcome, the process, and even the problem become more clear throughout the different stages of ideating, testing, developing and adjusting.

Visual Thinking can be seen as visual methods and tools which support thinking throughout the design process. For example, Visual Thinking tools can help designers in their way of thinking, reasoning, explaining, retrieving information from others and validating their ideas.

Co-creation is a way of going through a design process with multiple people. The participants of a co-creation process often are multiple people from different disciplines.

In co-creation settings, it can be difficult for participants to understand each other and communicate effectively. Besides this problem, not all the participants of a co-creation process are experts of the design process. For these problems, a (creative) facilitator is needed. The facilitator is an expert of the creation process and is a neutral person to the group. He or she helps the participants of the co-creation sessions to get to a certain goal. This person is responsible for the meeting agenda, leading the discussions, providing the working methods, motivating the group and creating the right atmosphere of the sessions.

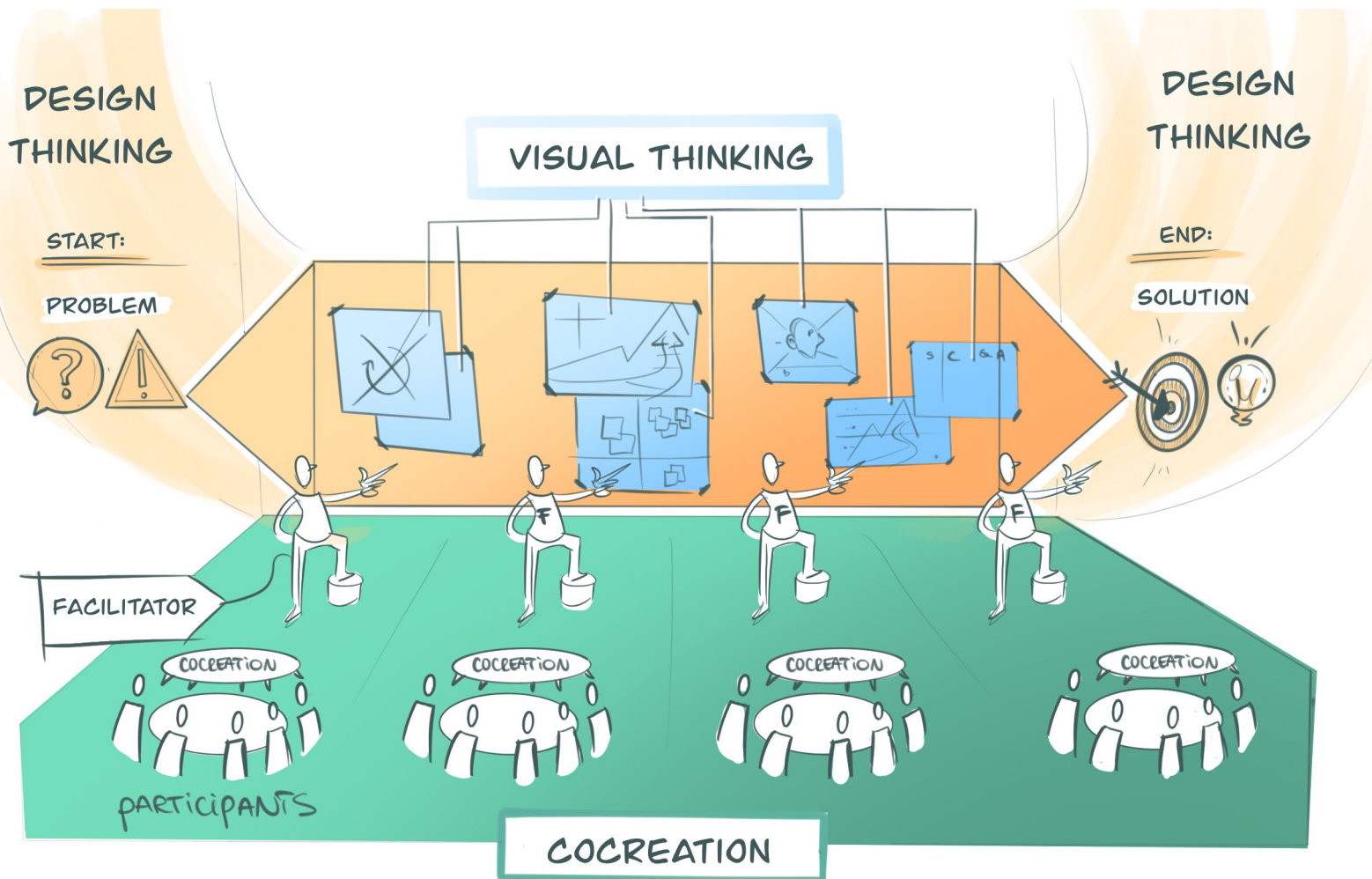


Figure 4: The interaction of facilitation and co-creation, Visual Thinking, and design thinking

2B) FACILITATION & CO-CREATION

Co-creation can be used for several reasons. Calabretta (2016) states the following: “within the business of strategic design, co-creation is often embedded in order to engage the participants’ and to maintain their commitment over time“. Other reasons for using co-creation is to get insights from multiple experts, to get insights from product users/target audience, to test your idea or to create ideas, strategies and/or stories. This section of the literature review explores recent literature on co-creation and facilitation. It describes what is, why it is used and how it can be optimized.

Definition: what is it?

A co-creation session normally has several stakeholders involved; a facilitator, a resource group (participants of the session) and a client (the problem owner), see figure 5. In an ideal state, participants of the co-creation workshop are actively taking part in the process which will increase their ownership of the process and its outcome. In practice, this does not happen automatically which is why these processes need to be facilitated.

First, co-creation needs to be defined. Numerous terms and definitions are used to describe it, for example, co-creation, co-design, and participatory design. These terms vary slightly in focus but show some overlap with the work of Flatland.

A holistic definition is described as co-design by Sanders and Stappers (2008). Co-design is defined as collective

creativity which is applied throughout the whole design process. This definition highlights collective creativity as part of the design process and the fact that co-design can be used in all phases of the design process.

In participatory design, the collective design moments happen in collaboration with the end-users of the product and its creators. The end-users are used as part of the design process to make sure the co-created product, service, and/or end-deliverable will fit the user’s life (Schuler, 1993). There are several moments in the design process where using end-users of the product can be useful. According to Visser, Stappers, and Van der Lugt (2005), end-users can be involved in the evaluation phase of the design process, or as generative research, which can be an ideation phase or an exploration phase. A more comprehensive definition of co-creation was described by Kleinsmann and Valkenburg (2008): “a process in which actors from different disciplines share their knowledge about both the design process and the design content, ... in order to create shared understanding on both aspects... and to achieve the larger common objective: the new product to be designed”.

This definition pinpoints the importance of knowledge sharing when working with multiple disciplines towards a common goal during the design process.

When referring to co-creation in this thesis, the definition of Kleinsmann and Valkenburg is referred to.

This is because it has the most resemblances to Flatland’s way of working: with a focus on creating

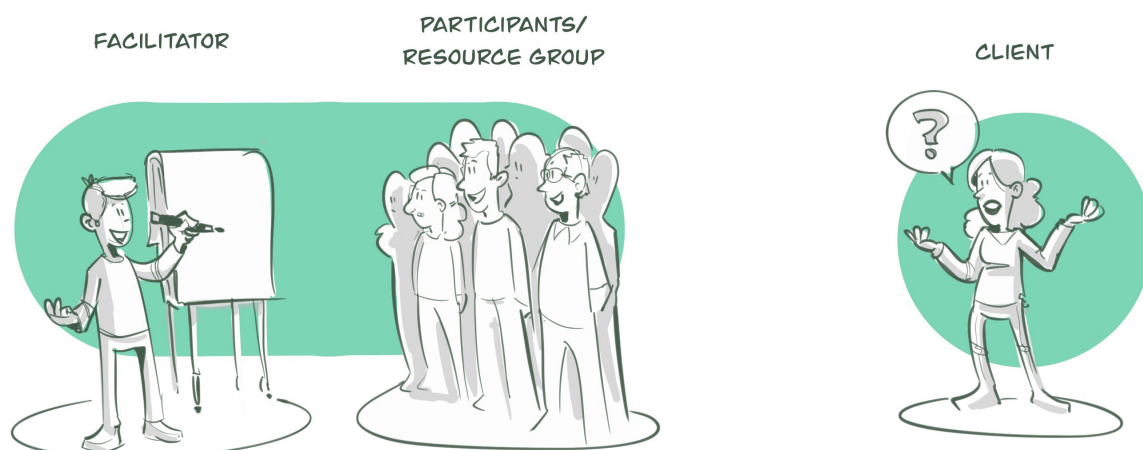


Figure 5: Overview of people and roles in a co-creation session

a shared understanding for people from multiple disciplines.

In addition, Flatland is collaborating with their clients throughout the whole design process and often in collaboration with the end-users and target group of their end-products/visuals.

Criticism: perception of effectiveness

When searching for literature about co-creation and collective creativity a lot of contradicting findings arise about its effectiveness. Many have argued that individuals outperform collective groups in a creative task like generating ideas (Diehl & Stroebe, 1991; Nickerson, 1999). These studies indicate that individuals generated more ideas than collective groups. However, other researchers argue the opposite (Isaksen, 2005; Kramer, Fleming, and Manis, 2001). Isaksen (2005) argues that interactive groups generated at least as many ideas as individuals when they are correctly facilitated by an experienced facilitator. Similar conclusions were made by Kramer et. Al (2001) who concluded that interactive groups come up with as many ideas as nominal groups when using a facilitator. Co-creation has significant benefits, regardless of the above described doubt of its efficiency. Hoyer, Chandy, Dorotic, Krafft, and Singh (2010) described that co-creation processes with end-users could improve the effectiveness of the process. The effectiveness is improved because the co-created ideas fit the end-users lives and needs which leads to a higher market attractiveness. Additionally, Stroebe, Diehl, and Abakoumkin (1992) indicated participants of group ideation sessions experience the illusion of group effectivity. In this study, participants had the perception that more than half of the ideas that were produced by the group were proposed by themselves, even though this was not the case. This bias leads to high levels of satisfaction and

ownership of the ideas. This increased the interest of the participants in the activity. Thus, co-creation is used to create ownership of the participants (Calabretta, 2016), leading to more relevance of the created content.

Why it is used?

Transformational design

This co-created ownership is not only relevant in product design processes, but also organisational transformation processes (Burns, Cottam, Vanstone, & Winhall, 2006). Transformational processes are not only about redesigning a service or a product, but also about organising change processes and to promote creativity and innovation so that people engage in continuous learning and innovation. Thus, co-creation allows people to communicate and cooperate across disciplines and between organizations which is critical for transformational design (Burns, Cottam, Vanstone, & Winhall, 2006). This is useful for all kinds of complex problems. when solving complex problems, which do not belong to only one discipline, multi-disciplinary teams are needed, as they provide a broad view of the different perspectives of the group. The main benefit of multi-disciplinary teams is the breadth of knowledge, skills, and abilities offered when solving a problem, due to the different backgrounds of each of the team members (Seidel & Fixon, 2013). Even though multi-disciplinary teams have these benefits, they face several challenges. An extra effort on communication is needed in order to perform in their task as their functional diversity needs different ways of sharing their thoughts and ideas (Pelled, Eisenhardt & Xin, 1999). Pennington(2008) states that multi-disciplinary processes could benefit from a facilitator. A Facilitator can orchestrate effective environments and interactions for the collaboration processes in order to obtain collaborative thinking and learning in multi-disciplinary teams.

What is facilitation: Definition of Facilitation

This part of the literature aims to explore facilitation.

1. What is facilitation 2? The facilitator's tasks. 3. The needed skills of a facilitator.

Starting at the beginning, facilitation has to be defined. Although differences in definitions exist in the literature, there appears to be some agreement that facilitation refers to structuring group interactions and processes in such a way that the group moves effectively to a certain goal (Mejias, 2007; Bens, 2017).

Therefore, the facilitator is responsible for structuring the process of creation to a common preferred goal, while involving and engaging participants in this process (Ben, 2012).

Tasks of the facilitator

The main tasks of a facilitator: structuring the process of creation and managing team processes are further explained below.

Structuring the process of content creation

The process of a co-creation needs to be designed by the facilitator. In literature, the facilitation of co-creation processes is often linked to a group's creative process which is referred to as creative problem solving (Osborn, 1953; Parnes, 1962; Buijs and van der Meer, 2013). In a creative problem solving process a group is guided by a facilitator in order to solve an open problem with the use of creativity techniques during one or more creative session(s).

According to Buijs & van der Meer (2013) there are no fixed rules on how to design a or how to conduct a creative session. However, researchers have developed many models for guiding successful creative problem-solving processes. Most models of creative problem solving (CPS) are based on the model of Parnes (1962) and Osborn (1953). In the fifties, Osborn (1953) described creative thinking as a diamond, a model which consists of two steps: a divergent phase and a convergent phase. The divergent phase is about generating ideas and the convergent phase is about idea selecting. This diamond

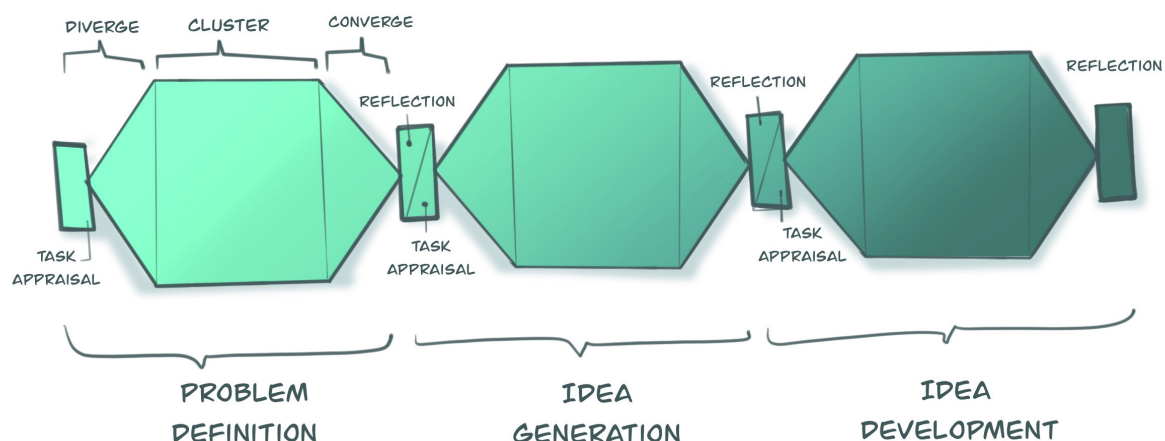


Figure 6: The CPS process according to Buijs & van der Meer (2013)

is elaborated by Tassoul and Buijs (2007) through the addition of an in-between step, a clustering step (see figure 6). This clustering step is used to categorise the earlier generated ideas of the first step which will affect the convergent phase in the last step.

Following Buijs and van der Meer (2013), most of the CPS model consists out of 3 diamonds, problem definition - idea generation - idea development. Every diamond has an opening and a closing phase, which are a task appraisal phase and a reflection phase.

The task appraisal phase happens at the start of each diamond where the sessions' tasks are reinvestigated and discussed if iterations are needed before starting the diamond. The reflection phase is the reflection of the things that happened during a diamond after it took place. In this phase, it is important to look at the quality of the delivered session and fact if the team is ready to move to the new diamond or if the team needs to go back to redo the earlier work.

The lack of this model is that it looks like a linear process. However, the CPS model is an iterative process. According to Buijs and Van der Meer (2009), the CPS is about the interrelated approach of content finding, information finding, acceptance finding, and project management. The content finding is the phase where content is created during the session. Information finding is the phase in which external information is added to the creative process. Acceptance finding is the phase where people try to share the outcomes of a creative session successfully throughout an organisation.

The facilitator is responsible for more than designing the co-creation session (see figure 7). According to Wardale (2013), effective facilitation is also about managing the client upfront of the session/project in the preparation stage, and managing the outcome of the session.

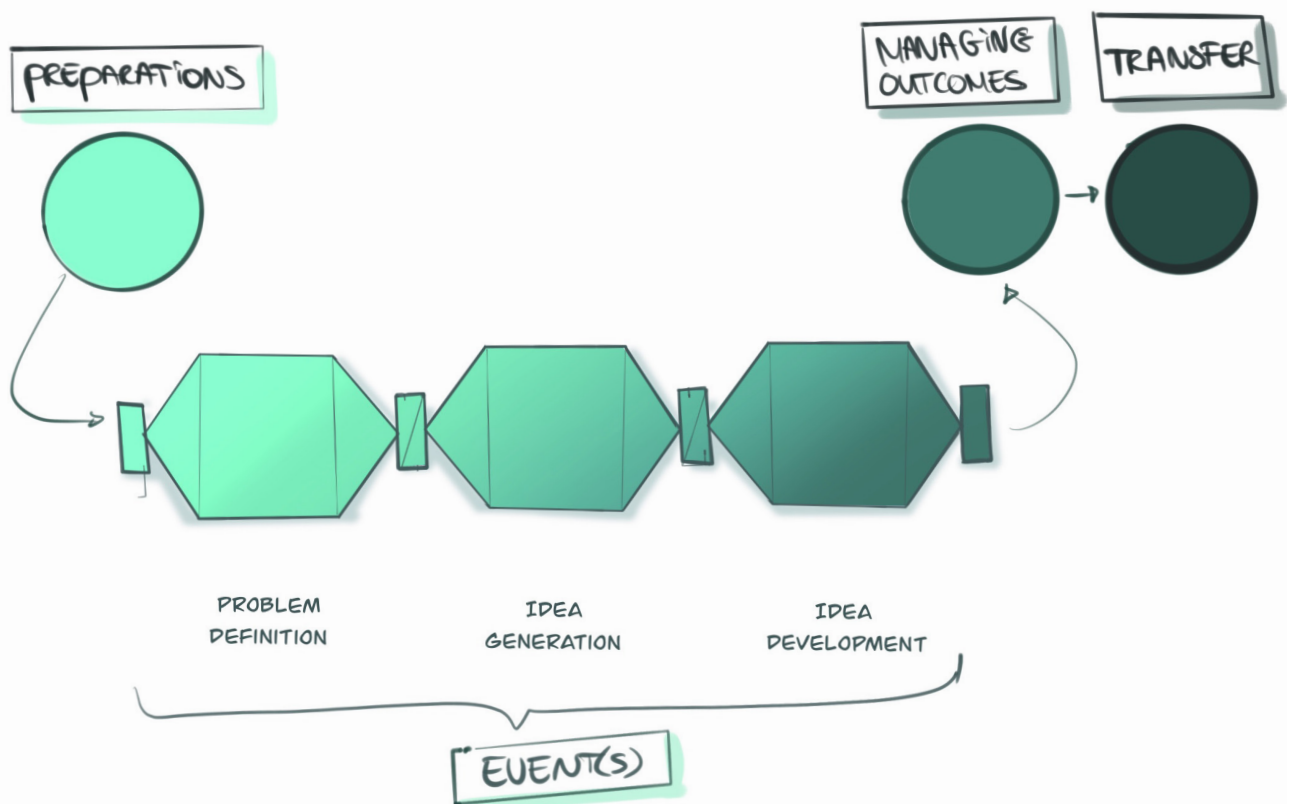


Figure 7: Responsibilities of the facilitator according to Wardale (2013)

Managing team processes

Next to the facilitator's knowledge of the process, facilitators are experts of team processes. Facilitators work in team contexts only. Team processes are explored in this part of the literature review. Following Grossman, Friedman, and Kalra (2017), teamwork processes can be subdivided into affective mechanisms, behavioural mechanisms, and cognitive mechanisms, the so-called ABC of teamwork, see figure 8.

Affective mechanisms concern how the team is feeling. It is linked to team motivation, confidence, and trust.

Behavioral mechanisms are about how a team acts. Grossman et. al (2017) subdivided this mechanism in transition processes, action processes, and internal processes.

Transition processes are what kind of task happen between actual work. For instance, planning, making agendas and/or doing evaluations.

Action processes are the things the team does to work towards its common goal.

Interpersonal processes are the things that happen between team members, such as conflict management, motivation or effect management, etc.

Cognitive processes are represented by the shared distribution of knowledge and information in the team. How a team is learning from its team members is also an important aspect of the cognitive mechanism.

Facilitators can influence the effectiveness of team processes by acting upon these mechanisms. In some cases, it can be more important for teams to work on affective mechanisms and for other cases it is more important to work on cognitive processes.

For Facilitators it crucial to understand what kind of team tasks and mechanisms he or she has to deal with while facilitating a certain team.

The low-level teams are characterized by their task-oriented approach (McFadzean, 2002).

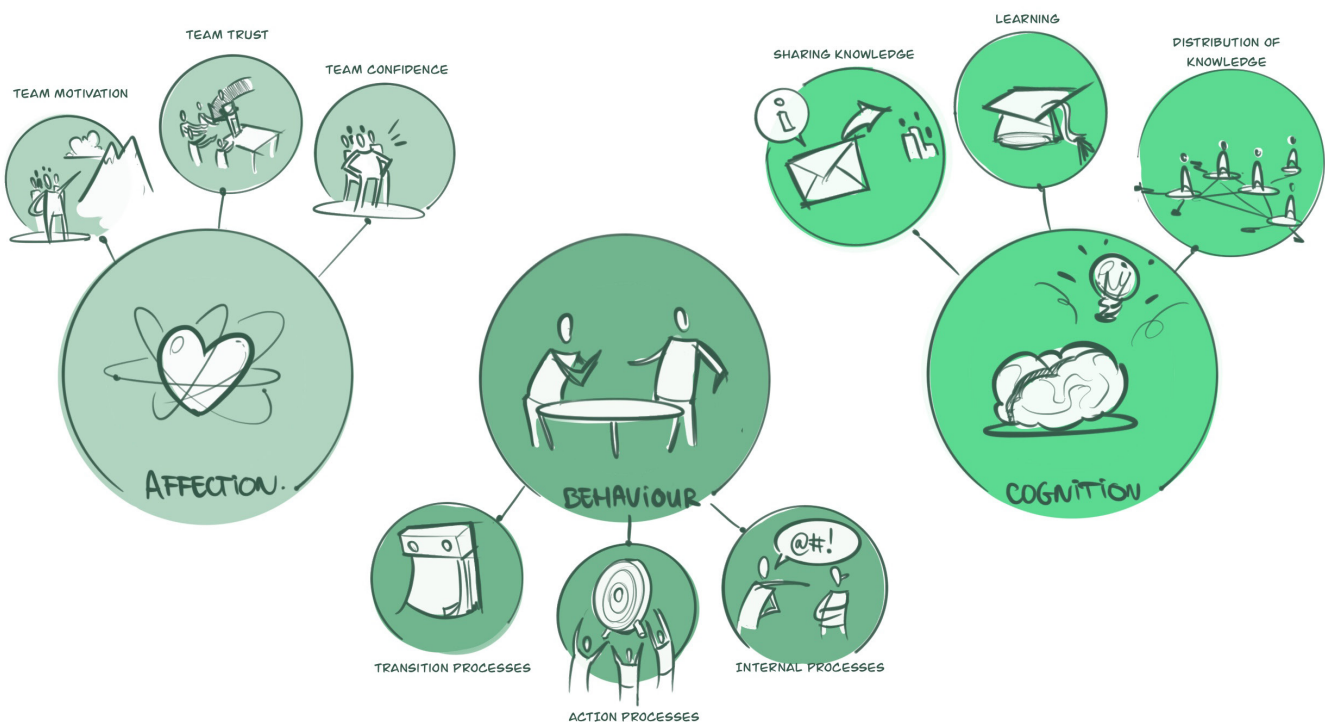


Figure 8: Effective teams, the ABC of Grossman (2017)

On the contrary, high-level teams are teams that pay more attention to the team's well-being and feelings. It is up to the facilitator to know whether their team is a high-level or low-level team that needs a more effective approach of the facilitator or a more task-oriented approach. Before designing a session, Flatland should be aware of the level of team they are designing the session for.

Facilitator's skills

The topics mentioned earlier about facilitation are about the responsibilities and tasks of the facilitator. This part of the literature review aims to address the skills a facilitator needs to have to fulfill these tasks. According to Isaksen (2017), a facilitator needs to have the following skills showed in figure 9. The right side of the figure shows the skills the facilitator needs to have on a process level and the left side of the figure shows the skills the facilitator needs to have on guiding the participants of the co-creation session (Isaksen, 2017).

Conclusion: Co-creation and facilitation

Co-creation is used to support thinking and creativity in groups. This can be useful for solving complex problems, such as design problems and even for transformational problems.

Designers embed co-creation in their work to create ownership of the content for their target group/participants of the workshop.

Collaborative groups can find it difficult to collaborate effectively, especially in multi-disciplinary settings.

Facilitators can support these collaborative processes. Facilitators are people who design problem solving processes for groups and guides these groups towards a solution. Thus, the facilitator is an expert of group dynamics and the process of creation.

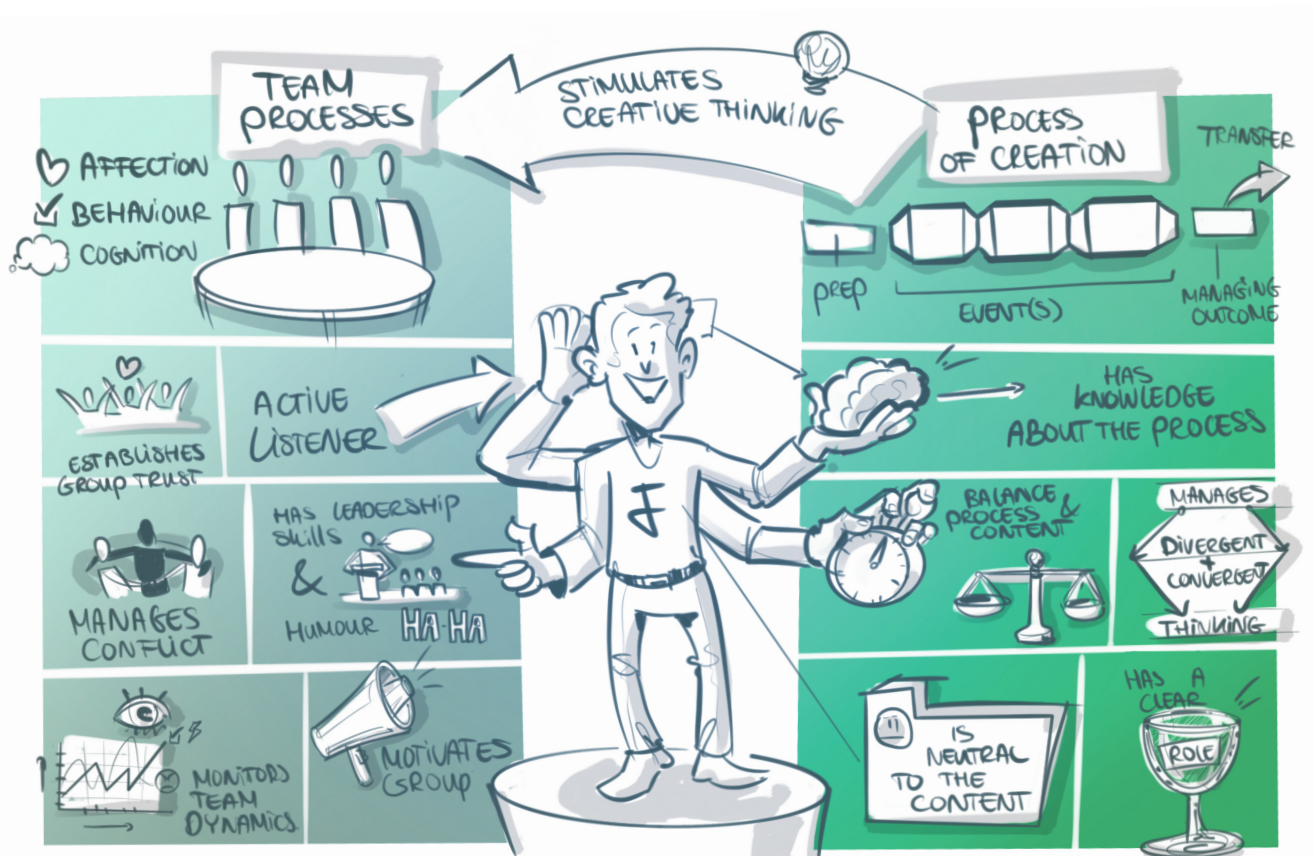


Figure 9: Facilitator's skills according to Isaksen (2017)

2C) VISUAL THINKING

Intro

Making complex content tangible or discussable through sketching is one of the main aspects of Flatland's service. Flatland is called a Visual Thinking agency. This part of the literature aims to explore 1) what Visual Thinking is, 2) why it is used, and 3) how it is used in practice.

1. What is Visual Thinking?

Calabretta (2016) points out that designers use their visualisation and materialisation skills in their co-creation processes to create tangible concepts. These visualizations could vary from sketches, renders, infographics, diagrams, scenarios, animations, 3D models, etc. These tangible concepts make it easier for participants of a co-creation process to explore possibilities of the concept.

There is not one exact definition of what Visual Thinking is, practice and literature describe it differently. This does not make it easy for people to completely grasp what Visual Thinking is or how it should be used.

Goldschmidt (1991) distinguishes different interpretations of Visual Thinking. A layperson will describe Visual Thinking as visual perception, which

means representation in the mind of information that reaches us through our eyes.

Goldschmidt (1991) argues that architects and designers see it as a visual representation (like a 2D or 3D model) which is made for communication purposes and or evaluation purposes. She argues Visual Thinking is about the production of ideas, the reasoning that gives rise to ideas and helps bring about the form of the design.

A less scientific definition is the one from David Gray, one of the founding fathers of the Visual Thinking business. He describes Visual Thinking as the use of visuals to support the process of organising your thoughts and improving your ability to think and communicate with others (Gray, Brown, & Macanufo, 2010). This implies that 'Visual Thinking' is more than thinking, it is an active process of doing and creating content in order to communicate better. This definition also implies that you can do it together, while co-creating content. In this thesis, the description of David Gray will be used as it is closed to the visual co-creational practice of Flatland.

So, Visual Thinking is an active form of using or creating visuals in order to think and communicate better. Some people refer to it as Visual Doing (Brand, 2017).

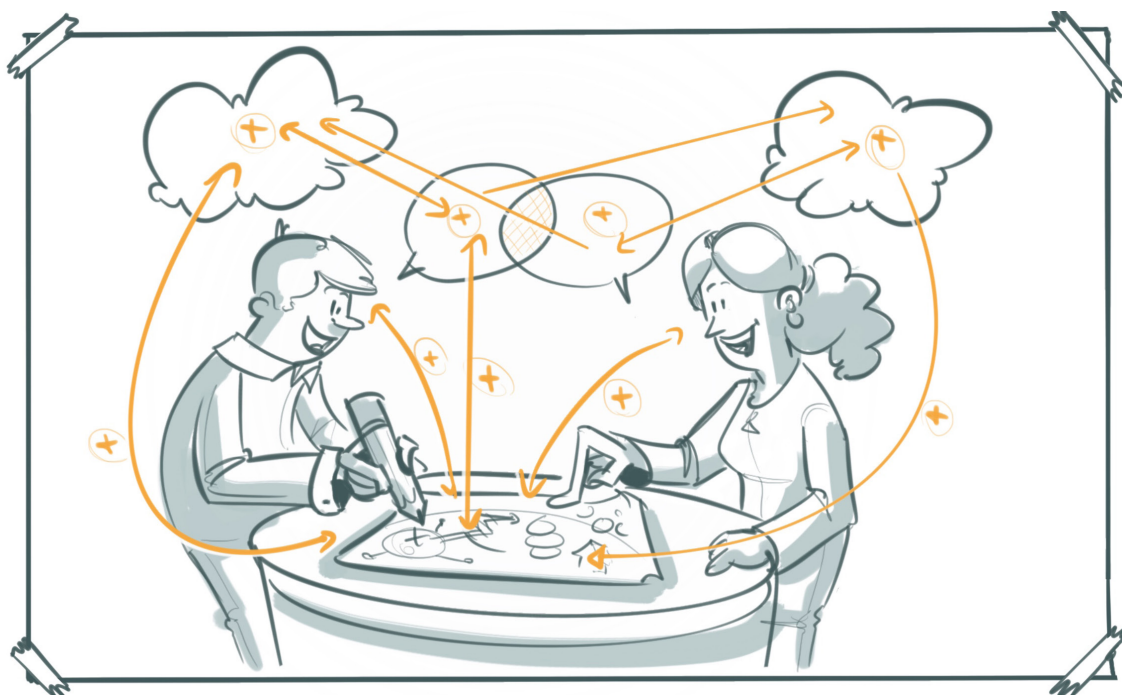


Figure 10: "The backtalk of a sketch" Schön (1984)

2. How does Visual Thinking work?

The backtalk of a sketch

These definitions suggest that Visual Thinking is more than thinking alone.

In literature, more explanations support this.

Goldschmidt (1991) describes sketching as an extension of mental imagery, she calls it interactive imagery. In cognitive studies, mental imagery is defined as the cognitive ability to mentally visualise, interpret and represent information, when this is physically absent (Eastman, 2001; Paivio, 1971). Interactive imagery means that a designer is able to see something that is not physically there from the sketch, which was generated by the same designer. This phenomenon is described as the ‘backtalk’ of a sketch by Schön (1982), see figure 10.

Goldschmidt (2003) argues that sketching helps designers in generating ideas and strengthening them by the interpretation of the ‘backtalk’ of the sketch in progress or the sketch that was just completed. In this sense, Visual Thinking is an extension of one’s thinking through sketching. The sketching you do generates new ideas in your head, which helps you to improve your idea sketch. This positive effect of the backtalk of a sketch is described by others as well. Goel (1995) points out that ambiguity in designer’s sketches enables them to re-

interpret what they have just drawn, and to proceed to design with the newly acquired insights.

The positive effects of the backtalk of a sketch or another materialization are not only true for individuals, but also for collaborative groups. The study of Stigliani and Ravasi (2012) suggests that physical or material artifacts extend the capacity of thinking and processing mental content for both individuals and groups. These artifacts allow mental structures to become external, which supports cognitive processes. Normally these processes happen unconsciously, but with these artifacts these cognition processes become conscious.

Visual thinking helps you to become explicit

Similar findings were provided by Fish and Scrivener (1990) who noticed that sketching makes a designer move from abstract to specific while sketching. For example, when drawing a chair, a descriptive symbol, the designer has to consider what kind of chair it is. It could be a rocking chair, car seat, a sofa chair and so on, these are called depictive symbols. When drawing iteratively the designer moves from more descriptive symbols to more depictive sketches, see figure 11. This helps Flatland in grasping complexity for their clients. When the designers are drawing out the group’s discussions they stumble on things which that they

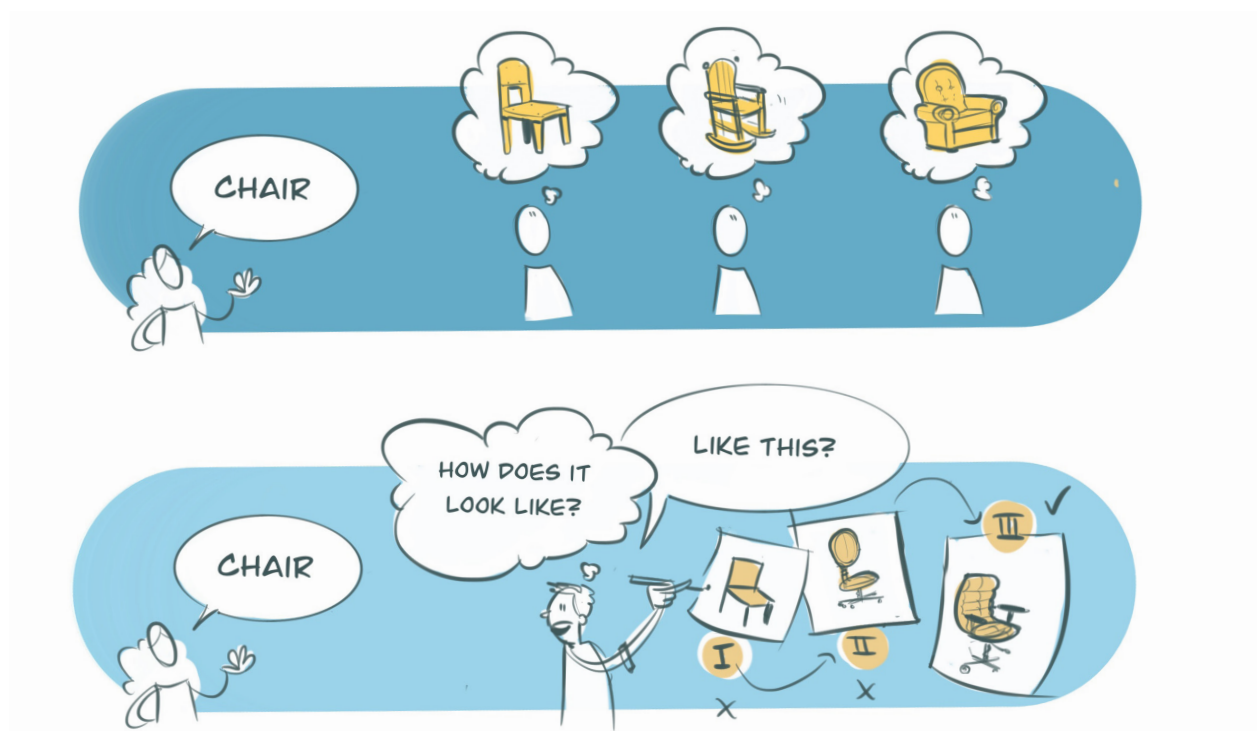


Figure 11: Moving from descriptive to depictive symbols while sketching

cannot draw without making assumptions. Therefore the illustrator needs more explanation from the group. Through asking clarification questions like: what does that look like? Participants become more clear in their wording and then they move from depictive to descriptive symbols. This makes the content easier to understand. Especially while discussing intangible or abstract situations, drawings can really help to clarify a situation. 'Innovation' is a really abstract word that could have multiple interpretations of participants during a co-creation session. By drawing those interpretations, people see that they are not understanding one another.

Using Visual Thinking: Graphic Ideation, graphic communication, graphic elicitation

Goldschmidt (2003) indicated Visual Thinking can help designers in generating ideas. Besides idea generation, Visual Thinking could also be applied for graphic communication and graphic elicitation (Crilly, 2006), see figure 12. Graphic ideation is described as freehand sketching to assist the process of visually talking to oneself. Graphic communications are visual representations with increased clarity that support visually talking to others. Graphic elicitation is used during interviews to visually elicit knowledge from the

interviewee (Crilly, 2006). Crilly argues that graphic elicitation is a qualitative research method that encourages the contributions of interviewees that are relatively inaccessible by using other methods. For graphic elicitation, Crilly used visual diagrams, which are visual representations that are composed of visuals in combination with text (Blackwell, 2001).

These three ways of using visuals are used in Flatland's co-creation sessions. For example, when Flatland is validating that they made, they first have to present/communicate it to their clients. As these clients are made to think about the content of the drawing, new content arises through graphic elicitation. Together, with the new content, new ideas will be generated in order to make the new content fit in the earlier made drawing.

3. How visuals are used?

Visuals as generative co-creation tools

As stated before not only individuals benefit from the 'backtalk' of sketches. In literature, multiple methods can be found that describe how groups can co-create a shared understanding with a visual or a diagram. For example by using a graphic facilitator, working on GIGA maps or mess maps. These are described below.

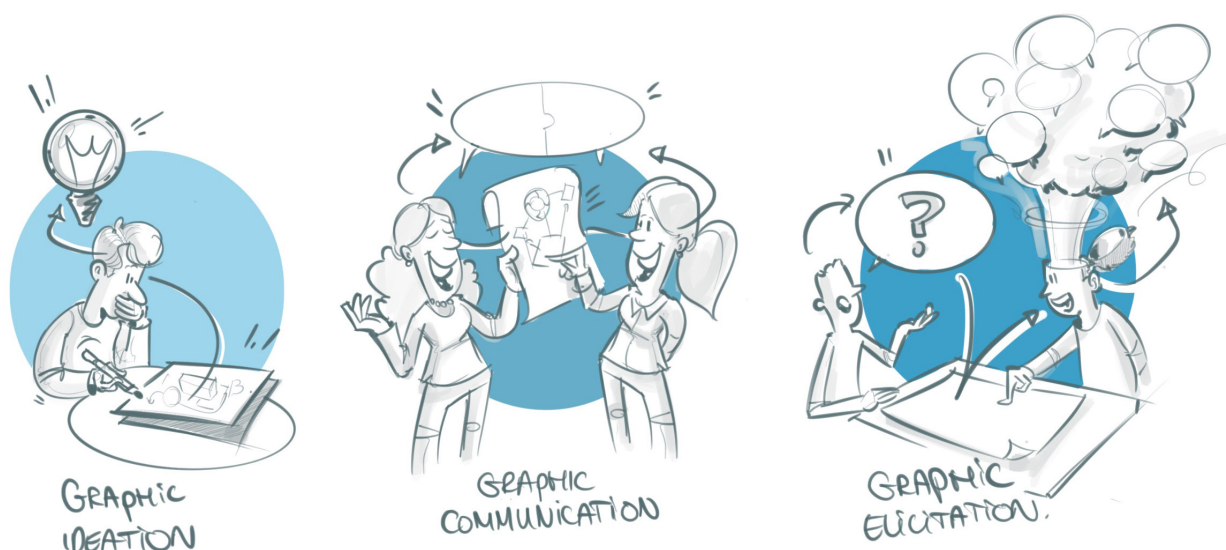


Figure 12: Three ways of using of visuals following Crilly (2006)

Graphic Facilitation improves participants engagement

One of the methods is described by Al-kodmany (1999). He described how visuals can support a co-creation process. During co-creation sessions, a graphic facilitator (in Flatland's case the designer) can freehand sketch the things the participants discuss during a co-creation session. These sketches can function as a visual summary of the content created at the end of the session. This helps the facilitator to deliver the outcome of the session and the implementation of this content later on.

Moreover, sketching during co-creation sessions sparks the engagement of the participants during that session (Al-kodmany, 1999). When sketches play an interactive role in the discussions, the participants can see their ideas come to life and provide an opportunity for the participants to add more input to the idea sketch. In this way, participants play an active role in the creation process.

Grasping complexity through GIGA-mapping

Another method is described by Sevaldson (2011) as GIGA-mapping. GIGA-mapping is meant for creating comprehensive diagrams/visuals in order to grasp the

complexity of a situation. Normally a diagram simplifies things, but GIGA-maps aim for the contrary: grasping complexity. The diagram in GIGA-mapping is seen as a central tool for generative or creative work, which differs from the purpose of a normal diagram, which is representation. In GIGA-mapping the creation task of the diagram is separated from the communication task of the diagram. This means that in the first phases the GIGA-map only needs to be communicative to its creators and not to outsiders (Sevaldson, 2011).

Flatland's view on the role of visuals and their approach to drawings is similar to the GIGA-mapping approach.

There are also different ways of using GIGA-maps. In the research of Sevaldson (2011) the different types of GIGA-maps and their specific purposes were mapped out. A couple of examples can be seen in figure 13. However, this research did not describe how these GIGA-maps were constructed.

So far, this section of the literature review explored how and why Visual Thinking could help or improve design processes. However, less literature was found on how you should go about these processes.

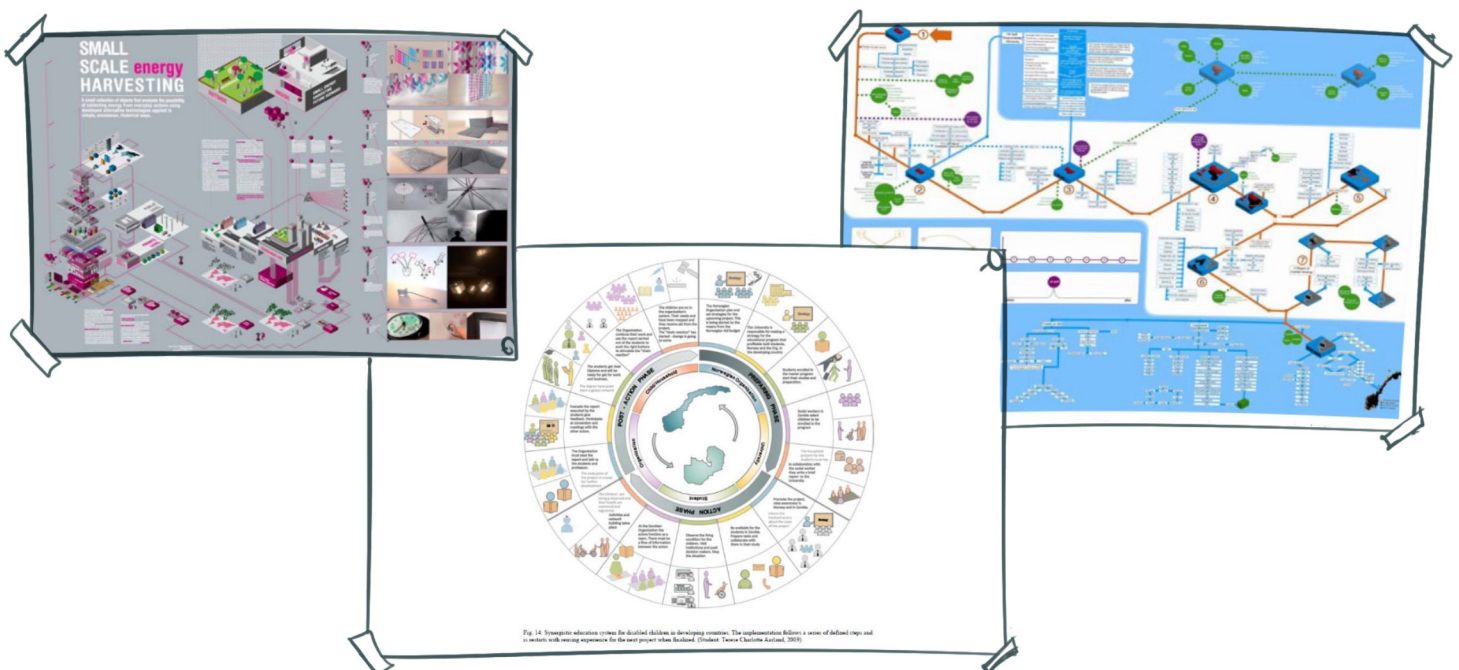


Figure 13: Examples from the GIGA-mapping research of Sevaldson (2011)

Mess mapping process

Another method that is used to represent, analyse or evaluate complex problems is Mess Mapping (Horn & Weber, 2007). They describe a collaborative visualization process in order to tackle wicked problems. Mess mapping takes into account: uncertainty and risk, complexity, systems interacting with other systems, competing views and values, different people knowing different parts of the problem (multi-disciplinarily) and inter-organisational politics.

In a Mess Mapping process, a resource groups collect shares, organises and evaluates information regarding a wicked problem. A Mess map (see figure 14) shows the important clusters of information and their relationships with other clusters.

In a Mess Mapping process, there are several key players: a resource group that consists of multi-disciplinary stakeholders of the wicked problem, a facilitator (who facilitates the process) and a designer (who is responsible for transforming the collected data into a visual).

A mess mapping process usually takes place in four steps (Horn et. al, 2007):

1. Initial interviews and analysis

The resource group and client are interviewed by the facilitators in order to create the boundaries of the wicked problem. With these interviews, an initial rough template is created by the designer to elicit new information in step two.

2. Identify interlinked problems

In a stakeholder co-creation session, the resource group creates a set of interlinked problems, as seen from their different stakeholder starting points. The goal of this meeting is to co-create a first concept of the common mental model of the wicked problem. After the session, the facilitator/designer creates a visual draft of this mental model.

3. Identify causal factors

The resource group edits the draft Mess Map which was made by the designer in order to identify principal influences and causes of the interlinked problems. Again the facilitators collect the information and iterate on the visual mental model, the created Mess Map, after the session.

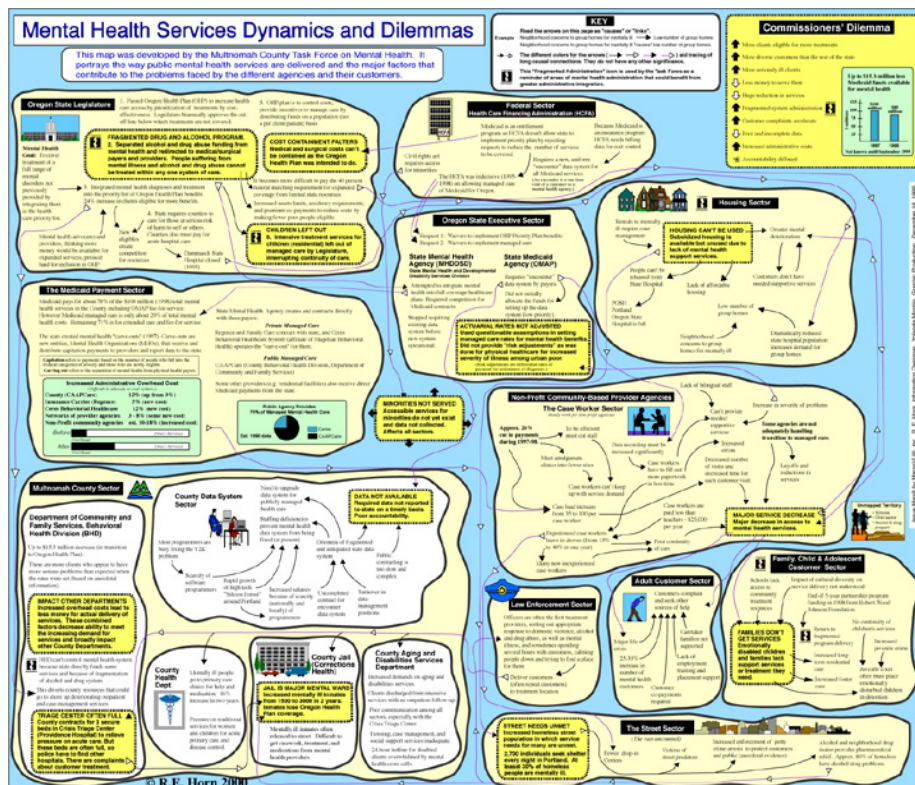


Figure 14: A final Mess map (Horn et. al, 2007)

4. Analyse major structural factors

In the last step, the resource group analyses the structures that underlie the major problems of the Mess Map. Discussing potential interventions of the interlinked problems could have an influence on the whole wicked problem.

After a Mess Mapping process, Horn et al. (2007) suggest a Resolution Mapping process. Which basically is a process of co-creation workshops in which several scenarios are created. These scenarios are possible results of the chosen intervention of the earlier created Mess Map. In this way Horn et. Al (2007) tries to make the created mess map actionable.

Flatland tackles complex problems through a comparable proccess. First, Flatland makes the complex content clear, next, they create a story out of the content and third they deliver the story through a tangible visual in the last part of their process. They call it clarity-story-deliver.

Conclusion: Visual Thinking

Designers use visuals to support thinking, communication, clarification, ideation, and elicitation of information. An active form of creating images, like sketching, forces people to be specific.

Using visuals in co-creation settings can lead to more engagement of the participants of the session. Beside leading to more engagement, visuals support the process of grasping a complex situation.

These effects of working visually are the base of the services of Flatland. Flatland is creating tangible concepts of complex topics while engaging people in this complex content over a longer period of time. This way of working aims to successfully implement the created visual content.

2D) DESIGN THINKING

There is a growing recognition and interest in design and design thinking. It is widely recognized that design (if correctly applied) can help companies to be more innovative, become more competitive and increase their performance. (Leon Cruickshank* and Martyn Evans). This part of the literature review explores what design thinking is and what kind of problems you solve with it.

Definitions

The well-known CEO of IDEO, Tim Brown, formulated design thinking as follows: “bringing designers’ principles, approaches, methods, and tools to problem-solving”. These traditional design approaches help disciplines to innovate both inside and outside of the design domain (Brown & Katz, 2011).

A comprehensive definition of Design Thinking was provided by Thomas Lockwood (2010): “a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis”. Both definitions highlight important aspects of Flatland’s service. First of all, Flatland’s design

approach is human-centered. In all their projects there is a clear focus on who to address in the visual. These visuals are co-created with their target group, which also ensures that the target groups create ownership of the content. This makes implementing the visual content easier, as the participants of the session are co-owner of this content.

Besides the fact that Flatland’s approach is human-centered, it is also based on rapid prototyping and multiple iterative loops. Flatland visuals are not designed directly as beautiful drawings as their website is showing. These drawings evolve gradually (see figure 15).

Their design approach includes multiple iterations of the visual before it is delivered. These iterations are done in collaboration with their clients. Within Flatland’s sessions, there is often a moment in which Flatland presents their concept visual and receives feedback from their clients. This concept visual can vary from detail level. This manner of prototyping ensures that the content of the visual is tested several times. This creates a better chance for success of the visual.

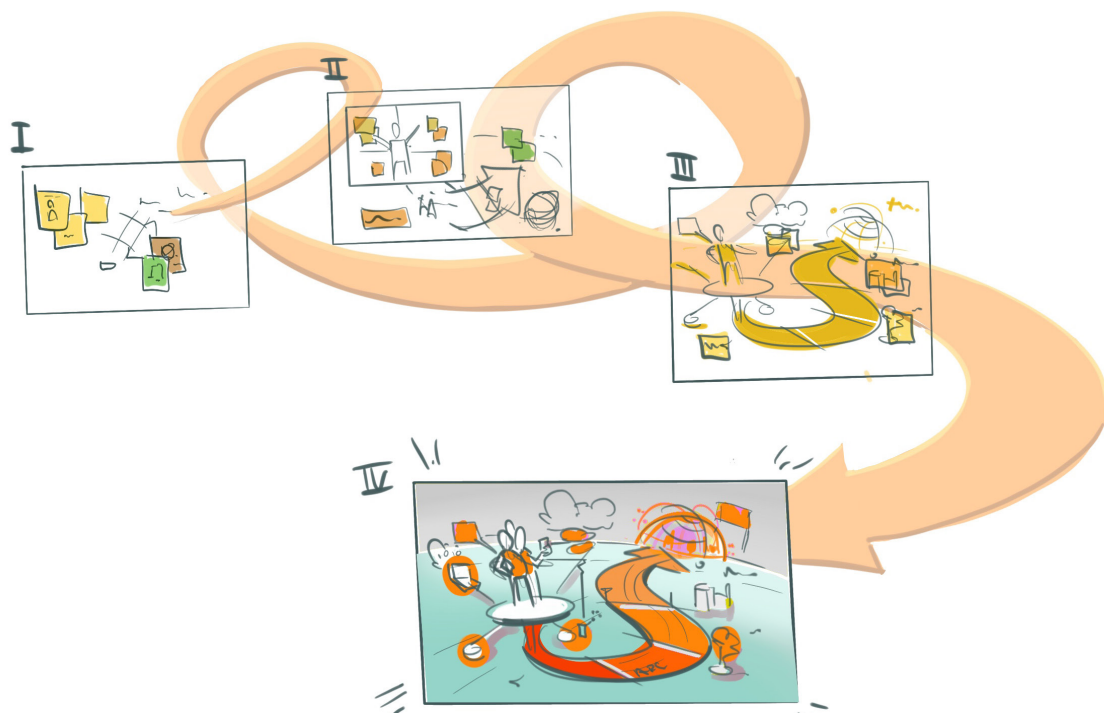


Figure 15: Complex visuals evolve gradually

Conclusion: Design Thinking

In short, design thinking allows both designers and non-designers to tackle complex problems that are ambiguous and need iterative exploration and testing of potential solutions in order to tackle them.

Design thinking is a problem solving approach that is human-centered and iterative. It is based on rapid prototyping. This way of testing allows designers to make adjustments to their design and process constantly.

This makes a design process difficult to grasp as it is ambiguous. The problem space evolves with its solution space.

03

FLATLAND'S WAY OF WORKING

This chapter describes Flatland's way of working based on the findings of the qualitative research. This is done in 3 steps: 1) Qualitative research methods, 2) Flatland's way of working, and 3) Fields of tension

The previous chapter explored the literature of co-creation, Visual Thinking and design thinking. This chapter aims to investigate how Flatland is implementing these elements in their services.

Qualitative research methods were used in order to explore Flatland's current way of working. The qualitative research uncovers two fields of tensions from Flatland's way of working. These fields of tensions are the basis for the reframe of this thesis. The reframe is described in chapter 4.

One of the research question was: "How does Flatland currently design their co-creation sessions?"

This chapter elaborates on how Flatland currently is designing their co-creations sessions and aims to is to pinpoint key aspects that need to be tackled in my design to make Flatland design their co-creation sessions more deliberately.

1) APPROACH OF RESEARCH

Flatland's ways of designing and delivering their services are investigated with four qualitative research methods. These methods are qualitative in nature as their aim was to create an understanding of the reasoning and behaviour of the facilitators while designing and facilitating. The following methods were carried out (an overview can be seen in figure 16):

1) Six semi-structured interviews were done with Flatland's facilitators in order to investigate how Flatland is currently designing their co-creation sessions. The goal was to learn how the facilitators approached clients' questions, go through their process of creation and what the facilitator's role is in this process. All insights from the interviews are clustered in Appendix B2.

2) A research-by-design method was used after the interviews to investigate how diverse the approaches of the different facilitators were while solving the same problem. Templates were provided to 6 facilitators with the same client question. On this template, the facilitators filled in how they would design 3 sessions based on that specific client's question. The templates can be found in Appendix C2.

3) Structured observations were done in 4 co-creation sessions. In these observations, the design and flow of the sessions were observed. This included observing how the facilitators are handling the group, the content and the visuals. It also included observations of the diversity of sessions in general.

4) Unstructured observations were done during the time I was working at the office. This included observing how Flatland is handling knowledge and how their company processes are structured and planned.

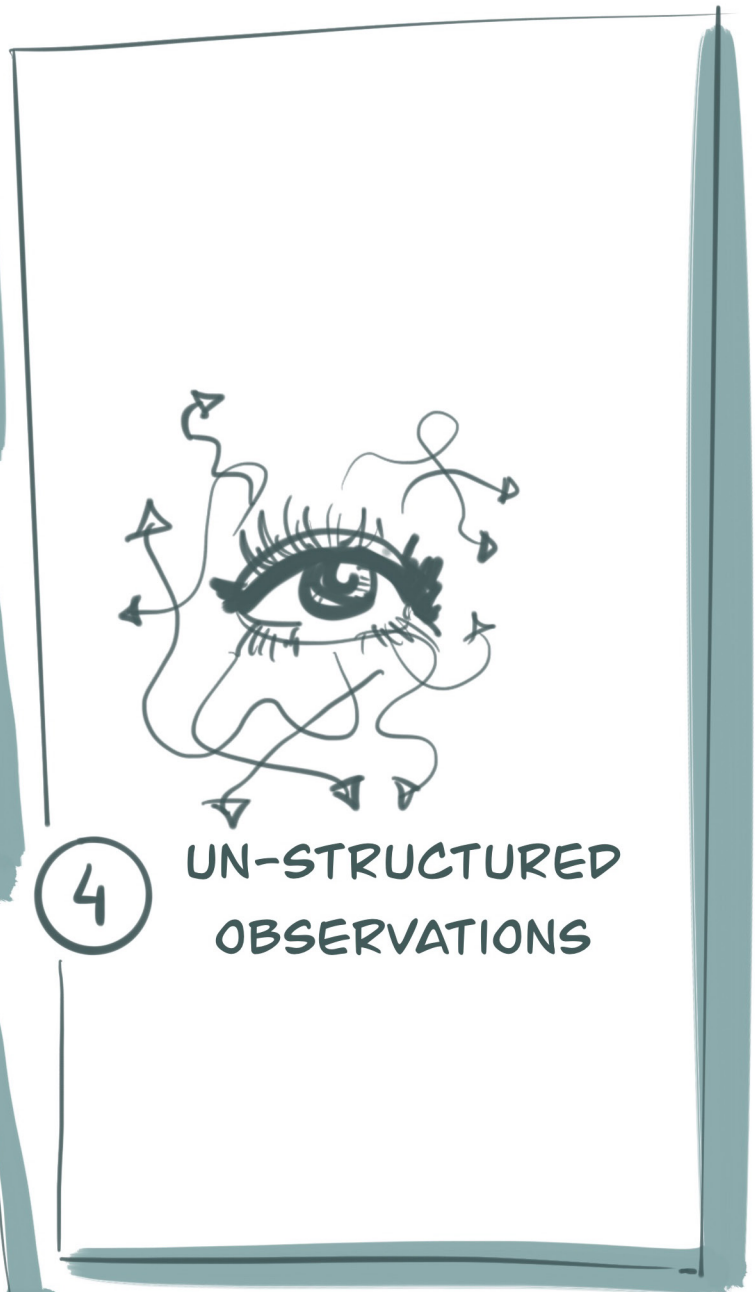
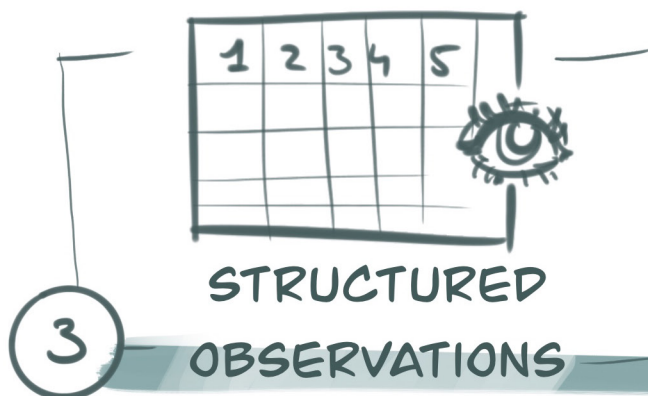
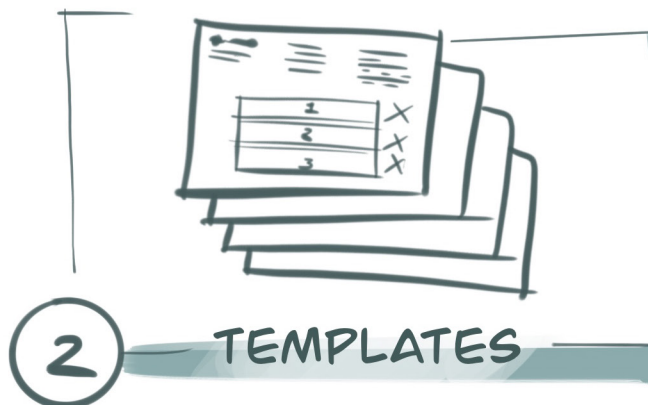
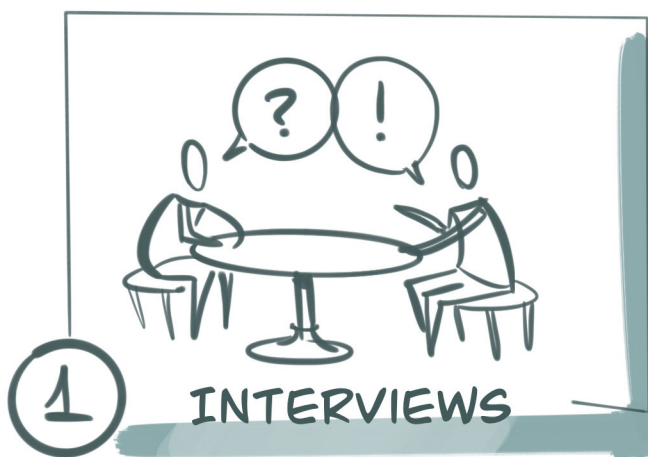


Figure 16: The approach of qualitative research

2) THE PROCESS OF SESSION DESIGN

Flatland's approach to designing and facilitating a co-creation session follows 5 stages: 1) sales, 2) align, 3) prepare, 4) session, 5) whiteboarding, and 6) deliver. If a project includes multiple sessions, the prepare, whiteboarding, and session steps are done repeatedly. Sometimes, an internal meeting with facilitator and designer of a session is scheduled, to see what the outcomes of the earlier session were and to check if adjustments need to be made in the direction of the project. An overview is provided in figure 17. This internal session is called a whiteboarding session.

Sales

In the sales stage, a project is sold to a client. The sales lead is responsible for this stage. This stage determines the boundaries of the project. From the interviews, it became clear that the sales have a big influence on the design of the session(s) of the project.

“This sounds sad, but if you are a project lead or a facilitator you are really dependent on how a project is sold because that is what determines a big part of the session.”

The sales lead determines together with their client: what the goals are of the project, how many co-creation sessions are going to take place, who is going to be present in the sessions, what the deliverables are going to be and of course, what the price of the project is. However, not everyone is selling Flatland's projects in the same way. Which leads to a bigger diversity of the projects.

“As Flatland, we have several models for projects: strategy design, maps and validation, and activation. However, person X uses a different sales deck: a simple process (a clarity-story-deliver), and a design sprint (a multi-day session in which you work towards a concrete result) and a change or activation program in which you have multiple sessions. Long story short: Flatland is doing longer strategic projects and more types of projects.”

Maps and validation is the service that has the clearest process structure: clarity-story-deliver. In the clarity phase, the goal is to co-create the clarity of the content and decide on the goal of the outcome of the project. This includes making a decision on who the target group is and what do they have to know and do with the content, and how these target groups are going to be reached. In the story phase, the earlier made content is structured in a flowing visual story. In the delivery phase, the created visual story is developed further and delivered to the target audience. Even though this clarity-story-deliver structure seems solid, not every project fits this model.

In short, the sales phase has a big influence on the design of a session and not every sales lead is selling Flatland's projects in the same way. This leads to a big diversity in projects.

Prepare

In the preparation stage, the facilitator is designing the co-creation session. He/she is updated by the sales lead in order to design for the right outcomes.

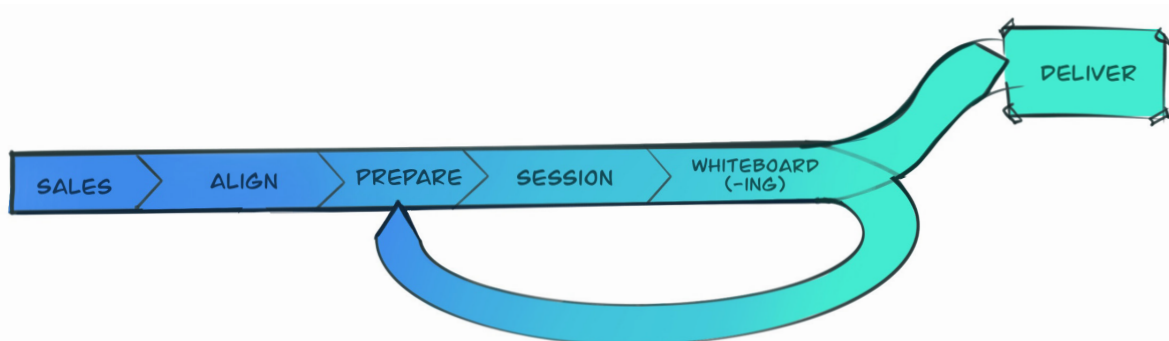


Figure 17: Flatland's way of designing a co-creation session

Sometimes session material (like templates or a concept visual) is prepared for the session in collaboration with the designer.

Not all facilitators prepare their sessions in the same manner. Some facilitators plan their sessions in detail in a tool which is called SessionLab. This tool allows you to plan every step in detail, to add tools you are going to use and plan how long every step is going to take. Others plan less in detail and write small notes done on an a5.

“The variety of individual tasks and group tasks differs, but there is not much idea behind it. So we don’t have a fine-tuned agenda and that could be the case.”

Every facilitator has different experiences on which he/she bases the design of their session.

“(…) two facilitators have different knowledge and that is why their work is different in every phase.”

Emphasis

Research-by-design templates were provided to the facilitators to find out what the differences are between all facilitator’s approaches (see appendix C2 and C3). From these templates became clear that facilitators differ in their assumptions of the design context. This resulted in the facilitators putting their emphasis in the sessions on different things.

Facilitators put their emphasis on the resource group, getting the content straight/right, or getting to the right deliverable (which was sold to the client) in their session design.

These different emphases are explained below.
Content focus: One facilitator did the most iterations on getting the content straight. This facilitator delivered filled in templates as final deliverables. He even gave participants probing material/homework to kick-start his first session. While other facilitators did not create new content in the last session.

Team focus: Two of the facilitators put emphasis on practicing the end-presentation with the resource group in combination with the end-drawing. In this way, more attention was paid to make the visual stick with the actual target group. One facilitator indicated that the visual needed to be validated in the end. This facilitator indicated that the target group needed to be present in the latest session to check whether the created content appealed to them.

Visual focus: Some facilitators already had most of their visual done the second version whilst another ended-up without one coherent visual. This made clear that some facilitators focus more on delivering a visual end-result and others focus more on getting the content right before moving to the visual end-deliverable.

Align stage

In the align stage the project team (of Flatland) gathers to discuss the roles of each team member in the session to come. Un-structured observations made clear that this phase is sometimes skipped completely or done in a rush in the train on the way to the session.

Thus, Flatland is not committing to their own structure.

Session stage

The fourth stage is the session itself. In this stage the facilitator and designer are facilitating the session. The sessions that were observed varied a lot. Their goals, the number of participants, the kind of session structures, the session preparations, and the length of the projects varied.

The most interesting observation was the following:

The facilitator and the designer of the session often discuss the positive and negative aspect of the session afterwards. This is done to understand the things that could be done better in the future or what needs to be different in the next session. However, of the 4 session that were observed, only 3 of them had a moment of reflection afterwards. Moreover, none of these reflections were written down.

Deliver stage

The fifth stage is the deliver stage. In this stage the illustrator is responsible for developing or finishing up the outcomes from the earlier session to transfer the created content to the client in a visually appealing. The templates showed that facilitators choose different end-products when designing a session. Therefore, the deliver stage has no standard form. Sometimes, Flatland sends an e-mail with the created visual to their clients. In other situations a whole creative session is designed to present the content in a more festive manner. These insights are summarised in two fields of tension.

3) FIELD OF TENSIONS

Field of tension #1: Customized work: Need for flexibility and wanting more structure

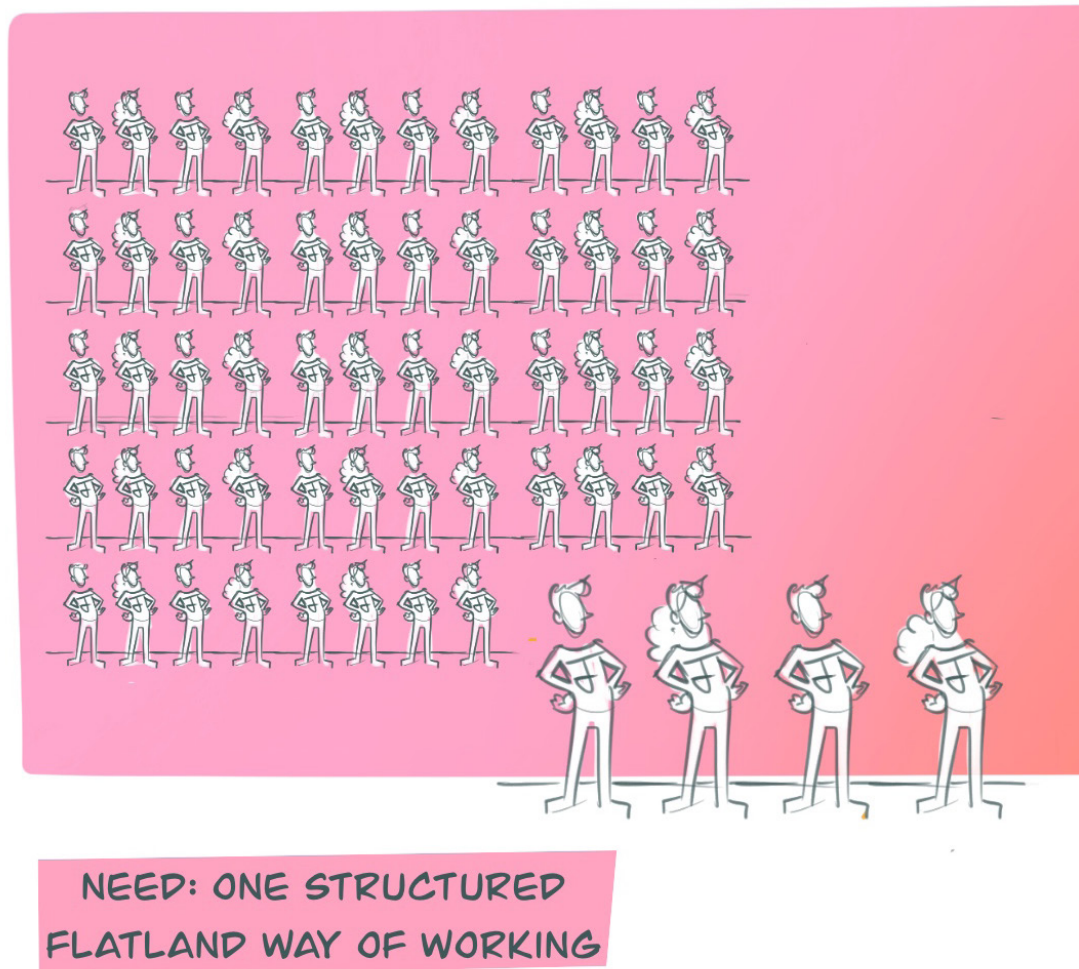
The diversity in session designs is created through the customisation of every project; this starts already in sales when multiple people are using different sales

decks. During an interview one facilitator mentioned:

“I think the Flatland way of working is we deliver customised work. We have no standard way of working. We believe our clients’ questions are so important that we look at their situation. I think that is important.”

Another mentioned: “every session is designed anew”.

Within Flatland this is observed as a strength: Flatland is delivering customised work. However, the outcome of a project depends on: who picks up the phone when a potential client calls the company, who does the sales, and who is designing facilitating the session. If a certain Flatland employee picks up the phone this may result in a different outcome compared to a situation in which another person picks up the phone. This situation could be a scary thing for Flatland’s



potential clients.

“In the Albert Heijn you buy to loaves of bread and a bottle of milk for 5€ and it doesn’t matter who is doing it. But if we do a project with a specific facilitator this will have a different output than the same project done by another facilitator. And I can imagine this can be risky for our clients.”

“(…) two facilitators have different knowledge and that is why their work is differently in every phase.”

In the interviews some facilitators see this flexibility as a pitfall:

“So we don’t have a fine-tuned agenda and that could be the case.”

“It would be practical to have more tools for designing a session”

“I believe we are bad at doing repetitive work. This leads to us reinventing the wheel, which sometimes a good thing. (...) I think we believe it is annoying to constantly repeat things.”

Thus, Flatland is delivering customised sessions for their clients by designing every session anew. However, there is a need for structure or a more fine-tuned agenda in session design.

Flatland seems to struggle with finding structure for their projects while keeping the right flexibility (see figure 18).

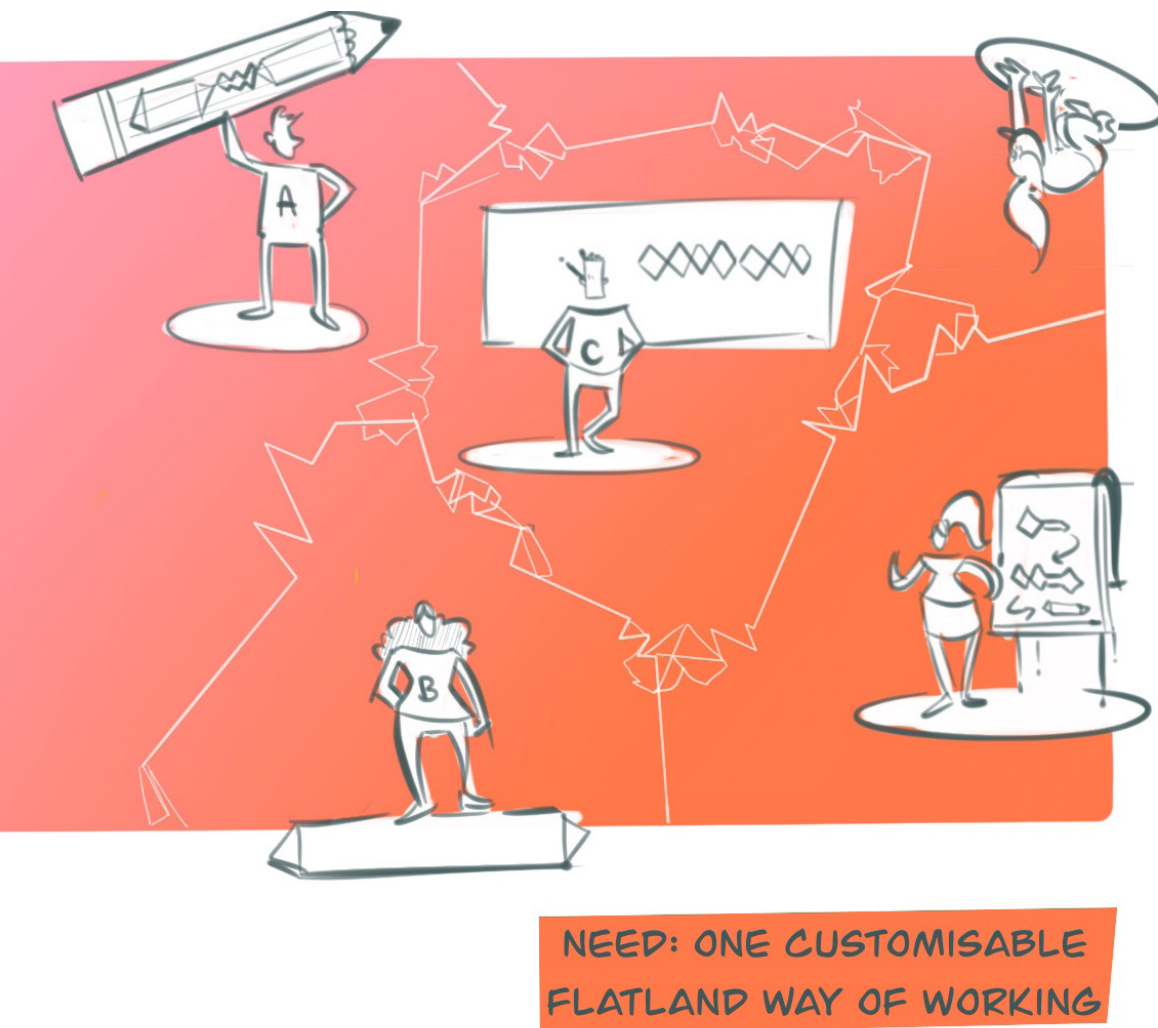


Figure 18: Field of tension 1 - The need for structure versus need for flexibility in session design

Field of tension #2: Flatland change of focus: visual-as-a-means (see figure 19)

Flatland exists for 9 years. They started by making visual notes during meetings or at events as graphic facilitators. Back then, Flatland's goal was purely to make a nice visual summary of the things that were said in those moments. Thus, Flatland's focus was on delivering a nice visual end-result.

Nowadays Flatland is a strategic consultancy. Flatland uses visuals to facilitate better collaboration between people and to get a better understanding of the content. Their visuals are used as a means to collaborate better and to grasp complexity. Flatland's way of working is a strategic asset. Even though Flatland shifted focus and is doing strategic projects now, they still mainly reflect on and share their visual end-results.

An un-structured observation was that Flatland has no structured moment for sharing knowledge about facilitation. Also, when such a moment is scheduled employees do not see this as a priority.

Every Monday morning there is a stand-up, the so-called Huddle XL. In this Huddle XL, Flatland shares several things: their strategic plans, how well they are performing in sales/marketing and if their targets are met for the month. The final topic of these Monday morning stand-ups is for people to discuss the projects they delivered the week before. However, the things which are discussed are based on the printed visual end-result only and not how the visual came to be or how visual was used as a means during this project.



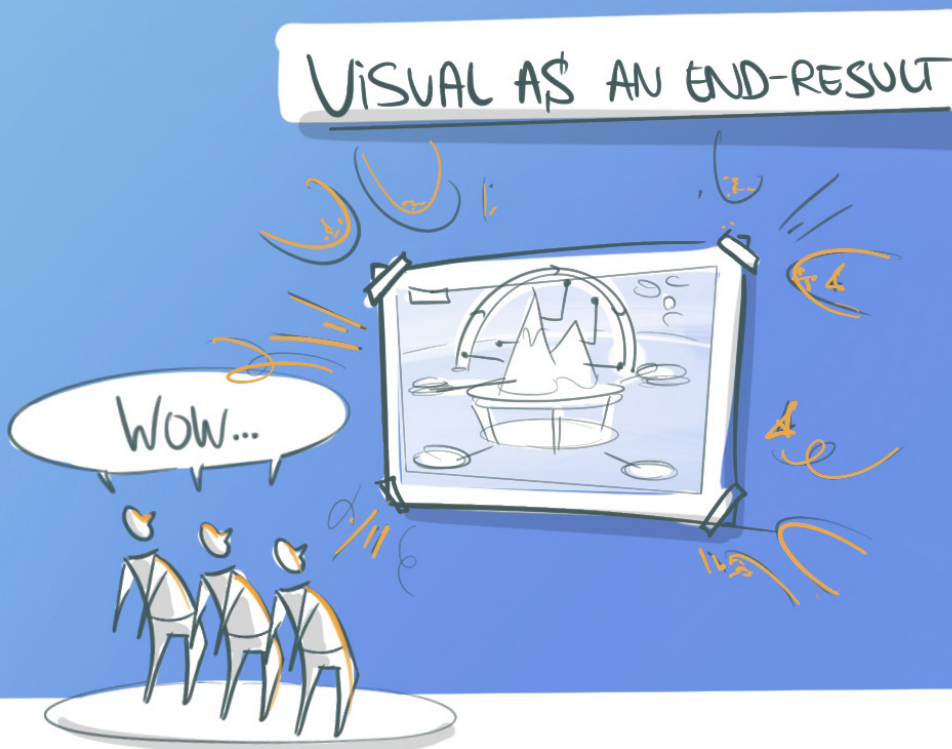
Figure 19: Field of tension 2 - Sharing knowledge on using the visual-as-a-means versus sharing knowledge on the visual as an end-result

“We share our session design a lot less, it has to be in some specific setting or it has to be a presentation of some sort, or it has to be in a Facilitator-learning-line workshop. But, if I print out my session planning and would put it in ‘het bakje’ I still would explain the drawing of the project because it is another piece of content.

Besides the Huddle XL, Flatland developed knowledge sharing moments for each of their employees’ roles. For the sales leads, they created a moment which is called the sales monthly. Flatland developed the Illustrator-learning-line. This initiative is created for all the employees who are interested in developing their drawing skills. Every month there are moments in which people share their knowledge about specific topics about drawing, for example, human anatomy, colour,

perspective and so on. These sessions are very popular amongst the employees. Sometimes an external person is hired to give a lesson about a certain topic. For the facilitators, there is thought of a facilitator-learning-line. However, during the time I was working at the office, these meetings were postponed several times and later canceled. They did not take place at all.

Thus, Flatland is not focussed on sharing knowledge of facilitation, but they are focussed on sharing knowledge about drawing and illustration. This leads to the following paradox. Flatland states that their business is about using the visuals as a means, but they only reflect on their visuals as end-results.



04

REFRAME OF THE PROBLEM

Based on the fields of tensions of the previous chapter, a reframe of the design brief is formulated.

The original design brief will not solve the threats that arise from the fields of tension. In this chapter, a reframe is proposed based on the insights of chapter 3. Figure 20 shows Flatland's current situation, with its two biggest threats. The following threats arise from the qualitative insights from chapter 3.

Threat 1: Threat of Knowledge Scarcity

The design of the sessions and therefore the way Flatland delivers the value of the services is based on their knowledge and experience. This knowledge is scattered amongst the different facilitators. For Flatland it is difficult to manage the company's knowledge on facilitation. Every facilitator has their own experience,

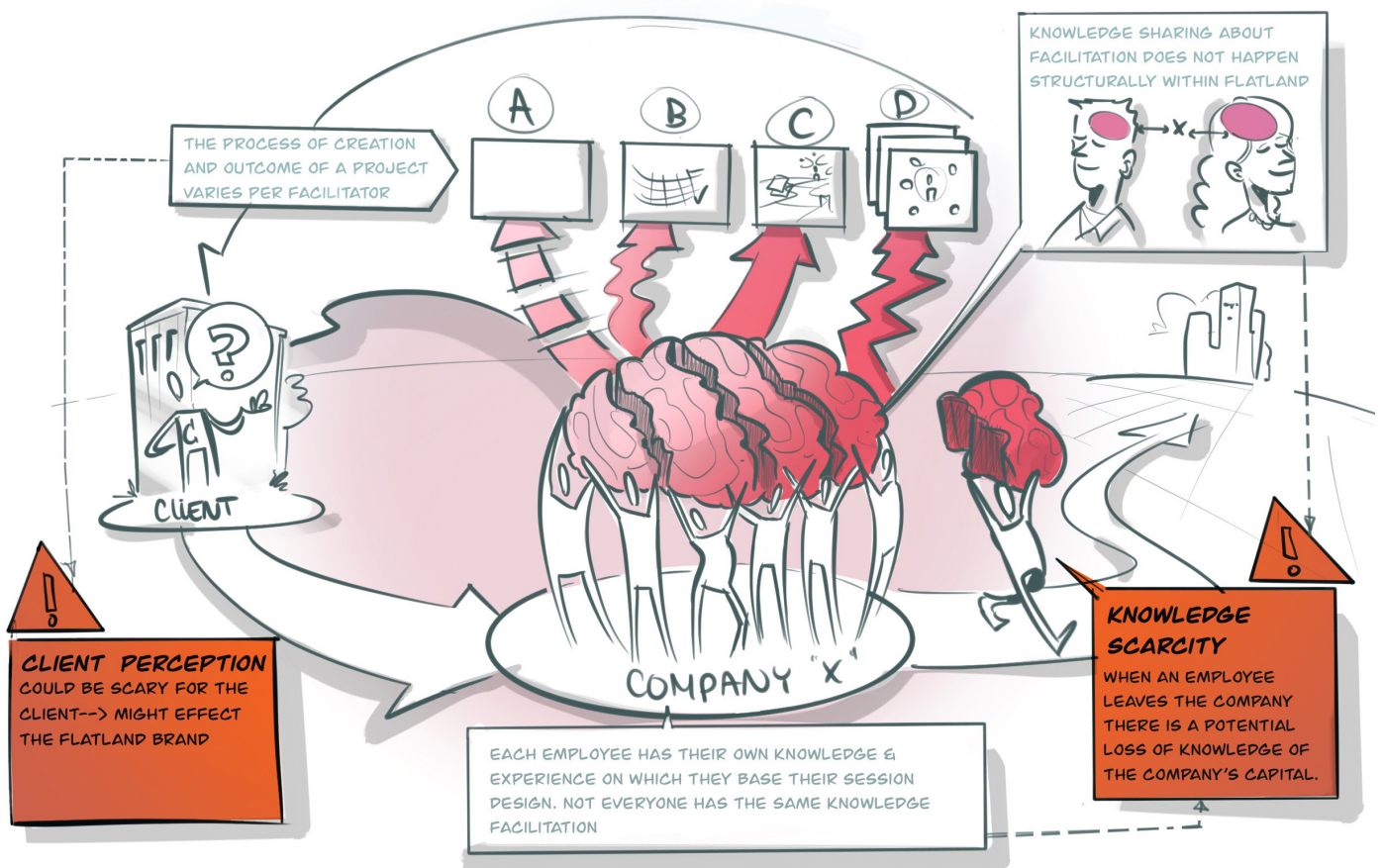


Figure 20: Threats that arise from the of fields of tension

background, and knowledge on which they base the design of their sessions. This knowledge is tacit which means that it can only be transferred through the interaction of employees of Flatland. It is difficult to code or to save somewhere besides in the human minds. However, this knowledge is not shared structurally within Flatland. Imagine that half of the staff leaves Flatland including some of the most experienced facilitators, there is a threat of knowledge scarcity in Flatland. This means that there is not enough knowledge within Flatland about session design and facilitation to deliver all the needed services for their clients. Flatland's services are depended on the knowledge of their employees, but to rule out knowledge scarcity, facilitators need to share their knowledge amongst other facilitators more structurally.

Threat 2: Client perception

Flatland has a lot of facilitators with various backgrounds and every facilitator has his/her style of facilitation. The fact that every session is designed anew and facilitators have their style, results in a large variety of sessions designs and therefore session outcomes. This can be a potential threat for Flatland.

As Flatland is aiming to grow their team towards 30-50 people in the upcoming years, the diversity of projects will only grow.

Potential clients find it currently already difficult to know what to expect from Flatland, as their services are difficult to understand. The potential growth of diversity will make it even more difficult to completely grasp what Flatland is offering.

A new structured approach of session design and evaluation could be a benefit for new employees and potential clients to understand the services of Flatland. This would make it easier for new employees to learn Flatland's methods.

How to overcome these threats?

To overcome these threats, Flatland must structurally share their knowledge about facilitation and session design. This will help every facilitator in designing their sessions more deliberately. However, to make Flatland's facilitators share their tacit knowledge, this knowledge needs to be made explicit. A structured reflection process can help Flatland to achieve this goal.

When every facilitator is reflecting on their sessions and experiences, they can create tangible knowledge about session design. When they share this knowledge structurally with Flatland's facilitators, this will eventually help Flatland in designing their sessions more deliberately. Figure 21 shows the reframe of this thesis.

Reflections enables designers to be more aware of situations and make them more capable of creating plans to solve new problems (Hong & Choi, 2011). Which is the goal of this thesis: to make Flatland's session designers (the facilitators) design their session more deliberately.

Reframe:

“Design a reflection process for Flatland in which their creative facilitators (and designers) can iterate on their visual thinking session design and tools, to enable a more deliberate design approach to Flatland's sessions”.

Sidenote to the reframe

Directly providing session design guidelines is not going to help Flatland to design their co-creation sessions more deliberately, because Flatland's employees need a certain amount of flexibility in their creative design approach. However, Flatland needs structure to grow as a company (see Appendix D1). This sidenote explains why a reframe is needed in this thesis, more explanation can be found in Appendix D1.

Creative organisations & individuals need flexibility

Flatland is a creative organisation with a lot of creative individuals. These creative individuals, including the

facilitators, need flexibility to deliver their creative services of session design. As a company, Flatland is managing their creative capacity well. Their employees are provided with a lot of flexibility to design their session in their own way and there is a lot of room for experimentation to improve their services. This allows them to experiment with new ideas and original approaches (Boone, & Hollingsworth, 1990).

However, Flatland has a need for structure as well, as they want to grow as a company (Greiner, 1989). A reframe is needed to help Flatland design their co-creation sessions more deliberately without losing their flexibility of their approach.

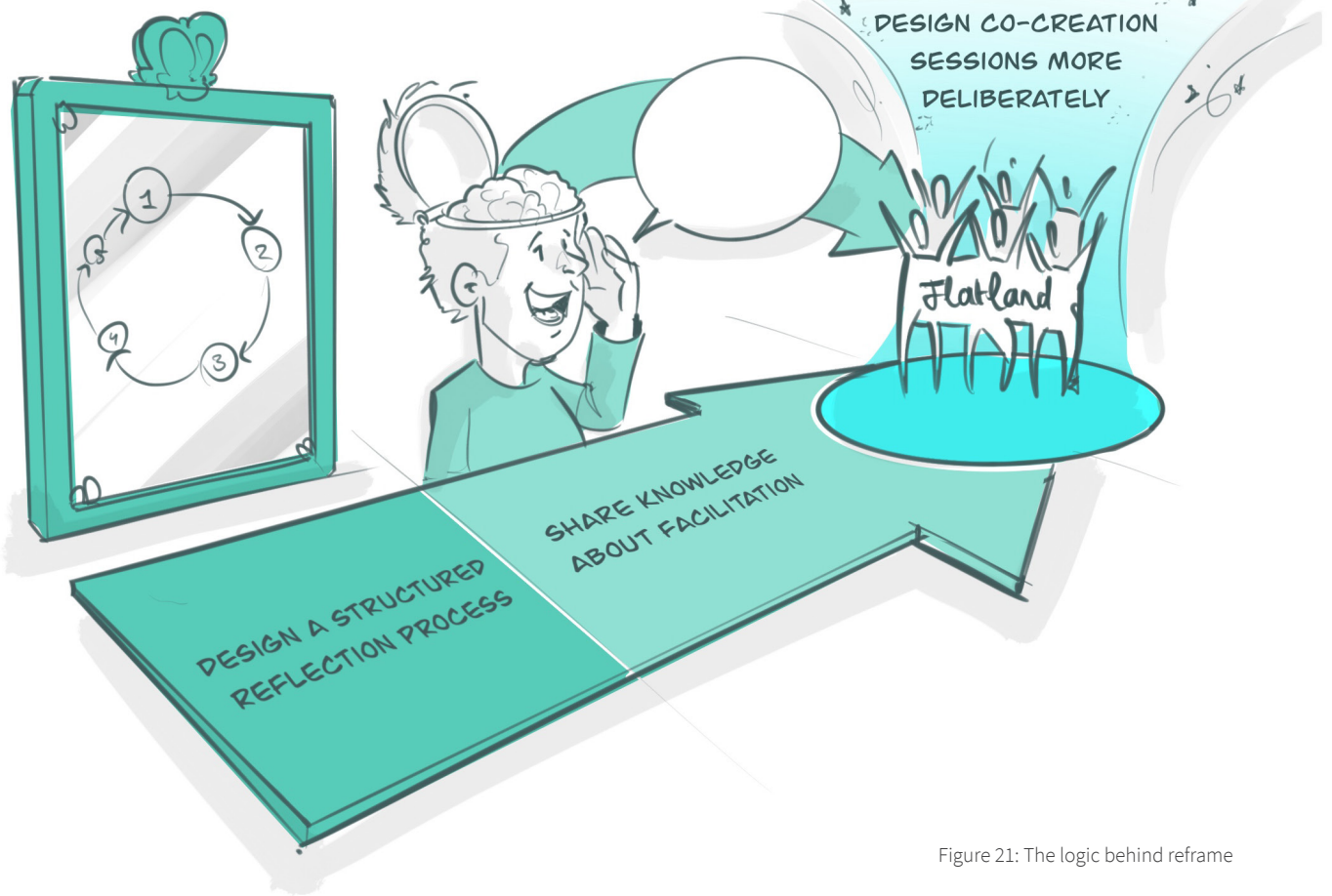


Figure 21: The logic behind reframe

This thesis aims to design a structured process for Flatland, but the reframe deliberately aims to maintain Flatland's creative flexibility. By focusing on designing a structured reflection process, the different session design approaches of Flatland are untouched and therefore, the flexibility of their facilitators can still lead to creative value and service solutions.

05

REFLECTION PROCESS

This chapter describes a plan for Flatland to implement a reflection process in their way of working.

First, an introduction to reflection is given. Secondly, a future vision for Flatland's reflective process is described. This is followed up by an explanation of an ideal reflection process for Flatland.

After this, an implementation plan is provided to ease

in the reflection process in Flatland's way of working.

Several tools are discussed in this implementation plan that support Flatland in the reflection process and supports them in implementing the process. An

overview of this chapter can be found in figure 22.

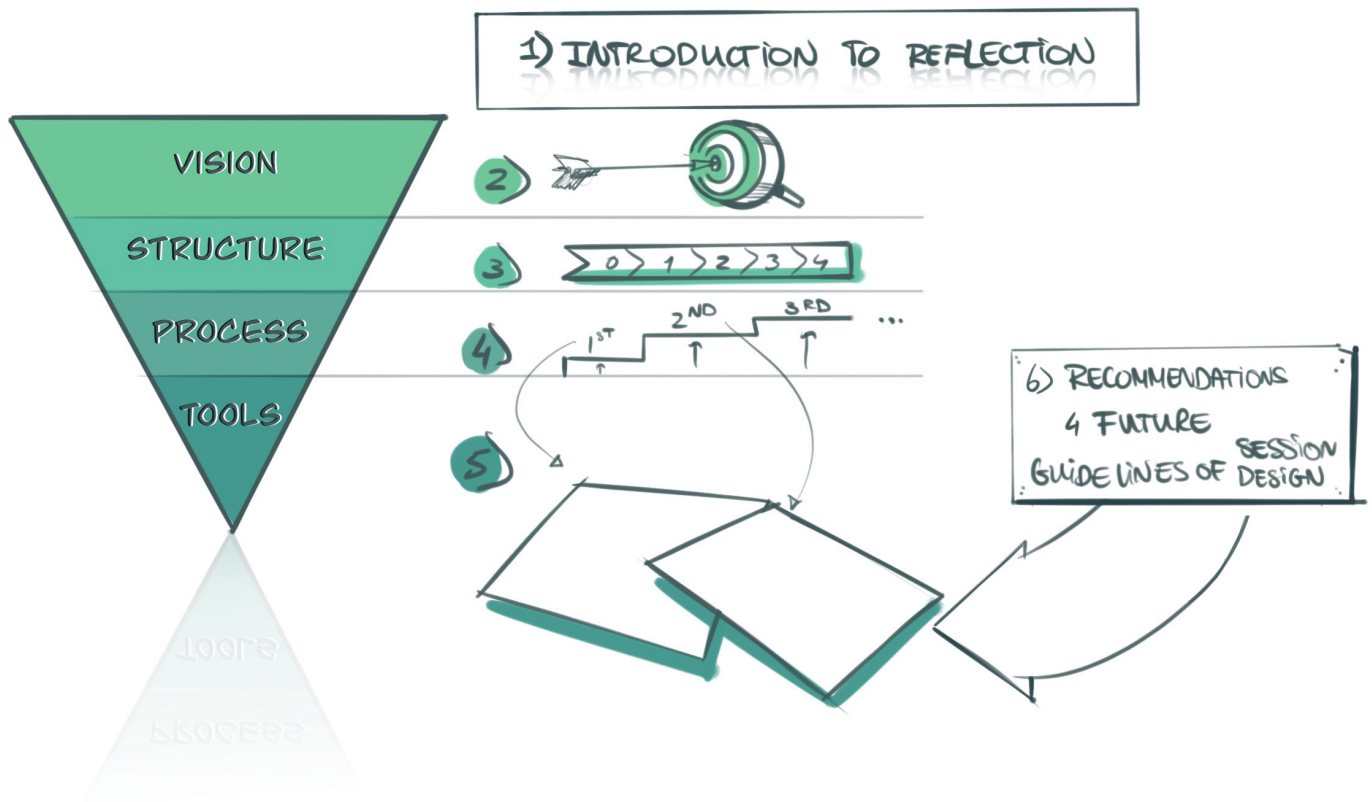


Figure 22: An overview of chapter 5

1. Introduction to reflection

Reflection can be seen as a learning process. Kolb (1984) developed a model for this, the experiential learning model, see figure 23. This model contains four steps: (1) A concrete experience, (2) observations and reflections, (3) generalisations of abstract concepts and (4) testing these new concepts in new situations. The model starts by describing an experience (I). This step is followed up by a reflective observation which is an analysis of the earlier experience (II). In this second step new data is gathered to find out why this experience took place, if it was a positive or negative experience, and how it can be improved, accelerated, discouraged, etc. In the third step, abstract conceptualisations are formulated that suggest new actions for the future (III). The final step is

carrying out these new actions, which results in new actions and new behaviour (IV). Behaving in a new way will result in new experiences which is the start of a new reflective cycle as this is a new experience (I).

Difference between Evaluation and Reflection

Reflection is often mistaken for evaluation or the other way around. But how is it different? Evaluation is a step of reflection according to Paterson and Chapman (2013). An Evaluation is done to score a specific moment to conclude if it went well or if it did not go well. Evaluation does not directly include an analysis of why a situation occurred. Thus, the model of Kolb evaluation is included in the second step.

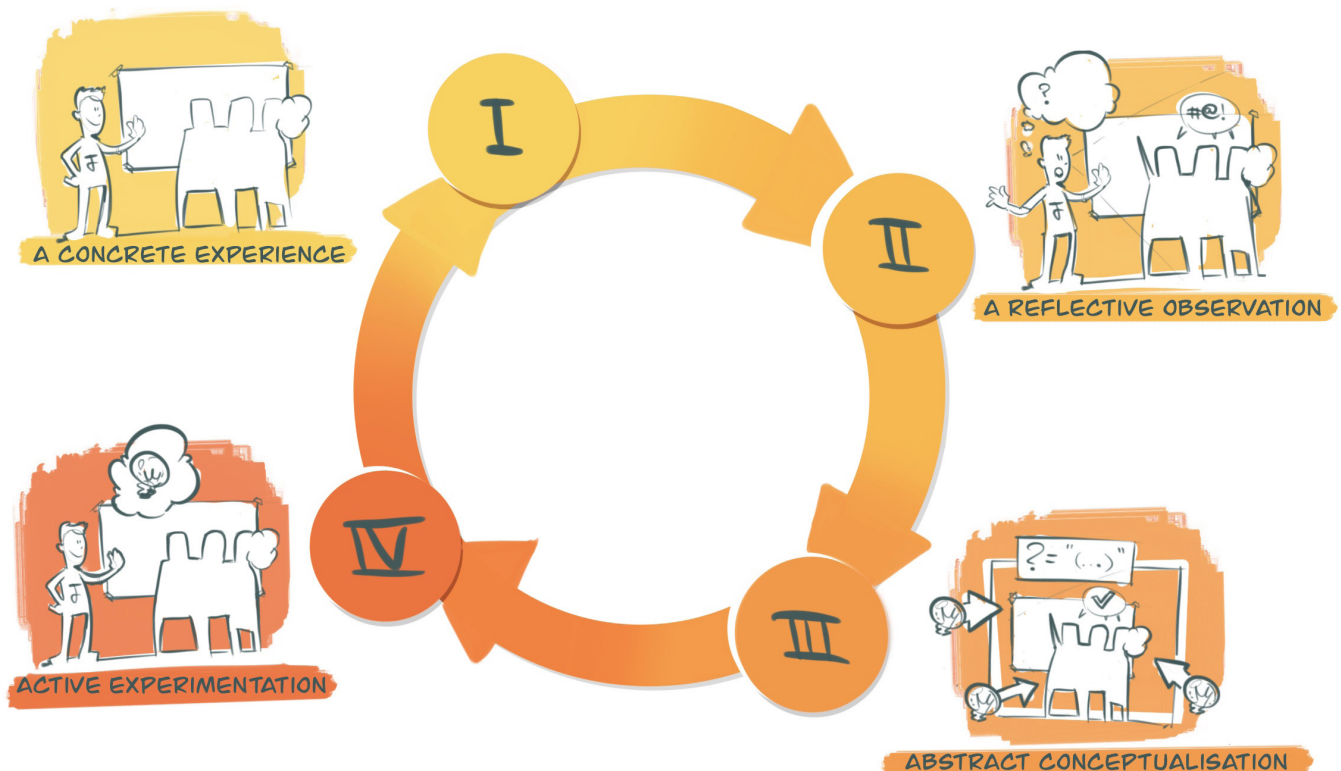


Figure 23: The experiential Learning model from Kolb (1984).

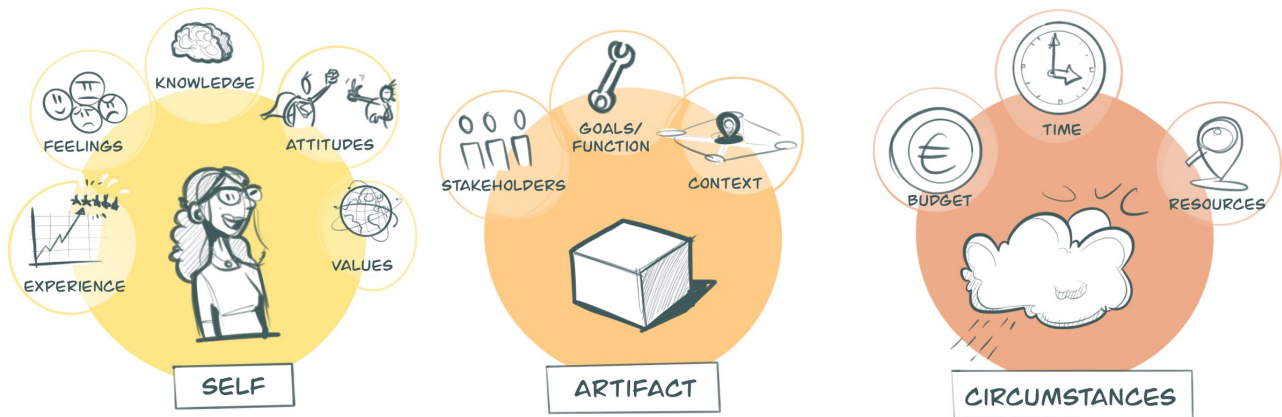


Figure 24: The objects of reflection according Hong & Choi (2011)

Object of reflection

In literature it is stated that designers can reflect upon different objects (Hong & Choi, 2011), see figure 24. Designers can reflect on themselves, their artifact and the circumstances of their design process. Each of these three elements has sub-categories on which can be reflected. When a designer reflects on themselves, he or she can reflect on their knowledge in a specific situation, if they experienced similar situations before, their attitudes, feelings, and values.

When reflecting on an artifact, the designer can reflect on the goal and function of the artifact, how stakeholders interact with it and the context of the artifact.

When a designer reflects on the circumstances of their design, they can reflect on the time, budget, and resources of their process.

Level-of-reflection

Besides the differences in the object of reflection, reflections can have different levels: single-loop and double-loop reflections (Hong & Choi, 2011). In a single-loop reflection a person is reflecting on their specific strategy to get to a certain goal (see figure 26). For Flatland this means reflecting on their methods, their session design and the tools of a session. In a double-loop reflections a person is checking whether their set goal was the right goal to solve (see figure 25). For Flatland this could mean that they reflect on the sales of a project. For example asking oneself, were the project goals and/or sessions goals the right ones to solve? Thus, reflections can have different levels and objects. But, how does an ideal reflection look like for Flatland? A vision is created that describes the ideal reflection process for Flatland.

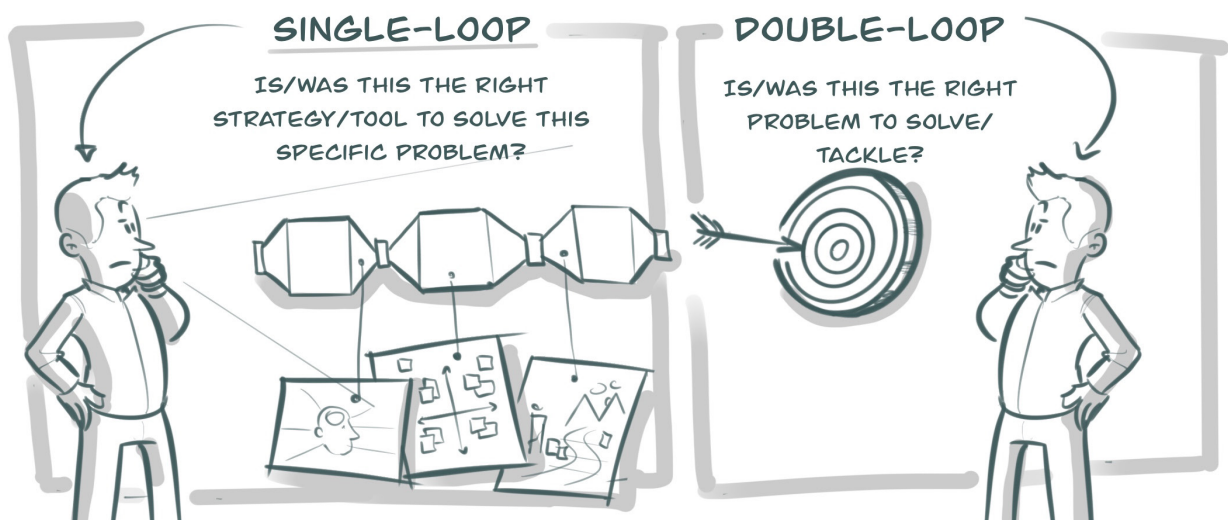


Figure 25: Single loop and double-loop reflection according to Hong & Choi (2011)

2. Future Vision

In an ideal state, Flatland is reflecting on their sessions (and designs) and sharing insights about these sessions as part of their routines. Experiences in facilitation are analysed, knowledge about facilitation is created, shared and saved during Flatland's everyday work. This happens effortlessly; the steps are part of Flatland's routines. These reflection steps result in new insights for all employees of Flatland. Reflections are not done to learn individually but done to learn and grow as a company. It is expected from Flatland's employees to share their insights and knowledge gained from their projects internally. Figure 26 is showing the future vision.

A bubble gum machine is chosen as an analogy. The gumballs represent the insights of facilitation. Before you can take knowledge out of the machine you have to put something in. It is a shared responsibility to create knowledge for one another. Thus, as a facilitator, you have to put the specific effort in to create knowledge that somebody else can benefit from.

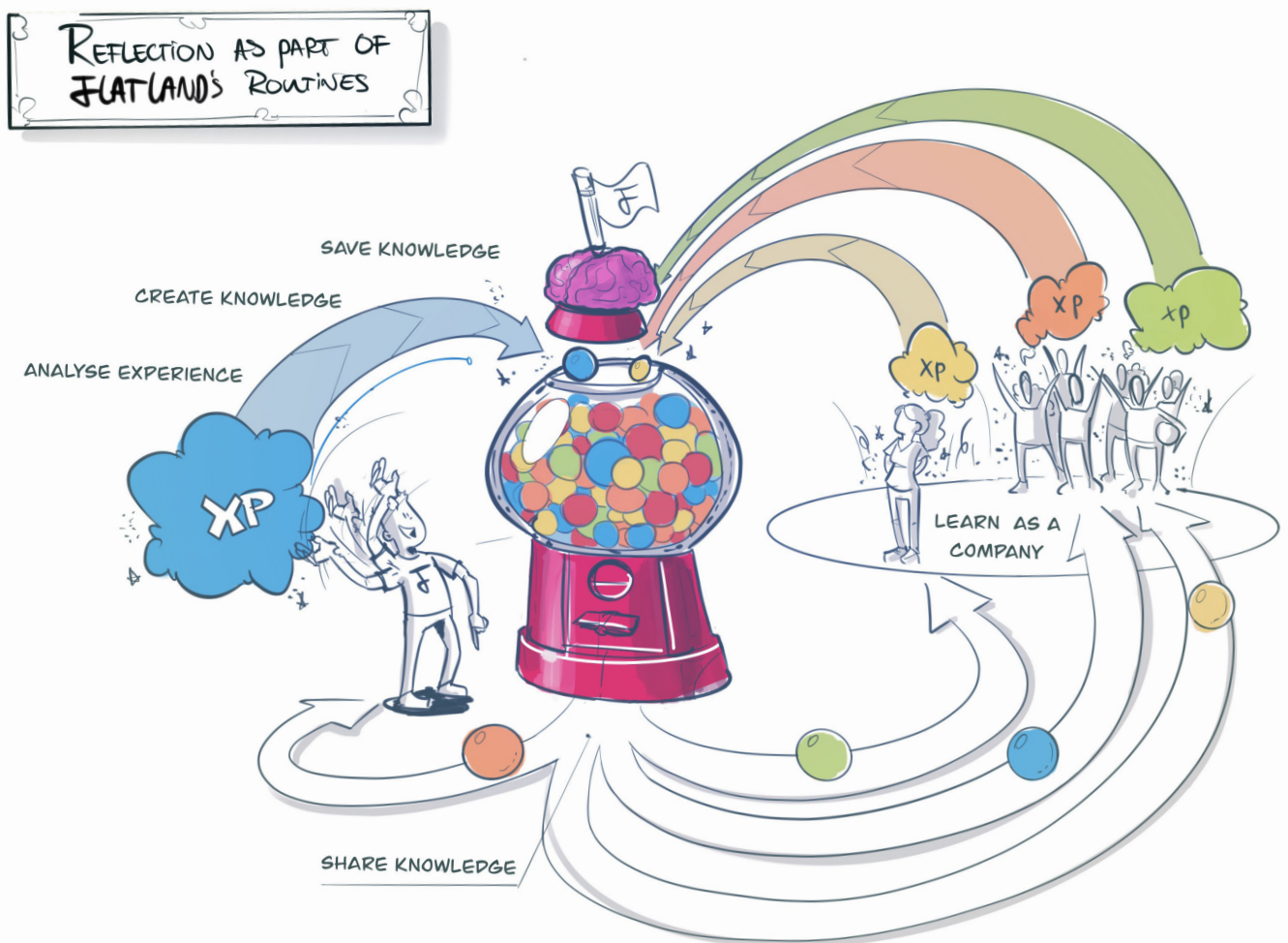


Figure 26: Future vision for a reflection process for Flatland

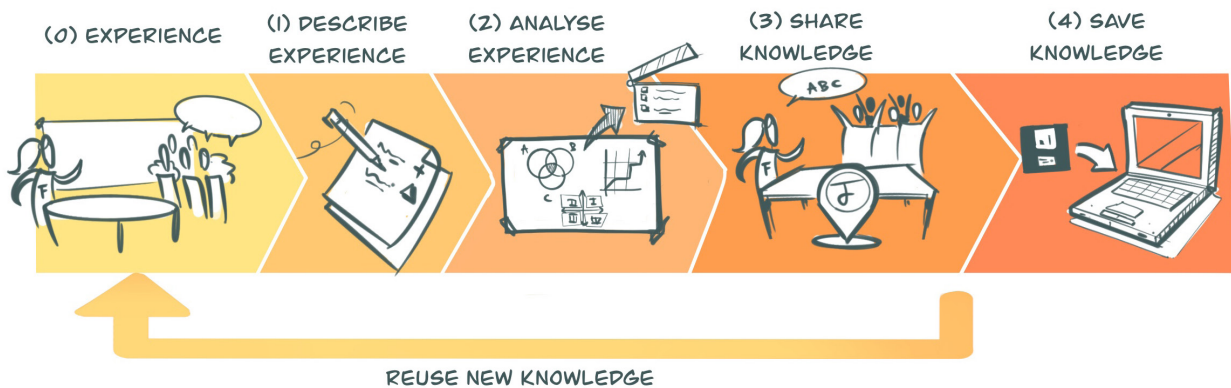


Figure 27: The ideal reflection process for Flatland

3. The Reflection process for Flatland

Implementing these steps in the context of Flatland and its facilitators would ideally have 5 steps see figure 27.

It moves from (0) an experience, (1) describing the experience, (2) analysing this experience into a new concept of knowledge, (3) sharing this knowledge with other facilitators, (4) save this knowledge to be able to reuse it in other projects and sessions. The suggested steps are explained below:

(0) An experience



Figure 28: Step 0 of reflection process of Flatland

In this step, the facilitator and designer are facilitating a session. During this session, a moment occurs that they did not expect, an element of surprise. Such an

element is the base of this reflection (Schön, 1983). An unexpected moment initiates reflection as it causes an internal conflict with someone's routines.

(1) Describe experience:



Figure 29: Step 1 of reflection process of Flatland

After the session, the facilitator and the designer shortly discuss and write down their elements of surprise in a plus-delta-action format of the session. The 'plus' stands for what went well during the session, the 'delta' stands for the things that can be improved and the 'action' step makes sure that the facilitator and designer are aware of what needs to happen with this insight. This includes a consideration of the target group for whom this insight is interesting and discussing whether this insight needs more analysis.

(2) Analyse experience

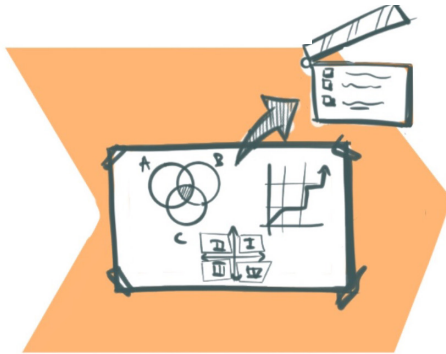


Figure 30: Step 2 of reflection process of Flatland

In this step, the earlier written down plus-delta-actions are further analysed. Why did this moment occur, can it be optimised, does it need to happen more or less often in the future, etc? This step needs to direct the facilitator and designer to reflect on the session and its design. Ideally, the facilitator and designer who are reflecting are aware of what kind of objects they are reflecting upon and which level of reflection they are dealing with.

(3) Share knowledge with others



Figure 31: Step 3 of reflection process of Flatland

This step makes sure that not only the facilitator and designer of the session benefit from their learnings but that other employees benefit from it as well. The moment of sharing knowledge depends on who the knowledge is for.

Flatland created several moments to share their knowledge: the Monday morning Huddle, F-learning

line, I-learning line, monthly sales meeting, etc. The knowledge needs to be shared in the right place in order to make it land/stick.

(4) Save created knowledge



Figure 32: Step 4 of reflection process of Flatland

This is the final step of the reflection, which makes sure that no created knowledge gets lost. After sharing the knowledge with the right person the new insights can be saved in one specific place, digitally. This makes sure that others can reuse the saved knowledge when it is needed for new projects. Thus, after sharing the knowledge somebody needs to convert the knowledge and save it somewhere. Somebody needs to be assigned to do so.

These steps are the lay-out for the implementation plan. This is explained in the coming pages. An implementation plan is created in order to make Flatland adopt these steps gradually.

4 Implementation strategy

To make Flatlanders reflect on their experiences and share their knowledge about these experiences structurally, they have to change their way of working. Changing the way Flatland work, does not happen overnight.

Flatland is a small company which is completely project driven; they finish several projects per week. Designers and facilitators are doing multiple projects in the same week and they have multiple projects running next to each other.

Literature tells us that people often tend to avoid reflection just when it is most needed: when they are under pressure (Thompson & Pascal, 2012). This is what happens with Flatland, Flatland is completely project focussed which results in them skipping their project reflections and evaluations. Flatland's employees are moving from session to session and from deliverable to deliverable in a short amount of time. The primary processes of Flatland: facilitating sessions, delivering content and finishing up deliverables are prioritised over secondary processes like reflection and knowledge sharing.

This makes implementing a structured reflection process complicated as it is going against Flatland's culture. Simply designing a reflection process or template is not going to change the company's way of working.

Thus, the question is: how to implement a structured reflection process within Flatland?

An implementation strategy is created to make Flatland gradually adopt a reflective way of working. This plan is described below and can be seen in figure 33. It consists out of 3 stages: 1) reflection is linked to a project, 2) Reflection as part of a project, and 3) reflection as part

of routines. Per stage the reflection process gradually becomes more extended. The stages are explained on the following pages. Per stage new tools are proposed to support Flatland in their reflection process.

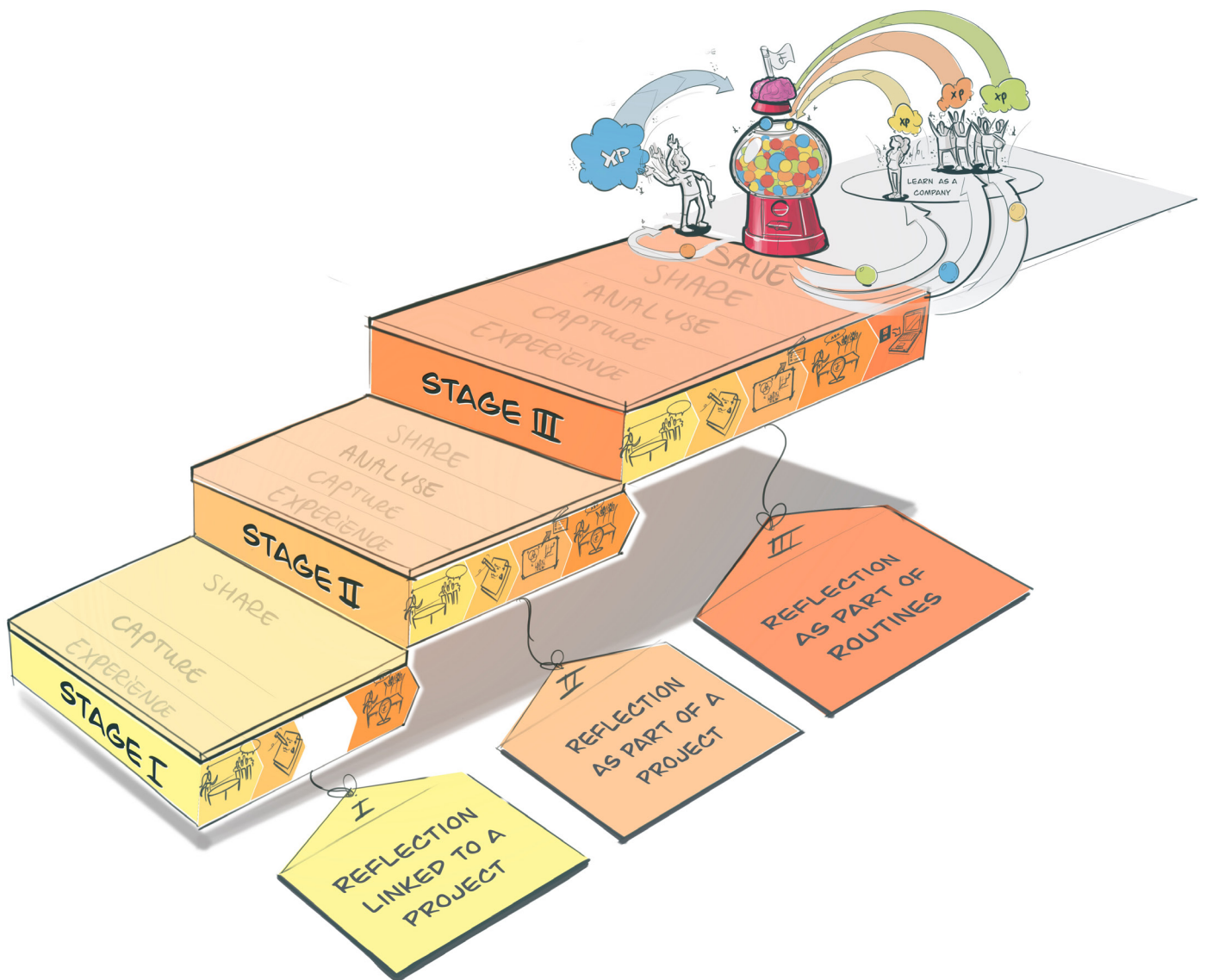


Figure 33: The implementation strategy of the reflection process, including 3 stages

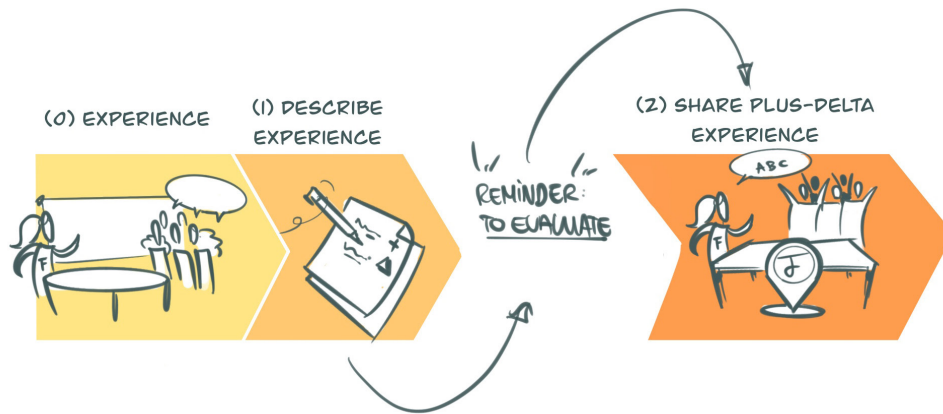


Figure 34: Stage 1 of implementation strategy

STAGE 1: Reflection linked to a project

GOAL: Trigger reflection & create awareness

The first stage of the plan focusses on making Flatland aware of the reflection process and that they need to share their insights to learn as a company.

Currently, the facilitators and designers do not share the insights they get from facilitating their co-creation sessions. This needs to change in this step.

(1) Describe experience

The observed co-creation sessions revealed that when reflections of a co-creation session take place, they normally follow a plus-delta format. The designer and facilitator discuss things that went well and things that can be improved. These discussions were not recorded.

This implementation strategy stage focusses on reminding the facilitator and designer to write down their plus delta and to save it. Besides writing it done, an extra element is opposed: 'the action step'. This step makes sure that the designer and the facilitator formulate action points based upon the plus-delta. These action points are written down. When formulating an action point the person describing it needs to think about:

- For whom is this reflection interesting?
- Do we understand why it happened?
- Does it need more thinking/analysis?

- Do we need somebody to help us to make sense of this?
- When can we inform people of the findings of this session?

After the plus-delta-actions are written down, they are saved on a big poster in the office. Per project, these plus-delta-actions are saved. This big poster serves as a reminder to do plus-delta-actions and as a reminder for further analysis. This large poster is located where the Monday morning Huddle takes place, so that these insights can be shared if necessary during the Monday morning huddle. In this way, everyone is reminded of the fact that reflections are needed to improve the knowledge of facilitation and session design.

Awareness campaign

Besides reminding Flatland's employees to reflect, these employees should be motivated to reflect. This is why an awareness campaign was designed.

"How to avoid learning as Flatland"

This campaign aims to trigger Flatland in not doing the things portrayed in this campaign. These trigger images are going to be put on the wall in the office and can be shared over communication tools like Microsoft Teams. Some example images can be seen on the right, see figure 35 and in Appendix E1.

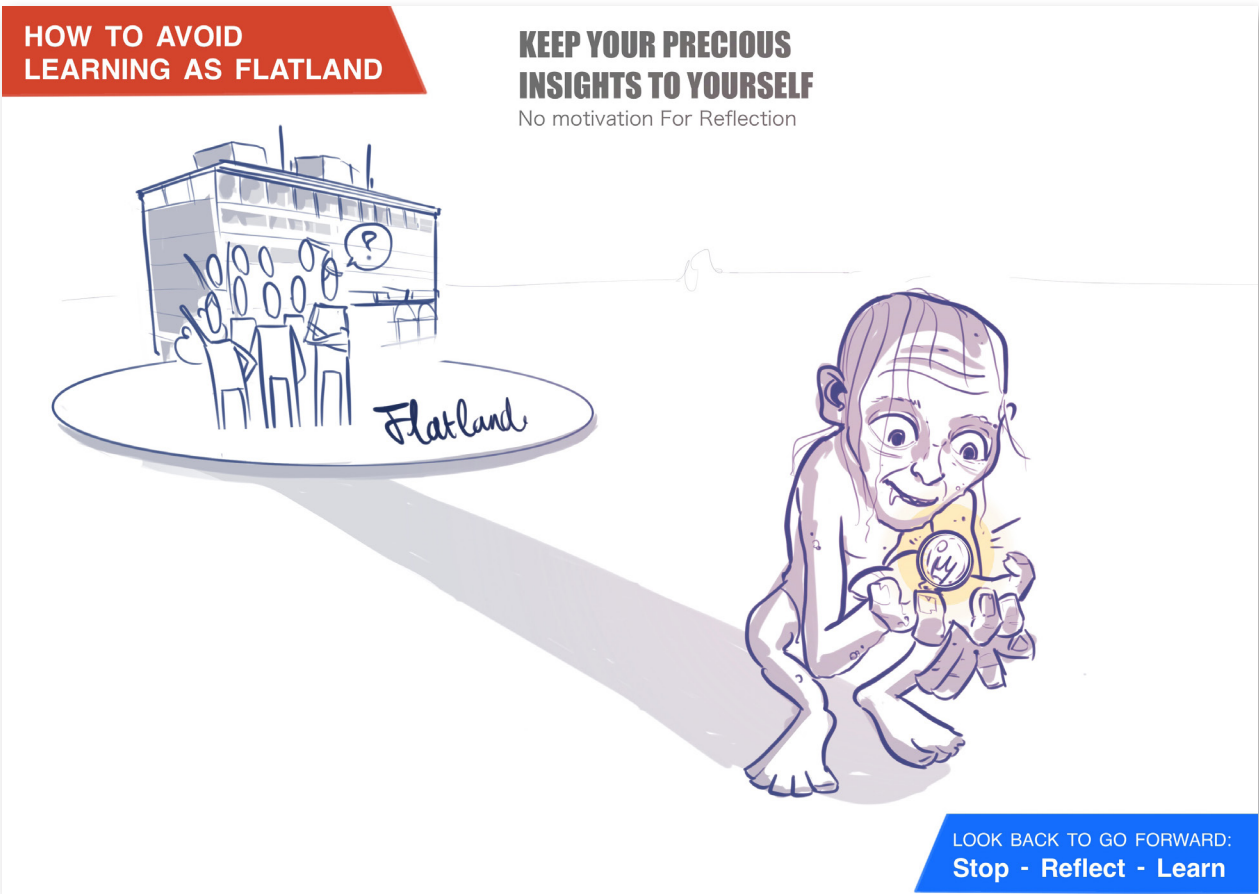


Figure 35: Examples of the campaign “How to avoid learning as Flatland”



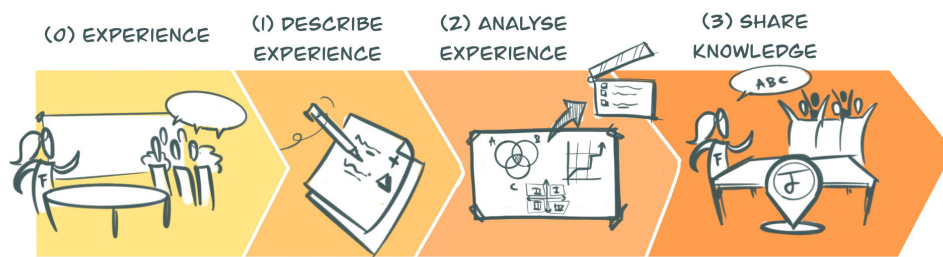


Figure 36: Stage 2 of implementation strategy

STAGE 2: Reflection as part of a project

GOAL: *Stimulate reflection: describing moment and analysis moment, and sharing knowledge*

In the second stage, the goal is to make Flatland reflect more structurally and based on the same content.

In the experience analysis step (step 2) the facilitator and designer analyse the earlier written down plus-delta-actions and try to make sense of what happened. A formatted explanation template (an explainer) is designed to structure the reflection, which could help to make sense of the experience.

This leads to more profound knowledge about session design and facilitation. After analysing these insights it is easier for Flatland to formulate action points, and to inform the group.

Analyse experience with a shared language

An explainer is designed to structure the object of reflection (Hong & Choi, 2011). This can be seen in figure 38. This explainer indicates important aspects of the session that should be reflected on. In all of Flatland's co-creation sessions, there is a goal for the content and participants of the co-creation session.

For example, the content needs to be validated, generated, or decided upon. The participants often need to grow their confidence in the creative process, need to share their information with each other, or common understanding needs to be created, for example.

The facilitator and designer use facilitation tools (some of which are visual) trying to reach these goals. This element of the explainer aims to reflect upon whether these tools were the right ones for supporting the participants in dealing with each other and the content. The explainer also helps to reflect on the goals of a session or project (double-loop reflection, see figure 38). In Flatland's case, these are influenced by circumstances like the sales, the client's goal, time, budget and location. All of these things influence the session. More explanation about the design of the reflection template and explainer can be found in Appendix F1 and F3.

Formulate action points

After the designer and facilitator made sense of the plus-delta with the explainer, new action points need to be formulated. So, who needs to know of this insight? Is it the project team, the client, other facilitators or designers? In what kind of form do we need to structure this information? Is it input for a new sales deck, a new tool for facilitation or something else? When is the best time to share this insight?



Figure 39: Stage 3 of implementation strategy

STAGE 3: Reflection as part of a routine

GOAL: *Routinise reflection: describing moment and analysis moment, and sharing knowledge and saving knowledge*

In the last step of the plan, Flatland needs to own the reflection process as part of their projects. No project is supposed to finish without reflection. Knowledge about facilitation and session experiences are shared and saved structurally.

Delta-Plus-Action

This step allows the facilitator and the designer to collect a situation of the project that went well and pinpoint a moment that can be improved. Moreover, further action points are formulated to find out if others can benefit from these insights, and if so, who.

Analyse moment: this moment will happen during the whiteboarding sessions or evaluation sessions. Here the earlier collected plus-delta-actions are analysed based on the same terms/shared language. Questions need to be asked like: why did these moments occur and what can be done to make this happen more/less often?

Observations can be done by facilitators who want to learn from other facilitators. While doing observing, it is interesting to write down plus-delta-actions from sessions that is observed and afterwards analyse these notes with the facilitator who facilitated the session. These insights should be recorded by the observer, who

was given the possibility to learn from another, to be able to make others learn from the same experience as well.

According to their contract, every Flatlander has the right to expand their knowledge in the so called rfi-time, the room for inspiration. These observations can be function as useful activities for this rfi-time.

Sharing knowledge

Sharing knowledge about facilitation should happen in a more structured way not only during the Monday morning huddle, as this sharing moment can not take too long during the Huddle. There needs to be a moment in which everyone of the team is present, receives new knowledge and is given a possibility to discuss the knowledge presented.

This moment could for example be during the lunch. A lunch lecture is an ideal situation for this knowledge sharing. For this moment of knowledge sharing, a structured way of presenting the knowledge would help the facilitator and designer of a session to structure and summarize the information which needs to be shared to the team. All suggestions for sharing and saving knowledge can be seen in figure 40.

Saving knowledge

After sharing this knowledge, the knowledge needs to be saved somewhere. Otherwise, it is going to be difficult for flatland to reuse it.

Depending on the content of lunch lecture, this knowledge can be converted to knowledge for sales, project design, session design, and or session design tools, and or facilitation methods. There needs to be a specific place and format to help the facilitator or designer to structure and save their insights. Some suggestions for tools are provided to help Flatland save and reuse their knowledge of facilitation and session design can be seen in figure 40.


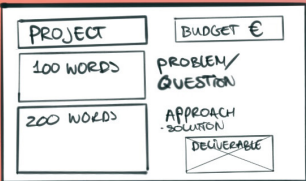
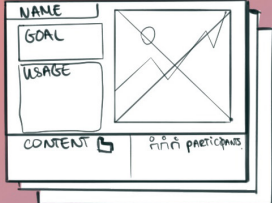
WHAT	LUNCH LECTURE	SALES SLIDE DECK	SESSION TOOLS
GOAL	<p>PROVIDE A SIMPLE FORMAT AND MOMENT TO SHARE KNOWLEDGE ABOUT FACILITATION TO THE WHOLE COMPANY. TO MAKE IT SIMPLE AND A ROUTINE TO SHARE KNOWLEDGE.</p>	<p>PROVIDE A SIMPLE FORMAT TO SAVE KNOWLEDGE FOR SALES TEAM. IN THIS WAY SUCCESSFUL DESIGN PROJECT CAN BE REUSED AS AN EXAMPLE AND LESS SUCCESSFUL PROJECT CAN BE AVOIDED.</p>	<p>PROVIDE A SIMPLE FORMAT TO SAVE KNOWLEDGE IN A STRUCTURED WAY FOR APPLYING SESSIONS TOOLS. IN THIS WAY OTHERS CAN LEARN FOR YOUR APPROACH AND REUSE IT.</p>
FORM	<p>PWP SLIDE FORMAT</p>  <p>STRUCTURED MOMENT OF SHARING</p>	<p>PWP SLIDE FORMAT</p> 	<p>SESSION DESIGN TOOLKIT</p> 

Figure 40: Suggestions for tools for stage 3 of the implementation strategy.

06

VALIDATION DESIGN

This chapter describes the validation of the first and second stage of the implementation strategy.

The implementation plan consists of three stages; 1) Reflection linked to a project, 2) Reflection as part of a project, and 3) Reflection as part of routines. Validation of the third stage did not fit the time frame of this project and is something to further investigate for Flatland.

The test set-ups, hypothesis, and the extended findings of the validation of stages 1 and 2 can be found in Appendix E2 & appendix F4. The most interesting insights of the validation tests are explained in this chapter.

Stage 1: Awareness Campaign

The goal of the validation of stage 1 was to check whether Flatland's employees are aware of how Flatland is reflecting and sharing knowledge at the moment. This includes checking the awareness of the risks that result from their current way of working. To capture this, four drawings were made as part of the awareness campaign: "How to avoid learning as Flatland". The four images were part of an exhibition and put on the walls in the office of Flatland. These initial thoughts provoked by the images were captured on post-its during the exhibition. This stage was validated with eight people of Flatland.

Billability versus reflectivity

In general, the Flatlanders had a shared view of the reason why the reflection of facilitation and session

design is not taking place at the moment. Due to time pressure, the employees normally stick to billable work instead of reflective work.

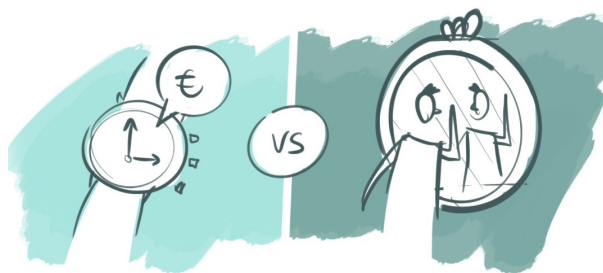


Figure 41: Billability versus reflectivity

Especially, when there are many projects going on, people find it difficult to make time for reflection. This is a lost opportunity as especially during these busy moments most insights about facilitation and session design can be generated through reflection.

Need for agreements on reflection

Several Flatlanders indicated they need more concrete agreements for doing reflections. Currently, a lot of new things are tried out or piloted within Flatland.

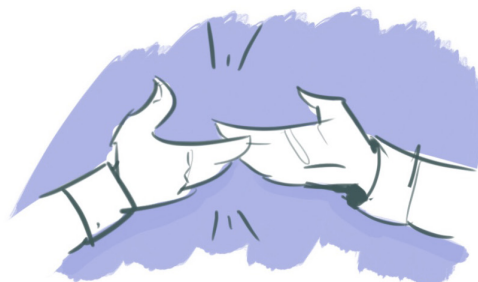


Figure 42: Need for agreements

Varying from new stand-up formats to communication channels. However, a lot of these internal projects are not completed or finished in the end.

During this validation test, several Flatlanders expressed doubt about a new reflection process. They are afraid of putting valuable time into something that perhaps will not be implemented in the end. Thus, there is a need for solid agreements about reflections, otherwise, there is the threat of everyone just sticking to their billable work.

Making it relevant

Several Flatlanders find it difficult there is no concrete way for saving and documenting insights that result from reflection. Currently, when people share their insights during a Monday morning Huddle or in a quick conversation it is most of the time quick and dirty. These insights are not recorded or documented anywhere.

Thus, people cannot retrieve them again.

In addition, these knowledge sharing moments are so short that the receiver of the knowledge hardly has time to make this knowledge their own. This makes it difficult to make use of another person's well-intended knowledge sharing moment.

Sharing, saving and reusing insights is not validated in this thesis, but it is important to take these insights into account when developing and validating stage 3 of this design proposed in this thesis.

Stage 2: Explainer + Reflection Template test

The second stage was validated by four people, three facilitators and one designer. In this stage, the reflection template and the explainer were tested. The four participants were asked to talk out loud while filling in the template and using the explainer. In this way, the understanding of the tools was researched. After filling in the test, the quality of the written reflections was measured with the scale made by Sparks-Langer, Simmons, Pasch, Colton, & Starko (1990).

In addition, the participants' interaction with and understanding of the two tools were observed. The most interesting insights are discussed below.

The quality of the reflection

All participants were able to complete a reflection cycle; from selecting an experience to making sense of this experience and to create a tangible action point for the future. The tools guided the participants in these steps.

“I really think I gained new insights by filling in this template. This feels like a reward that encourages me to do it more often. Especially, using the explainer in combination with the reflection template... that provided me new subjects to reflect on.”

Written words compared to spoken words

Remarkably, the recorded audios were often from a higher level than the written reflection. For example, one facilitator wrote down: the PowerPoint reading guide was a great tool as a plus (level 3, from the Spraks-Langer, et. al (1990)) and as delta, he wrote down: he could have had a better image of the cognitive ability of the group (level 4) upfront of the session. In the audio, he mentioned, that in the previous session that participants appeared to have a lower cognitive ability than he expected. Therefore, he chose for an extra visual deliverable (a PowerPoint reading guide) to guide the participants in presenting the created visual and content.

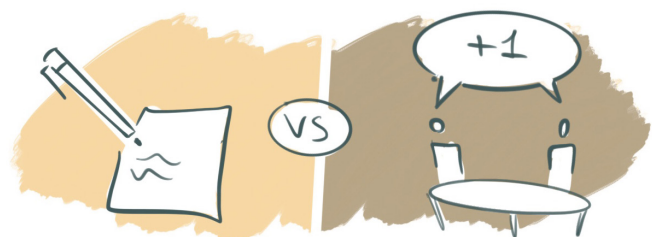


Figure 43: Written reflection versus spoken reflection

This spoken reflection included reasoning of context factors that influenced the design of the session. This can be seen as a higher level of reflection (level 6) according to the Sparks-Langer et. al (1990) scale. Thus, it is recommended to reflect with these tools in duos as explaining your reflection to others results in reflections of superior quality.

Content of reflection

The explainer and the reflection template supported Flatland in doing reflections, as Flatland is currently not reflecting on their session and session design structurally. One of the facilitators mentioned during the test:

“Normally, when Flatland is reflecting, we reflect on the whole project and not necessarily on one session or a moment within a session.”



Figure 44: The content of reflection

The explainer sparked new content for reflection. One facilitator asked herself, what else she could reflect upon. She took another look at the explainer. [The facilitator reads out loud from the explainer:]

(Visual) Tools, how did the facilitation methods/

tools support the content or the participants...?

Ah, that was really cool actually. We made a template for the participant with which they could capture all their stakeholders and their needs. This provided them a possibility to discuss the needs of their participants and what the participants from the session could offer them.”

The explainer directed the participants to reflect on the visual as-a-means instead of reflecting on the visual as an end-result.

“I like the fact that you showed the visual as a support of the content and the participants. I think it helps us (as Flatland) to see it like that as well. The visual does not always have to be the end-goal”.

Single-loop versus double-loop

Even though new topics of reflection were touched upon, the tools did not seem to support all kinds of reflections. All four participants reflected with single-loop reflections and no double-loop reflections were captured on the templates.

Sharable outcome

The ultimate aim for Flatland is to create insights about facilitation to share these insights with other colleagues of Flatland. Even though every template resulted in a tangible action point, not all insights appeared to be relevant to share with others. Some created insights were too personal and, therefore, mainly interesting for the person doing the reflection.

“This is a really personal insight that is difficult to make generic for others. As I can function as both a designer and a facilitator, I need to be aware that

a better role division between the facilitator and the designer in a session can really be beneficial. This can, for example, help me to facilitate discussions better. When I do not have to make visual notes, I can focus on guiding the discussion only. However, other facilitators who do not draw at all, do not have to be aware of this insight”.

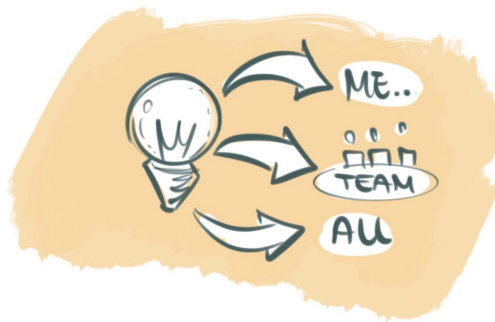


Figure 45: Sharable outcome

In addition, another facilitator mentioned:

“This insight is mainly interesting for me. I first need to find out what works better: to let the participants first present the drawing themselves or whether I need to present the drawing first as a facilitator. Then I show them how it supposed to be done. (...) I need to make sense of these different practices first before I am going to share this with others in a facilitator-learning line”.

It is not necessarily a bad thing that not all the filled-in templates are relevant to share with others. However, Flatland should be aware that these reflections are supposed to be done to learn and grow as a team and not as individuals.

Next steps for reflection tools

To conclude this validation step, the reflection tools support Flatland in doing reflections about session design and facilitation. All facilitators were able to reflect on topics that were normally not written down or spoken about.

Even though valuable insights were created, the tools and the implementation strategy need further development. New iterations of the concepts are described below.

Integration of explainer and template

The two tools differed in their visual style which made it difficult to see that they supposed to interact. Two of the participants suggested integrating the explainer and the template.

Besides, both tools showed questions for clarification, however, only the template was meant to be filled in. This appeared to be confusing for the Flatlanders.

Emphasise Double-loop reflections

The template should include questions that guide double-loop reflections as well. The design of the explainer tried to emphasise this by naming sales goals and client goals on top of the explainer. However, this did not seem to be enough. This guidance towards double-loop reflections should be emphasised more. For example, by making the sales and goals part of the explainer bigger to attract more attention of the facilitators.

07

CONCLUSION THESIS

This concluding chapter is divided into 4 parts: 1) Contribution of this thesis, 2) Answers to research questions, 3) Limitations of the research, and 4) personal reflection.

1) Contribution of this thesis

This thesis adds value to professionals in the field of Visual Thinking and facilitation, the strategic design field, and laypersons.

The contribution to these stakeholders is described below.

Contribution of thesis for layperson

This thesis provides an overview of the context of Visual Thinking, facilitation, and its applications. The relatively new field of Visual Thinking is intangible for many people. This thesis marks out what Visual Thinking is by combining literature and qualitative research of the context of Flatland. For a layperson, this research shows new ways of solving complex problems in groups. Besides this, the designed tools provide a clear overview of subjects to take into account when you want to learn to visually facilitate groups.

Contribution to the strategic design field

This thesis is a contribution to the strategic design field as it shows what the value is of Visual Thinking in co-creative business settings. Strategic designers often face complex problems that include communication challenges. This research shows strategic designers ways to use Visual Thinking while facing complexity. Hopefully, this thesis encourages strategic designers to use and/or develop these Visual Thinking skills to become a better problem solver.

Contribution for the Visual Thinking professional

For professionals working in the Visual Thinking field, this thesis creates a shared language that supports reflection on and/or communication about Visual Thinking services. For Flatland specifically, the designed strategy and tools can structure reflection processes. In this way, they support internal conversations about session design, and facilitation. This thesis supports Flatland in knowledge creation. It makes them aware of the fact that reflection is needed from their employees to learn and grow as a company.

2) Research questions

• What is Visual Thinking and how is it used in practice?

Exploration of the literature revealed that designers use visuals to support thinking, communication, clarification, ideation, and elicitation of information. Visual Thinking is an active form of creating visuals, like sketching, that forces people to be specific. Visual Thinking in combination with co-creation leads to more engagement of the participants of the co-creation session. Besides this, visual thinking can be used to grasp a complex situation.

The effects and benefits of working visually are the base of the services of Flatland. Flatland is creating tangible concepts of complex topics while engaging people in this complex content over a longer period of time.

• ***How does Flatland currently design and facilitate their co-creation sessions?***

The qualitative research (including semi-structured interviews, research-by-design templates, and observation) revealed that Flatland's way of working is project-focused, customer-centric, and moreover diverse.

Customised work/Everything designed anew

The six interviews with facilitators of Flatland indicated that Flatland designs every co-creation session anew. Flatland believes that there is no one-size-fits-all session design or design project.

This belief results in Flatland customising every project and session to fit their client's needs.

However, Flatland indicates that they need more structure for designing their co-creation sessions. This could help them in making more deliberate choices in their session design and to be more effective and efficient with their time.

Flatland is finding it difficult to manage the balance of structure and flexibility in their design processes.

During the interviews, several facilitators said they would benefit from a more structured design approach, as this would help them to be more efficient or effective.

On the contrary, they indicated they need flexibility in their design process to deliver customised value to their clients or to be creative as a designer.

Another conclusion from the interviews and observations is the fact that every facilitator is doing

multiple sessions per week and multiple projects simultaneously.

This results in the facilitators and designers run from one project to another. As a consequence, the Flatlanders only look forward and they are not looking back. As a result they are not reflecting on their sessions or session design.

Different experiences, backgrounds, and emphasis of facilitator

The interviews and research-by-design templates revealed that Flatland has a lot of facilitators with different backgrounds and experiences.

The diversity of experiences and backgrounds of the facilitators result in a wide variety of session designs and projects.

In addition, the research-by-design templates revealed that the different facilitators have a different emphasis in their co-creation sessions, even when designing for the same problem and context.

Some facilitators focused more on the goals for the resource group, others emphasised the visual end-result, and some reserved most time for getting the content straight.

• ***Why and what kind of guidance/guidelines does Flatland need to design their sessions more deliberately?***

Flatland is a strategic design consultancy. They do not want to be seen as a company that purely makes beautiful drawings, but they want to be seen as a company that uses their visuals-as-a-means to collaborate better or to overcome complex subjects. However, the qualitative research showed that the

evaluation of projects mainly focuses on the visual as an end-result.

Flatland evaluates and shares knowledge internally about the visual end-result and they rarely share knowledge internally of how these results came to be (how the visual-as-a-means were used in a session).

As said before, the qualitative interviews revealed that all facilitators have their own style, focus, knowledge, and/or assumptions of their client's problem on which they base the design of their co-creation sessions. Even though, Flatland's co-creation sessions are the core of their services, these differences of the facilitators design approaches are not shared structurally within Flatland. This results in Flatland facing the threat of knowledge scarcity.

If Flatland loses one of their facilitators (who has their unique knowledge), Flatland loses a part of their company's capital. This is a threat as Flatland's whole service is based on the knowledge and skills of facilitation and session design.

Therefore, a structured reflection process is created to help Flatland overcome this threat of knowledge scarcity. This reflection process supports the facilitators and designers of Flatland in creating tangible insights from their session in order to share this knowledge of facilitation with other colleagues. By doing so, the facilitators become aware of the variety of facilitation styles, and their benefits. The threat of knowledge scarcity can be resolved if all facilitators know the different approaches that are needed for all Flatland's services.

Moreover, awareness of the different facilitation styles, more deliberate choices in session design can be made.

A structured reflection process, an implementation plan, and two reflection tools were created and tested. The reflection process consists of 5 steps. The facilitators and designers should notice a moment in the session that is interesting for them to reflect on, reflect on this session experience, analyse this experience, save and share insights of this experience. An implementation plan is designed to make Flatland implement one reflection step at the time. The implementation plan consists of 3 stages: 1) reflection linked to projects, 2) reflection as part of projects, and 3) reflection as part of routines. The first stage consists of an awareness campaign that was validated in this project. The two reflection tools are tested as part of the validation of the second stage of the implementation plan. The two tested tools are: an explainer that suggests topic for reflection and a reflection template that guides Flatland through the analysis of experience from a session.

3) Discussion and Limitations research and process

Session design template (feasibility)

The Research-by-design templates provided valuable insights into the differences of the facilitators' emphasis on their session design. The templates showed a wide variety of focal points for the facilitators.

Normally, when facilitators design a session for their clients they would have more background knowledge of the context for which they design compared to the context described on the template. Thus, this design exercise was not completely realistic as it forced the facilitators to make assumptions based on their experiences.

Ideally, this test would contain more context information about the problem. In addition, multiple problems would be provided to every facilitator, instead of just one problem. In that way, a more realistic comparison could have been made between the differences in approaches of session design of every facilitator.

However, this was unrealistic to do within the time frame of this thesis.

Desirability of elements

The differences in emphasis that were found with the facilitator templates were included in the design and content of the explainer. This explainer was validated and the Flatlanders found it useful to reflect on session design.

Validation test with Sparks-Langer et. al (1990) scale (feasible)

The scale for Sparks-Langer et. al (1990) was used to validate and measure the quality of the reflections. This scale did not function optimally. First of all, three of the four participants indicated that they found it difficult to use.

Therefore, no solid conclusions were made about the quality of the facilitators' reflections (see appendix F4). On the contrary, Flatland is not currently reflecting on these subjects, so the fact that the reflection tools support reflection about the subject of session design shows an improvement of reflection already.

Own influence on validation test (viability)

From this research can be concluded that the designed reflection tools have a positive impact on the reflections of Flatland. However, the fact that Flatland improved their reflections did not solely depend on the tools. The test setting forced the facilitators and designers to take at least 30 minutes to reflect on their session, facilitation, and session design.

Within these 30 minutes, all facilitators were able to complete their reflections, formulate tangible action points, and create new insights (desirable).

However, it is questionable whether these participants would spend this amount of time on a regular workday, on secondary tasks of their job (viability).

Hopefully, this thesis and the created reflection tools will force and remind Flatland to take this time to reflect.

Tested within the context of Flatland only

The research of this thesis on visual thinking context and Flatland's projects and processes showed was based on literature, six interviews with facilitators, six filled-in session design templates, 4 observed sessions and observations of Flatland's internal processes. This does not provide a full understanding of all Visual Thinking services and businesses out there in the field as this is only based on Flatland's processes.

On the other hand, it does provide a clear overview of how visual thinking can be used for people who are not familiar with this field.

These validated tools are created based on the insights from the qualitative research that was carried out within the context of Flatland. These results of the validation test showed that they are valuable for Flatland, but this does not directly mean that these tools are valuable for other visual thinking professionals.

The reflection tools can be developed and tested in other Visual Thinking business contexts, but this was out of the scope of this project.

Tools for sparking reflection among Flatland (viability)

The validation test of the reflection tools showed that the tools sparked reflective thinking for Flatland. However, these tools are based on writing only. According to Valli (2007) reflective thinking can be stimulated in other ways as well:

- Action research
- Doing case studies
- Doing observations
- Journal writing
- Having classroom discussions
- Having supervision

The created tools (the explainer and the template) are similar to journal writing as they are based on writing. Within Flatland classroom-like discussions are done

within the facilitator learning line. Thus, Flatland already stimulates reflection in multiple ways. However, Flatland can stimulate reflections even more by structurally implement: case studies, observations of the co-creation sessions from their colleagues, and supervision of the more expert colleagues. These manners of stimulating reflection could provide Flatland with more flexibility for their employees to reflect in the manner that works best for them.

Stage 3 is not tested/validated

Stage 3 is not tested and validated within this thesis. To successfully implement the full implementation strategy, new ways for saving and sharing knowledge about facilitation need to be designed and tested. The first two stages can be viable for Flatland if concrete agreements for reflection and sharing knowledge are made. In the long run, new ways of saving knowledge have to be designed or found and tested in order to make the design succeed.

4) Personal Reflection

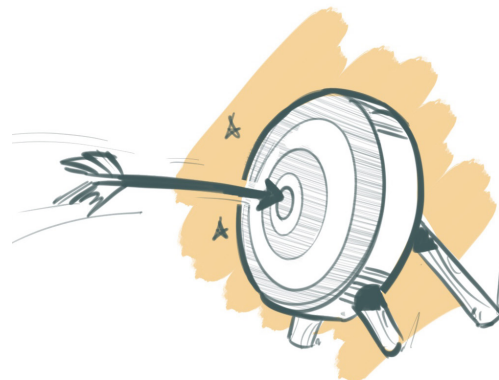
This thesis would not be complete without a personal reflection about my design process, goals and results. Before this project, I was already tremendously interested in the field of Visual Thinking, however, I never had the time to dive as deep in the topic as I did now. I am truly thankful for the opportunity that Flatland provided me to explore this topic and their services over the last couple of months.

Personal Ambitions

Developing my facilitation skills

One of my main personal learning goals of this thesis was to broaden my knowledge about and skills of facilitation and Visual Thinking methods. During this project, I noticed that it was difficult for me to schedule

internal co-creation sessions with the facilitators of Flatland that I could facilitate. The facilitators of Flatland were often facilitating sessions and therefore unavailable, especially in the time I was doing my research (at the end of the year). Thus, in this project, I did not manage to specifically practice my facilitation skills directly.



However, all research of the literature on facilitation and the observations of Flatland's co-creation session I did, provided me with a lot of useful insights and tangible knowledge I can implement later on in my career. In short, I could have pushed Flatland and myself more to practice my facilitation skill, but I believe the methods I chose provided me with the relevant insights nonetheless.

Project Planning

This project was everything but structured and that is why I had to approach this project with more flexibility than was anticipated in the original planning from the project brief.

All my tests were dependent on the busy schemes of all facilitators. Especially in the busiest time of the year, these were not easy to schedule. Besides, when the coronavirus took over the country, some of the validation tests needed to be done digitally. This was not preferred, but it taught me to be flexible.

Quality

It was quite difficult for me to see the relevance of my design throughout the whole project. I believe the most quality was generated with the qualitative research during this project. I enjoyed this research part, especially the part with the facilitator templates. It was the first time I tried such a research method and I would easily use it again. These templates provided me with a lot of new insights that resulted in the reframe of the design challenge.



I believe, the insights about Flatland's way of working and the fact Flatland could benefit from a more structured approach of reflection (and knowledge sharing) is the most valuable part of this thesis. The development of two reflection tools, in the end, felt like a short design sprint. It felt like this time was almost too short to develop a concept that could support Flatland in their reflection activities. It was only until the end of the project I realised that the quality of my thesis and the project will not only be measured from its end-result, but also by the process of getting there. Overall, I am happy with the quality of this project as I believe I undertook the right steps to get to right insights. The fact that the concepts are not finished, is the result of this process and therefore a fair end-result to me. I believe this projects indicates a valuable and tangible

starting point for Flatland to start reflecting more on facilitation and sessiond design. But, now it is up to them to actually start.

Communication

I did not experience a lot of communication issues during my project. Structural meetings with the supervisory team of the TuDelft as well as my company mentor took place. I prepared these meetings well and visually. Overall, I am happy with how this project turned out. I received the supervision that I needed and when I needed it. Even with the baby boom and a switch of project chair that occurred during this project, I never experienced any trouble in meeting my supervisory team and company mentor. I am grateful for that. The only thing I struggled with was the writing part of the thesis. It took me quite some time to feel comfortable with my writing skills.



To conclude, I learned a lot from this project. Working on my own is not one of my favorite things, but it did force me out of my comfort zone. I am happy to experience this, but I am thankful to be provided the opportunity to further explore visual and co-creation processes with Flatland in the future.

Appendices

A1 References

A2 Project Brief

B1 Interview guide

B2 Interview Clusters

C1 Facilitator Templates

C2 Filled-in facilitator Templates

C3 Sense making of the

Facilitator Templates

D1 Reframe: Balancing the need for structure and flexibility

E1 Awareness Campaign

E2 Awareness Campaign test

F1 Explainer (stage 2)

F2 Reflection template

F3 Explanation reflection template

F4 Reflection template and explainer validation

F5 Filled-in reflection templates

A1

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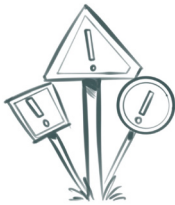
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B1

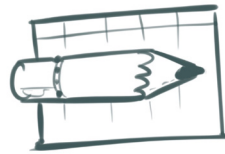
INTERVIEW GUIDE

PROBLEM



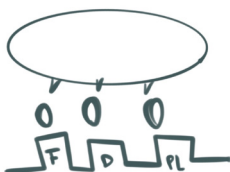
- What kind of problems or question do clients have when they approach Flatland?
- Which problems or projects do like to work on and why?

SESSION DESIGN



- Who is responsible for the design of a session?
- How does it normally look like? How does it occur?
- How do people capture their session design? Digital or analogue?
- What are the main aspects/variables you base your session on? (the goal/the group/the dynamics/...?)
- What kind of tool do you use often while facilitating? Do you have preferences or preferred tools? Are there tool you do not use and why?
- Do you design tools for clients specific? Why would you do that?
- What are the main benefits from hiring Flatland and how do you see that back in your the session design?
- What aspects need to be in a session of Flatland?
- How long does it take to design a session?
- How did your last session look like?
- Can you explain how you came to this design of this session?
- Do you recycle session plans?
- To what level are you prepared to obtain a structured way of working?

ALIGN



- Can you explain how an align session looks like? Who is involved and why?

KICK-OFF



- Can you explain how a kick-off looks like? Who is involved and why?

SESSION



deliver structure? why? why not?

- How often do your session plans work completely?
- Do you often have to alter your design? How come?
- Do you design session following the clarity story

NAVIGATION/WHITEBOARDING



- How often do sessions get evaluated?
- How does that look like?

DEVELOP



- no questions...

DELIVER



- How does a project gets delivered. Is this done during a session or an event?

B2

INTERVIEW CLUSTERS

N: The variety of individual tasks and group tasks differs, but there is not much idea behind it. So we don't have a fine-tuned agenda and that could be the case.

J: What I am saying is that we are pretty good at establishing content, but the other part team/feeling and such is too much trial and error, and needs to be made explicit and we reflect too little upon it.

PRECONDITIONS

J: Every sales questions can be compared with a session plan. What is the goal of the client, what is the budget and how can we help them. It is similar to clarity story deliver approach. But not totally the same. So this determines already how many sessions there going to be. After that you have the kick off to check who the participants are what the goals are and preconditions. Within these preconditions (place time date) you are going to design a session.

NEED FOR STRUCTURE?

J: As Flatland we have several models: strategy design, maps and validation and activation. The three circles, but Dan uses different sales deck; a simple process (clarity-story-deliver), and a design sprint (a multi-day session in which you work towards a concrete result) and a change or activation program (in which you have multiple sessions). So the combination of this all means... so you have the projects are getting bigger and there are more types of projects we are doing.

S: "I want to make the process more clear, for sales at least... Some people are curious others just ask: why draw?"

N: "It would be practical to have more grip/hanvatten for the design of a session"

T: So you could argue that more structure is needed. So or you make approach fixed, or you don't let very one do what think they can do. The latter is even trickier. In a small company, to restrict some people...

SALES

SHARED IMAGE OF PROJECT SCOPES/APPROACH

V: "Sometimes we are asked during sales to find the question behind the questions, but why can't I sell a quick fix and sell. The bigger project will come later when we are already in?"

T: No I am thinking of if we are telling the same story. So if you approach us randomly on the street I doubt if everyone will tell the same story

N: "I think visualisations is our most important aspect. Because we are experts when having that role. If you we take a strategic project we have to perform at all three levels: illustration, people and content."

N: "During sales you already initiate how your project will look like. This is something you do with your client and your team mate.

J: In the end what you want to deliver as facilitator is not that clear. I think insights...

BOUNDARIES OF METHODS/WOW

T: Vorig jaar heeft (...) een project verkocht voor een jaarplan 2019 en dit jaar gaan we een project doen voor een jaarplan 2020. En hij had een clarity sessie verkocht en daar heb je soms geen controle over en hij had een clarity sessie verkocht van 36 man. Dat vind ik echt niet kunnen. Je kan geen clarity doen met 36 man. Ik wilde gewoon een soort clarity of pre-clarity sessie. Want holy cross is echt een hele goede basis, het is zo triviaal, maar dat is ook wat we leren in de cursus, het lijkt zo simpel het holy cross, maar als je echt goed nadenkt dan is het dat zeker niet en is het echt een goede basis om vanuit te vertrekken.

S: "Strategy projects are more complex problems where the content is not there yet/not ready yet to be made visual."

S: "During process no slik drawings, especially not in the beginning or in the middle, near the end the image is made slik, I tell clients during sales you see the image evolve?"

S: "I have a strategy approach from Berenschot but it isn't yet translated to the visual approach of Flatland"

S: "What is your clients goal. Do you need more information? If yes diverge, if no... What are your clients priorities here and there?"

T: So no more be a fly-on-the wall and listening what is being said, and capture it live. I am always trying to prevent this.

SORTS OF PROJECTS

- you just told me about subscription model. I assume these aren't sold yet?

J: You sell some sort of monthly session, with a smaller preparation and the session itself and small piece of post-processing. Up front you don't fix what you are going to do within the session. You take a look every month and decide what is necessary to do the session. Sometimes you need an extra session to deepen the content of a subject.

J: Flatland's goal is to do more bigger projects, so complex problems which move away from communication problems. And within team B we focusing on how to tackle innovation projects.

J: So we were looking at how we can become better at innovation projects. Because, it requires a different approach from us. Because these projects are fuzzy, it can be really unclear what the outcome of the session/project could be.

J: Innovation projects could sound something: we need a new way of working, or we can not go through like this.

J: Recently, I made a session and did a session for the following question. We have a big team and we want to make clear for each other what we are doing and why. So, we needed to align a team on their vision mission and goals.

J: We have to change because the context is changing. This context is asking something from us, for example een question which we received from Vestia. We need to work differently with the outside world. Therefore we need to take along our whole organization in a change in working style. To do so, we need to make clear who is doing what and how people are achieving this. So this is a multiple-year -projects,

J: First establish the content and after that communicate about it. So it brings two questions with it. Together make it clear and communicate clearly about it. I noticed that people know that Flatland visualises and therefore in the question there is often a communication problem

J: De kern van waarde zit toch boven. Want jij heb tijd om te kijken naar de gemeende deler. Ik zie er wel veel waarde in. Want wij hebben naast ons eigenwerk niet veel tijd om dat te onderzoeken.

Then you have a sort of activation curve?

J: So first you make a strategy and then you want to activate this strategy. When you are communicating the strategy you are activating it afterwards. Or as a big company is going through a big change such as the implementation of a new IT system for example. How are you going to activate your employees. There a drawing could be very helpful.

J: I think we are learning to let go the mindset that every project will end up as a communication means. A lot of people sell things and think it has to be a communicational visual, a drawing.

I sell projects and sessions which are aimed to create a visual in the end. But this does not have to be necessarily what the client needs. Sometimes clients need just an understanding of each other. A drawing can be a means to tell 1 shared story. Or can create understanding when the content is becoming abstract.

J: Even at the end of such an innovation project change making is a part of it. That is something we are focusing on as flatland, not only strategy but also change activation.

S: If the information is there you can focus more on the drawing, if not you have to focus more on how to get the information on the table

J: Often there is a manager who is feeling responsible for to make something and put something on paper beforehand. So often clients have some content, but they often notice that their content did not come across or not everyone can tell their story.

HOMOGENITY VS SPECIALITY

J: I think the Flatland way of working is to deliver customised work. We have no standard way of working. We believe our clients question is so important that we look at their situation and think that is important. Because two different people have different knowledge and they do their work differently in every phase.

J: A good facilitator is asking the right question and is ready to ask follow-up questions. Your sales lead does that as well. So this is a f-skill which you, which should be a sixth sense with which you can feel the history of a team and if you don't sense that you will notice that during your session

T: This sounds sad but if you are just a PL or a F then you are really depended on how a project is sold. And that is what determines a big part of the session and has a part of the align in it as well.

T: "talking about the elements of our work"

Niva and I can discuss this for days to get the right thing above the table, and others have a different mindset, let's just do it and find out.

N: How skilled you are visually, how skilled you are in dealing with content and how good you are in dealing with the group. How do deal with trust building encouraging.

SORTS OF GOALS

T: Especially making team dynamics visual can be used during the process. This was the case with Enaxis and we were pointing out the team dynamics as part of our role. Not every clients does that. They often see as more as JvdT, they do not see as a company which is in the position of pointing this out. However Willem sold us in this way with the jongeren Loket, so now it was our role and responsibility.

T: The difference within our team will grow only more if we hire more people with different profiles. How can we justify the budget of our work to our clients without justifying what the outcome will be.

T: ... In the Albert Heijn you buy to loaves of bread and a bottle of milk for 5€ and it doesn't matter who is doing it. But if we do a project with somebody this will have a different output from the same project done by somebody else. And I can imagine this can be risky for our clients.

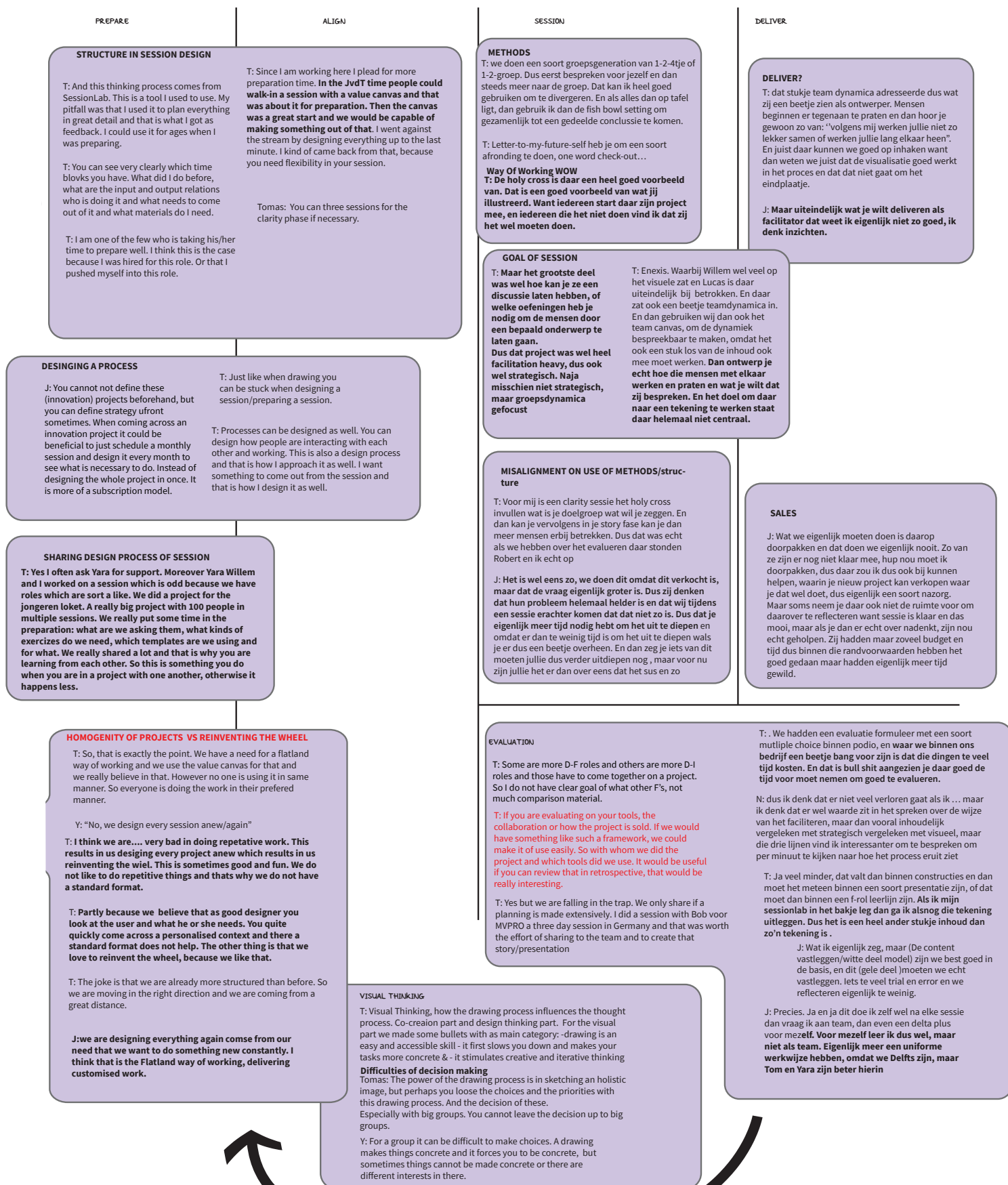
T: Niva creates more chaos in his session, but he delivers something: maybe people think we have to do something with this. But Piet has worked here, and he did like the bull shit bingo and did not know what he should do with that. His approach results in different outcomes.

T: Asking yourself if you want to create a basis of putting the right people together with the right background profile or their skills or education, or if you want the structure the way people use their tools so you establish the same way of working.

N: In our job we have two routes of decision making, decision making visually and decision making content wise. I try to let the group make the decisions on the visual, but as we are experts on this it would be nonsense to stay away from decision making here. Sometimes you are also involved in decision making in the content. But the first steps you have to give freedom to the group that's important. I think in the beginning of the process you are more a facilitator who is facilitating and when we are pushing and pulling towards a visual solution and later we do a step back when it goes more towards decision making so you move along that line/spectrum.

T: We can say we deliver customised work or we can say we deliver always something else. And then we are back at the thing Niva mentioned. It depends on which tool you have and which person you put next to each other. And then it appears to be a scary sentence. Which is something the client does not want at all.

N: we are not so much of chairman of they day or extreme energizers and sometimes you want that... So I wonder where how far we could stretch the profiles of the people we have in this company



C1 FACILITATOR TEMPLATE

**HOW DO YOU DESIGN YOUR
SESSIONS AND PROCESS?**

0. GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/flatlanders.

session 1

session 2

session 3

1. CONTEXT

There is budget for 2-3 sessions (each een half dagdeel).

Company X has a 15 person multi-disciplinary research team with currently two needs:

- 1) Develop 4-6 themes to guide research groups for the following 3 years.
- 2) Specify focus points within these themes to make the themes more concrete and presentable to the rest of the company.

The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold.

2. EXERCISE

Below you see 3 brown papers each representing one workshop.

- Draw on these brownpapers how your session wall would look like the end of the session (from left to right), based on the context description the left. List the following:

- a) Name your: process/meeting points/deliverables/...
- b) Which tools are you using & how: individually/sub-group/plenary/
- c) Why you would use these tools? (Diverge/converge/cluster/...)



Deliverable after session 1 ?



Deliverable after session 2 ?



Final Deliverable ?

FACILITATOR TEMPLATES FILLED-IN

GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/facilitators.

a) Name your process/meeting points/deliverables/...
b) Which tools are you using & how: individually/sub-group/plenary/...
c) Why you would use these tools? (Diverge/converge/cluster/...)

The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold

CLARITY on
RESEARCH THEMES
NEXT 3 YEARS

GOALS

- 1 CLARITY growth + themes
- 2 ALIGNMENT within TEAM
- 3 SHARING our story with the rest of the COMPANY.

- Holy cross summary
- conclusion - why we (this research group is on earth)?
- picked 5 (visual) research themes.

- Pitch from group members.
- Templates themes and relationship with purpose
- aligned teams.

- a common story
- pitch canvas.

GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/facilitators.

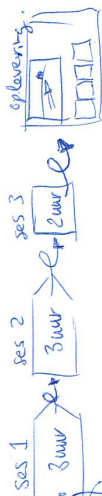
Below you see 3 brown papers each representing one workshop.

- Draw on these brownpapers how your session wall would look like at the end of the session (from left to right), based on the context description the right. List the following:
 - a) Name your: process/meeting points/deliverables/...
 - b) Which tools are you using & how: individually/sub-group/plenary/...
 - c) Why you would use these tools? (Diverge/converge/cluster/...)

There is budget for 2-3 sessions (each een half dagdeel).

- Company X has a 15 person multi-disciplinary research team with currently two needs: 1) Develop 4-6 themes to guide research groups for the following 3 years. 2) Specify focus points within these themes to make the themes more concrete and presentable to the rest of the company.

The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold.

[illegible]

C2

FACILITATOR TEMPLATES FILLED-IN

HOW DO YOU DESIGN YOUR SESSIONS AND PROCESS?

GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/facilitators.

EXERCISE

Below you see 3 brown papers each representing one workshop.

- Draw on these brownpapers how your session wall would look like at the end of the session (from left to right), based on the context description on the right. List the following:

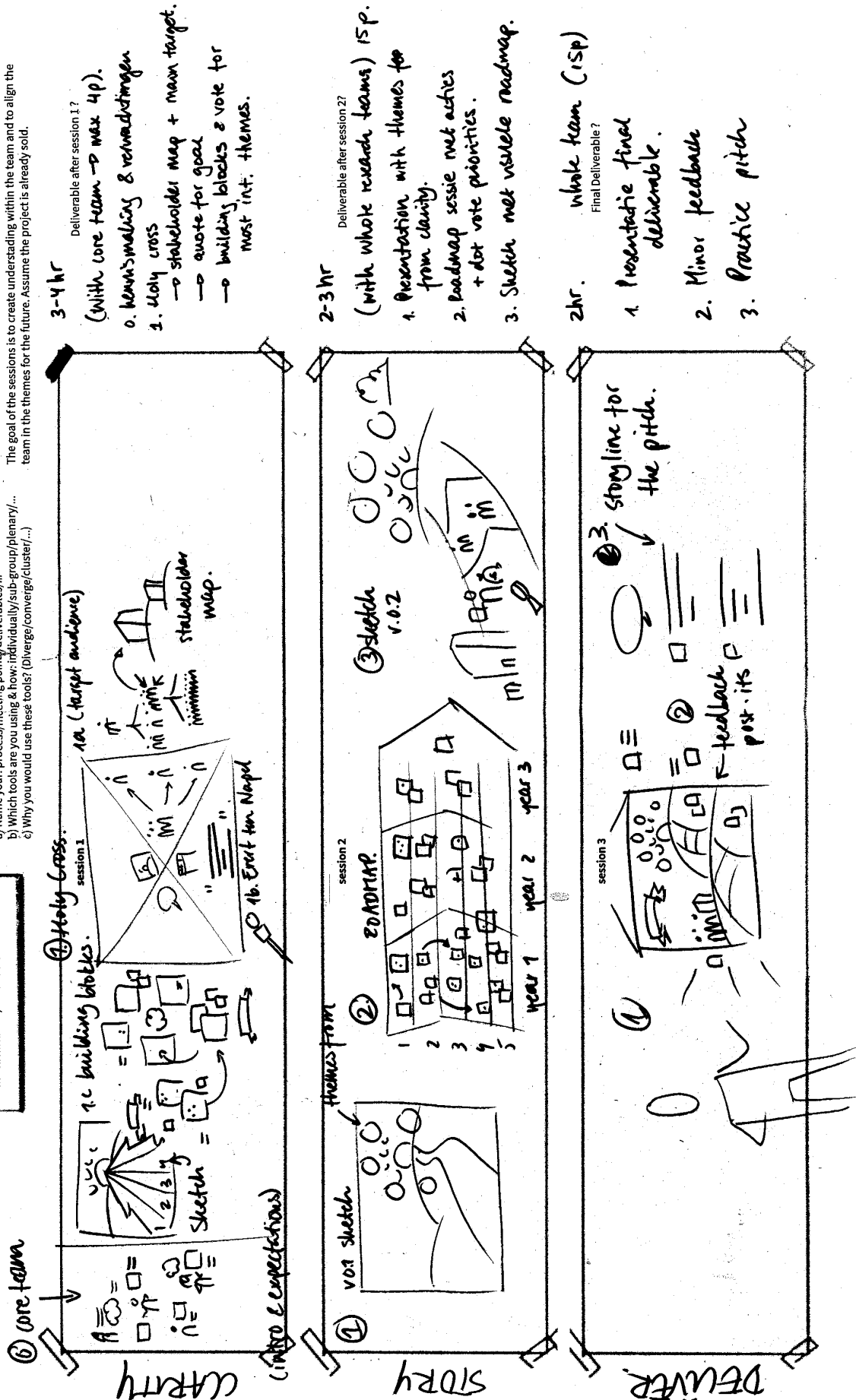
- Name your process/meeting points/deliverables/...
- Which tools are you using & how: individually/sub-group/plenary/...
- Why you would use these tools? (Diverge/converge/cluster/...)

CONTEXT

There is budget for 2-3 sessions (each een half dagdeel).

Company X has a 15 person multi-disciplinary research team with currently two needs: 1) Develop 4-6 themes to guide research groups for the following 3 years. 2) Specify focus points within these themes to make the themes more concrete and presentable to the rest of the company.

The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold.



AMBITIE & BOUWSTENEN

DAY / SESIE 1

1. Opening, intro, goal
2. (divergeem) ~~(cover story)~~ : waarom is-a je over 3-5 jaar in de krant, individueel nadaken, in twaalfden bespreken
3. (convergen) Startstellen ambitie: wat willen we? plene presenten (rode draad) eendelen
4. (divergeem) Wat welke hoofdbouwblokken bestaat dit? welke (sub) doelen Stellen we ons zelf?
5. (convergen) Visuele samenvatting (in schets)

Start alignment
Oplevering van schets
het ambitie & bouwingen

CONCRETISERING

DAY / SESIE 2

1. "Wrap up, & goal today"
2. Check ambitie & hoofdbouwblokken: Staan deze nog steeds overeind?
3. Start / stop / continue: wat moeten we doorzetten, stoppen & opstarten
4. Welke mensen & welke tijdspad hoort erbij? Welke onderlinge relaties binnen de organisatie?
5. Visuele samenvatting

Oplevering van schets
van hoofdbouwblokken,
concreet beeld met
concrete acties en
trekkers

OPLEVERING

- DAY / SESIE 3
1. Wrap up
 2. Presenteren van finale plaat
 3. Next steps bepalen (= hantje naar ext. vervolg)
 4. Afsluiting

Finale plaat
Alignement
Concreet beeld op implementeerbare actie

C2

FACILITATOR TEMPLATES FILLED-IN

CONTEXT

There is budget for 2-3 sessions (each een half dagdeel).
Company X has a 15 person multi-disciplinary research team with currently two needs:
1) Develop 4-6 themes to guide research groups for the following 3 years.
2) Specify focus points within these themes to make the themes more concrete and presentable to the rest of the company.

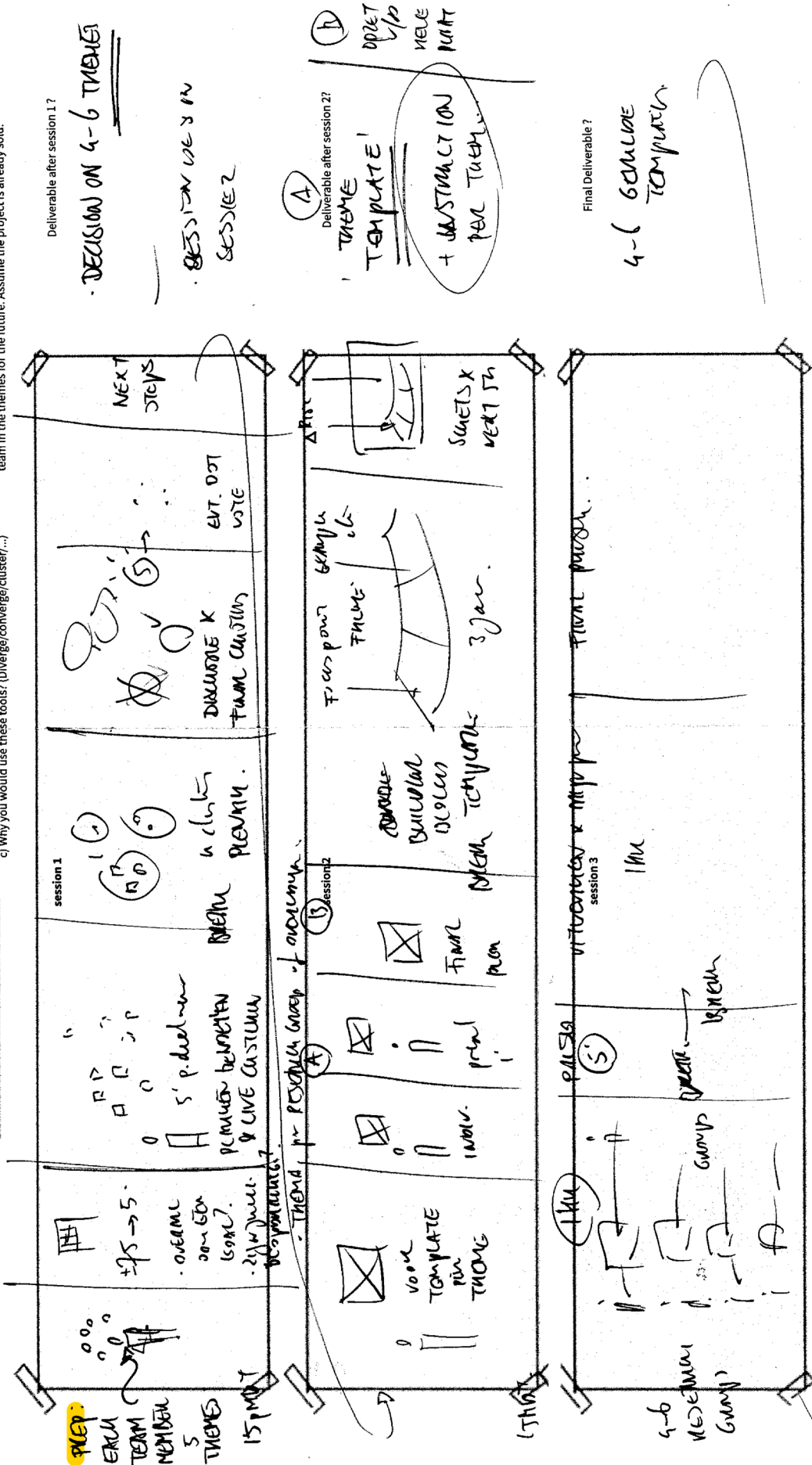
The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold.

EXERCISE

- Below you see 3 brown papers each representing one workshop.
- Draw on these brownpapers how your session wall would look like at the end of the session (from left to right), based on the context description the right. List the following:
a) Name your: process/meeting points/deliverables/...
b) Which tools are you using & how: individually/sub-group/plenary/...
c) Why you would use these tools? (Diverge/converge/cluster/...)

GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/facilitators.

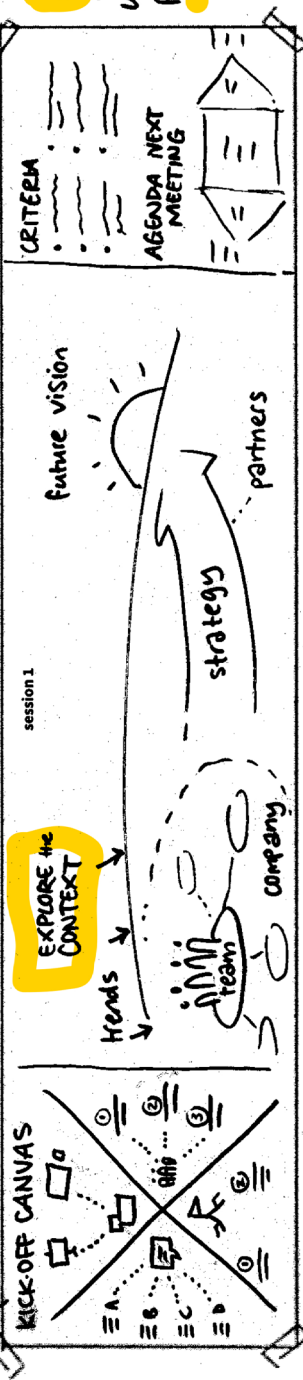
HOW DO YOU DESIGN YOUR SESSIONS AND PROCESS?



HOW DO YOU DESIGN YOUR SESSIONS AND PROCESS?

GOAL OF THIS TEMPLATE: With this template I want to investigate the overlap and differences in process and session designs among the facilitators/facilitators.

FIRST SESSION with SMALL CORE TEAM + MANAGER



session 1

EXPLORE the CONTEXT

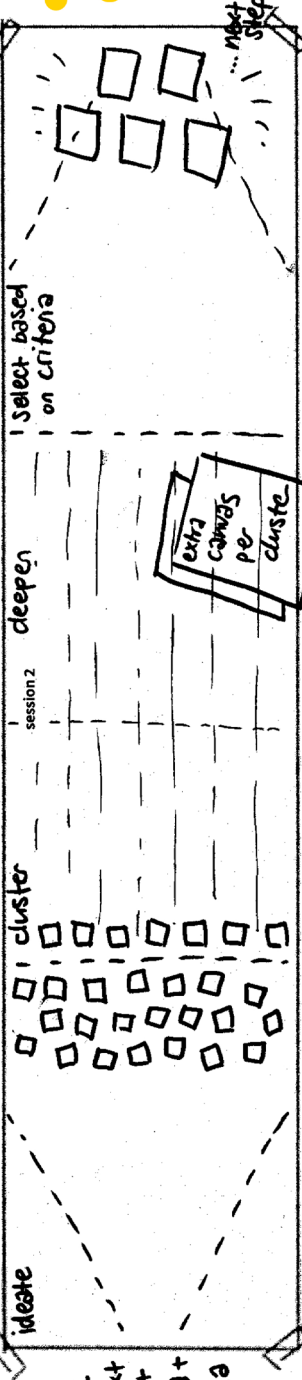
CRITERIA

AGENDA NEXT MEETING

Deliverable after session 1?

Context map to understand criteria for themes + common understanding about goals & process steps next meetings - session plan

'EXPLORE/IDEATE' SESSION WITH WHOLE TEAM

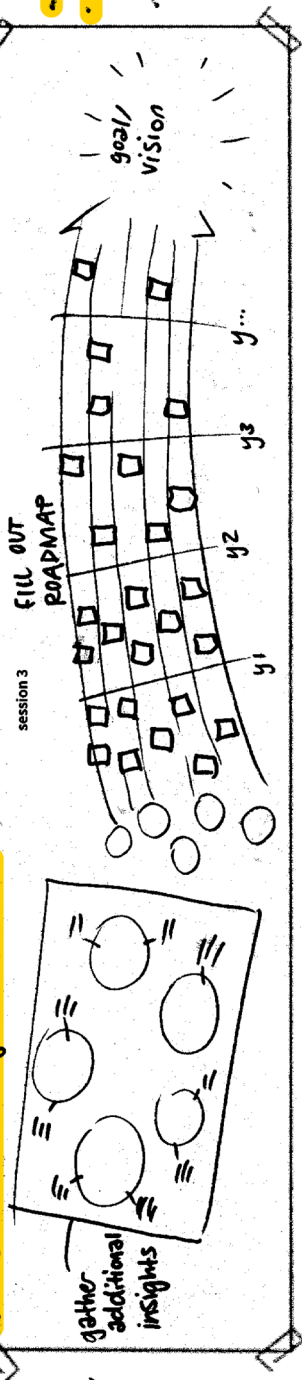


session 2

Deliverable after session 2?

first selection of 4-6 themes, common understanding & ownership within the team. session plan next meeting

PRESENT THEMES, GATHER FEEDBACK



session 3

Final Deliverable?

theme visual roadmap 8 years presentation with all the visuals & photos.

1

"HAD TO DEN UTWERINGEN IN MYN WOOD" S -> WAREN OOK GOED GEVENES

CONTEXT

There is budget for 2-3 sessions (each een half dagdeel). Company X has a 15 person multi-disciplinary research team with currently two needs: 1) Develop 4-6 themes to guide research groups for the following 3 years. 2) Specify focus points within these themes to make the themes more concrete and presentable to the rest of the company.

The goal of the sessions is to create understanding within the team and to align the team in the themes for the future. Assume the project is already sold.

EXERCISE

Below you see 3 brown papers each representing one workshop. Draw on these brownpapers how your session wall would look like at the end of the session (from left to right), based on the context description the right. List the following: a) Name your: process/meeting points/deliverables/... b) Which tools are you using & how: individually/sub-group/plenary/... c) Why you would use these tools? (Diverge/converge/cluster/...)

C3

ANALYSIS OF THE FACILITATOR TEMPLATES

Templates were created and provided to the facilitators of flatland to gain more thorough insights on how they design their sessions

One of the main goals of the interviews was to gain insights in how Flatland is designing their co-creation sessions. From these interviews it became clear that every session is designed anew and is customised by the facilitator to fit its context. Due to the variation of these sessions, it is difficult to find patterns in the way that Flatland's sessions are designed.

Therefore, facilitator templates were created and provided to the facilitators of flatland to gain more thorough insights on how they design their sessions. All facilitators were asked to fill in a template with the assignment to design three sessions. This assignment was based on real project proposals of Flatland.

The template can be found in Appendix C2.

To gain more insights into the reasoning behind the facilitators session designs and their assumptions, the templates were discussed after they were filled in.

Insights form template

When comparing the filled in templates, some interesting communalities and differences can be found. These are explained below.

Tools

Holy cross

Every designer used the holy cross template: A template Flatland uses in order to get a better understanding of the problem of the client, the target group of the visual and the building blocks of a story. However, the moment when and why facilitators applied this template varied. For example, one of the facilitators used this tool as a small check-in template in the beginning of session 1. On the contrary, another facilitator based the whole first

session on this template. Others used it in the second session or in both session 1 and 3.

Assumptions

Differences in the amount of people in sessions

There was another remarkable difference between the templates. Each of the facilitators was asked to define the amount of participants that they would like to have in their session. Facilitators decided differently on the amount of people that had to participate in their sessions. Some facilitators started with a small group of people in the first session and used the maximum amount of available people in session 2 and 3. Other facilitators started with the maximum amount of available people in session 1 and downscaled this amount in second session, after which they increased it again in the third session.

One of the facilitators decided to not only to include the resource group, but included a couple of people from the target group as well. This was done with the aim to validate the created content of the sessions.

Different deliverables and end-deliverables

Facilitators decided differently on the outcomes of their sessions. For example some facilitators chose to end their first session with a drawing, whereas others ended with a filled-in template.

Facilitators differed not only with the deliverables of their sessions, but also on their end-deliverables. Some facilitators end with a nice visual and others already focussed on how to spread the message of the visual by including a pitch training or a validation step

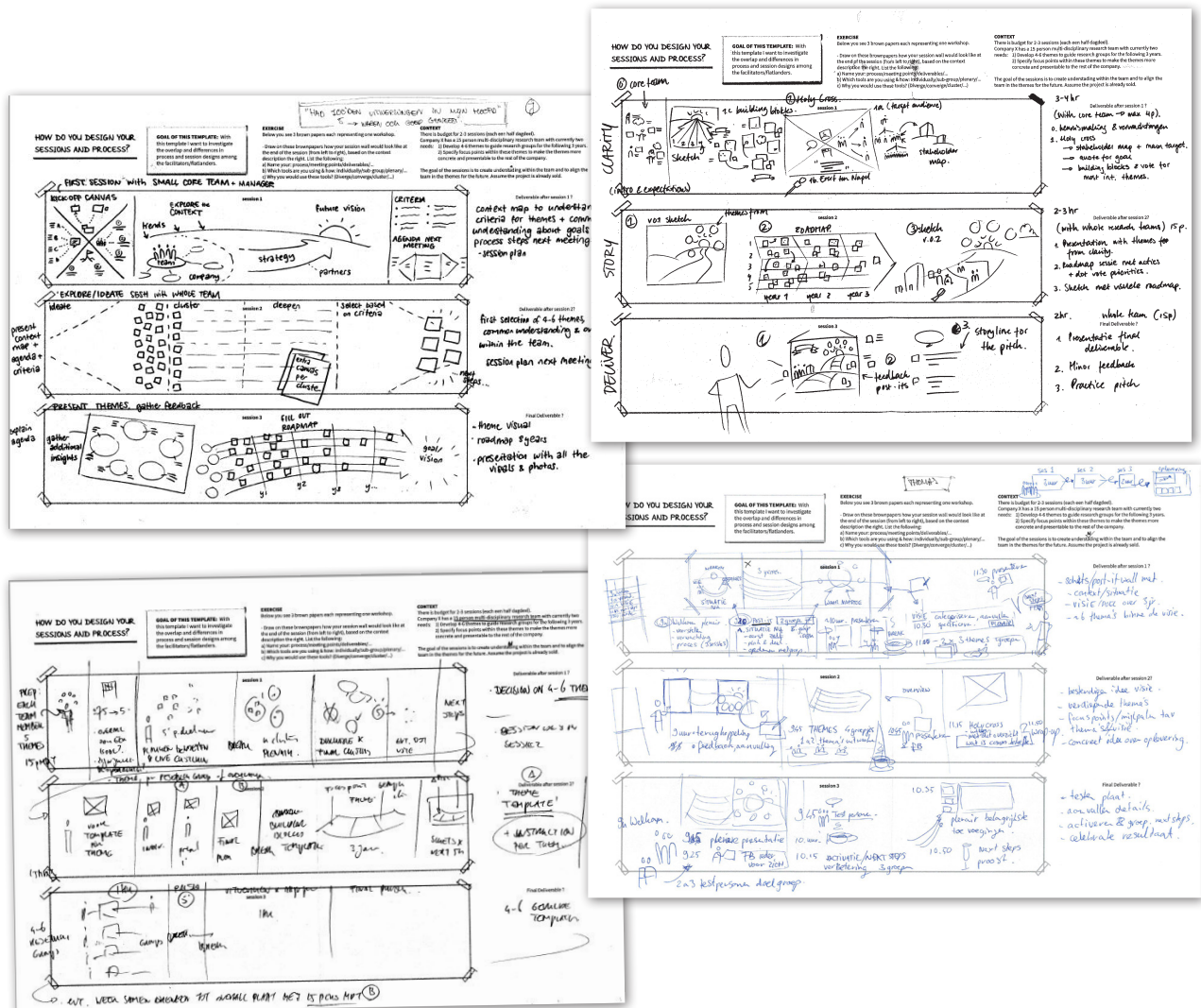


Figure 46: Examples of filled in templates

with the target audience. This was done with the aim to communicate the content better and to make the drawing stick the target audience.

Different levels of in-depth knowledge gathering

Besides, the variation of deliverables, some facilitators focussed more on the creation of a visual while others had more iterations on creating the content of the visual.

Participants of the workshop

One facilitator asked me who the client of the problem was on the template. For him it was not clear if the client was part of the team or is the client the company and the resource group are other stakeholders. This would have a different influenced the design of his sessions.

Team building activities

Another facilitator indicated team building activities and others did not. This facilitator described that teams who are not familiar with each other could benefit from a

small Visual Thinking crash course to loosen up a little. Others asked me after filling in the template if the team knew each other before the session or if they did not.

So, in short facilitators design different sessions for the same problem. The above mentioned aspects and variables influence the design of a session. In order to make Flatland design their sessions more deliberately, it is important to keep these aspects in mind.

However, not every facilitator based their session design on all of these aspects. It is questionable whether every facilitator is aware of all of these aspects and their assumptions before the design their sessions and while evaluating their sessions.

D1

REFRAME: BALANCING THE NEED FOR STRUCTURE AND FLEXIBILITY

A returning theme in this thesis is Flatland's struggle of balancing their need for structure (guidelines/efficiency) and their need for flexibility (creativity)

Why is a reframe needed?

The initial design brief was: "Develop guidelines to help Flatland design and facilitator their co-creation sessions more deliberately". Directly providing these guidelines to Flatland is not going to help them to design their co-creation sessions more deliberately, because Flatland's employees need a certain amount of flexibility in their design approach, see figure 47.

However, Flatland has a need for structure there, as they want to grow as a company. A reframe is needed to help Flatland design their co-creation sessions more deliberately without losing their flexibility of their approach.

Creative organisations & individuals need flexibility

Flatland is a creative organisation with a lot of creative individuals. These creative individuals, including the facilitators, need the flexibility to deliver their creative services of session design, see figure 47 (Gundry, Kickul, & Prather, 1994). Proposing Flatland with a structured process for session design could restrict their creativity and, therefore, affect the value of their service.

As a company, Flatland is managing their creative capacity well. Their employees are provided with a lot of flexibility to design their session in their own way and there is a lot of room for experimentation. This allows them to experiment with new ideas and original approaches (Boone, & Hollingsworth, 1990).

Growing organisations need structure

This flexibility works well for managing creativity. However, Flatland needs more structure if they want to grow. According to Greiner (1989), growing organisations have a growing amount of employees. For these companies informal knowledge sharing moments become insufficient for proper knowledge exchange. Flatland experiences the same. Flatland's informal knowledge sharing moments do not provide the facilitators enough time to share their differences in session design approaches.

In addition, growing organisation experience a need to make their operating services/practices more efficient (see figure 47) as they are delivering more growth in the amount of projects they are doing (Greiner, 1989). Flatland is experiencing the same as they express their need for session design guidelines.

How to propose a structure to Flatland without crushing their creativity?

Thus, Flatland is in need of more structured processes. However, these structured processes go against the nature of their creative individuals.

This thesis aims to design a structured process for Flatland, but the reframe deliberately aims to maintain Flatland's creative flexibility. By focusing on designing a structured reflection process, the different session design approaches of Flatland are untouched. This keeps the creative value of their services.

CREATIVE ORGANISATION

NEED FOR ORGANISATIONAL PROCESSES:

Tolerance for failure
Experimentation

How to measure a creativity of an organisation (look at):

- the number of new ideas, and percentage of new ideas implemented,
- the flexibility of an organisation's structure and financial, and accounting systems to permit new approaches.
- the originality of approaches to old and new opportunities
- the permissible degree of deviance from standard operational practices

(Boone, & Hollingsworth, 1990)

CREATIVE INDIVIDUAL

Attributes

A creative person is open, taking risks, curious, flexible, visionary, needing autonomy, (Velthouse 1990)

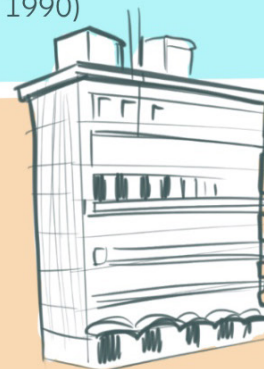
Behavioural

The act of bringing into existence something that did not exist before (Boone and Hollingsworth, 1990)

(Gundry, Kickul, & Prather, 1994)

NEEDS:

- NEED TO TRY NEW THINGS,
- NEED FOR FLEXIBILITY IN PROBLEM-SOLVING APPROACHES.



GROWING ORGANISATION

Attributes

- growing number of employees, results in a need for more formal knowledge sharing moments
- doing more projects results in a need for more efficiency of operating practices

(Greiner, 1989)

NEED:

NEED FOR MORE STRUCTURE

Figure 47: Balancing structure and flexibility arguments and references

E1

AWARENESS CAMPAIGN

The awareness campaign 'how to avoid learning as Flatland' consists out of several images which can be structurally shared via the several communication channels of Flatland.

The goal of these images is to trigger the employees of Flatland and to remind them to reflect and share their insights with other employees. These trigger images were tested with Flatlanders. The test set-up can be found in Appendix E2.

**HOW TO AVOID
LEARNING AS FLATLAND**

WAITING FOR OTHERS TO GO FIRST

Be passive without a shared responsibility



**HOW TO AVOID
LEARNING AS FLATLAND**

KILL EVERY ATTEMPT OF KNOWLEDGE SHARING

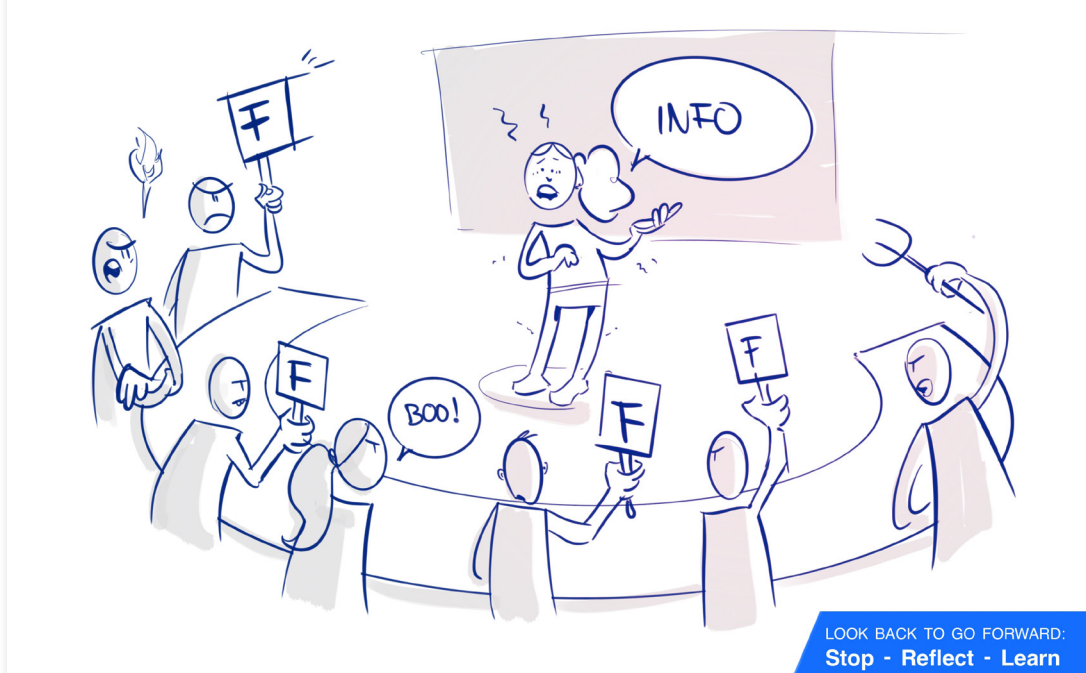


Figure 48: Two images of the awareness campaign.

E2

AWARENESS CAMPAIGN TEST

Test set-up

EXHIBITION

The images were printed out and put up on the wall in the office of Flatland as an exhibition. The employees of Flatland were asked to write down their initial thoughts on post-its and to stick these next to the images they found most confronting/recognisable.

QUESTIONNAIRE

After a day or two a questionnaire was send to the employees as another reminder to ask them again of what they thought of th awareness campaign.

ANALYSIS

Quotes of post-its are analysed and fed back to the management team. In this way the management team knows whether they need to change the way the team looks at the reflection processes.

1. EXHIBIT THE 4 POSTERS OF THE AWARENESS CAMPAIGN

LET THE PEOPLE FROM FLATLAND WRITE DOWN THEIR FIRST THOUGHTS OF THE POST-ITS AND LET THEM STICK IT NEXT TO THE POSTERS. IF NECESSARY ASK THEM SOME FOLLOW-UP QUESTIONS.



2. FOLLOW-UP QUESTIONNAIRE

ASK FOLLOW-UP QUESTIONS IN A QUESTIONNAIRE A COUPLE OF DAYS AFTER THE EXHIBITION. ANOTHER REMINDER MAY SPARK NEW COMMENTS ABOUT IMPLEMENTATION OF REFLECTION PROCESS WITHIN FLATLAND



3. DISCUSS FINDINGS WITH THE MANAGERS AND THE REST OF FLATLAND

PRESENT THE FINDINGS OF STEP 1 & 2 TO LET THE MANAGERS KNOW HOW READY FLATLAND IS FOR IMPLEMENTING THIS REFLECTION PROCESS



Figure 49: Test set-up for reflection template and explainer

F1

EXPLAINER (STAGE 2)

This tool is used in stage 2 to help the facilitators reflect with the same language

The goal of the explainer is to make the facilitators and designers of Flatland reflect on their sessions in the same manner. By doing so, it can help them in reflecting and designing their sessions more deliberately.

The explainer helps Flatland in reflecting on their session design and projects. It aims to support both single-loop as double-loop reflections. Moreover, it tries to create a common language for all the facilitators and designers to reflect on their sessions and projects.

In figure 50 the explainer is shown with added information and reasoning behind the design.

The most important object of reflection for Flatland is their artifact, their co-creation sessions. Normally, Flatland is not reflecting on this topic at all. The artifact is portrayed the biggest in the middle of the explainer and it shows several sub-topics which could function as the base of a reflection, see figure 50.

In every session something needs to happen with the content and the participants. These are portrayed in the middle and the circles. The designer and facilitator who are present in the co-creation session, try to achieve something with both the content and participants. They use several visual and facilitation tools for this. These are portrayed as the hands in the middle.

Beside these, the facilitator and designer can also reflect on themselves. The designer and facilitator are therefore portrayed at the bottom of the explainer.

The circumstances of the co-creation session are portrayed smaller at the top of the explainer. The goals of the sales lead and client are shown at the top together with the circumstances of the project: the budget, the time, and the location(s) of the project. Where the set goals the right ones? Or was more time and budget needed to create a valuable outcome?

The facilitator and designer are responsible for the preparation, align, deliver and the transfer phases. These are visualised at the left and right side of the explainer.

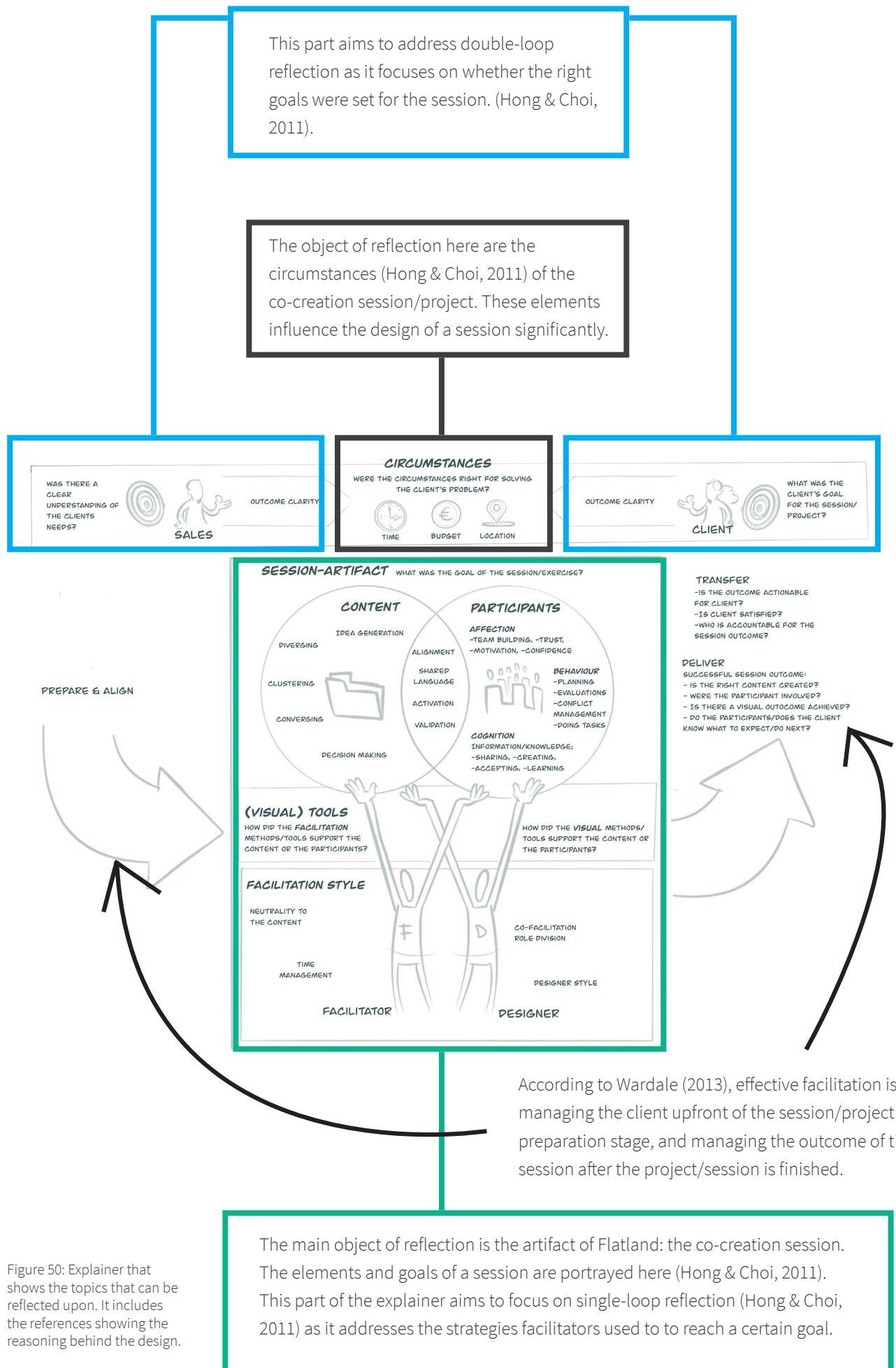


Figure 50: Explainer that shows the topics that can be reflected upon. It includes the references showing the reasoning behind the design.

F2

REFLECTION TEMPLATE

Facilitatie-Reflectiemiddel 3.0 A

Project _____

Sessie _____

MIJN ROL IN SESSIE: [F] [D] [I] [PL] [SL]

+

1. MOMENT IN SESSIE

Wat ging er goed? Wat minder?



VERGELIJKBARE ERVARINGEN: Heb ik dit eerder meegemaakt in een eerder project? Zo ja, welke? _____

2. EEN LES VOOR DE TOEKOMST /ACTIEPUNT

Kan/moet het de volgende keer anders?

Wat neem je mee naar je volgende sessie?

Figure 51: The reflection template



Wat gebeurde er vlak voor dit moment/deze momenten?
Hoe kwam dit moment tot stand?

DELEN MET WIE?

Voor wie is deze reflectie relevant & bedoeld?

**SALES / IEDEREEN (HUDDLE) /
CASES / FACILITATORS / I ROL / PL /
/ ... /**

F3

EXPLANATION REFLECTION TEMPLATE

The reflection template (see figure 52) is used in stage 1 and stage 2 to help the facilitators and designers reflect and think of the right steps

The left question is asking for comparable earlier experiences. The object of reflection: the self (Hong & Choi, 2011).

The right question in this square is aiming to make Flatland reflect at level 5 of scale of Sparks-Langer et. al (1990): explanation with principle or theory given as rationale plus consideration of context factors.



Describe a positive and negative moment to reflect upon from the session. This is level 4 of reflection scale of Sparks-Langer et al. (1990): Explanation with personal preference given as the rationale.

Facilitatie-Reflectiemiddel 3.0 A
 Project _____
 Sessie _____
 MIJN ROL IN SESSIE: [F] [D] [I] [PL] [SL]

+

△

1. MOMENT IN SESSIE
 Wat ging er goed? Wat minder?

☐☐☐ **VERGELIJKBARE ERVARINGEN:** Heb ik dit eerder meegemaakt in een eerder project? Zo ja, welke? _____

Wat gebeurde er vlak voor dit moment/deze momenten? _____
 Hoe kwam dit moment tot stand? _____

2. EEN LES VOOR DE TOEKOMST /ACTIEPUNT
 Kan/moet het de volgende keer anders?
 Wat neem je mee naar je volgende sessie?

DELEN MET WIE?
 Voor wie is deze reflectie relevant & bedoeld? _____

SALES / IEDEREEN (HUDDLE) / CASES / FACILITATORS / I ROL / PL / / ... /

Indicate future action: Level 4 of the Model from Sparks-Langer et. al. (1990)

Indicate for whom this reflection could be interesting. This step allows Flatland to already think of the moment to share this insight.

Figure 52: The reflection template that shows the steps and guiding question needed for a reflection cycle. It includes the references showing the reasoning behind the design.

F4

REFLECTION TEMPLATE AND EXPLAINER VALIDATION

An explainer and a reflection template were provided to three facilitators and one designer in order to test the quality of their reflections made while using the designed tools.

The test set-up can be seen in figure 54.

Goals of the test:

a] Research the quality of Flatland’s reflections on their session design/session moments/facilitation. Which level of reflections are captured on the template and in combination with the explainer.

The quality of the written reflections are scored with the scale of Sparks-Langer, Simmons, Pasch, Colton, & Starko (1990) (see figure 53).

b] Research whether Flatland reflects both with single-loop as double-loop levels.

c] Research the usage of explainer and template. Whether the Flatlanders use the same language/the right language in their reflections.

Hypothesis

a] The tools support the Flatlanders in doing up to level 4-5 scale of Sparks-Langer et. al (1990).

b] The explainer helps the person doing the reflection in directing them to do both single-loop as double-loop reflections.

c] The explainers helps in finding the right language for reflection.

Findings

The filled-in reflection templates can be found in Appendix F5.

a] Quality of reflections

Level of reflection

Level 1: Non-judgemental report/
description of events

Level 2: Simple lay-person language

Level 3: Events labeled with
appropriate terms

Level 4: Explanation with personal
preference given as the rationale

Level 5: Explanation with principle
or theory given as the rationale

Level 6: Explanation with principle
or theory given as rationale plus
consideration of context factors

Level 7: Explanation with
consideration of moral, political
and ethical issues

Figure 53: The model from Sparks-Langer et. al. (1990)

The quality of the written reflections varied from level 3-6 of the scale of Sparks-Langer et. al (1990). All Flatlanders scored themselves with at least one level 6 reflection.

Written words compared to spoken words

Remarkably, the recorded audios were often from a higher level than the written reflection. For example, one facilitator wrote down: the powerpoint reading guide was a great tool as a plus (level 3) and as delta, he wrote down: he could have had a better image of the cognitive ability of the group (level 4) upfront of the session. He mentioned (in audio) that in the previous session he noticed that participants had a lower cognitive ability than he expected. Therefore, he chose for an extra visual deliverable (a powerpoint reading guide) to guide the

participants in presenting pitch/present the created visual. This spoken reflection included reasoning of context factors that influenced the design of the session. This can be seen as a higher level of reflection (level 6) according to the Sparks-Langer et. al (1990) scale. Thus, it is recommend to reflect with these tools in duos as explaining your reflection results in a better quality reflection.

Are the created insights relevant to share?

All 4 Flatlanders who filled in the template were able to formulate at least one tangible action point at the bottom of their reflection template. Three of them filled in multiple action points.

The ultimate goal of the thesis is to make Flatland reflect on their sessions, create new knowledge (about session

0. INTRODUCTION

THE GOAL IS TO TEST THE CONCEPT REFLECTION TOOLS, TO SEE WHETHER THEY IMPROVE THE QUALITY OF REFLECTION. YOU ARE GOING TO FILL IN THE REFLECTION TEMPLATE AND THE EXPLAINER MAY FUNCTION AS INSPIRATION FOR YOUR REFLECTION.

1. FILLING IN THE TEMPLATE

WHILE FILLING THE TEMPLATE ASK THE FACILITATOR/DESIGNER TO THINK OUT LOUD.



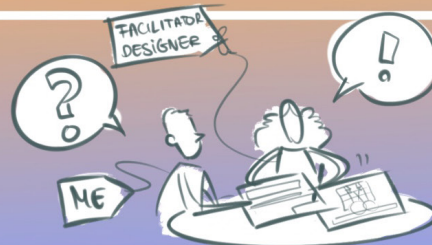
2. RANK THE REFLECTION(S) ON THE TEMPLATE (FACILITATOR/DESIGNER)

ASK THE FACILITATOR/DESIGNER TO RANK THEIR WRITTEN REFLECTIONS WITH THE SPARKS-LANGER ET. AL (1990) LET THE FACILITATOR/DESIGNER WRITE DOWN THE NUMBER OF THE LEVEL OF REFLECTION



3. ASK THE FACILITATOR/DESIGNER:

- WHAT THEY THINK OF THE TOOLS, BOTH THE TEMPLATE AND THE EXPLAINER
- WHAT THEY THINK THAT COULD BE IMPROVED
- FOLLOW UP QUESTIONS



4. RANK AND ANALYSE THE FILLED IN TEMPLATES (ME)

RANK THE FILLED-IN REFLECTIONS ON THE TEMPLATES MYSELF. IN ORDER TO ANALYSE THE REFLECTIONS MORE OBJECTIVELY. ANALYSE THE COMMONALITIES AND DIFFERENCES.



Figure 54: The test set-up for reflection template and explainer

design and facilitation), and share this knowledge internally within Flatland. Even though every template included a tangible action point, not all reflection template included an insight that is relevant to share with other colleagues. The reason for this was that some reflections were not generic enough. One of the facilitators mentioned:

“This is a really personal insight that is difficult to make generic for others. As I can function as both a D-role and a F-role I need to be aware that a better role division between the facilitator and the designer present in a session. This can help me to facilitate discussions better. When I do not have to make visual notes, for example, I can concentrate on the discussion only. However, other facilitators who do not draw at all, do not have to be aware of this insight”.

Two out of four of the filled-in templates indicated that their insights are relevant for others. The other two indicated that their insights were mainly interesting for themselves. Thus, not all reflections are interesting for other employees, but Flatland needs to remember that they are not only reflecting for themselves.

b) Single-loop and double-loop reflections

Lack of double-loop reflections

None of the four templates that were filled in included a double-loop reflection. It can be concluded that the facilitators can be supported in doing double-loop reflections. However, the tools did include new topics for Flatland that were reflected upon. During the test, one of the facilitators mentioned:

“Normally, when Flatland is reflecting, we reflect on the whole project and not necessarily on one session or a moment within a session. Normally

our reflections/evaluations include questions like: is the client content with the outcome and/or how did the collaboration go?”

This tells us that the explainer and the template support new ways of reflecting for Flatland. However, the tools are not complete as they do not include double-loop reflections.

c) Language and usage of explainer

Explainer as a checklist

The facilitators and designers used the tools differently. Three out of four used the explainer as a checklist to find new things they could reflect on when they were out of inspiration for their reflections. Only two of them drew over the explainer to cross out things that were not interesting and to circle the things that were interesting. Two out of four test participants said they would have preferred the tools to be integrated.

“I would have preferred this (the explainer) at the beginning of my reflection, because now I did not use it that much. I think I need to see it more often, because I did not take a look at all the details. But, I can imagine that when I have seen it more often, I can circle something that I found most interesting it could spark new reflection”

Unclear parts of the template

It was unclear for all whether they were asked to reflect on one or multiple moments of the session. Three out of four facilitators filled in several moments as subject of reflection. Only one facilitator described just one moment to deepen/investigate. The people who described multiple moments found the middle part of the template confusing. This part asks for clarification questions for a single moment.

Beside this, some facilitators chose multiple moments from one session to reflect on and others multiple

moments out of multiple sessions (of one project) to reflect on. Both are interesting as they resulted in interesting action points. However, the facilitators should be aware of what is asked of them. One designer found it difficult to come up with the things happened during the session as it was a week ago. He states that:

“The moment of filling in these templates should be right after the session as it makes it easier to remember everything”.

Flow of Template

The template had a clear structure. One facilitator mentioned:

“The structure works well for me, I was just about to say that I never experienced this before, when I read this question on the template.”

The goal of the test was to make Flatland reflect on their session design and session. With these tools the Flatlanders were able to do a structured reflection process and to reflect on the right subject, the session itself.

F5 FILLED-IN REFLECTION TEMPLATES AND EXPLAINER

This tool is used in stage 1 to help the facilitators and designers reflect and think of the right steps

Facilitatie-Reflectiemiddel 3.0 A ①

Project **CLIENT A**

Sessie **Basecamp-sessie**

MIJN ROL IN SESSIE: ☐ [D] ☐ [I] ☐ [PL] ☐ [SL]

1. MOMENT IN SESSIE → presenteren resultaten na carroussel

Wat ging er goed? Wat minder?

→ stakeholder-analyse-canvas ③

⑦? ④

↳ + werkte goed in proces ⑤

③ + gaf nieuwe inzichten

+ Meer tijd voor discussie, flexibiliteit ⑥ ⑤

④ - Meer betrokken bij discussie - LSD → snellere conclusies & daardoor meer rust in middagprogr. ⑥ ⑥

Δ meer tijd voor nemen ③

mensen uiteten in groepen zonder facilitator ③ ③

VERGELIJKBARE ERVARINGEN: Heb ik dit eerder in een eerder project? Zo ja, welke?

PROJECT B

Wat gebeurde er vlak voor dit moment/deze momenten? Hoe kwam dit moment tot stand?

2. EEN LES VOOR DE TOEKOMST /ACTIEPUNT

Kan/moet het de volgende keer anders? Wat neem je mee naar je volgende sessie?

→ JA → bewust zijn van strakkere facilitatie die nodig is → F: bij omschakel-moment benoemen ⑥

④ ⑥ - CONTEXT

D: conclusies visueel vastleggen

↳ bij elkaar roepen: terugpresenteren ⑥

afstemming ⑤

DELEN MET WIE?

Voor wie is deze reflectie relevant & bedoeld?

~~SALES~~ / IEDEREEN (HUDDLE) / ~~CASES~~ / FACILITATORS / I ROL / PL / ... /

F-rol leerlijn D-ROL

Figure 55: Filled-in reflection template + it level of reflection (indicated by me in red and by the participant in black)

Facilitatie-Reflectiemiddel 3.0 A

Project [REDACTED]

Sessie Story ① & Deliver

Mijn rol in sessie: (F) (D) (I) (PL) (SL)

1. MOMENT IN SESSIE
Wat ging er goed? Wat minder?

④ 6x STORY VRAAGSTELLING CARROUSSEL ③

DEIVER ④

⑤ Er was een's (storyspine) op de achterkant van de plaat 30x ligne 300 gsm.

③ powerpoint als leesruiter xxl ③

waagstelling

STORY ④ Beter beeld van de deelnemers → verwachtingen participatievraag (cognitieve)

STORY ④ check op de vragen met de klant.

STORY ④ Het was echt nog een sluitstap de beslissing voor structuur moest nog komen.

VERGELIJKBARE ERVARINGEN: Heb ik dit eerder meegemaakt in een eerder project? Zo ja, welke?

Wat heb ik geleerd of vlak voor dit moment?

Hoe kwam dit moment tot stand?

2. EEN LES VOOR DE TOEKOMST / ACTIEPUNT
Kun/moet het de volgende keer anders?
Wat neem je mee naar je volgende sessie?

• vraagstelling in vb (+ check met klant)

• leesruiter in powerpoint

DELEN MET WIE?
Voor wie is deze reflectie relevant & bedoeld?

SALES / IEDEREEN (HUDDLE) / CASES / FACILITATORS / I ROL (PL) / ...

Figure 56: Filled-in reflection template + it level of reflection (indicated by me in red and by the participant in black)

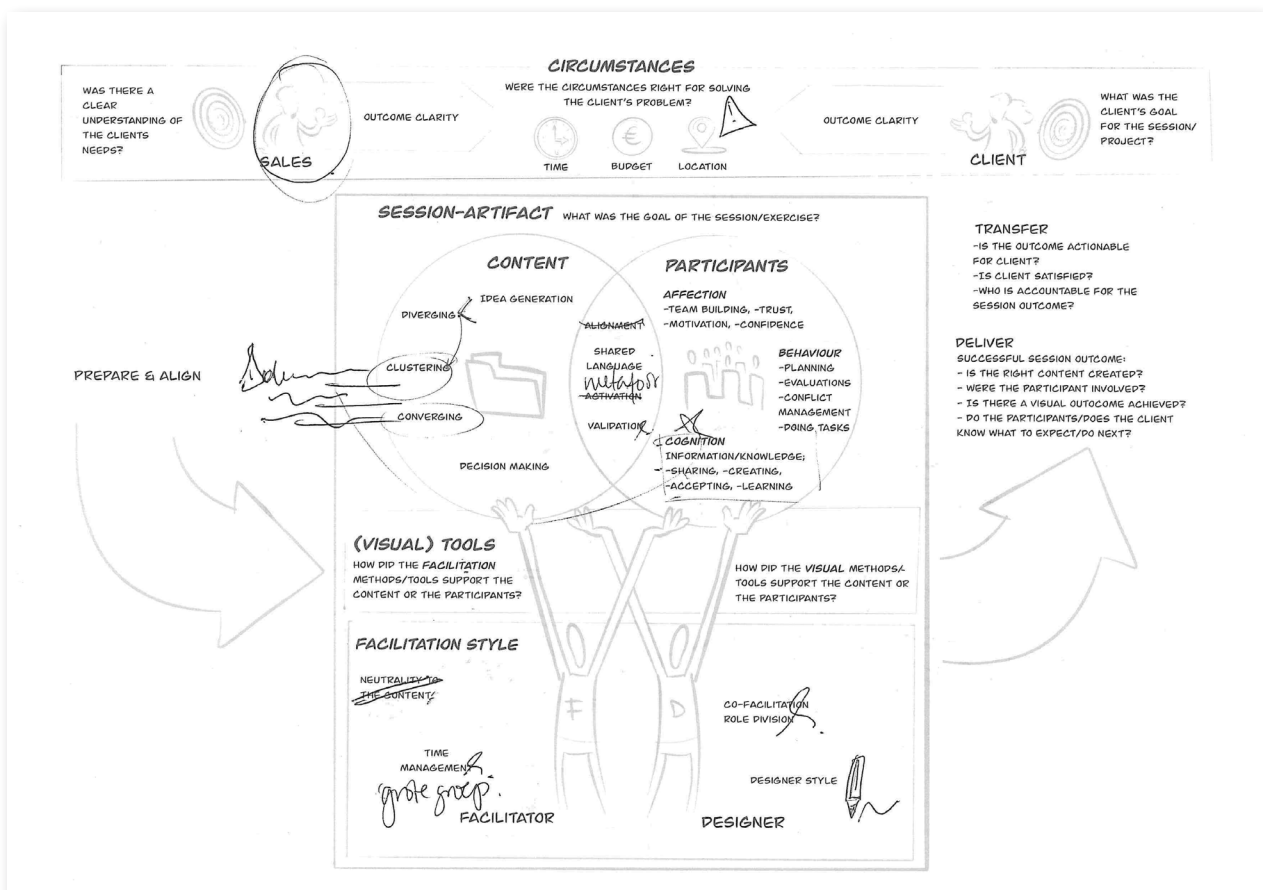


Figure 57: The explainer scribbled upon by a participant of the test

Facilitatie-Reflectiemiddel 3.0 A

Project [REDACTED]

Sessie **STORY**

MIJN ROL IN SESSIE: **0** [D] [1] [PL] [SL]

1. MOMENT IN SESSIE

Wat minder?

CO-FACILITEREN

Werkvorm: (GROEP/SGROEP & SAMENSTELLING)

INDIVIDUEEL EERSTE INNOVATIE

VERGELIJKBARE ERVARINGEN: Heb ik dit eerder meegemaakt in een eerder project? Zo ja, welke?

NEE, NIET OP DEZE MANIER

Wat gebeurde er vlak voor dit moment/deze momenten?

NIVA = 7

Hoe kwam dit moment tot stand?

ORGANISCHE WISSELING DOOR SPONTANE VERING L.

2. EEN LES VOOR DE TOEKOMST /ACTIEPUNT

Kan/moet het de volgende keer anders?

Wat neem je mee naar je volgende sessie?

J A, NIET L IJN A N D E R S. M O E T N I E T, M A R K H E T I S W E L C E L L E R E N P O T E N T I E E L V A N D E R V O L L E R V O O R U L T A T.

Illustrator A **SESSIEPLAN W A R D E R I J B J B E I D E F A C I L I T A T O R S E E N V E R K I N H E T P R O C E S E E N V O L U E S S E N.**

WKL

DELEN MET WIE?

Voor wie is deze reflectie relevant & bedoeld?

SALES/IEDEEREEN (HUDDLE)/CASES/FACILITATORS/1ROL/PL/1...

CO-FACILITATORS (B/L)

Figure 58: Filled-in reflection template + it level of reflection (indicated by me in red and by the participant in black)

Facilitatie-Reflectiemiddel 3.0 A

Project [REDACTED]

Sessie **VALIDATIESESSIE (3)**

MIJN ROL IN SESSIE: [F] ☐ [PL] ☐ [SL] ☐

1. MOMENT IN SESSIE

Wat ging er goed? Wat minder?

SESSIE GING GOED:

① OPTIMALISEREN v/h KERNVERHAAL
de 3 is aangevuld, besluitvorming ②

③ gedeeld beeld, inwerken v/d content ④

⑤ low opacity plant ⑤ om overheen te schetsen
Goede tool ④

⑥ KLANT heeft oefenpitch gedaan voor de doelgroep ⑥

⑦ Heldere rolverdeling ⑦ ON PAPER ③

⑧ magic getoond ⑧

⑨ Wij hebben geen overdracht/witleg vooraf gegeven
(VI of IV ④) ON PAPER ④ IN AUDIO ⑥

⑩ "PREFEERED BECAUSE OF STRUCTURE" HIS AUDIO

VERGELIJKBARE ERVARINGEN: Heb ik dit eerder meegemaakt in een eerder project? Zo ja, welke? 1 t/m 8

Wat gebeurde er vlak voor dit moment/deze momenten? Hoe kwam dit moment tot stand? door validatie met toehoorders

2. EEN LES VOOR DE TOEKOMST /ACTIEPUNT

Kan/moet het de volgende keer anders?

Wat neem ik mee naar je volgende sessie?

NEUH.

- VALDEREN met de klant+ toehoorders
- Bij oefenpitches vooraf heldere overdracht doen
- Heldere rolverdeling

DELEN MET WIE?
Voor wie is deze reflectie relevant & bedoeld?

SALES IEDEREEN (HUDDLE) / CASES FACILITATORS I ROL / PL / ...

PROBEER ALTYD VALIDATIE TE VERKOPEN

Figure 59: Filled-in reflection template + it level of reflection (indicated by me in red and by the participant in roman numbers)

Sieb Posthuma

**DESIGNING A STRUCTURED REFLECTION
PROCESS FOR A VISUAL THINKING BUSINESS**