Enhancing team collaboration in the Customer Experience department

Improving collaboration between the teams of the Customer Experience department for a more consistent implementation of the customer needs.

MASTER THESIS by Joëlle Kok

Strategic Product Design

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| Preface

Dear reader,

Here it is, my final deliverable of my gradation project of the Strategic Product Design master at the Delft University of Technology. With this report, my time as a student is concluded. In six months, I have learned so much, and gained so much new expertise as a designer. This has been made possible by all the amazing people around me.

Since this thesis has been made possible by the Customer Experience department of Flyco, I want to express my gratitude for offering me the opportunity to be a graduation student at your department. Therefrom more specifically, I would like to thank Carlijn for being my company mentor through this process. I think I could not have had any better company mentor for this project. You have stood by me during every step of this process. Whenever I needed any support, you would respond to me directly and try to help me as good as possible. Not only in process, but also in personal issues I had great support on you. Furthermore, I would like to thank my team, as you were always willing to offer me help if I needed it, to make sure that my thesis would be finished the best as possible. You made me feel very welcome in your team, making my time with you enjoyable!

Next, I want to thank my supervisory team Mariëlle and Gert Hans for supporting me throughout the process. I think it was super valuable to have such diverse guidance. Mariëlle, thank you for your critical look, where things sometimes slipped my mind. You could always offer me valuable feedback. Gert Hans, you have given me great insights from all your practical expertise. I enjoyed the meetings we had,they always made me smile. And yes.. that is just my face! ;)

At last, I want to express my gratitude to all my dear friends around me. My roommates who have always stood by me, with all the ups and downs, and always helped me when I needed it, or made me smile when I was not doing well. My dear boyfriend who has been so supportive of me, making sure I pushed my boundaries. All my IDE friends who were there at the faculty for brainstorming, creative sessions or just to have a nice chat.

Lastly, everyone around me that was involved, it was you who helped me make this project such a success and help me develop as a designer.

Thank you! Enjoy reading!

Joëlle

| Executive summary

Flyco is a large airline company who has built its strategy emphasising on operational excellence. Yet, since competitors can now achieve similar results, they have expanded their strategy to offering excellent customer experience too, resulting in the foundation of the Customer Experience (CX) department. Nevertheless, Flyco notices their NPS is not rising above 50. One of the reasons is the silo-driven lay-out a typical corporate as Flyco has, where teams lack knowledge sharing. A way to bridge these silos is by using cross-functional collaboration, where multiple distinct functions come together to tackle complex problems with a multidisciplinary perspective.

This results in the research question: "How can Flyco improve the consistent implementation of customer needs throughout the customer journey through more effective collaboration between the different teams of the CX department?" During the research, multiple perspectives are taken into consideration. At first, the connection between collaboration and customer needs is defined to learn why the stated claim is currently a problem. Thereafter, the current way of collaboration between the different teams is reflected on by means of seven in-depth interviews with employees. Simultaneously, a literature review gives insights into what way effective cross-functional collaboration should be framed and which elements are essential. However, since multiple elements have a considerable effect on cross-functional collaboration, a decision needs to be made for a focal point to realise effective change at one, or a few of these elements. A quantitative analysis, filled in by the CX department, gives insight into where the department believes they could improve. The focus is put where most progress can be made for the CX department. This results in a focus on effective knowledge sharing between the different teams through more effective and open communication to lead the focus within the department towards the group.

Lots of literature has been written in knowledge management, including multiple tools and methods. Nevertheless, earlier attempts in implementing a new knowledge management method have failed due to unacceptance of implementation by the employees. Therefore the behaviour of the employees needs to change. Consequently, literature in behaviour change is reviewed, resulting in four behaviour change techniques most appropriate for this problem. Five concepts are established through combining cocreation insights on the behaviour change techniques with knowledge management tools and methods. These concepts in unison form a system for a profound knowledge management, which ideally are all developed and applied. However, for the purpose of this thesis, the concept 'Community of Practice (CoP)' is chosen for further development.

The concept focuses on knowledge sharing through a group, sharing a domain/passion, a practice, and a community, coming together to discuss a question or statement stated by one of the teams of the CX department. People can apply when they are interested to learn more or have gained expertise in this area. The group of employees form a community group where they run through five steps to get an agreement on the topic. The results will be shared with the department for knowledge sharing.

| Abbreviations

CX = Customer Experience
CoX = Centre of Excellence
CJM = Customer Journey Manager
NPS = Net Promoter Score
BCW = Behaviour Change Wheel
CoP = Community of Practice

| Table of Contents

Project Introduction

Chapter 1 introduces the project and the approach taken in this research. Therefore, first an introduction is given, whereafter the approach and the research questions are defined. It describes how the project runs through different stages to answer the main research question.

Chapter

01
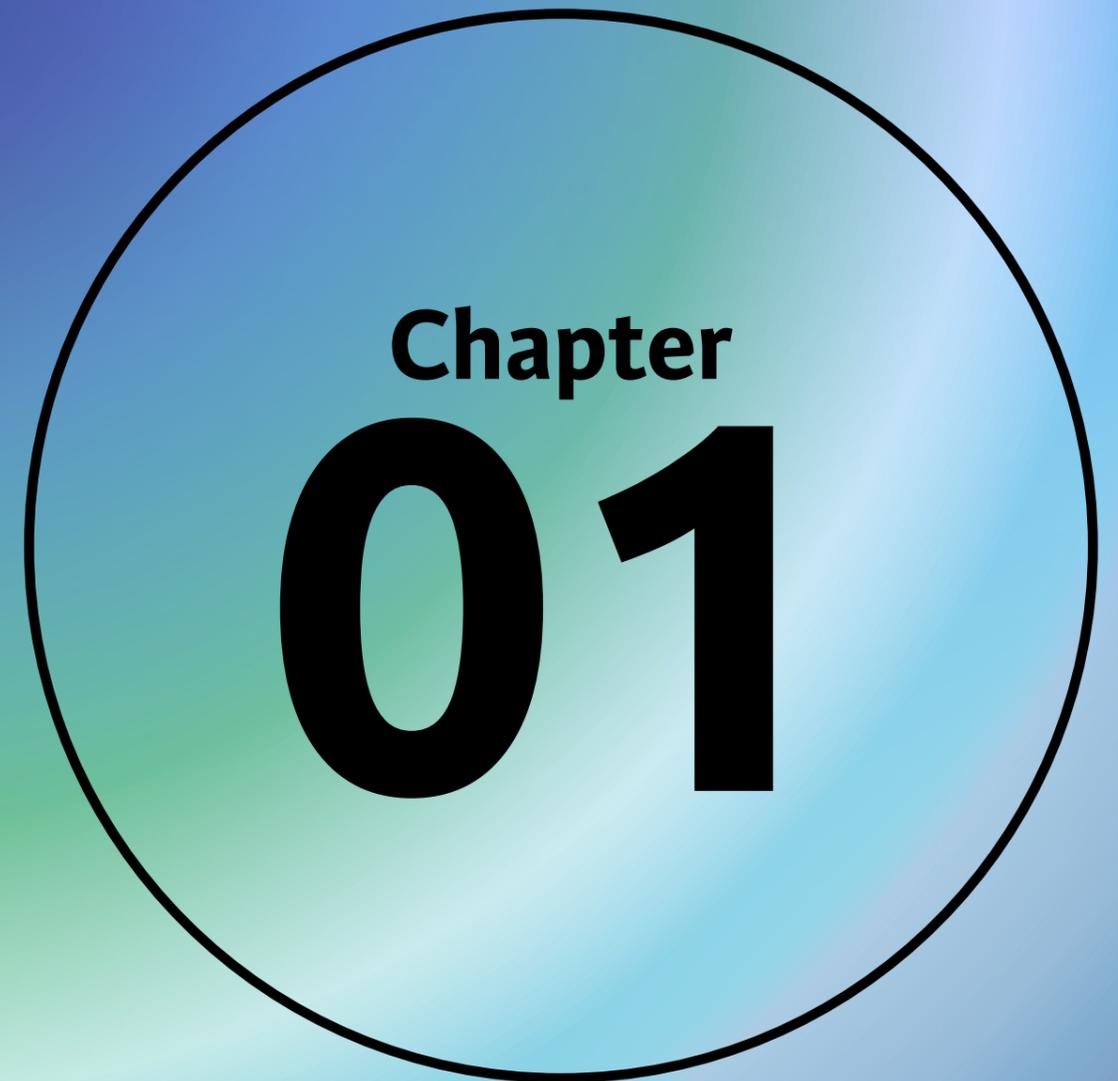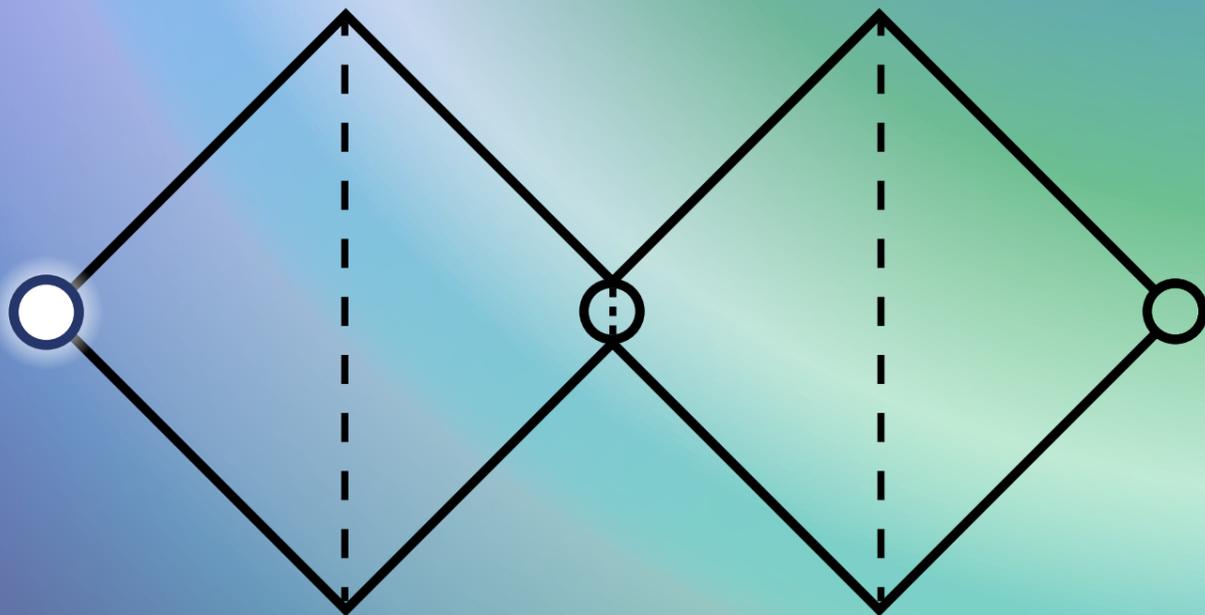
Introduction

Formerly, companies built their strategy emphasising on operational excellence. Yet when all your competitors can achieve similar operational excellence, a new differentiation strategy is necessary to still distinguish yourself (Adformatie, 2019). Increasingly, companies realise the necessity for a change of focus towards customer-centricity to become leading in delivering excellent customer experience. Especially airline companies should recognize the relevance, since research shows that 70% of worldwide people mention customer experience is a crucial factor in purchasing decisions for flights. Nevertheless, on average, the delivered customer experience is 33% lower in quality than expected (Clarke and Kinghorn, 2018).

Excellent customer experience implies a satisfied customer throughout the entire customer journey (Meyer and Schwager, 2007). There are many touchpoints and channels to improve the customer experience in the more than ever complex customer journey (Lemon and Verhoef, 2016). Nevertheless, a pleasant experience is not necessarily created by offering as many new features as possible, but by optimizing the most relevant touchpoints by effectively listening to what your customer needs (Meyer and Schwager, 2007). What is relevant to keep in mind is that changes in one touchpoint also influences other touchpoints and channels. Integration of design between the different touchpoints has a beneficial effect on the customer experience, meaning touchpoints should not be adapted alone, but in combination with other touchpoints within the customer journey. Therefore, a cooperation between the design of the different touchpoints is required. The multiple functions within the company responsible for these touchpoints should therefore collaborate to deliver excellent customer experience (Lemon and Verhoef, 2016).

Excellent customer experience not only influences the purchasing behaviour, but it also influences whether your customers will come back to your company. 32% of all customers would not come back after one bad experience with the brand (Clarke and Kinghorn, 2018), the more reason for a company to stress the importance of it.

Collaboration

The distinct functions responsible for the touchpoints should collaborate and therefore integration is required. There are barriers holding back the integral way of working within a company. A common challenge in airline companies is the silo-based organisation. The department or teams have their own KPI's, so there is being steered to individual performance instead of group or company performance (BCG, 2021). A popular way to bridge these silos are cross-functional teams. This form of collaboration includes distinct functions across the organisation with their own expertise, so that all these diverse types of knowledge are combined to a well-considered and multi-perspective concept (Denison et al., 1996). However, an important disclaimer is that the mere use of these cross-functional teams does not necessarily lead to successful integration (Turkulainen and Ketokivi, 2012). A cross-functional team should be effective by making sure all the most important aspects are correctly working. Therefore, it should be examined precisely whether all team aspects are working properly (Henke et al., 1993).

Project aim

The Customer Experience (CX) department has been divided into six teams, thereof four teams cover a part of the customer journey, and two teams are support for these four journey teams. These teams are all focusing on optimising the customer journey based on the customer needs that are continuously being defined. They are working according to the design thinking processes to optimally comply with their customers' needs. Nevertheless, they notice that the organisation is a typical corporate with a silo-driven lay-out which leads to the fact that on the right they do not know what is happening on the left. Therefore, they aspire towards more effective collaboration between the different teams for more integration of the department, leading to more consistent answering of the customer needs.

Research assignment

On the one hand the airline industries are a silo-based organisation obstructing cross-functional collaboration, but on the other hand there is a need to deliver customer experience excellence. Therefore, Flyco wants to investigate how an optimised way of collaboration between the different teams of the CX department can be reached for a more consistent implementation of the customer needs. The project brief for this thesis can be found in appendix XX. The research question that has been formed is as follows:

How can Flyco improve the **consistent implementation of customer needs** throughout the customer journey through **more effective collaboration between the different teams of the CX department?**

Project approach

This chapter describes how the project has been approached and based on which model the research question is being answered.

The overall approach for this research, is the Double Diamond Model (British Design Council, 2019). This model helps to structure your design process into four phases, but also helps to retain the focus continuously. The model is divided into two so-called diamonds, which are a research diamond and a design diamond. Both diamonds include two phases where you first have a broad exploration phase to explore the given issue (divergent thinking), whereafter you have a defining phase to take a focused action (convergent thinking). This process describes how the graduation journey has followed

different steps from the project brief to the end delivery and it also describes how the report has been structured. The process is not a linear one, but it is an iterative process where steps can be retaken when needed, therefore continuous reflection and iteration are very important steps to take. Both diamonds are divided into two phases. The first diamond consists of the phases discover and define. These phases are meant to understand the context and explore where the problem focus should be, instead of assuming the problem is at it has been given. The second diamond consists of the phases develop and deliver. These phases are meant to create a diverse set of answers for the stated problem, which are then tested with stakeholders and iterated upon.
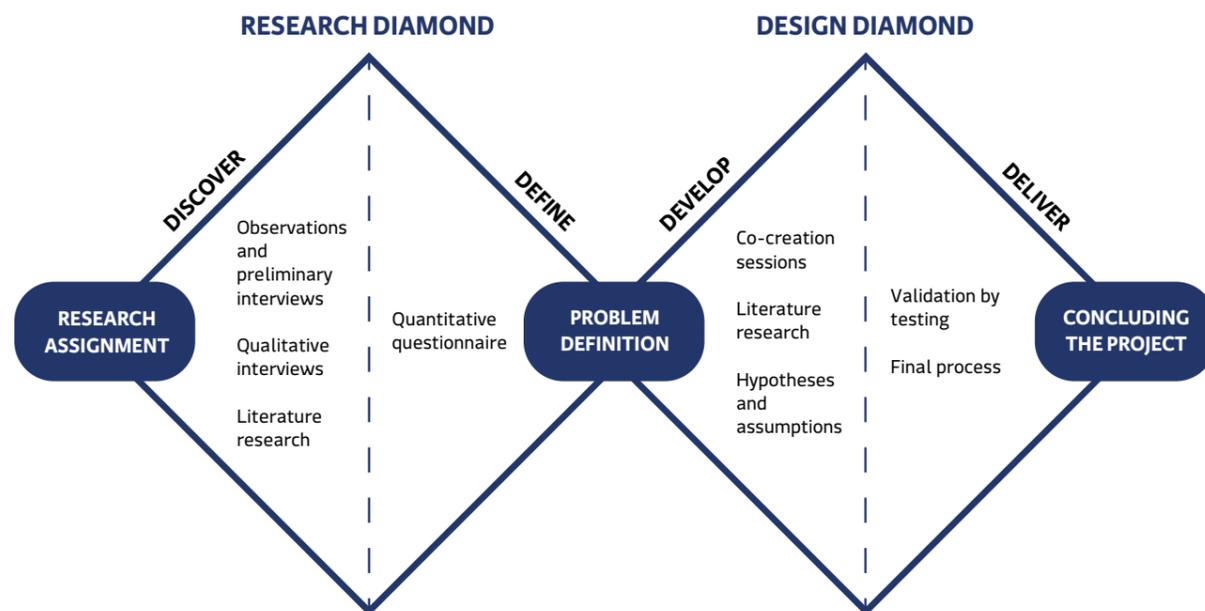
Figure 1: Overview of the different process steps taken throughout the thesis.

Discover

The first phase is meant to broadly explore the context of the problem definition. This exploration is being done based on the earlier mentioned sub research questions, which gives the discover phase some guidance. Therefore, first a literature review has been executed to discover more about the context of customer experience, customer needs and cross-functional teams. Simultaneously, informal research has been done by observing the department, talking to people about the department to discover how everything works. In this stage, the problem was also deepened out to see how silo working effects the customer experience. The next step was to do qualitative interviews with employees from all different teams to deepen into the context.

Define

The second phase is meant to regain focus and define the problem definition. All the findings of the discover phase are structured and are converted into valuable insights. Conclusions are being drawn from the observations, the qualitative interviews and the literature review. These conclusions are converted into a quantitative questionnaire that has been sent to the CX department. This questionnaire helps to define in what way the CX department believes they should still improve its collaboration and where the design focus should be in the second diamond.

Develop

The third step is to develop a solution for the given problem statement. This is therefore also the design phase. The development step starts with broadening the perspective with literature insights. These insights will be the basis for the further development, since already many solutions have been discovered for the given problem. Thereafter, a cocreation session is being held with members from all teams from the CX department to have a broad view on the topic. Based on the literature and the brainstorm insights, five concepts are generated which all have the potential to encourage effective knowledge sharing within the CX department.

Deliver

The last step is to deliver the concept. From the five concepts, one concept is chosen to continue with. This concept is then being defined further, and iterated upon. Thereafter, the assumptions in the concept are defined, to be able to gain insights in the aspects that should be iterated upon quickly. These assumptions are tested by creating testable hypotheses. By testing the hypotheses, insight is quickly gathered on how the different elements for the concept are perceived. Then, a last iteration is defined for the concept, resulting in the final design of this master thesis.

Research questions

The main research question that needs to be answered in the end of this thesis is the following:

RQ: How can Flyco improve the consistent implementation of customer needs throughout the customer journey through more effective collaboration between the different teams of the CX department?

The research question focuses on the broadest definition of collaboration. To define a focus area within this research question, during the research phase, four sub-research questions will be answered. These subresearch question will make sure that the problem framing is narrowed, so that the design can be more focused.

SRQ1: What obstructs the optimal implementation of customer needs throughout the customer journey for the CX department specifically?
→ answered in chapter 3.

SRQ2: What are the current issues in the collaboration between the different teams of the CX department
→ answered in chapter 4.

SRQ3: How can the CX teams optimally collaborate for consistent implementation of the customer needs throughout the customer journey?
→ answered in chapter 4.

SRQ4: What actions can the CX department take to ensure more effective collaboration in the future?
→ answered in chapter 5.

The first half of the report will focus on answering these subresearch questions to define the problem that will be designed for. These are the following four chapters. The second half will focus on designing a solution for the problem stated in the fifth chapter.

1. **Project introduction**
2. **Understanding the context**
3. **Insights in the department**
4. **Theoretical foundation**

Discover

Define

5. **Defining the problem**
6. **Literature input for the solution**
7. **Designing the solution**

Develop

Deliver

8. **Concept development**
9. **Delivering the solution**
10. **Concluding the project**
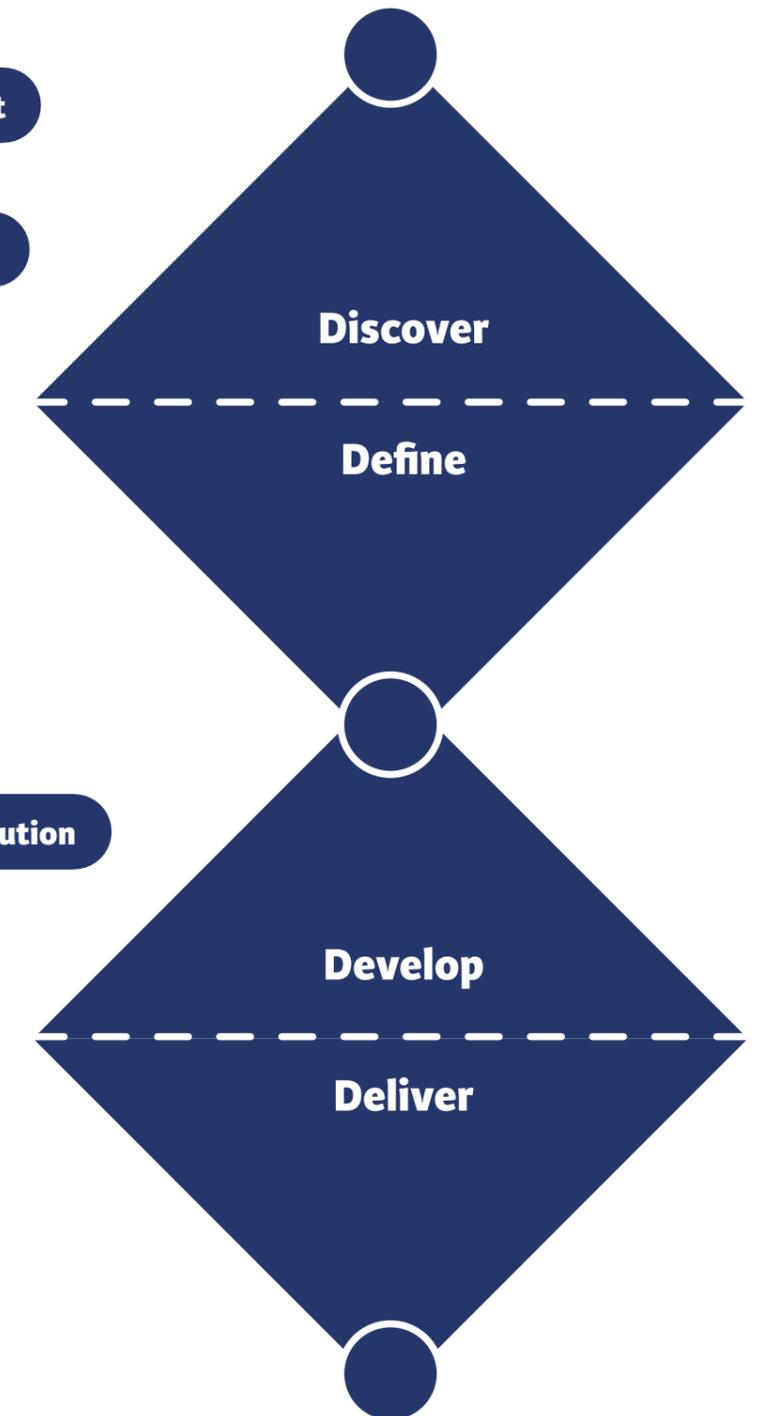
Understanding
the Context

Chapter 2 explores the context of the defined problem. Therefore, insights on the structure of the company and more specifically, the department are gathered. Eventually, based on preliminary interviews and observations, a description is given on why the problem that has been given is in fact a problem.

Chapter

02
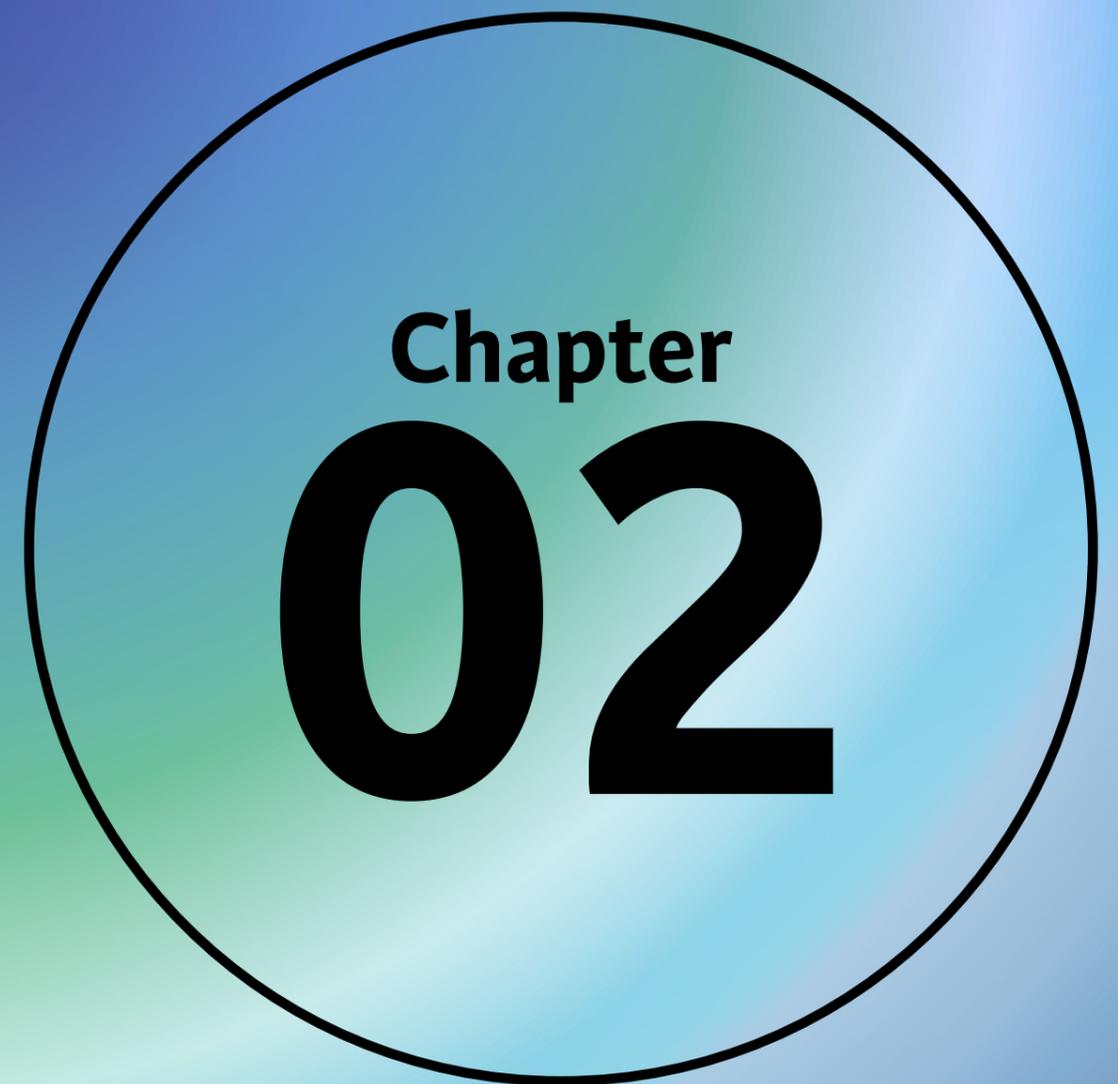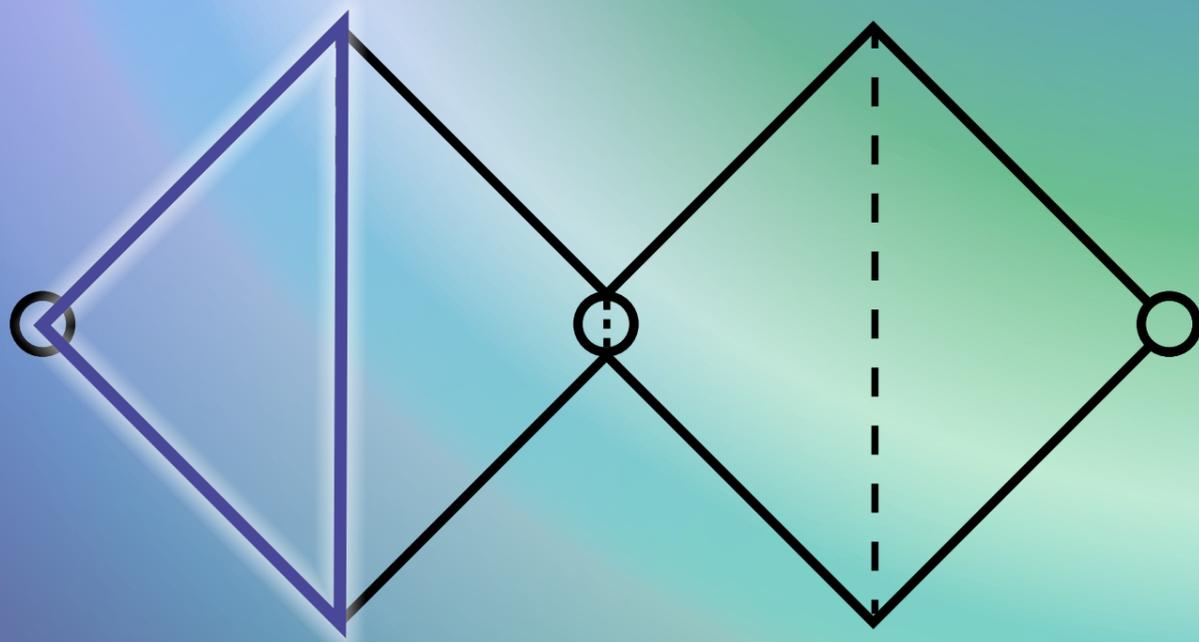
The organisation

For the organisation we can define the company, a somewhat smaller scope of the CX department and the even smaller scope of the Centre of Excellence, from where my internship has been initiated. This chapter focuses on the context of the project, and also on answering the first sub research question which focuses on what obstructs the optimal implementation of customer needs throughout the customer journey for the CX department.

2.1.1 The company

Flyco is a large airline company, mainly focusing on innovation, efficiency and customer experience (Redactie Adformatie, 2019). Flyco wants to differentiate itself from the competition by delivering excellent customer experience. This has been a change of focus which was realised in 2016, when the company decided to change from an operational excellence focus, towards a customer-centric excellence focus (Redactie Adformatie, 2019). Since the competition can now all deliver operational excellence, this was the way for Flyco to distinguish itself from others (Lemon and Verhoef, 2016). Therefore, a change within the company was required, meaning the organisation needed a new structure. This change was based on an advice by the consultancy firm BCG, who had discovered that airline companies are too complex slow and expensive (Bhalla et al., 2011). Therefore, the company needed to arrange a reorganisation within the company, reducing the number of employees. In this reorganisation, the customer experience department has been founded so that Flyco could realise their desired customer-centric focus. The head of the customer experience department, the

senior vice president (SVP), would report directly to the company CEO (Redactie Adformatie, 2019).

2.1.2 The Customer Experience Department

Due to the reorganisation in 2016, the customer experience department was founded, which in fact was a rearrangement of the marketing department (Redactie Adformatie, 2019). By then, the department consisted of about 20-25 employees. After about two years, the existing SVP left, and a new SVP was being introduced. In his responsibility, the department grew larger.

Reorganisation

The CX department has been reorganised again in 2019. By that time, BCG evaluated how CX should be set up. Their advice resulted in the realisation of the division of eight teams in the department. Thereof there were six so-called journey teams and two support teams being created. All these teams would contribute to improving the entire customer journey. When the Covid-19 pandemic strikes, the department had to shrink from the about 70 employees that were working at that time, to 50 employees. Due to this shrinking of the department, the offer and interaction team is being merged with the airport team, and the flight team is being merged with the partner team.

Each team has got their own team manager, and all these six managers have got one manager of the CX department, the Executive Vice President. These seven managers together form the management team. Nevertheless, the SVP also has a lot of connection with the team members of the department.

TEAM:	COVERS:	
Brand and Markcom	This team is a little bit different than the rest of the customer journey teams. They focus on the brand that is being shown in advertisement, focusing on both the potential and the current customers. They mainly focus before the customer journey starts.	**CUSTOMER JOURNEY TEAMS**
Flight and Partners *In 2016, the Airport and Offer and Interaction team, and the Flight and Partner team were both two teams. The teams were called: Aiport, Customer Offer and Interaction, Flight, Partners. Due to the reorganization in 2019, these teams were merged together into two teams.*	The flight, so verything that happens in the sky. The partners, so the follow-up transfer flights for passengers flying with Flyco and with another airline company. When the passenger first flies with Flyco and thereafter with another airline company, there should be a seamless transition for an optimal customer experience. This is a moment where is a lot of disappointment happens, negatively impacting the NPS. The reason is that when a passenger flies two flights, and the other flight is better or worse, the expectations differ between the flights, disappointing the customer.	
Airport and Offer and Interaction	The offer and interaction, so they focus on the dreaming and orientation phase of the customer, until the moment of booking and preparation. The airport, so they focus on everything that happens on and around the airport.	
Disruption and care	The entire journey. Whenever there is a disruption within the customer journey, it should be solved as quickly as possible. So they focus on solving problems before they escalate. A large focus area of theirs is aftercare and also a piece of rebooking.	
Centre of Excellence	This team supports the other teams with historical data from the customers who are flying with Flyco. This means that if the data shows experiences that negatively influence the NPS, the information is given to the support teams to realise an improvement for the customer.	**SUPPORT TEAMS**
IT, Data and Tooling	This team supports the other teams by realising their projects with data. They are really focused on the operational data.	

Preliminary interviews CoX

Since the Centre of Excellence (CoX) team is the team that has proposed this assignment to me, their view on the topic seemed very relevant. Information on the CoX team and what different roles are present in the CoX team, can be found in appendix 2. The interviews were held with seven members of the CoX team.

This team has quite a holistic view on the department, since all team members are involved in all different teams. They know quite a lot about the department and about what everything is working on. That is the reason why I have started with preliminary interviews with the team members of CoX to dive into the topic (see appendix 1).

Lack of awareness to involve another part of the customer journey
Different insights came forward in the conversations. Firstly, there appears to be a lack of awareness to involve another part of the journey. In their perspective, when a project is started, the impact in the entire journey should be measured, which does not always happen in every project. People tend to keep the focus on their own small part of the customer journey.

Solving small details in the customer journey
Since other parts of the journey are not involved, a so-called bandage is being put on the customer journey, instead of tackling the bigger underlying issue. What I mean is that small issues are being solved, which might be easier in the first place, however there is not being looked at the entire customer journey and to what influence this solution might have on other parts of the journey. These 'bandage solutions', do not improve the customer journey in the end.

In a corporate, change should be implemented in small steps
Another insight is that people do want to change, but they have to deal with the fact that it is a large corporate culture. Changing a corporate culture is hard, little steps need to be taken, since it is not just one person that needs to change, but the entire system has to join this change. This must be kept in mind when the solution is created, that it must be a low barrier, a small step for the department.

Unawareness of what other employees are doing in the department
This corporate culture also causes that teams are unaware of each others doings. Even though the social communication is quite good, the functional communication can still be improved. This problem leads to overlapping projects, solving the wrong problem or not involving the right people. The knowledge between employees is not being shared enough.

Silo working organization
A last issue is that people work in their own silo's. What is meant with silo's, is that people are working in their own team with their specific focus on the customer journey. This is the silo, but the collaboration with the other silo's is lacking. The focus is mainly on themselves or their own team. They have their own priorities, instead of looking for the priorities best for the department. CoX would like to see this to be more integral in the department.

Defining the problem

The customer experience should be consistent throughout the entire customer journey. Apparently, the CoX team has noticed this is not yet fully the case. This can be seen in the NPS that does not rise, or even decreases. To define the impact of the problem, this chapter describes a case about baggage where ineffective collaboration leads to inconsistent implementation of the customer needs. Since customer experience and the impact of collaboration is not directly measured, the steps that are taken before you can see the impact, are being explained.

Net Promoter Score

The customer experience is what a passenger experiences during its journey and how they feel about this experience. Therefore it is not easily directly measurable. Flyco measures their customer's experience using the Net Promoter Score, or NPS. This is a very commonly used market research metric where one question is being asked to decide the score: "On a scale from 1-10, how likely are you to recommend this company's service to a friend or colleague?". The result is divided into three groups, a detractor (a score between 1-6), the passively satisfied people (a score between 7-8) and the promoters (a score between 9-10). The promotors minus the detractors results in the company's NPS. This NPS is a score between -100 and 100. However, the NPS does not specifically mention anything about the experience during the journey at specific moments, therefore further questions should be asked to see specifically what the score is in a specific point in the customer journey (Fisher and Korduplesi, 2019).

How NPS is measured
Since the customer experience cannot be decided based on one single question, Flyco works with multiple interview teams that are walking around at the airport to ask questions to passengers. However, data is not only gathered by these interview teams, there are for instance also automatic questionnaires after a booking, and there are surveys that are send to people to ask them about their experience during their journey. So the data is gathered very broadly. Therefore Flyco has quite a representative response from their customers. All the data elements that are collected are being merged and are then analysed by the data analysts. These analysts then make overviews, these overviews also show specific experience points in the customer journey. These overviews of data then represent the customer experience (see appendix 3). These overviews clearly show the places where Flyco excels in the customer experience, but they also show the pain points where improvements can still be made. Therefore this is a very helpful and good way of measuring the customer experience and to specifically respond to different issues in the journey.

NPS does not rise above a score of 50
The CoX team collects data to see where the customer journey can be improved. These data insights are used as a basis for projects to be set up. Even though the teams set up projects on the customer journey points with a low NPS, Flyco notices that their NPS does not rise above 50. They see that amongst other things, silo working in the department is an obstruction holding back the optimization of the entire customer journey and customer experience. The silo working entails that people do not yet fully have an integral view on the customer journey and department, but that they focus on their own function or team.

What is the problem

To illustrate the problem more clearly, we look at the case of lost luggage. Lost luggage means that the passenger arrives at the destination airport, but then it appears that the luggage has not arrived at the airport. Lost luggage negatively influences the customer experience, whereof the effect can be see in the NPS. From the customer data, Flyco sees that this service failure of lost luggage leads to a negative impact on the NPS of -34, which is a very high number. The data shows that especially the moment of reclaiming the luggage highly impacts the overall negative influence on the NPS. Apparently, this part of the customer journey is still far from optimal. This case of lost luggage should therefore clearly be taken under consideration and be improved in the customer journey. When we look at the data closely, it shows the problem that is being framed by the customer.

Complaint: There are too long waiting lines at the airport for the kiosk where you fill in your form for reclaiming your bagage.

This is one of the complaints that has come out of the customer data. The next step is to consider this complaint as the problem where a project team is created for. The team will then go through the process of generating a solution for the problem. This solution is then implemented in the customer journey whereafter it will be evaluated for its performance and its impact on the customer experience.

For this specific case of long waiting lines, Flyco has indeed created a project team, which resulted in a solution which was called the SSPIR (a self-

service for the property irregularity report). This self-service is a tool for people to fill in the form for reclaiming their luggage themselves online. This would mean that the people with lost luggage do not have to wait in line at the airport for the service desk to fill in this form. When you look at the stated issue which was about the long waiting lines when reclaiming luggage, this solution sounds like a very tactic idea to improve the customer experience when a passenger's luggage gets lost. However, as can be seen in appendix 4, the SSPIR impacts the NPS very negatively. For this project, as it turned out, people who should be using this service were not aware that the service existed, nor did they know how to use it. There had not been any communication about the possibility to fill in the PIR yourself to reclaim the baggage. Therefore, this solution appeared to be a very solid solution for the issue, but still due to the lack of including the entire customer journey, the eventual solution was not yet optimal.

The problem

This case explains why the problem that is being framed by the CX department is in fact a problem. The solution that was defined for the problem lacked the integral view on the entire customer journey. For a consistent customer journey experience, the information about the actions that needs to be taken when the luggage is lost could be mentioned earlier in the customer journey, before the luggage was lost. This lack of information could have been prevented when the design of the solution had been approached intergally, including multiple teams covering the customer journey.

TEAM 1 **TEAM 2** **TEAM 3**

First aid

Baggage storage

Lost & Found

No further information

Self-service property irregularity report
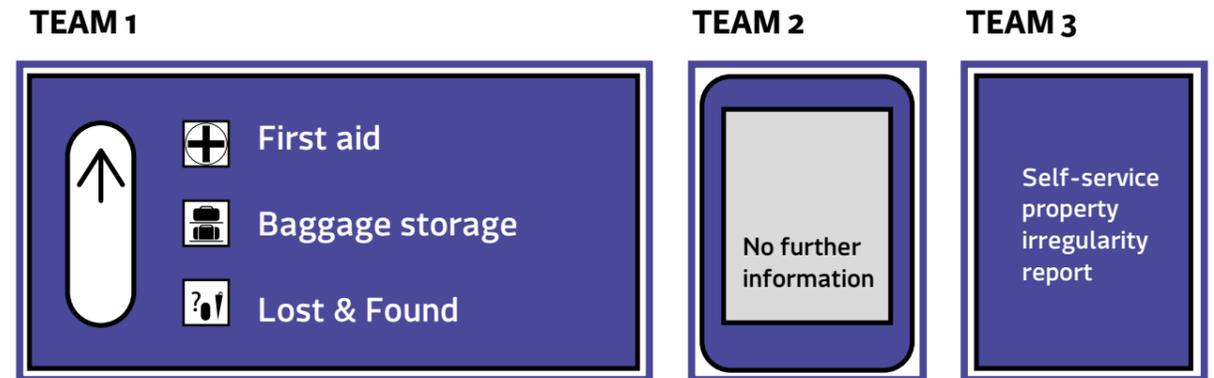
Figure 2: Visual representation of the problem the CX deparment notices. Having solutions implemented in a specific point of the journey, without looking at the integral customer journey. This leads to inconsistent answering of the customer needs due to a lack of collaboration.

Figure 2 visually explains the possible case that the customer experienced. Team three could have implemented a great new service. However, if team one and two did not know anything about this idea, they could not have changed anything in their offer.

Chapter 2.3

Key take-aways

The CX department consists of six different teams. Thereof there are four journey teams and two support teams. The CX department notices that the NPS does not rise above 50. One of the noticed causes of this, is that the different teams are siloed from each other, and that there is not yet optimal collaboration between the different teams. This problem can clearly be seen in the example of lost luggage. This example shows that due to ineffective collaboration, there is no consistent implementation of customer needs in the customer journey. More effective collaboration between the different teams would lead to better listening and answering the customer needs consistently throughout the customer journey. This answers the first subresearch question, which was what currently obstructs the optimal implementation of customer needs throughout the customer journey. There clearly should be more effective collaboration. Therefore, it is important to discover in what way the CX department currently collaborates, and how theory describes effective collaboration is defined.

Insights in the Department

Chapter 3 explores the current form of collaboration within the CX department. Therefore, seven in-depth interviews with members from the different teams give insights. The results of these interviews are given.

Chapter

03
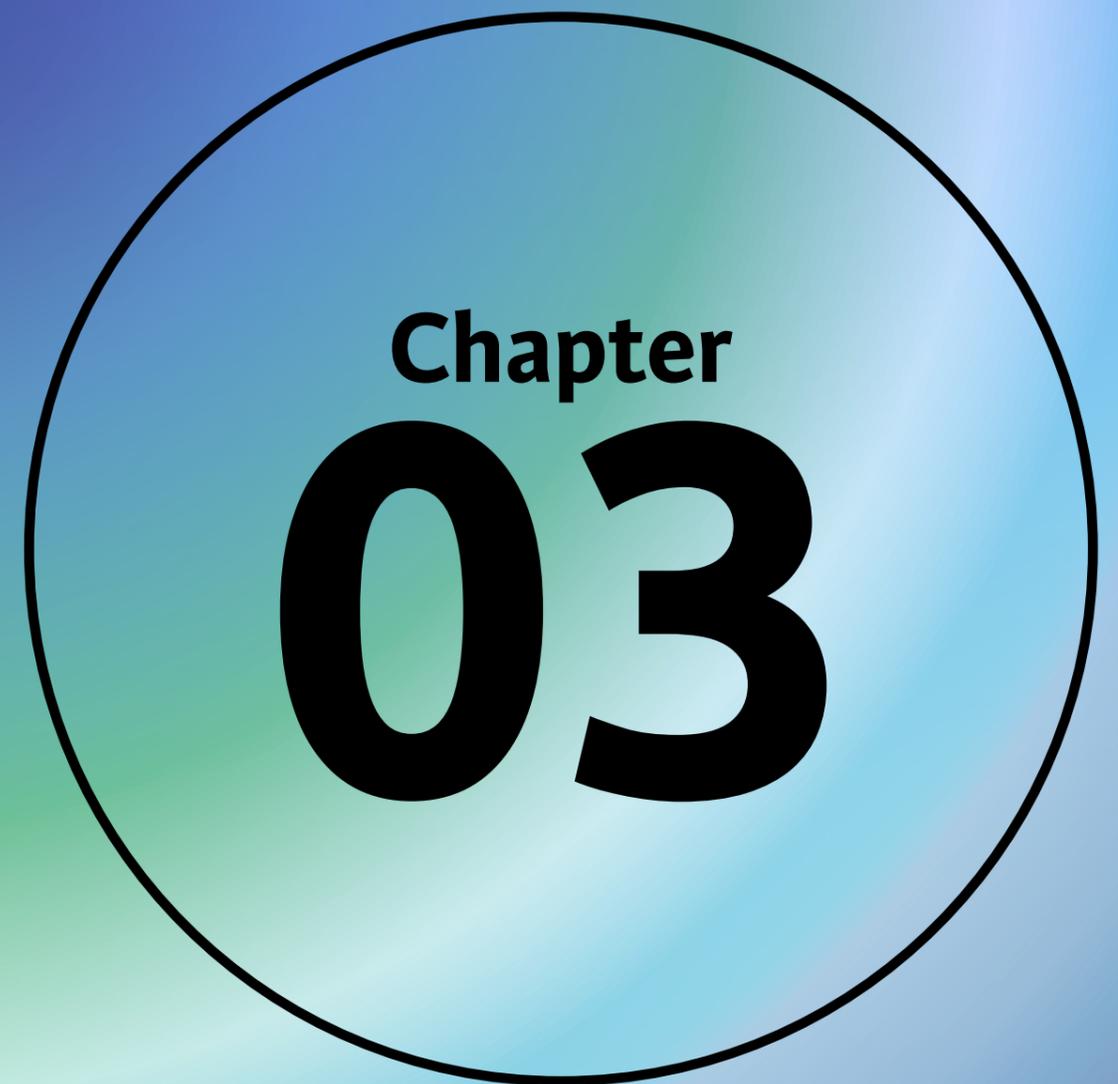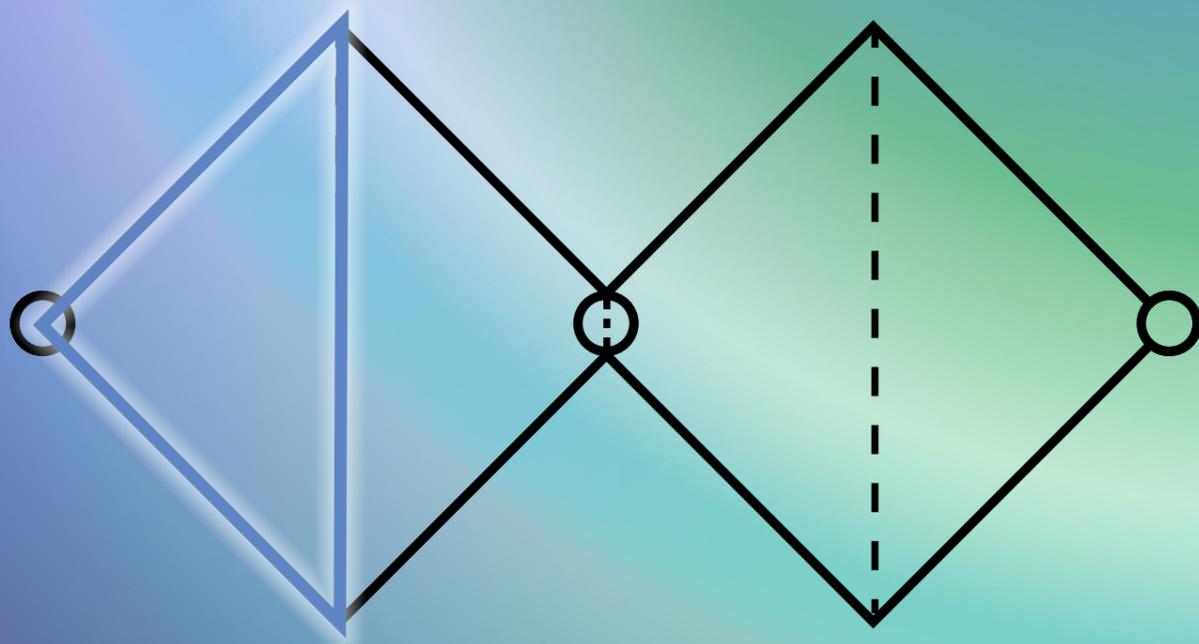
Research approach

This chapter focuses on answering the second sub research question which was the question what the current issues are in the collaboration between the different teams of the CX department. For answering this question, qualitative research has been done with members of the different teams. The approach for this research is being described in this subchapter.

Qualitative interviews

For answering the second sub research question, qualitative interviews within the different teams of the CX department have been conducted, to gain deeper insight in to the current way of collaboration between the different teams in the CX department. In the interview, open questions are being used to understand the complexity of the situation (Creswell, 2014). More specifically, an interview guide approach is being used, so that all respondents will be answering the same general areas of questions, but will still give the freedom to have a broader conversation (Turner, 2014) .

Method

The goal of the interviews is to frame the current way of collaboration, and to discover the desired way of working for the future, since the research focuses on a more optimal collaboration between the different teams. Therefore, the methodology of generative research is very optimal to explore these. Especially due to the use of the tool 'path of expression' (Sleeswijk Visser et al., 2005). This tool helps to guide the interview through the experiences of the interviewee towards a possible future scenario. First you focus on the present scenario, whereafter you look at the past. Based on the focus on these two moments, you can explore a possible future scenario.

Sample

To sample employees from the other teams, I have used typical case sampling, to make sure I will have a general view on the situation (Suri, 2011). From a colleague from within the CoX team, one or two participants had been appointed from every team, based on the sizes of the team. These participants have all been working in the company for multiple years, so they have a good understanding of the way thing go within the department. Seven different employees have been interviewed from five teams. In this interview, the CoX team was excluded, since they had already delivered input during the preliminary interviews. The questions to guide the interview can be found in appendix 6. During the interview, the questions were being posed according to what was fitting in the conversation, not specifically sequentially.

Data analysis

Since the interview focuses on analysing and identifying patterns in the department, to demonstrate a general view on the situation within the department, there is no need to fully transcribe all the interviews, but a summary transcript can be used (McLellan et al., 2003). The summary can be found in appendix 7.

Insights from the CX department

The interview transcripts were analysed and put into order to have the same overview in all the interviews. The information that was not relevant for the sub research question has been removed from the transcript. The essential quotes specifying something about the way they are collaboration and really mentioning something relevant about the statement the interviewee was mentioning, are made bold in the transcript. Thereafter the quotes that are similar to each other are being put together. These combinations of quotes are defined by categories, resulting in insights about the current way of collaboration. These insights are being described below. Quotes from the interviewees are being used, these are held anonymous due to confidentiality reasons.

The teams are siloed from each other

Every interviewee mentioned by themselves that the organisation is silo based, meaning that it operates in separation. It was described that this is definitely due to the culture of the company, a traditional culture that has never changed, but which has always had a top-down structure.

> "In all honesty, we work in silos, even withing CX, and that is a shame."

The opinion of the usability of the silos differed between people. Since they were sometimes also considered as useful. What was concluded is that silos have both a positive and a negative aspect. The company is a very large one, therefore, having a specific function to focus on, can also be very beneficial. Then you clearly have people with a specific expertise to approach. But it is also beneficial for stakeholder management. People always contact the similar people in your domain, so you can build a relationship with these people to ensure the relationship is good. It makes it easier to manage these types of situations.

> "Silos makes it easier to manage the people you need, the more integral your role gets, the more difficult it gets for stakeholder management."

However, it might also be a negative influence. People are in their comfort zone and own expertise, making it harder to collaborate with when you have a different background. It also negatively influences sharing knowledge between different teams.

> "People are comfortable in their own silo."

In a department like the customer experience, where the journey should be optimized consistently, optimal collaboration is highly important.

Desire for integrality but steered towards individualism

This corporate silo working results in individualistic approached of situations. People feel their responsibility for their own domains and therefore want to ensure that their domain performs well.

> "Why are we being managed to a result? I believe it is better to manage on cocreation and commitment, since this style makes sure we stay individualistic."

The Customer Journey Managers (CJMs) feel responsible for their specific responsibility within the customer journey, while you want people to feel responsible for the entire integral customer

journey. The question was raised if it would be possible to combine the individual roles and the cross-functional teams. This would mean that people have their own responsibility, but that people are also being held responsible for the team effort. Cross-functional teams are already being used, but not yet optimally. This individualism also leads to less willingness to help other people when you might know the answer.

There is a lack of effective knowledge sharing

People in the CX department are not always aware of wat other people are doing in the other project teams. Sometimes people do not even fully know what other people are doing within their projects. This leads to people getting involved too late in the project, or that they are not at all being involved in the cross-functional teams. People are not aware who to reach out to, and who could have a beneficial role in the project team. It also was remarkable that not all of the respondents perceived this as a problem, even though this might lead to a less efficient result.

"The question is who to reach out to?"

"You notice that sometimes, the connection with another journey team has been made too late."

There used to be an information sharing moment, which was being called "the guild", where the different CJMs would learn from each other. This was a moment to improve your skills as a CJM, but also to share what everybody is working on. This moment made it very easy to connect to other people when you thought you could help someone. However, this also cost a lot of time, and not everyone would want such a way of information sharing anymore. The guild is now being reintroduced again for about once per two months. Nowadays, once a month, you have the demos. This is a moment where every team gets six minutes to share what they have done

in a month, presenting the results. These demos are very helpful to get an overview of what everybody has worked on. However, this shows the project results, not what people are currently working on. This might be too late for people to offer their help.

"What we would need is something separately from the guild, some sort of leverage meeting to align content."

Some form of connection between the teams to align content would also help within the transparency within the department. Even though the communication is not as effective as desired yet functionally, the people within the department are socially quite well connected.

There is not yet a clear vision and strategy

In 2021, there was no clear strategy for the department. This led to people doing what they thought was most relevant for their own team, and which they thought was helping the customer best. This resulted in every team making their own lists of priorities. However, this did not consistently improve the customer journey. Since the beginning of 2022, there is an OGSM being reintroduced by the CoX team. This is a template to put your business planning on one page, containing your Objectives, Goals, Strategies and Measure (OGSM). In short, this tool includes the goals you want to achieve and the different steps to get to this goal (Chaffey, 2021). Currently, the OGSM is mainly a list of the projects that all the teams are working on put together, whereon every team has put their own list of priorities. The opinion from the employees is that the OGSM has not yet been compiled correctly, but should be compiled based on a vision and a mission.

"The OGSM should be built from a vision, now it has been built from lists from the department, so the other way around. That is way too pragmatic."

It is already a first step in the direction of a structured strategy, but it is not a fully defined strategy yet based on a mission and a vision. This is a wish from all teams, to have a clear CX vision. This might be put on two pages for instance. But currently the employees believe the department misses a clear vision and a strategic direction. The CJMs are now working on many projets, and due to this lack of vision and strategy, there are no clear guidelines what projects to priorities, resulting in everybody being very busy.

"We must know clearly which projects we should prioritize over others."

They have to run their projects and manage their stakeholders so they feel limited in further improvements for the department. Since there is a lack of time, decisions must be made where to put their attention.

"Preferably, in every beginning of a project you have a service designer helping you out."

There clearly is a wish for some guidance and facilitation in improving the department and the teams. This might be helped out by having a clear strategy which makes it easier to prioritize.

Key take-aways

This chapter discovered the answer to the second subresearch question, what the current issues are in the collaboration between the different teams of the CX department. The following lists summarises the issues.
- The teams within the CX department are siloed from each other, which might be caused by the fact that it is a typical corporate.
- There is being steered towards individualism more than towards integrality, even though the people would desire a more integral way of working. They see that it is currently not happening this way.
- There is also a lack of effective knowledge sharing, which leads to people also not knowing what other people are doing, or who they should involve in their projects. This unawareness used to be less when there was still the guild to share where everybody was working on, however this was not as desired by everybody due to it costing a lot of time.
- The department desires a clear vision and strategy, which they believe also helps in more effective collaboration, since you are all also working towards the same goals.

These four main insights are points to take into consideration in the decision making for the focal point of the design.

Theoretical Foundation

Chapter 4 focuses on the literature on cross-functional collaboration. The outcomes of the literature review are divided into three areas. The challenges, the factors needed, and the challenges for effective cross-functional collaboration. Eventually, a framework illustrates how different factors influence each other.

Chapter

04
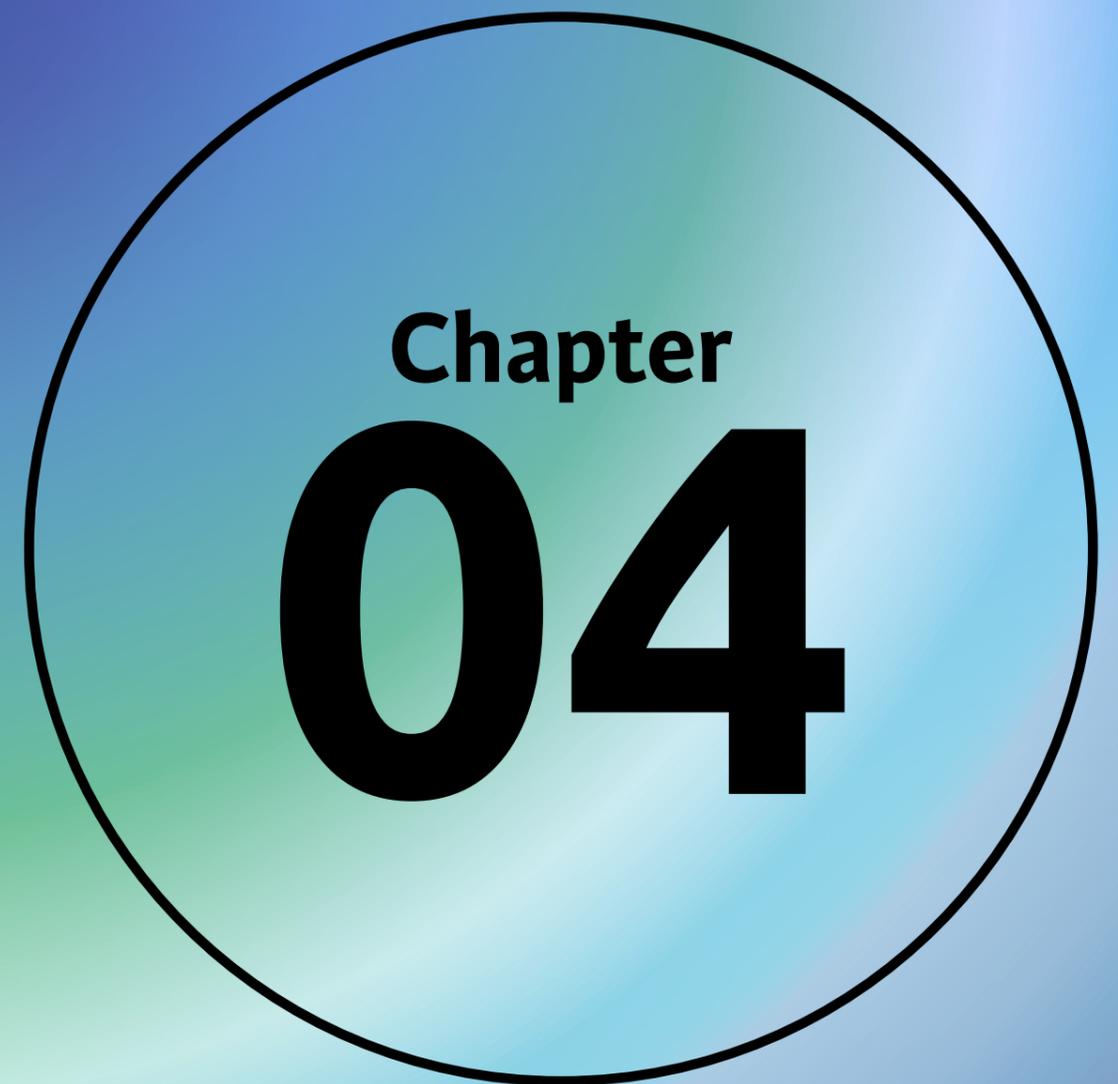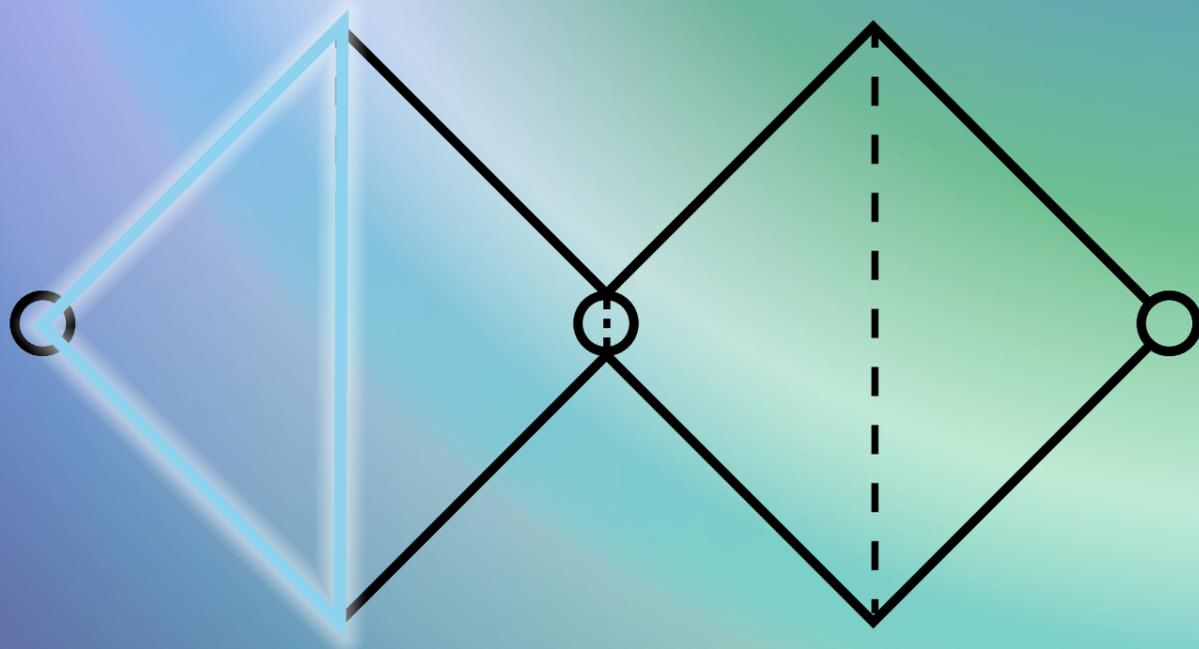
Chapter 4.1
Literature review approach

The goal of this chapter is to answer the third sub research question. The result of this chapter should define a solution for this question. Therefore this sub chapter defines what literature research questions can guide the literature research into this topic. These literature research questions are then being answered in the following three sub chapters.

The previous chapters focused on the existing problem at the CX department, and the current way of collaboration. These chapters have not illustrated yet how the optimal situation should look like according to literature. The third research question is how the CX teams can optimally collaborate for a consistent implementation of the customer needs throughout the customer journey. The second chapter has shown that cross-funtional collaboration between the different teams of the CX department will help in more consistent implementation of customer needs. Therefore in this chapter, a literature research is being done to explore the generic factors influencing collaboration, and more specifically cross-functional collaboration.

I: current challenges in creating a working cross-functional team
When starting a cross-functional team, it should not per se directly be started. It is good to define the boundary conditions. Therefore the first subchapter focuses on the challenges that are described for a cross-functional team, for Flyco to know what they should take into account

LRQ1: What are currently the challenges in creating a working cross-functional team?

II: the success factors for a cross-functional team
For a cross-functional team to work, there should be some information on what specific factors are most important to take into consideration. These are the success factors that will be the basis for a cross-functional team to work. The second subchapter focuses on answering the following question.

LRQ2: What are the factors needed for cross-functional teams to be realised?

III: the benefits of having effective cross-functional teams in your organization.
Lastly, it should be clear why a cross-functional team is the most useful way to approach a project. It should be clear for who a cross-functional team is effective and also in what certain way. This last subchapter focuses on the different benefits resulting from effective cross-functional collaboration.

LRQ3: What are the benefits of having cross-functional teams in your organization?

For the literature research, scientific studies have been used as a basis. These have been added by articles which have been published by well-regarded companies, who have done research in this area as well. This thesis is focused on the practice of cross-functional collaboration, where consultancy companies and business schools have done extensive studies in and therefore have information in the topic that could be of great value.

Chapter 4.2
Current challenges for cross-functional success

LRQ1: What are currently the challenges in creating a working cross-functional team?

For defining the major challenges that withhold cross-functional team success, Wall and Lepsinger (1994) have done a survey within Fortune 500 companies, where 43 companies participated. There were six most important obstacles found in this research. These obstacles are outlined below

1. Conflicting organizational goals.
80% of the respondents noticed that there was a tension between the team goals and their functional priorities. The goals that the organization was aiming to achieve was not in line with the tasks being performed. Clear goals that cascade down into the organization are therefore very relevant.

2. Competition for resources.
75% of the respondents lacked the resources for the project. This can be in many forms like money or people. The basic resources for a project should be ready and clear.

3. Overlapping responsibilities.
75% of the respondents hasn't got enough time to work fully for their project teams. 70% did not know they had the authority for making decisions. A feeling of being to busy and not having enough time to finalize your tasks is a risk for employees.

4. Conflicting personal goals.
66% of the respondents had different goals which conflicted with each other. Therefore not only the organizational goals should be in order, personal goals should be clearly defined too.

5. No clear priorities or direction.
60% did not know anymore where to focus on and which project was most important. When many projects are running, people are lacking the time for a clear planning and prioritization of projects.

6. A lack of cooperation.
Half of the respondents mentioned that the cooperation was lacking (Holland et al., 2000). In a cross-functional team, collaboration is key to having an effective outcome. This is also being described in the following chapter.

Factors needed for cross-functional team success

LRQ2: What are the factors needed for cross-functional teams to be realised?

Literature proposes many factors influencing the performance of collaboration, and more specifically of a cross-functional team. However many models contain different important factors which are also differently named. McDonough (2000) proposes a framework with three main internal areas containing the most mentioned different factors to achieve cross-functional team success. The three areas are stage setting elements, enablers and team behaviour. The model tries to frame the complexity of team dynamics (Daspit et al., 2013). Petri (2010) also made a distinction of two areas, focusing on attributes and antecedents leading to positive consequences. When combining these literature articles, you can see three main areas leading to cross-functional team success. Success factors for cross-functional teams are confirmed to also be success factors for collaboration in general (Katzenbach & Smith, 2005; Mattessich & Monsey, 1992).

1. Stage-setting elements

The basic starting principles of cross-functional team success are the stage-setting elements (Daspit et al., 2013; McDonough, 2000), or what is being called the attributes (Petri, 2010). What is meant with these elements are the actions needed to be taken before the project has started, creating a foundation for the project (McDonough, 2000).

This stage includes the factors; strategic goals, empowerment, shared responsibility, human resources needed (McDonough, 2000), and a problem-focused approach (Petri, 2010). The very basis of the team should be clear strategic goals which will set the boundaries for the team to work on, making sure everybody focuses on the same direction (Daspit et al., 2013, McDonough, 2000, Petri, 2010) and are perceived highly relevant for optimal collaboration (Katzenbach & Smith, 2005; Mattessich & Monsey, 1992). When there are clear goals to achieve, employees are also empowered to make decisions within these project related goals (McDonough, 2000). The power to make own decisions, also encourages people to feel dedicated and responsible for the project (Henke et al., 1993). Furthermore, the team should be consciously formed, including all human resources needed for the project, therefore it is very relevant to be aware of people their roles and what other people are doing (Henke et al., 1993; McDonough, 2000). Lastly, a clear problem-framing should be the basis of the project, to be sure you are solving the right problem (Petri, 2010).

These factors are a basis for the further work to be undertaken by the team. However, this area alone will not significantly influence the team effectiveness, but should be followed by the help of enablers and/or great team behaviour (Daspit et al., 2013; McDonough, 2000).

2. Enabling elements

With the enablers is being referred to the individuals who are able to facilitate and make a success out of the team. They can literally enable the success of the team (McDonough, 2000) and could therefore also be defined as shared leaders (Daspit et al., 2013). The have a supporting role towards the employees in the team, inspiring and helping them towards their mutual goal (Petri, 2010).

The factors included in this stage are team leaders, senior management support and the so-called champions (employees who can create awareness or change mindsets at managers) (McDonough, 2000). The team leaders should give the project group a sense of control, that they are able to open up their minds, hereby enabling the team to open up (McDonough, 2000). This gives the employees a feeling of support (Petri, 2010). But support can also be given for instance by offering the employees the training where their skills are still under development. Senior management support really focuses on the encouragement of the employees. When management is not encouraging towards the team, this effects the view of the employees on the teams negatively (McDonough, 2000). Lastly, champions are people who can have an impact on management above them. These people can help change opinions in management to a positive mindset towards cross-functional teams (McDonough, 2000).

3. Team behaviour

The last area is the team behaviour, or antecedents (Petri, 2010), focusing on the relationship between the people and how their behaviour is towards each other. Is it open or closed, are people sharing or individual. This stage includes the factors cooperation, commitment, ownership and mutual respect (McDonough, 2000) but also role awareness of the people in the team (Petri, 2010). The team behaviour elements have always been very important in effective collaboration (Katzenbach & Smith, 2005; Mattessich & Monsey, 1992).

Cooperation really focuses on working together. People should be able to work with other people towards mutual goals (McDonough, 2000). It also means that the project would not be able to succeed when people would have been working apart (Petri, 2010). Commitment means the willingness of people in the team to ensure the goal is being reached (McDonough, 2000) and a focus on the team objectives (Henke et al., 1993). This is quite related to the feeling of ownership, really wanting to make a difference (McDonough, 2000). Mutual respect is also a relevant factor in cross-functional teams (McDonough, 2000; Petri, 2010), and might be considered essential for effective collaboration (Mattessich & Monsey, 1992). Mutual respect also leads to open communication and will lead to a feeling of trust (McDonough, 2000). Lastly, role awareness means being aware of the skills and knowledge that is included in your team, so that these resources can be used as effectively as possible (Petri, 2010).

Chapter 4.4

Benefits of cross-functional teams

LRQ3: What are the benefits of having cross-functional teams in your organization?

For a cross-functional team to be effective, the three areas that are being described in the previous sub chapter are highly important. The elements within these areas should be addressed in team. But once these cross-functional teams have been implemented effectively according to these elements, this will have great beneficial effects in an organization. Generally, well-implemented cross-functional teams will have a beneficial effect on three aspects: on the customer, on the organization and on the employee (Petri, 2010).

1. The customer

The most mentioned consequence of succesful cross-functional collaboration which is being described in literature is for the customer itself. Successful cross-functional collaboration namely helps the improvement of the entire customer experience (Petri, 2010). Since the customer is more demanding than ever nowadays, cross-functional teams can create more coordination, efficiency and cost effectiveness in the customer journey. This is due to the combination of all resources within these teams where every single contributor has its own specific piece of knowledge and expertise about the customer. This diverse perspective on the customer, helps in solving the complex problem or demand that the customer has alltogether, which then becomes easier, and also better (Parker, 2003; Petri, 2010). This is especially due to the holistic approach you can take on a problem with many different perspectives that are watching (Petri, 2010). The customer experience cannot be improved by only solving small problems in a part of the customer journey, but by improving it by looking integrally at the problem framing and the customer journey (Lemon and Verhoef, 2016).

2. The organisation

The benefits for the organisation can be looked upon from two sides in principal. Benefits for the customer, is also beneficial for the company, since a company is then bein well-looked upon. When customer satisfaction increases, this leads to a better perception from the customer towards the company (McDonough, 2000; Petri, 2010). But this can also be looked upon from an organisational perspective. Since it also has multiple benefits when cross-functional teams are implemented effectively for the organisation. Henke et al. (1993) identified four important benefits.

1. Cross-functional teams cut across traditional vertical lines of authority, getting rid of the shortcomings of the vertical business, making the business more efficient by faster connection lines.
2. Decision-making is decentralized, making decision making quicker and easier since not every decision has to go through management first. Management is not per se most experienced for every decision to be made.
3. Hierarchical information overload is reduced at higher levels, since not everything needs to go through management to be decided.
4. Higher quality decisions than with individual decisions, since the people who are most experienced in the areas make the decisions.

What is very important to note with these benefits, is that these can be reached when the cross-functional team has been implemented effectively according to the steps described in the earlier subchapter (Mankins and Garton, 2017).

3. The employee

Working in a team with different functions, allows people to learn from other individuals, when the team works well together. In this way, the employees can develop themselves socially and professionally (Petri, 2010). When people learn to work with multiple types of people and different types of expertises, they can develop themselves to be broadly interested, making it easier to cross boundaries (Edmondson & Harvey, 2018). But not only the learning curve can influence employees, also the feeling that their expertise can help others, gives the people confidence about themselves (Petri, 2010). Therefore, cross-functional teams are a sort of learning process for the employees, creating a learning organisation.

Literature framework

The literature insights can be combined into one literature framework. This framework shows the overview of the how different actions influence each other, and how effective cross-functional collaboration has beneficial effects.

By combining the insights from literature, I have created the framework in figure 3. This framework involves the challenges, the factors needed and the benefits of cross-functional working. As you can see, the challenges as described in this chapter have a lot to do with strategic alignment and available resources in the beginning. Therefore the starting elements seem to be one of the biggest struggles for cross-functional teams to work effective. Furthermore, another challenge states that the resources needed are in competition. However, when you work towards a same goal, this should not be an issue. Therefore there is also a challenge in the enabling elements. The factors needed for effective collaboration are described in the three boxes. As can be seen in the overview, stage-setting elements alone will not effectively influence team effectiveness. Therefore, the team behaviour or shared leaders should be effetively arranged to lead to team effectiveness (Daspit et al., 2013; McDonough, 2000). When the cross-functional teams comply with the elements in the figure, this will lead to the benefits of the cross-functional teams as being described in the last subchapter.

The role of this literature framework

The literature framework is a useful basis for the further development of this project. The project focuses on more optimal collaboration between the different teams of the CX department. This framework is a clear overview of what optimal collaboration looks like. Furthermore, this framework can also be used by the CX department as a basis for optimising their collaboration in general, outside of my project.

Stage setting elements

Strategic goals —leads to→ Empowerment

availability of
Human resources   from the beginning, who to involve?

kicking of a project with a
Problem focused approach

Team behaviour

Cooperation: complementing each other in the team

Commitment: willingness to reach the goal

Ownership: feeling responsible for the project

Respect towards team members

Role awareness: different responsibilities

Enabling elements

Team leaders: give a sense of control to the employees

Senior management support
give: a feeling of support for the team
training to improve skills

Champions people who have an influencing role on management

Benefits of team effectiveness

Customer gets a more consistent customer journey

Organization has a more efficient way of working

Employee learns and gets more confidence

Figure 3: Framework representing the elements required to achieve the benefits of cross-functional teams.

Key take-aways

This chapter answers the third subresearch question, which aimed to find out how the CX teams can optimally collaborate for consistent implementation of customer needs throughout the customer journey.
Optimal collaboration is based on three areas, the stage-setting elements, team behaviour and enablers.
The stage-setting elements are:
*   Having clear strategic goals which will then lead to human empowerment
*   Having the right human resources from the beginningn of a project
*   Starting the project with a problem focused approach.
As the first subchapter describes, the stage-setting elements are the biggest challenge to get right in an organization and are the hardest obstruct against effective cross-functional collaboration.
The team behaviour elements are:
*   Cooperation meaning people work together well
*   Commitment to reach the goal
*   Ownership to the project
*   Mutual respect between the different team members
*   Clear role awareness of everybody its input in the team.
The enablers are:
*   Having team leaders who give a sense of control
*   Support from senior management which is both in the team formation as well as in training
*   Having champions who influence management.
The stage setting elements alone will not significantly result in team effectiveness, but when the team behaviour or enablers are correctly implemented, this will lead to team effectiveness, which has beneficial effects for the customer, the organization and the employee.
The elements in the bulleted list are all influencing team effectiveness, and are therefore all relevant to include in the questionnaire design to decide on the focal point for this thesis.

Defining the Problem

Chapter 5 combines the insights gathered in chapter 2-4 by answering the intially posed sub research questions 1-3 that have been defined in chapter 1. Thereafter, based on the answers of the first three sub research questions, the fourth sub research question is answered by using the insights from the first three sub research questions, which have been combined in a questionnaire. This questionnaire has been sent out to the CX department for people to rate where they believe most improvement can be made. This results in the focal point for this research, which is on knowledge sharing. In the end, the design requirements are framed.

Chapter

05
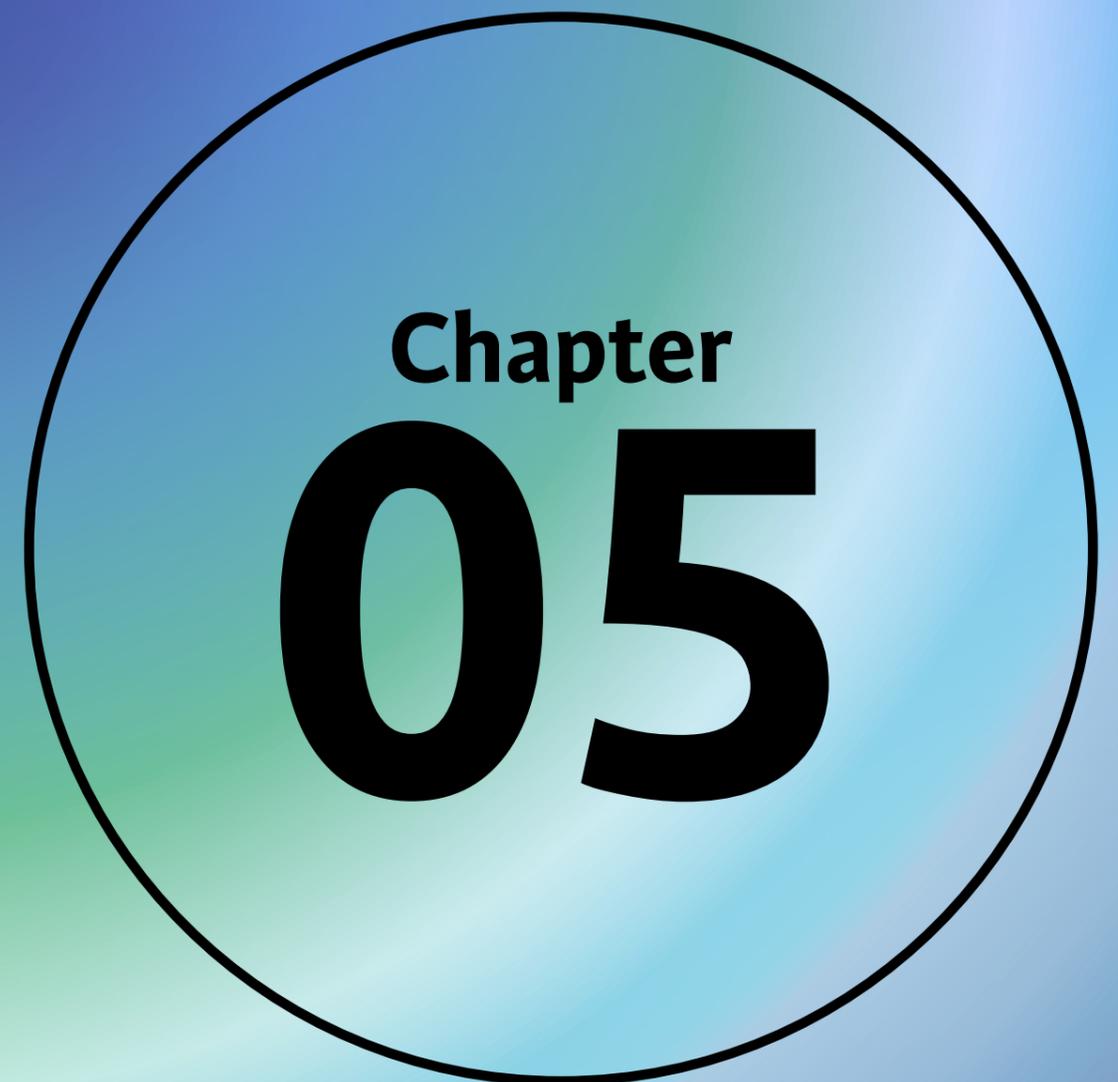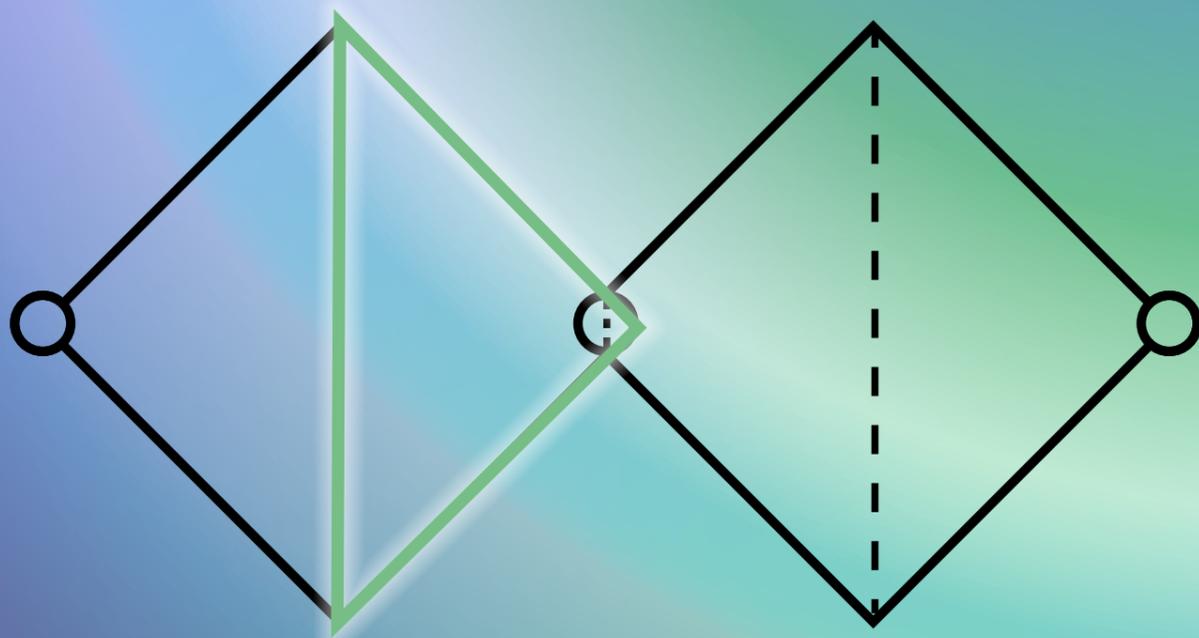
Research results

Chapter 2 - 4 focuses on gathering information that helps answering the first three sub research questions. This subchapter gives a summarized overview on how the research results from these chapters answer the first three sub research questions. These three sub research questions are the basis to answer the fourth research question, which is being described in the next subchapter.

> **SRQ1: What obstructs the optimal implementation of customer needs throughout the customer journey for the CX department specifically?**

In the context analysis in chapter 2.2 shows the problem behind a most optimal implementation of the customer needs throughout the customer journey. There are three aspects that are the largest issue behind this.

1. Defining the problem in the beginning
The first and one of the most important aspects is to define the problem from the beginning on directly. When the problem is not being researched, the core of the problem is not being defined. This results in a so-called bandage being placed on the issue, while the underlying problem remains unsolved.

2. Involving the right people from the beginning of the project
There should be an evaluation in the beginning of a project to define which people should be involved in the project. When the problem is clearly defined in the beginning, an evaluation should take place to see which other parts of the customer journey are being influenced by the problem, so that the people responsible for that other part of the customer journey can already be involved in the process. This would save time and make the solution more efficient, since the right people are there the whole time. The case about luggage that has been explained in chapter 2.2.2 would have benefitted from the inclusion of the right people from the beginning.

3. Evaluate the impact of the solution on the entire customer journey
Once a solution has been defined for a specific part of the journey, there should be an evaluation again whether this new solution influences another part of the customer journey. For instance by testing the solution to quickly see the effect of the solution on the journey. But also making a journey map directly after defining the solution would help to discover the impact.

> **SRQ2: What are the current issues in the collaboration between the different teams of the CX department?**

Five key aspects resulted from the interviews within the CX department. These were all issues in the current way of collaboration between the different teams of the CX department.

1. Teams are siloed from each other
Flyco has a typical corporate organization structure, resulting in a hierarchy in the department. Even though there has been a reorganization in the organisation, there are still many hierarchical layers in the organization. This results in the teams being steered by their director in a top-down way. But the teams do not collaborate with other teams standardly. They stay in the focus of their own team silo.

2. Steered towards individualism
This statement might also strengthen the silo working, since people are very focused on their own function and results. People have the feeling that they are being steered on results of their own function, which is why everybody is aiming to achieve the best results for their own projects. But this results in people focusing more on the 'me' than on the 'we'.

3. Lack of effective knowledge sharing
Since people are very much focused on their own work, there is less focus on what other people in the department are doing. This results in a lack of effective knowledge sharing. While the sharing of the knowledge could be very useful for involving the right people and learning from each other, this benefit might not always be seen by the employees.

4. People are always busy
There is a feeling that people are always running and are busy the whole time. The employees are doing many projects at the same time, which results in a feeling that they always need to hurry. There are no clear guidelines for when a project has reached the end line, which gives a feeling that the work is never truly done. This gives a busy feeling, which can feel frustrating for the employees trying to work very hard.

5. A clear vision and strategy
There is a desire for a clear vision and strategy for the department. This wouls also result in people having a clear goal to work towards, instead of approaching every project that is being proposed and saying yes to every project. Due to the currently reintroduced OGSM, the department has made the first steps towards a CX vision and strategy. This is a work in process.

> **SRQ3: How can the CX teams optimally collaborate for consistent implementation of the customer needs throughout the customer journey?**

This question is being answered based on literature findings. The framework in chapter X.X gives a clear overview of all the seperate aspects influencing cross-functional collaboration.

1. Stage-setting elements
The project needs starting elements, before the project kicks off. The stage setting elements are **having clear strategic goals** which will lead to **human empowerment**. Furthermore, you should have the **right human resources from the beginning** of a project and start the project with a **problem focused approach**.

2. Team behaviour
When the project has started, the aspects of team behaviour are important. There should be good **cooperation, commitment,** clear **ownership, mutual respect** to each other and **clear role awareness**. These are the most relevant behavioral aspects during a project.

3. Enablers
The enablers also have a large influence on the collaboration. Especially the **team leaders, senior management** and **champions**. These should be stimulators of the cross-functional collaboration.

Results of effective cross-functional collaboration
When cross-functional collaboration is effective, this will lead to **benefits for the customer, the employee** and **the organisation.**

Analysing the results

The answers of the first three sub research questions on the previous subchapter, has led to a large amount of insights on where the focus could be for the design. Nevertheless, there are many directions which cannot all be solved in the design. Therefore, a decision must be made for a focal point where the design should be based on. This is also the fourth sub research question, to discover what actions can be taken to ensure more effective collaboration in the future between the different teams of the CX department.

SRQ4: What actions can the CX department take to ensure more effective collaboration in the future?

Analysis approach

For deciding the focal point of this thesis, the insights that were gathered in the research phase, which have been described in the previous subchapter chapter 5.1 are transferred into statements. These statements have been combined into a questionnaire (appendix 8). This questionnaire has been send out to all employees of the CX department. The questionnaire has answers on an uneven-point likert scale of five. Hereby the middle option of the likert scale has been removed, and an 'I don't know' is placed on the side. So that when people really do not have a specific opinion on the statement, they can still give an answer, but they are being pushed a little more to give their opinion. 31 employees have responded to the questionnaire, which is not a full representation of the CX department, since this would include 60 employees. However, due to the time available for this research, the answers have been analysed based on these 31 employees.

There are 21 statements in the questionnaire, this is a large amount of statements to analyse. Therefore a factor analysis has been executed to find statements that can be combined into one, to reduce the amount of statements to eleven statements. This analysis can be found in appendix 9. The resulting statements are illustrated in figure 4. The four factors are combinations of multiple statements that resulted from the factor analysis.

The next step is to analyse the remaining eleven statements. When putting the answers in a boxplot (appendix 9), there is a lot of disparity in the answers of the statements visible. Almost in all questions, at least one employee agrees, while another employee disagrees. Meaning that conclusions cannot directly be drawn from this data set. For having a better analysis, the answers have been split out into the six different teams, resulting in an overview per question per team. Now the amount of data to generalize is smaller, since this is generalised per a maximum group of seven employees.

To have a perception on the opinion per statements, three groups have been made. This helps in deciding where the focal point should be for the design.
1. Statement with good scores
2. Statements with average scores
3. Statements with low scores (appendix 9)

For defining the focus point, the statement with a low score will be the most important. The statements with average scores should be taken into account, but will not be the most important in the problem statement. The good scores can be feedback for the department on where they are doing good on.

STATEMENTS USED IN THE ANALYSIS

HIGH SCORES

Factor 1: We start a project with a clear strategic goal, commitment to the project, and effective and open communication.

In my project teams, I feel empowered to make decisions on my own.

I have a feeling of responsibility for the projects that I am working on.

There is mutual respect and trust within my project teams.

I am aware of the skills and knowledge that people have within my team.

AVERAGE SCORES

Factor 3: CX steers on a broad customer journey approach in our project teams, defining the customer need and problem, giving me a sense of control.

Factor 4: In my project teams, the right people are involved from the beginning of the project, covering the entire customer journey.

I know where and when to share the projects I am currently running.

There is mutual respect and trust within the CX department.

In my project teams the team members effectively work together to a mutual goal.

LOW SCORES

Factor 2: I know what the other (project) teams in CX are working on due to effective knowledge sharing, open communication and the right training.

Figure 4: The statements that remained after the factor analysis. These statements are taken into account in the statement analysis, to evaluate where the focal point of this research should be.

The outcomes of analysing the statements gives as most important issue a statement with a low score, being factor 2 (see figure 5). This is therefore the most important statement for the focal point. The average scores should be taken into consideration, which are that people should know when and where to share about their projects, there should be involvement of the entire customer journey and there should be a clear mutual goal to work towards.

These are the most important aspects resulting from the analysis of the questionnaire.

Factor 2: I know what other (project) teams in CX are working on due to effective knowledge sharing, open communication and the right training.
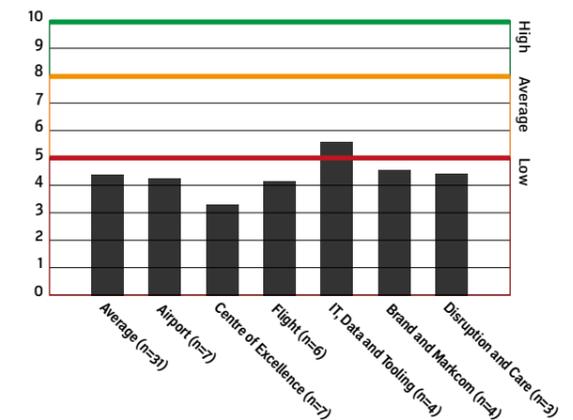
Figure 5: The lowest scoring statement is this factor. This is the most important factor for the focal point since most improvement can be made here.

Reasoning behind answers

The outcomes of the analysis have given direction to where the design should focus on. However, the reasoning behind 'why' people gave these answers is interesting to elaborate on. For the reasoning behind the answers, the open comment spaces from the questionnaire gives first insights (appendix 10). For more elaborate reasoning behind the questions, a short interview of half an hour was held with five employees of the CX department. Thereby three questions were being asked:

- What was your score on the statement that there is effective knowledge sharing, and why? (this was the lowest scoring statement)
- What was your score on the statement that you are aware of what other project and journey teams are doing, and why? (this was the second lowest scoring statement)
- What was your score on the statement that there is mutual respect and trust within the CX department, and why? (this statement was added to ask in person if respect and trust were affecting the earlier two statements)

The most important insights are the ones below, which should be taken into account when creating a design:
- There is a lack of alignment between the different teams, and a lack of knowledge sharing, also due to minimal physical contact. This has reduced due to hybrid working.
- The teams work in silo's and this makes sure that people are separated from each other.
- There is a lack of tacit knowledge sharing, which is the knowledge you have gained due to experiences, which is harder to explain. The focus is mostly on explicit and result oriented knowledge (further explained in chapter 6.1).
- Knowledge should preferably not always be shared with everyone, but only with the best fitting people who need to hear it. Not everything needs to be shared with the entire CX department.

- The current moments of knowledge sharing could be used for optimisation (thereby the CX demo or the guild are meant).
- Employees often know what is going on in one or two other teams, but they always lack information on what the remaining teams are working on.

Problem definition
There is a lack of effective knowledge sharing between the different teams of the CX department, since there is not enough effective and open communication due to a focus on the individual. This is a problem for everybody within the CX department, as well as for the customers themselves. People work less efficiently which manifests itself in the right people being involved too late, or people working on the same case without knowing this from each other. This problem results in the customer experience going down since not the whole customer journey is being covered.

5.2.1 **Design requirements**

Based on the insights from the research, the following design requirements are formulated for a succesful design.

The design stimulates knowledge sharing between all the different teams.

The design focuses on tacit knowledge instead of only on explicit and result-oriented knowledge.

The design is a low barrier for the employees to make sure implementation succeeds.

The result of the design is a stimulation in alignment between employees.

The design moves the focus towards a group focus instead of an individual focus

Chapter 5.3

Key take-aways

This chapter answers the fourth subresearch question, which was what actions the CX department can take to ensure more effective collaboration in the future. The focal point for the design should be on effective knowledge sharing between the different teams of the CX department by stimulating effective and open communication and focusing on the group instead of on the individual. This will contribute to more effective collaboration between the different teams of the CX department and will ensure alignment between the different teams so that the customer needs are implemented consistently. This focus is a first step towards more effective collaboration.

Literature input for the Solution

Chapter 6 explores literature in knowledge management and behaviour change. Since the concept focuses on knowledge management, but enough research has been done in this direction, using literature research as input for the design is a valuable option. However, for ensuring adoption into the knowledge management tools and methods, behaviour change is required. The second subchapter describes the literature in behaviour change.

Chapter

06
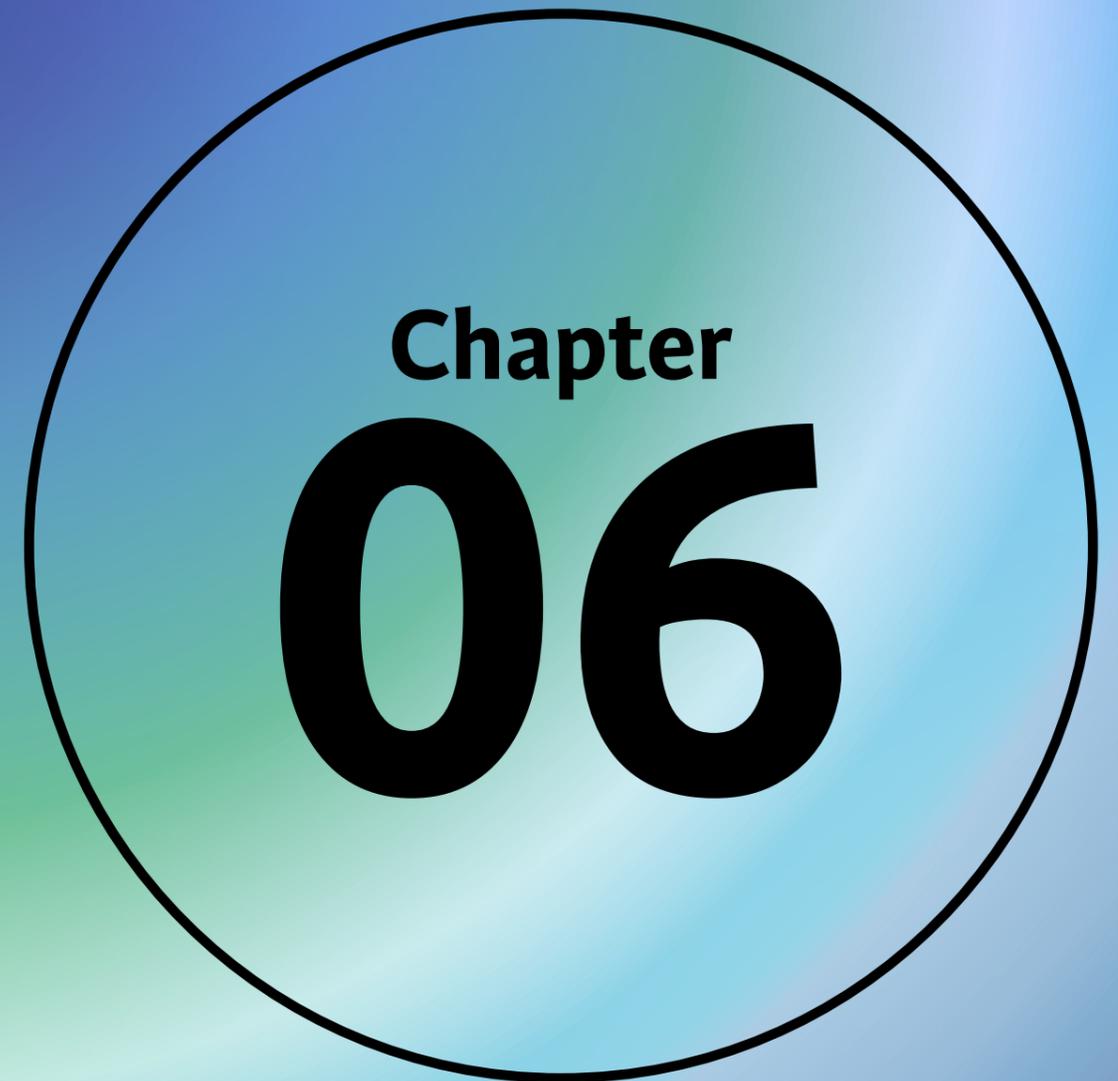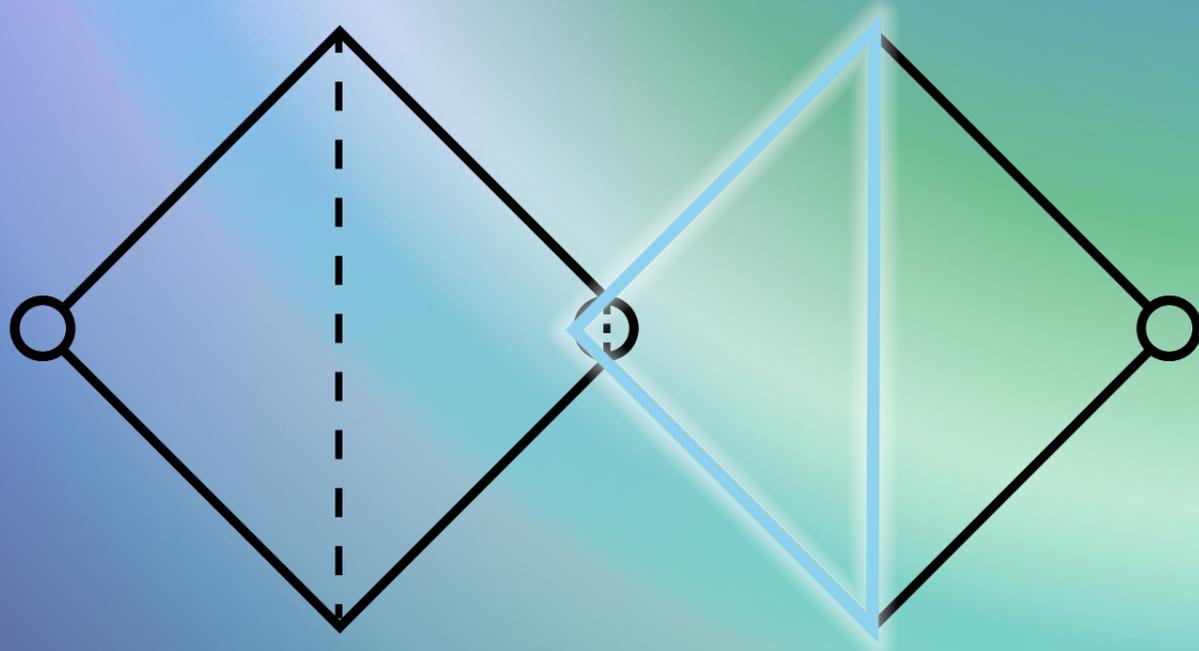
Knowledge Management

The fact that knowledge is not effectively being shared among companies, due to silo structures, is a big issue in many corporates. So this is not only a problem within Flyco. Therefore, already existing research and literature can be used as an inspiration source for the design. This chapter gives an overview of the literature research which has been executed in the term 'knowledge management' to define what it is, why it is so relevant, which stages exist in knowledge management and what tools and methods exist which can be taken into consideration for the design.

The assignment was focused on optimizing collaboration between the different teams of the CX department. What resulted from the research phase, is most importantly where the focal point for the design phase should be. This result showed that it should be focused on more effective knowledge sharing between the different teams, both on skill knowledge, as well as on the explicit knowledge of the projects that people are working on.

The problem of not knowing what other teams and departments are doing, is not a new issue within large corporations like Flyco. Due to the traditional organizational structures, and the working in silos, many organizations face issues like lacking communication and sharing knowledge (Cross et al., 2007). Therefore, it is assumable that there are already techniques and tools in place for knowledge management in organizations. For this reason, it is more logical to dive into the literature looking for existing ways of knowledge sharing in large corporations, instead of trying to discover a brand new solution for this problem.

Knowledge management

For better understanding knowledge, the existing literature has been explored to dive into the topic of knowledge sharing, which is in fact a part of a larger aspect that can be described as knowledge management.

At first, I want to define the term 'knowledge', since this is the basis of knowledge management. This word can already be described in different forms. For this research, we focus on two different forms, namely tacit and explicit knowledge. Tacit knowledge can be described as things that we know, but which are very difficult to verbally communicate or write down. While the other form, explicit knowledge, is what we know but what is easily transferable to others and easily to state in words (Sleeswijk Visser et al., 2005).

When looking at this description, we could define the knowledge people have about a running project as explicit knowledge, and the knowledge that people have learned as skills as tacit knowledge. While organizations have always focused on the use of explicit knowledge, it becomes clear now that people know more than they are capable of writing down. Therefore organizations are focusing on finding ways to convert this tacit knowledge into explicit knowledge with effective knowledge management for optimizing the organisation (Gupta & Aronson, 2000).

Using and choosing the right tools and techniques for more optimal knowledge sharing, is called knowledge management. This is considered to be a critical aspect nowadays to transfer knowledge. This also helps the organization to learn and to grow (Goh, 2002).

Relevance of good knowledge management

Literature describes an effective knowledge management system in organizations to be key for a sustainable competitive advantage in our globalizing world (Alavi and Leidner, 2001; Gupta and Aronson, 2000; Nazim and Mukherjee, 2016; Young, 2010). There is less chance of people doing double work, it improves productivity and eventually leads to saving costs (Nazim and Mukherjee, 2016), since you clearly know what fellow employees are working on. Eventually, an effective knowledge management wil boost innovation in your company (Darroch and McNaughton, 2002).

An effective knowledge management is also very relevant for companies in times where retaining employees is difficult due to low unemployment. Employers do not always notice the high prices of knowledge loss that comes with an employee leaving (Cross et al., 2007). Furthermore, not enough management on supporting knowledge exchange is a reason for employees to leave a company, which would be a reason for companies these days to focus more on this issue with the currently tight labour market in the Netherlands (Work Institute, 2022).

Stages of knowledge management

Knowledge management in general focuses on the broadness of knowledge, which includes many different steps within the process (King, 2009).

These can be summarized in five main stages that are important in knowledge management (Alavi and Leidner, 2001; Chang and Lin, 2015; Young, 2010):

- Knowledge identification: identifying what knowledge exists which is important to share within the organization
- Knowledge creation: the development of new content and new knowledge through collaborative processes
- Knowledge storage: a technological system or place where knowledge can be shared with others effectively
- Knowledge sharing: communicating the knowledge with others.
- Knowledge application: applying the knowledge learned to improve the organization

These five stages are steps that should be taken in consideration in the design. However, for this project specifically, knowledge sharing and knowledge storing are very relevant. Making sure that the knowledge is being communicated with each other, but also that the communicated knowledge is being kept within the department due to good storage. This will also build an overview of the knowledge generated over time, so that people will not be doing things double.

Methods and tools

Knowledge management is described by Nazim and Mukherjee (2016) as a way to identify and leverage the collective knowledge in an organization to help the organization compete. Therefore, there have been systematic approaches to manage knowledge. The biggest sources of information that is not being shared is within the employees, which is 42% of the organizational knowledge. However, transferring the knowledge between them is most challenging for organizations (Nazim and Mukherjee, 2016). Especially facilitating the knowledge flow between different employees for as much knowledge transfer as possible. What is most challenging about this, is to also make sure the knowledge available is also meaningful to others (Alavi & Leidner, 2001). What organizations can do about this, is use the employees' knowledge by making it explicit, or by providing a platform to share their knowledge with others. There are numerous options to do this. This can be face to face (communities of practice, apprenticeships, mentoring, meeting, conferences, seminars, workshops), or remotely by using technologies (over the phone, by computer or mail, etc.)(Nazim and Mukherjee, 2016).

Young (2010) gives an extensive overview of all the stages of knowledge management and shows the tools that are best fitting for each stage as they have also been described on the previous page. Nevertheless, in total there are 26 different techniques and tools for the stages for effective knowledge management, both physical and digital. Therefore the question remains which type of tool is best suitable for Flyco to use for more effective knowledge sharing. The different types are being described in figure 6.

Throughout an interview with the COX director, it clearly came forward that there have been efforts for a more integrated manner of working, which should also result in effective knowledge sharing. However, these initiatives have not been truly adopted within the CX department. The initiatives that have been taken, would mean that the patterns of knowledge distribution had to be changed within the department. Changing patterns is more difficult to do then implementing only small changes. For changing pattenrs, it is important to consider the changes in attitudes and behaviours that are necessary for this new initiative to be adopted (Michie et al., 2011). But also the practices that should be changed should be made explicit. The values and norms of the new initiative should be clear as well (de Long & Fahey, 2000). When these actions are not being considered, there are higher chances of failure of implementing a new working system.

What can be concluded from this, is that there are many options for effective knowledge management, but that no direct choice should be made from the broad overview of knowledge management techniques. For defining what is the best suitable solution, it should be considered what behavioural change is required within the organisation. Then based on these results, the technique that is best to fitting to this specific situation should be defined for implementation success.

	Identifying	Creating	Storing	Sharing	Applying	Short explanation
Brainstorming		✓				Creating knowledge by having creative sessions. This is already actively being done within Flyco.
Learning and idea capture		✓				Process of continuously writing down your learnings through a template.
Peer assist				✓	✓	Sessions where people help each other to give feedback from different perspectives, preferably with more expertise.
Learning reviews		✓	✓			A technique used during projects for continuous learning. Specific meeting formats after the meeting are helpful.
After action reviews		✓	✓			Evaluate the projects and have a reflection and feedback moment once a project has finished.
Storytelling				✓		Transfering tacit knowledge in explicit knowledge by telling it storywise.
Collaboratice physical workspaces		✓	✓	✓		Changing aspects and routines in the office and direct the office in a way to stimulate collaboration and knowledge sharing.
APO knowledge management assessment tool	✓					A survey questionnaire that helps the organization to quickly assess the readiness for knowledge management.
Knowledge cafés	✓	✓		✓	✓	A group of between 15-50 participants discussing one or two questions. Results are not necessary, it is about the conversation.
Communities of practice	✓	✓		✓	✓	Groups with the same passion used for sharing and developing common skills to put into practice.
Taxonomy			✓	✓		A way to structure information, by making a guiding table of context to quickly access the right information.
Document libraries		✓	✓	✓	✓	Having an online taxonomy with a clear overview so that documents are easily searchable.
Knowledge bases (wikis, etc.)		✓	✓	✓	✓	A central place were knowledge is available, so you can easily find the right landing page (like a wikipedia).
Blogs		✓		✓		An overview in timeline of someone describing information. Very time consuming.
Social networking services				✓		Similar as a physical social group, only this type of group only meets online through networking systems.
Voice and Voice-over-Internet Protocol (VOIP)		✓	✓	✓		Having meetings over the internet by using video calling. However, this is nowadays due to covid-19 a commonly used tool.
Advanced search tools	✓				✓	Online search engines like google and yahoo to discover a large amount of information.
Knowledge clusters	✓			✓		A form of community of practice, only this is online.
Expert locator	✓			✓	✓	An IT tool that makes it easy to search for the specific skills and knowledge in a person.
Collaborative virtual workspaces	✓	✓	✓	✓	✓	Online platforms where people can remotely collaborate to gather information. Places like teams or miro.
Knowledge worker competency plan					✓	A competency plan to ensure people will become effective knowledge workers.
Knowledge mapping	✓					A technique to identify existing knowledge on a certain topic. Mapping out the knowledge on a board.
KM maturity model	✓					A method to measure the current maturity on all different aspects of knowledge.
Mentor / mentee	✓	✓		✓	✓	Having a senior buddy up with a junior to learn from each other new things.
Knowledge portal		✓	✓	✓	✓	This is a portal where all other documentation can be found in. A place to combine online knowledge.
Video sharing		✓	✓	✓	✓	Making a video and using this as a way to spread knowledge, like lectures are recorded in the university.

Figure 6: overview of the 26 tools and methods that can be used for knowledge management in an organisation. Per tool/method, you can see on what stage of knowledge management it focuses, and you see a short description (Young, 2010).

Behaviour Change Wheel

The previous chapter gave insights into knowledge management. However, what was concluded is that it is necessary to change behaviour as well for a knowledge management method or tool to work. Therefore, the next step is to dive into the literature on behaviour change. This chapter describes the chosen model of the behaviour change wheel (BCW), and follows the steps of this model to come to behaviour change techniques.

Based on the findings from the earlier chapter, it has been decided there needs to be a change of patterns of behaviour (Michie et al., 2011). The next step is to find the best fitting model for behaviour change to use. In philosophy studies, many models have been created to design for behavioural change. Nevertheless, not all of these models are most appropriate to apply within Flyco. Niedderer et al. (2014) gives an overview of different behaviour change models and defines the different types of them, shows where they are used for, and helps in easier understanding which model to apply. In the article, they describe three types of models, the first type is the individual type which focuses on the the individual, since these models believe behaviours are self-interested. The second type is the context type which describes that behaviour is a consequence of its social norms and therefore context should influence behaviour. The third type is called the middleground type,

which combines the individual and the context types, and these models believe these one-sided perspectives of the individual or the context should be overcome and that they should be integrated.

In the CX department, the behaviour change should be stimulated by the context, as well as by the people themselves, therefore, for this project the models in the middleground type are most relevant.

Three mostly used models have been described in the article, focusing on the middle ground type. These were the social practice theory, mindfulness and behaviour change wheel. The first is the social practice theory, which seeks for the relation

between practice and context in a social situation. However, I am looking for an intervention result, instead of a comparison of a current situation. The second is mindfulness, which focuses on raising awareness and consciously considering choices, which is not the specific change that is desired right now. The third is the behaviour change wheel (BCW) (figure X), which is a tool where your results are intervention techniques. These can be adjusted to your situation to make it fit, so they give clear directions to an intervention. This is a desired model, since this can be related back to the output of the knowledge management research.

The BCW from Michie et al. (2011) is appropriate for realising change within Flyco, since it focuses on both the policy makers and the individuals. Especially due to what I have discovered in the interviews and observations, which is that the people within the department are willing to change patterns, but that

it is eventually steered by management. Hence, it is important to take the individual and the policy makers into account in the design.

The BCW is a guide towards finding the appropriate interventions for the specific behaviour you want to change. It is designed as a workbook, where you run through eight steps resulting in the best suited interventions to apply. Next, these interventions are linked to behaiour change techniques that might be most appropriate. You can consider all the behaviour change technique options, but by a systematic evaluation, the tool helps to choose the most fitting and promising techniques (Michie et al., 2014). The BCW comprises 19 frameworks from literature in one framework. It thereby focuses on interventions for the policy makers, as well as for the individual.

Layers of the wheel
The BCW consists of three layers (figure 7).
1. The centre of the wheel identifies the sources of behaviour that define the most promising directions for interventions. This is based on the COM-B model (figure 8), a model which focuses on identifying what specifically needs to change in the behaviour for the intervention to be successful. This helps the developers of change to identify the best targets for interventions (West & Michie, 2020). The letters stand for
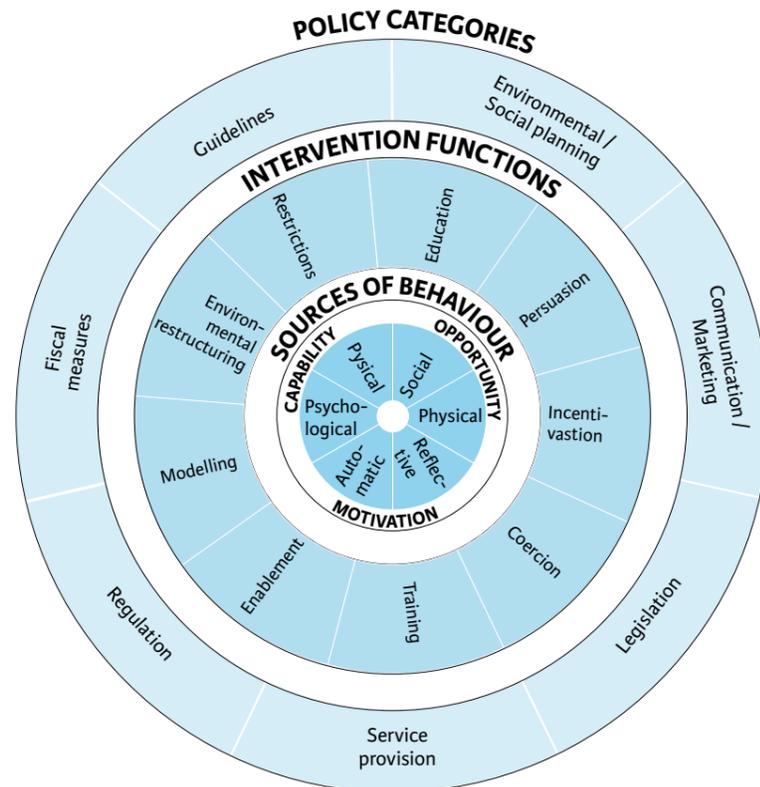

Figure 7: The behaviour change wheel (BCW), where you can see the three wheels it uses (Michie et al., (2015).
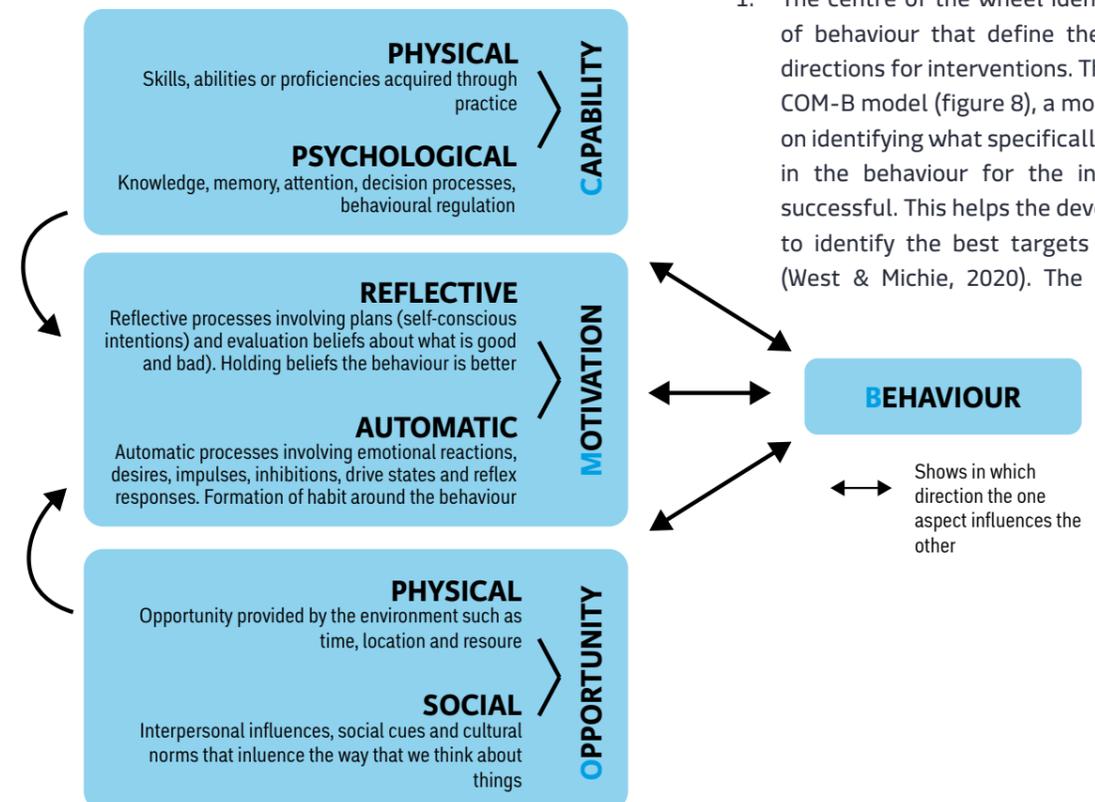

Figure 8: The COM-B model, which is a framework for understanding behaviour, and the three different elements influencing this behaviour (Michie et al., 2015).

having the Capability and the Opportunity to engage in the Behaviour, but also having the Motivation to perform this behaviour over another one. Figure 8 shows the more specific definition of the meaning of the COM-B model. The eventual result from the first wheel analysis, is to define which aspects of the different influential factors are most important for optimization, meaning those are the sources of behaviour on which the intervention should be focused (Michie et al., 2011).

2. The middle layer of the wheel consists of nine intervention functions which needs to be chosen based on the outcomes of the COM-B analysis. So a choice needs to be made to see which intervention direction is best suiting to change the behaviour. Therefore, a table (Table 1, p. 58) shows which intervention functions are linked to which COM-B factors. These design intervention are described very generally, a broader guide with behaviour change techniques is being used throughout the guide.

3. Then the last outer wheel consists of seven types of policy which can be used for delivering the interventions. Therefore, again a table (table 2, p. 58) shows which types of policy best fit for the chosen intervention functions.

The BCW is the basis and the overview of the important aspects of the process. However there are eight steps to walk through within three stages:

Figure 9: The three different stages and the eight different steps that need to be walked through for the BCW method (Michie et al., (2015).

The steps are run through by using the worksheets that are featured in the back of the book. The appendix 11 gives an extensive overview of the worksheets. The results of the three stages have been described below.

Stage 1: Understanding the behaviour

The first stage focuses the understanding of the desired target behaviour. Thus, as always when starting off, it is important to understand the current problem by defining problematic behaviour in behavioural terms. When the problematic behaviour has been defined, the target behaviour should be defined and specified to have a clear overview what

specific behaviour you want to shift. The behaviour should be specified by describing it in six steps: who needs to perform the behaviour, what does the person need to do differently to achieve the desired change? When, where, how often and with whom will they do it?

The behavioural terms have been described based on the insights from the interviews, the questionnaire and the follow-up interviews from the questionnaire. The outcomes can be viewed in figure 10.

When the behavioural terms have been defined, the last step should be taken in the first stage, which is to identify more specifically what needs to change, based on the COM-B analysis. This means defining what needs to change in the person itself or within the environment to achieve the desired target behaviour. This model is the basis and starting point of the BCW, to understand the behaviour in its context. The model recognizes the fact that behaviour is influenced by multiple factors. Therefore one should consider consciously which component should still be modified. The three factors can be described as follows:

- There must be the "capability" to do it.
- There must be the "opportunity" for the behaviour to occur in the physical and social environment.
- There must be sufficient strong "motivation".

The results from the interviews, the questionnaire and the follow-up questions for the interviews were again the input for the answers of the COM-B model. The results can be found in figure 10, this is the behavioural diagnosis.
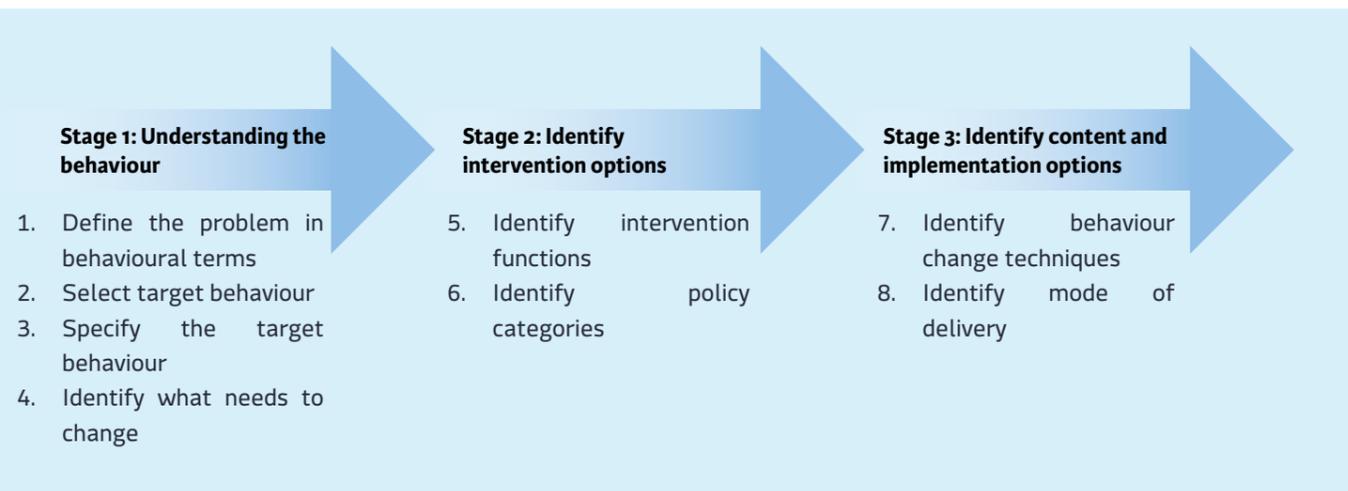

Figure 10: An overview of the behavioural diagnosis, where the desired target behaviour is being described.

Stage 2: Identify intervention options

Since the components that should be improved have been discovered in the COM-B model, the next step is to define which intervention functions are linked to the behavioural diagnosis. In the matrix in table 1, the bold boxes are the link between the components and the intervention functions. The COM-B components that resulted from the behavioural diagnosis which need optimization are the physical and social opportunity and the automatic motivation. The best suitable intervention functions are environmental restructuring and enablement for this specific behaviour, since these all overlap in the three COM-B components that needs changing. The more suitable the intervention function is to the COM-B components, the higher the chance that the final intervention technique will be effective.

Directly after the intervention functions, the policy interventions can be defined. As you can see in table 2, these are quite diverse for environmental restructuring and enablement. The best fitting options can be guidelines, fiscal measures, regulation, legislation and environmental/social planning.

	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical capability					▨				▨
Psychological capability	▨				▨				▨
Physical opportunity					▨		■		■
Social opportunity							■		■
Automatic motivation		▨					■		■
Reflective motivation	▨	▨	▨						

Table 1: The COM-B components can be changed with intervention functions. This table shows which intervention functions influence which COM-B component. Where there is most overlap, most impact can be made.

	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Communication / marketing	▨	▨	▨	▨				▨	
Guidelines	▨		▨				■		■
Fiscal measures		▨	▨	▨			■		■
Regulation	▨		▨	▨			■		■
Legislation	▨		▨	▨			■		■
Environ./Social planning							■		■
Service provision	▨						■	▨	■

Table 2: The intervention functions are also linked to specific policy interventions. These policy interventions are broader defined. This table shows in blue which policy interventions can be used.

Stage 3: Identify content and implementation options

The last step is to define which behaviour change techniques are best suited for the intervention functions that have been defined. The earlier worksheets have already narrowed down to ensure the best fitting directions were defined. The last step is to go through the list of 93 intervention techniques and discover which techniques best fit with the two intervention functions. With these two intervention functions, still many techniques remained. Appendix 11 gives an overview of the consideration of the different techniques. For every technique, the decision needs to be made why a technique could be working or not. From this selection, four best fitting intervention techniques remained.

The resulting and best fitting techniques are having clear goals with an action planning, creating social support between colleagues, changing the environment or adding objects to stimulate behaviour and fitting rewards. Specifically changing the environment is important, since this fits within both intervention functions. When deciding on a mode of delivery, this should be done physically (Appendix 11).

Clear goals with an action planning

Creating social support between colleagues

Changing the environment or adding objects to stimulate behaviour

Suitable rewards

Chapter 6.3

Key take-aways

This chapter dove into the literature on knowledge management and behaviour change. Both literature directions are very insightful for the design of the concept. The insights in knowledge management can be used as directions for tools and methods for the design. However, the insights in behaviour change show what techniques should be used to ensure that the knowledge management tools and methods are also actually adopted by the department. Therefore, combining these insights are a solid basis for designing a solution.

Designing
the Solution

Chapter 7 describes how the solution has been designed. By means of cocreation insights on the behaviour change techniques, combined with the the knowledge management tools and methods, five concept are established. These five concepts in unison form a system for a profound knowledge management.

Chapter

07
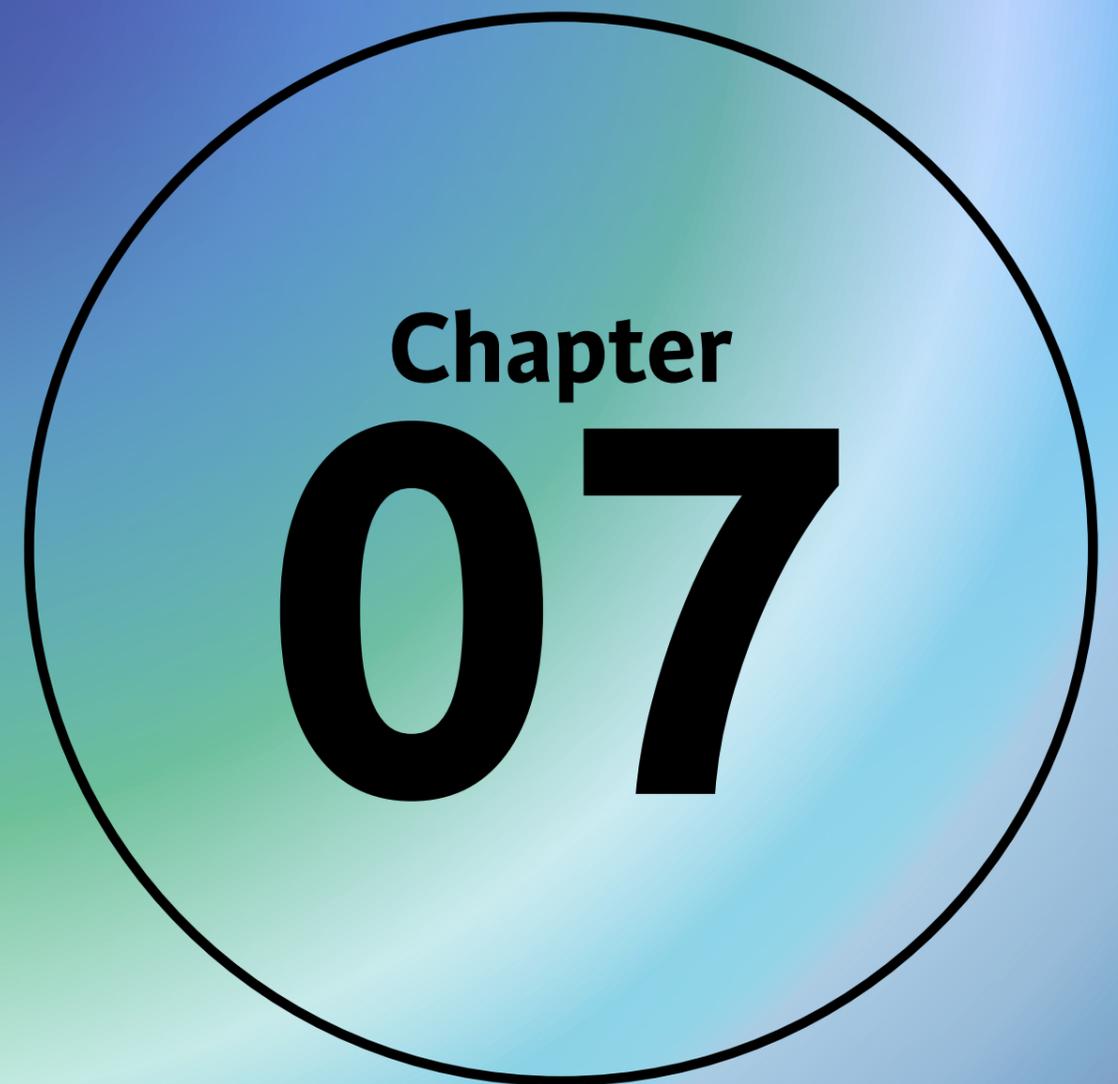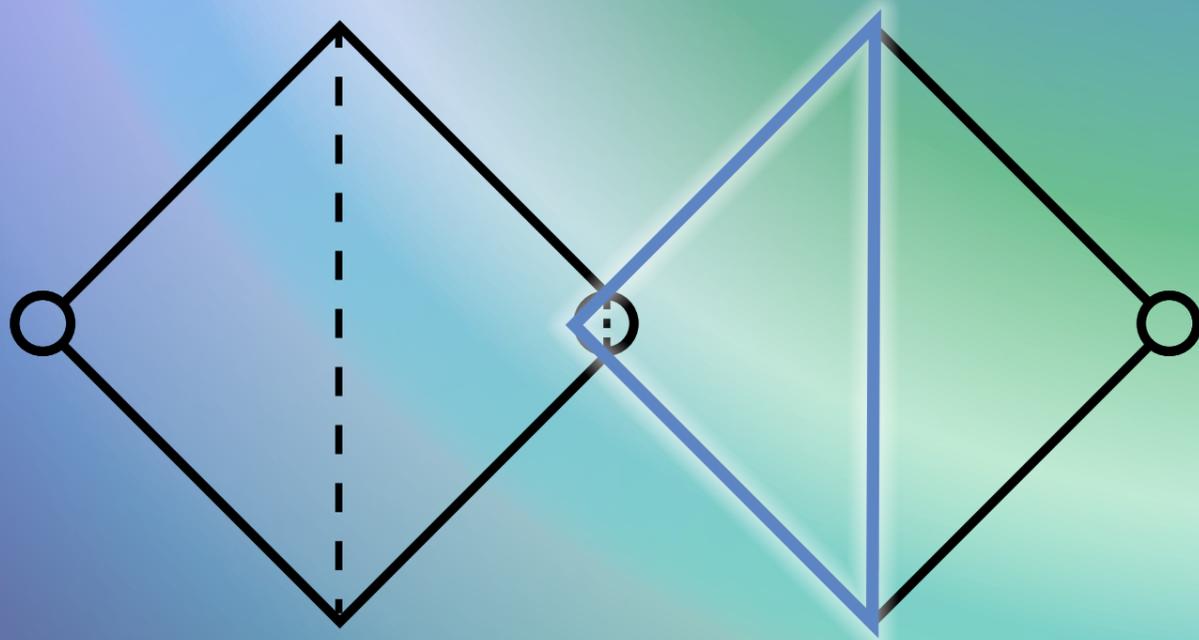
Co-creation sessions

The previous chapter was a literature research into knowledge management and behaviour change. It was clear that there needed to be a behaviour change in the department for a knowledge management tool to work. Therefore, four intervention techniques have been defined by using the BCW. To make these techniques specific for Flyco and to see how these techniques might be working in the department, two co-creation sessions were held. The cocreation sessions gave many insights into more specific ways to change the behaviour.

Chapter 5 has narrowed down the scope of the project in a design brief with a clear framing for the design. Subsequently, a co-creation session has been held with IDE students for some fresh insights into the problem framing, and to gain some outside-in ideation on the topic. This session also helped to gain insight in how to organize a co-creation session. The insights from the session were a source of inspiration to stimulate the people in the co-

creation sessions at Flyco into thinking as broadly as possible.

After the research and the co-creation session with IDE students, two co-creation session were being held with employees of Flyco. Per session there were four employees of the CX department and two other Flyco employees who are former IDE students. These other employees helped in the open mindset in the brainstorm. From every CX team, at least one member joined the brainstorm session. From the CoX team and the airport team, an extra team member joined the session.

The output from the BCW is being used as input for the co-creation session. However, since the output of the research were thematic, they should be translated to questions were the employees could brainstorm on. Therefore, the results from the research were analysed and transformed to questions.

RESULTS FROM RESEARCH	QUESTION IT IS TRANSFORMED INTO
Clear goals with an action planning	*How can you make sure your goals at Flyco are 'actionable'? (action planning)*
Creating social support between colleagues	*How can you encourage each other to share knowledge?* *In what ways can you effectively exchange 1-on-1 knowledge?*
Changing the environment or adding objects to stimulate behaviour.	*How can you document shared knowledge / make it visible to all?*
Fitting rewards	*What type of incentive / reward / stimulation would motivate you to complete your task?*

During the co-creation session, my assignment was to help the employees to ensure they focused on the specific research result behind the question in the brainstorm. Since the questions were a translation of the research results, they did not completely match. Therefore, I made sure I would steer them in this direction if their brainstorm insights would go too far off theme.

When planning the brainstorm, what I already noted was the busy schedules people have, or think they have. It was hard to make sure there was at least one person representative from all teams. Eventually I have therefore decided to have co-creation sessions of one hour. This meant that the schedule should be very effective. For making sure the most optimal techniques were being used, the road map for creative problem solving techniques book was used (Heijne and van der Meer, 2019).

The figure on the next page shows the results of the brainstorm session and the combination of ideas leading to the concepts. The concepts that are defined are a combination of the ideas that were generated in the brainstorm session

BRAINSTORM PLANNING	TIME
Welcoming word and introduction	10 minutes

- Problem framing
- Rules of the brainstorm
    - Pospone judgement
    - Quantity over quality
    - Hitchiking on each others ideas
    - Freewheeling
- Planning of the brainstorm	

Energizer	5 minutes
Describe as many types of fruit as you can think of. Idea is that people get in the mood of open mindedness.	
Brainstorm round 1	15 minutes
The group is being divided into two groups, so that each group can work on two themes, due to timing.	
- Brainwriting on theme 1 silently	3 minutes
- Hitchiking on each other with talking	4 minutes
- Switch	1 minute
- Brainwriting on theme 2 silently	3 minutes
- Hitchiking on each other with talking	4 minutes
Brainstorm round 2	15 minutes
Grouping ideas for theme 1 into cluster ideas*	7 minutes
Switch	1 minute
Grouping ideas for theme 2 into cluster ideas*	7 minutes
*Clusters should be potential solutions fitting within CX.	
Pitching	15 minutes
Group pitches their results to the other group, the other group gets red and green post-its to place their compliments and concerns per cluster.	7 minutes per group

Figure 11: The planning of the cocreation sessions that have been executed with different CX team members.

How can you encourage each other to share knowledge?
In what ways can you effectively exchange 1-on-1 knowledge?

How can you make sure your goals at Flyco are 'actionable'? (action planning)

How can you document shared knowledge / make it visible to all?

What type of incentive / reward / stimulation would motivate you to complete your task?

1-ON-1

Obligated coffee dates	Planned biweekly-monthly 1-on-1 sessions
Buddy system with set moments	Exchanging roles ones in a while for new insights

REWARDING

A points reward, or a game	Knowing what is in it for you

SPECIFIC PLACE / MOMENT

Weekly update moments	Stand-up sessions
Using a template which everybody fills in	

CLARITY

Goals should be measurable	Realistic goals in a clear time frame
Clear ownership and accountability	Clear governance on tasks
Clear owners of each goal	

TASKS

Dividing bigger goal in small activities that can be achieved	Keep an overview of the actions done, owners, next steps
Good time - planning relation	Monitoring of tasks and projects
Knowledge cafés theory It must always have a cause	Regularly sharing your activities

PHYSICAL

Whiteboards on the 6th floor	Deliverables on the wall
Newsletter	Kick-off demo for new projects
Visible in your face	

DIGITAL

Jira / Miro / Drive	Videos or animations
Guide for new starters to be introduced	One person responsible for the documentation

ELEMENTS

One structure for all people the same	Environment where sharing feedback feels safe

INSTRUCTIONS

Clear results per taken initiative	Clear KPI's with a clear timeframe
Clear guidelines or instructions	Clear strategy and projects set by top management

BONUS

Recognition for work	Celebrating the successes and the checkpoints
Money bonus	Visibile acknowledgement for work
Checking boxes	

PERSONAL DEVELOPMENT

Personal development	Challenging tasks
Ownership to the subject	Task should fit with competenes and talents

Figure 12: Outcomes of the cocreation sessions with CX employees from the six different teams.
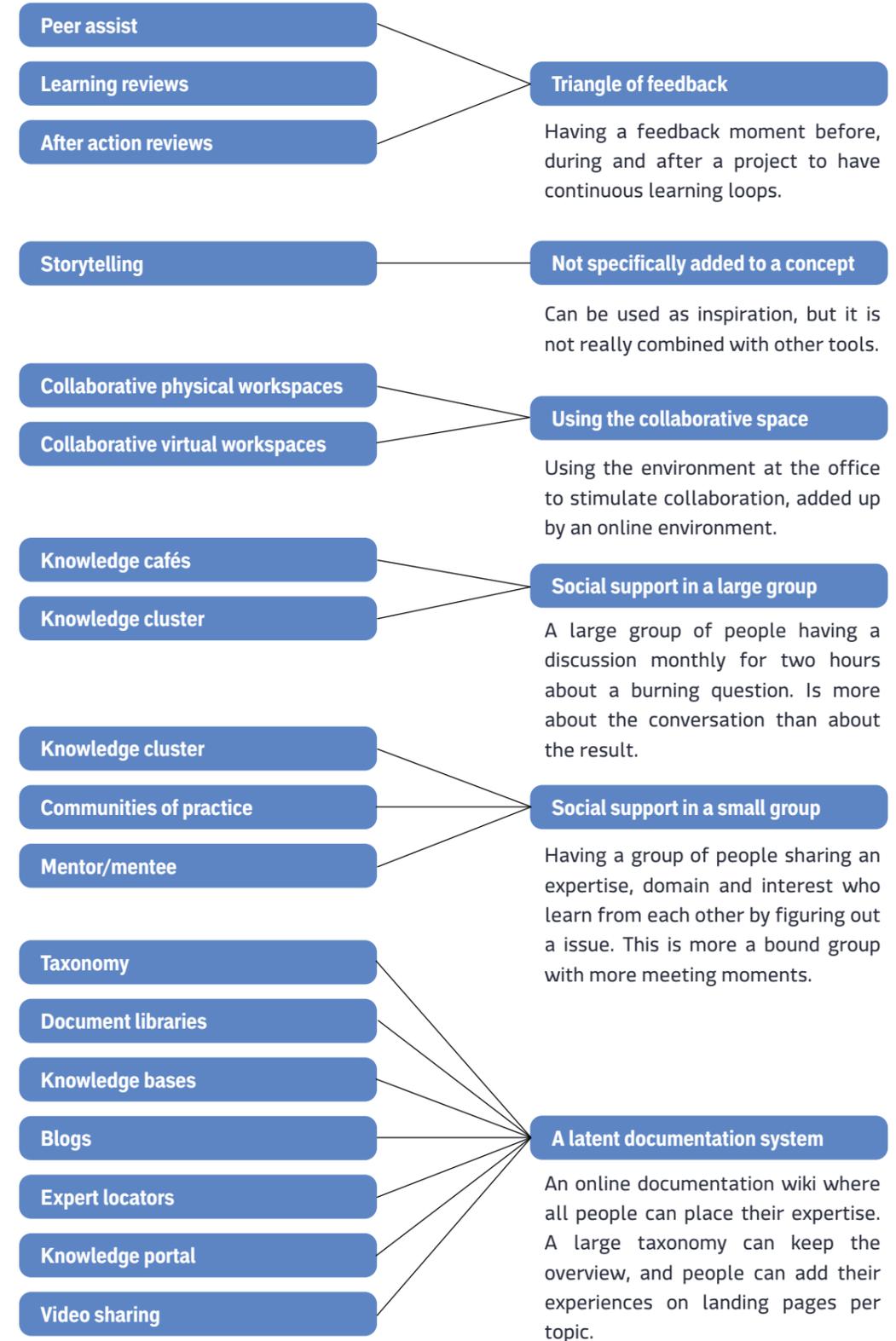
Defining concept directions

The brainstorm sessions have resulted in many insights from the employees. These insights are all focused on the direction that is most appropriate for behavioural change within the department, based on the four techniques that were defined (chapter 6.2). Clustering these insights merely with this literature background in behaviour change would exclude the literature insight into knowledge management. Therefore, hereby the insights from the knowledge management literature (chapter 6.1) are being clustered into five concept directions. The brainstorm input is then combined with the concept directions to develop concepts in the following subchapter.

The literature review into knowledge management has resulted in a list of 26 methods and tools designed to ensure effective knowledge management. However, these were focused on all five stages of knowledge management. For this research, the stages of knowledge sharing and knowledge storing are most relevant. By excluding the methods and tools that focus on the other three stages of knowledge management, the list is already narrowed to 19 methods and tools.

Additionally, the knowledge management tools are assessed for their usefulness in this situation. Two more methods and tools have been excluded from the list: the social networking services and voice and voice-over internet protocal. These are excluded because these are already used standardly since these are regular daily tools which are not new for the concept. Especially the voice and voice-over internet protocal is often used as tool since the covid pandemic minimalized the face-to-face meetings. Therefore, these two can be used as a tool to distribute knowledge, but are not a main tool as input for the concept directions.

Now seventeen methods and tools have remained as options for the concept directions. However seventeen options are a lot to use in the further concept development. Nevertheless, it is very clear that methods and tools have similarities and overlap in a certain way. Therefore, the decision was made to cluster these methods and tools together to create directions for the concepts. On the next page, the methods and tools that are combined are shown, and a short description is given how this combination is supposed to look like. The five output clusters will be used as a basis, where the brainstorm can give further direction to for developing concepts.

Peer assist

Learning reviews

After action reviews

Triangle of feedback

Having a feedback moment before, during and after a project to have continuous learning loops.

Storytelling

Not specifically added to a concept

Can be used as inspiration, but it is not really combined with other tools.

Collaborative physical workspaces

Collaborative virtual workspaces

Using the collaborative space

Using the environment at the office to stimulate collaboration, added up by an online environment.

Knowledge cafés

Knowledge cluster

Social support in a large group

A large group of people having a discussion monthly for two hours about a burning question. Is more about the conversation than about the result.

Knowledge cluster

Communities of practice

Mentor/mentee

Social support in a small group

Having a group of people sharing an expertise, domain and interest who learn from each other by figuring out a issue. This is more a bound group with more meeting moments.

Taxonomy

Document libraries

Knowledge bases

Blogs

Expert locators

Knowledge portal

Video sharing

A latent documentation system

An online documentation wiki where all people can place their expertise. A large taxonomy can keep the overview, and people can add their experiences on landing pages per topic.

Synthesis of results

The brainstorm has resulted in interesting directions for the further concept development. The insights from the knowledge management literature have resulted in five concept directions for the development. The next step is to combine these five concept directions with the brainstorm ideas into concepts. The following pages will illustrate the final five concepts.

For defining concepts, the five directions from the knowledge management literature and the insights from the brainstorm have been clustered. Appendix 13 shows an overview of which ideas from the brainstorm have been added per concept direction for generating and defining the concepts. Per concept direction, every idea that resulted from the brainstorm session is assessed on added valu for the concept direction and general fit.

The generated concepts are a very diverse set of ideas, also focusing on different approaches of knowledge management. In a way, the ideas supplement each other, where one might lack some aspects, the other could complement to this concept, strenghtening another. Therefore, I believe

the concepts should not be seen as single seperate concepts, but as a system that supports each other. Preferably all the ideas would be implemented to improve knowledge management massively within the CX department. But due to time and resources of this master thesis, this is not possible and a decision needs to be made. Therefore, for all concepts, a base has been generated for Flyco to continue on, but only one concept can be further developed within this thesis.

The five concepts are:

1. **Triangle of feedback**

2. **A documentation/wiki of tacit knowledge**

3. **A stimulating collaborative space**

4. **Social support in large groups**

5. **Small rotating communities of practice.**

7.3.1 Concept 1: Triangle of feedback

This concept relies on the three methods being: peer assist (learn before), learning reviews (learn during), after action reviews (learn after). Therefore this concept is more specifically a process structure, for everyone the same that is being done before, during and after a project.

First step: peer assist

The first step is to learn before the project has started. The guidelines for the peer assist are important, further specific form on how to organise the meetings is free to define. Before the project takes place, a meeting should be planned. Hereby, outside-in knowledge from someone not within the project team is relevant. The following steps are being followed during the session:

1. *Select the participants, meaning you add participants outside of the project group*
2. *Be clear about the deliverables and what you want to learn from the session*
3. *Define the purpose and set ground rules.*
4. *Share the basic information like the problem or challenge that is upfront*
5. *Encourage the visitors to ask questions and to give feedback*
6. *Analyse and reflect on what is being said.*
7. *Present the feedback and adjust the plan based on the feedback.*

Second step: learning reviews

The second step is a technique that is being used for continuous learning during a project and to also improve a project. This could be done after every meeting. But to lower the barrier for Flyco, this should be standardly planned after, for instance, every month in a project.

The form of the meeting should be as follows. A facilitator is required in this meeting. For the meeting, a template is used where standard questions need to be filled in. The learnings can then also be hang up on the walls of the CX department to share with everyone, so others can see peoples learnings. The template should hold some specific questions.

- *What was supposed to happen?*
- *What did actually happen?*
- *Was there a difference?*
- *What have we now learned?*

After the meeting, the results should be translated into changing the action planning for the project. So after every meeting, changes might be made to the project.

Third step: after action reviews

The third step takes place after the project has finalised, for capturing the lessons that have been learned in the project. There is again a standard template needed with questions to be asked:

- *What was expected to happen?*
- *What actually happened?*
- *What went well, and why?*
- *What can be improved, and how?*
- *What are the lessons that can be used in the future?*

This last session is to learn especially from the project, from the mistakes and from the gains, which then should be taken into account in a next project.

7.3.2 Concept 2: Documentation / wiki of tacit knowledge

The documentation concept focuses on storing all the information that normally gets lost in a company. The knowledge lost, is mainly tacit knowledge, so one's expertise, which could be valuable for others. The documentation wiki is designed to create landing pages where experiences can be shared, facilitating knowledge exchange.

The basis of the documentation is a large taxonomy based on keywords, to allow easy access to a specific theme.
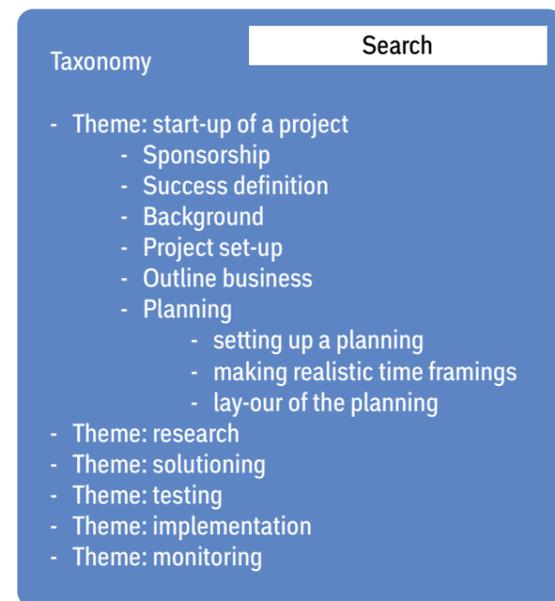

Figure 13: An example set-up of the taxonomy, which is the basis for the documentation system.

Selecting a keyword will direct you to a landing page with information on the topic. There should be a similar template for all people to make sure the structure of the landing page is clear and structured. When people actively contribute to adding information to the landing page, it will become a large guide for all employees to approach projects. The landing page will contain a short introduction,

the information on the subject as promised, and specific do's and dont's in the area. Then at last, the expert is mentioned, for recognition of the person. But also so that other employees can contact this person for further information. An example set-up is shown below.
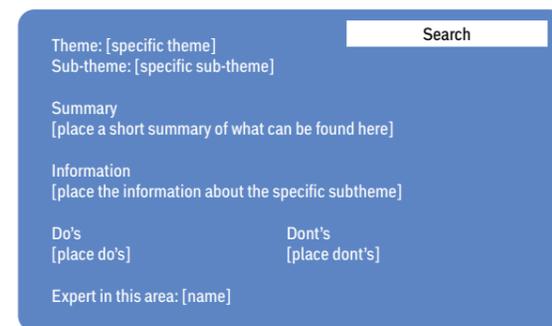

Figure 14: An example set-up of a landing page for a specific theme.

Continuous addition of information to the documentation wiki will result in a large database suitable for knowledge sharing. The employees will also create a personal database with their expertises. This would mean that when you are looking for someone with some specific expertise areas, you can look this person up in the documentation system.

Figure 15: An example set-up of a personal database with expertise of an employee.

7.3.3 Concept 3: A stimulating collaborative space

This concept focuses on using the collaborative space to stimulate team collaboration. In contrast to generally static office structures, this space could be used much more as a stimulation tool. Using the human interactions at the office will stimulate face-to-face discussions between people.

By adding the insights from the brainstorm, this concept uses the background of the agile working tool which is a KANBAN board. This is a project management tool, where you visualise an overview of your workflow. This helps to clearly show where everybody is working on and where every project stands in the process. Making the KANBAN a physical working tool, will show the department insights in the current projects that they are working on.

The concept is as follows, the board is divided into three sections (requested projects, running projects and finished projects). All OGSM projects are displayed on the board with some short information on the project and the responsible employee. These projects are placed in the phase that they are currently in, to have a clear overview of all projects.

The physical board should not be a board just to look at, but there should be active involvement around the board. Therefore it is relevant to combine the board with a form of social support. For instance biweekly moments should be planned to update the board. This could be done in the beginning of the week to start fresh. This is a moment where the people from the CX department are gathered around the board to look at what projects change in phase.
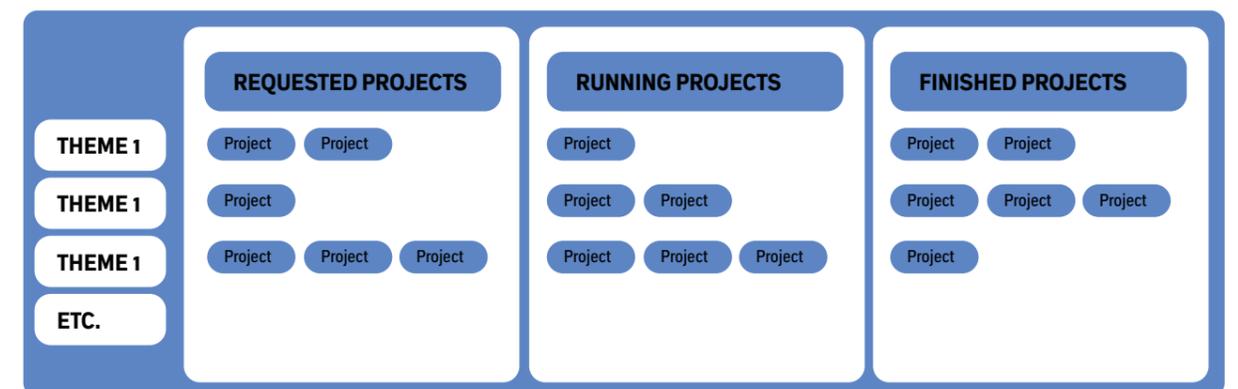

Figure 16: An example set-up of how the project management board can look like.

The overview might look something like the overview above. Per theme, the projects are placed in the overview, so that all people can see how the projects of the OGSM are running.

7.3.4 Concept 4: Social support in large groups

The social support in large groups is mostly derived from the theory of a knowledge café. A knowledge café is a meeting that can take place for instance once per month or once per two months, in what time frame is preffered by the department. The goal of the meeting is to gain insights into opinions and knowledge on a specific theme from your colleagues. The café has a theme with a question that raises a discussion. The goal is not to reach a consensus on the answer to this question, but to stimulate conversation on the topic and stimulate learning. It has the potential to be a powerful tool for sense-making.

A regular group size for a knowledge café is 12-24, but it might be expanded to approximately 80 participants.

In this concept for Flyco, a knowledge café would be a place to discuss important topics that are running in the CX department. So this would be a place to e.g. discuss the seven OGSM themes and the five process steps. This would result in twelve topics, meaning one topic per month.

Below, a suggestion is made on how the two forms of discussion would look like.

	1.	2.
TYPE OF KNOWLEDGE	Explicit: OGSM	Latent: process oriented
WHICH FORM	A short introduction lecture followed by a discussion	In the form of a discussion on the questions raised
WHO JOINS	Apply when you are interested, one person from every team is obligated	People apply when they are interested in the theme
WHEN DOES IT OCCUR	7x per year, as often as there are themes, planned based on urgency	5x per year, based on the process steps.
HOW LONG	For 2 hours - half a day	For 2 hours - half a day
WHO IS RESPONSIBLE	Person who is on the theme, gets contacted by the planner	To be decided, people interested in the team for instance
HOW DOES IT WORK	Short lecture, then a discussion, brainstorm, presentation	Put a pot in the office where people can put in their question per topic
WHAT IS IT FOR	To have insights in different peoples opinions on a certain topic	To learn from each other on how to approach a problem differently

Figure 17: The form which social support in large groups would look like.

7.3.5 Concept 5: Small rotating communities of practice

The fifth concept is based on the literature proposal of a community of practice. Etienne Wenger defined a community of practice as: 'a group of people who share a concern (same domain), or a passion for something they do and learn how to do it better (shared practice) as they interact regularly (same community)' (Wenger, 2011, p. 1). It is typical for a community of practice to improve a certain aspect in the work of people by meeting up together, and figuring out the question.

Within Flyco, people from the same team learn from each other, but have limited interaction with the other teams. Therefore, for Flyco it would be very interesting to create communities of practice between the different teams to learn from each other, and improve each others working method.

Combined with the insights from the brainstorm, the following concept can be defined.
Employees would be divided per a period of time, for instance per eight weeks in a new community. This community would focus on learning from each other. For topic definition, there would for instance be a stack of cards with questions and a stack of card with themes. A question and a theme card would be drawn, which is then the discussion topic for the meeting. For this meeting, a standard moment is planned for the whole department, for instance thursday at three o'clock, where everyone meets up with their group as a coffee break for about twenty minutes. This break will provide the opportunity to discuss the topic. This will give the whole department the opportunity to learn from each other. In the end, the outcomes of the discussions are being shown in the office, for instance on the walls of the CX department so that people can learn from each others input, like the image below.

	OUTCOMES	TEAM
TOPIC 1	A description about the outcomes of the discussion	The names of the involved people
TOPIC 2	A description about the outcomes of the discussion	The names of the involved people
TOPIC 3	A description about the outcomes of the discussion	The names of the involved people
TOPIC 4	A description about the outcomes of the discussion	The names of the involved people
ETC.	A description about the outcomes of the discussion	The names of the involved people

Figure 18: A possible way to illustrate the outcomes of the communities of practice on the walls for the CX department to see.

Concepts together as a system

The five concepts provide a diverse set of directions. However, they do not fully stand as single seperate concepts. The concepts can have a beneficial influencing role on each other. Therefore, my recommendation to Flyco would be to continue developing the four remaining concepts in addition to the work in this thesis. This subchapter describes how the concepts can influence each other.

The five concepts have separate focus areas but can influence each other. Below is described how the different concepts can influence and strenghten each other.

1. Triangle of feedback

The first concept focuses on continuous feedback loops during the project. When the triangle of feedback would be used alone, there would be no beneficial effects for the rest of the department on what you have worked on. Therefore, it would be of great value if the input and the lessons learned during the triangle of feedback would be shared with others in the documentation system.

Another way to show the results to others, is to pick out the most important lessons learned during the project, and print these on a large paper to put on the walls of the CX department. This would create a stimulating collaborative space, showing the results of people's reflection.

Lastly, questions coming out of a project where people might still struggle with, could be input for the social support groups (concept 4 and 5).

2. A documentation/wiki of tacit knowledge

The documentation system can be considered as a basis where all the insights from the other concepts is gathered. The lessons learned can all be put together in the system to have a large database of information.

3. A stimulating collaborative space

As described in the comments on the triangle of feedback, the collaborative space can be stimulating in more ways then only by making it an overview of the process in a KANBAN. All the important lessons learned can be placed on the walls. My advice for Flyco is to start directly using the office as a place where lessons can be put on the walls, since that is a very easy and accessible way to change a routine and stimulate knowledge sharing, even without a fully generated concept.

4. Social support in large groups

When the social support in large groups do not document their insights, the information that was learned will stay in the group that was present at the meeting. What might be interesting for instance, is to use insights from the meeting as input for the small rotating communities of practice. Another option is again to put the most relevant insights on the wall of the CX department or in the documentation system. In these ways, the information gathered will not get lost.

5. Small rotating communities of practice

Also for the communities of practice, it is very useful to use the insights that were gathered, and place them on the documentation system or on the walls to make sure the insights will not get lost.

When looking at the concepts together, you could define the concepts 1, 4 and 5 as concepts that focus on making the tacit knowledge explicit, and learning from each other by this knowledge. Concepts 2 and 3 can be used more as a place to store this knowledge so it remains within the department to share amongst one another.

SYSTEM OF CONCEPTS
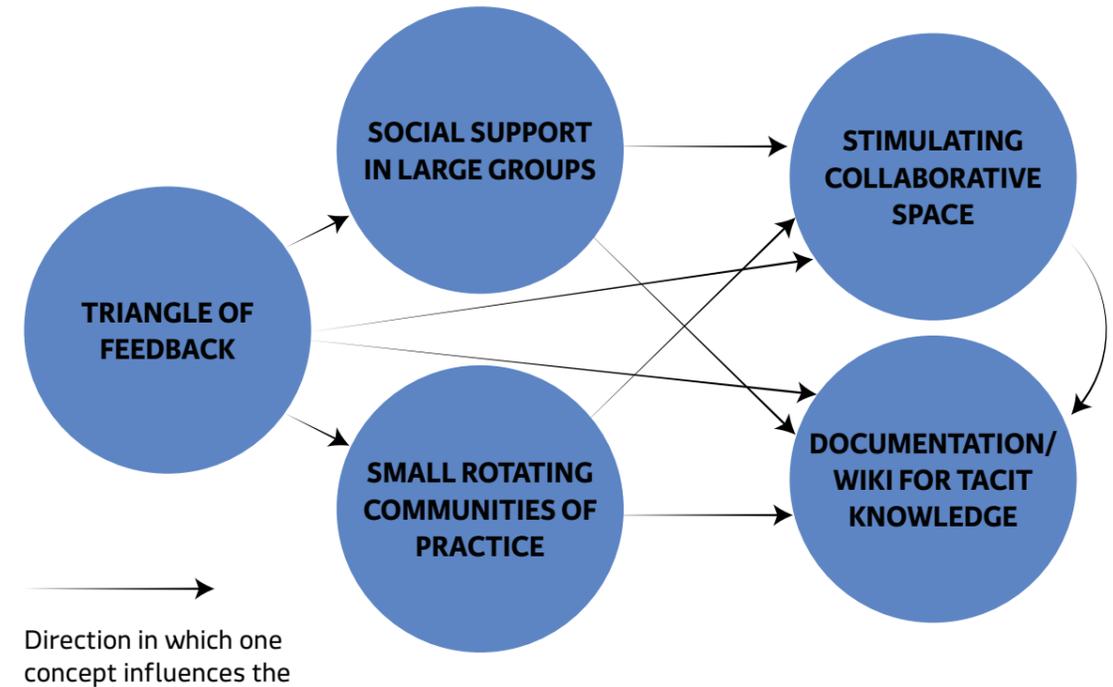
Figure 19:System overview of how one concept might influence the other concept

Key take-aways

In this chapter, the literature insights from the previous chapter have been used as basis. Therefrom, concepts were generated. Five different concepts are the outcome of all insights from this thesis. All five concepts together form a diverse set of directions for Flyco to take. These five concepts all have high potential, and should preferably all be developed within the CX department, which is highly recommended. The concepts are:
1. The triangle of feedback
2. A documentation/wiki of tacit knowledge
3. A stimulating collaborative space
4. Social support in large groups
5. Small rotating communities of practice

These concepts are the basis whereof one will be finalised completely for Flyco to implement.

Concept Development

Chapter 8 describes the process of concept development. Where first a decision is made for concept three, whereafter a switch is made based on a good consideration, to continue with concept five. Both the concepts have been developed. However, concept five has been further developed and tested for iteration.

Chapter

08
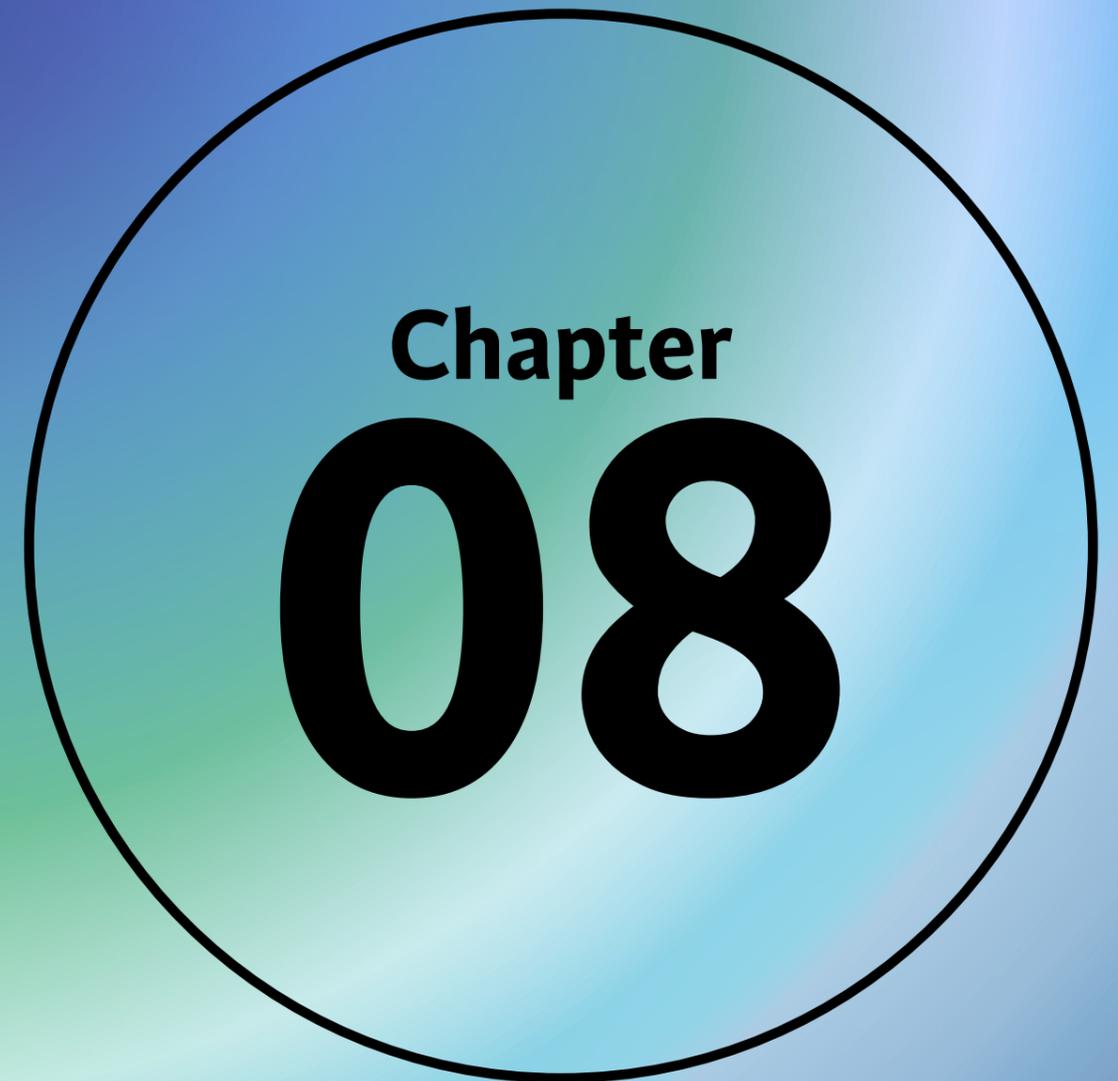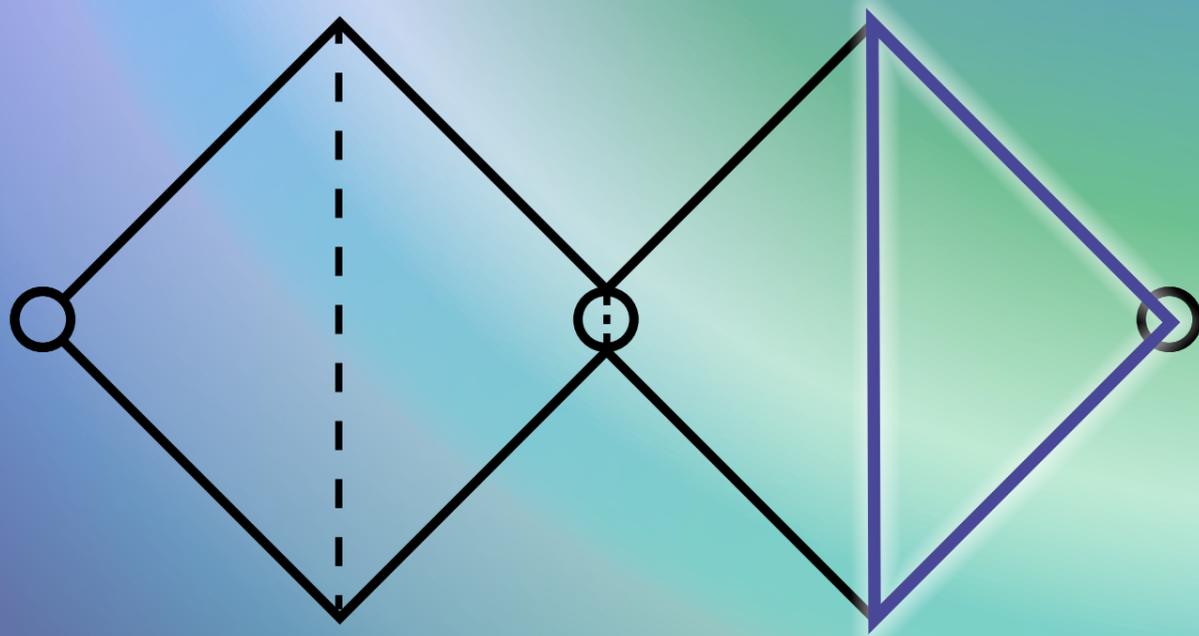
Chapter 8.1

Decision making

The brainstorm delivered multiple promising concepts. However, one concept showed most potential and will therefore be defined further in this chapter.

Preferably all five of the concepts would be developed and implemented in the CX department. Nevertheless, considering the scope of this research project, a decision needs to be made about the best fitting solution for the problem.

To converge towards the most promising solution, the design requirements are applied again. Important to note is the addition of the final design requirement found in literature. This requirement entails that the concept needs to be subsequent to the behaviour change techniques. The relevance of implementing this requirement is high, since this will ensure that behaviour change will occur in the department.

Consequently, the following six design requirements (DR) are used:

1. The design is subsequent to the behaviour change techniques.

2. The design stimulates knowledge sharing between all the different teams.

3. The design focuses on tacit knowledge instead of only on explicit and result-oriented knowledge.

4. The design is a low barrier for the employees to make sure implementation succeeds.

5. The result of the design is a stimulation in alignment between employees.

6. The design moves the focus towards a group focus instead of an individual focus.

After evaluating all concept, based on these requirements (see figure 20), we can conclude many concepts might be very effective. However, eventually there is one concept scoring best. Thus, concept three, which emphasises the stimulating collaborative space is considered most suitable.

Results initial test with chosen concept

The analysis of the concepts based on the requirements was a comparison process in which I evaluated all concepts per requirement. The next step was to develop the chosen concept. The more advanced version (see chapter 8.2.2) of the concept was used in a first testing round with the CoX team. This session revealed a timing issue for this concept, despite its potential. The team illustrated that it would not reach most potential if implemented immediately. There is currently a project team working on the subject of 'portfolio management'. This project team is there to ensure that people become more aware on what other teams are working on. Therefore, they are aiming to make the projects that the CX department is working on visible online via a Jira board. So the concept has a lot of potential, since there is also already a project team working on this project. However, they are already far in this project, working on specific content. This might therefore not be the most interesting direction for this research project and the design. Especially since the other four concepts can be of great value too. Therefore, the decision

was made together with Flyco to change direction to another concept. This concept will therefore be delivered as an advice. The concept and iteration for the stimulating collaborative space can be found in the next sub-chapter.

Iteration on decision making process

In the first concept decision, I decided myself whether this concept would be a low barrier for the employees (design requirement 4). However, this appeared to be different in practice. Therefore, this requirement will not be judged by me, but by the six CoX members, since they have a broad practical perspective on the CX department on what is currently the lowest barrier to implement.

The overviews of the judgements are shown in the figure below. In conclusion, the chosen concept is number 5: the small rotating communities of practice.

FIRST DECISION MAKING PROCESS

TRIANGLE OF FEEDBACK

DR	-2	-1	1	2
1		X		
2			X	
3			X	
4	X			
5		X	X	
6			X	

DOCUMENTATION/WIKI OF TACIT KNOWLEDGE

DR	-2	-1	1	2
1	X	X		
2		X		
3			X	X
4		X		
5			X	
6		X		

A STIMULATING COLLABORATIVE SPACE

DR	-2	-1	1	2
1			X	X
2			X	X
3			X	
4			X	
5			X	X
6			X	X

SOCIAL SUPPORT IN LARGE GROUPS

DR	-2	-1	1	2
1			X	
2			X	X
3			X	X
4		X		
5			X	
6			X	

SMALL ROTATING COMMUNITIES OF PRACTICE

DR	-2	-1	1	2
1			X	X
2			X	X
3			X	
4		X		
5			X	X
6			X	X

SECOND DECISION MAKING PROCESS

TRIANGLE OF FEEDBACK

DR	-2	-1	1	2
1		X		
2			X	
3			X	
4		X		
5		X	X	
6			X	

DOCUMENTATION/WIKI OF TACIT KNOWLEDGE

DR	-2	-1	1	2
1	X	X		
2		X		
3			X	X
4	X			
5			X	
6		X		

A STIMULATING COLLABORATIVE SPACE

DR	-2	-1	1	2
1			X	X
2			X	X
3			X	
4	X	X		
5			X	X
6			X	X

SOCIAL SUPPORT IN LARGE GROUPS

DR	-2	-1	1	2
1			X	
2			X	X
3			X	X
4	X	X		
5			X	
6			X	

SMALL ROTATING COMMUNITIES OF PRACTICE

DR	-2	-1	1	2
1			X	X
2			X	X
3			X	
4			X	X
5			X	X
6			X	X

Figure 20: The two decision making processes.

Concept 1: A stimulating collaborative space

This section describes the concept that was initially chosen, developed further and evaluated with the CoX team. As described in the previous chapter, the decision was made to design another solution in more detail. However, the initial concept has lots of potential and is therefore presented as an advice.

To refresh the memory, the initial concept focused on a stimulating collaborative (physical) space was at first the chosen concept. The concept is based on the inspiration of the KANBAN board, which is a large physical inspiration board where an overview of the running tasks are placed. This formed the basis of the interactive board for the CX department, in combination with physical meetings for updates.

Inspiration from a portfolio manager

Within the Digital Studios department at Flyco, a portfolio manager has been working on creating a physical portfolio board for her department for more knowledge sharing and learning. A meeting with their former portfolio manager was scheduled to gain inspiration.

The Digital Studios consists of twelve different teams, each with their own expertise. They would benefit a lot from more knowledge sharing between them, but were lacking this at the time. She noted a problem within the department, the lack of agreement on the origin of ongoing projects. The teams were also not aware of what the other teams were working on. Therefore, she has effectively implemented a physical board, inspired by the KANBAN board, in the department to learn from each other. She also confirmed that the tool resulted in pepole doing less duplicate work, and that they were working more effectively together,

so that they could provide better solutions for the customer.

Insights from the meeting on portfolio management

The meeting gave insights into some of the most important insights that she had discovered during her project, which she recommended me to use for my design.

- There should be reminders continuously on the purpose of the board.
- You need a sponsor from management who supports this project, especially the SVP.
- It will be one person its daily responsibility to work on the board.
- There need to be regular update meetings for updating the board, for instance biweekly.
- It is valuable to place the project on the board from the very beginning, even when they are not ready for kick-off, to make sure help can be offered directly and so that people can learn from each others processes.
- Making decisions about the projects progression should happen at the board with everyone present, so that people will feel responsible.
- There needs to be a clear strategy guide to define which ideas will be on the board.
- The interaction between people is even more valuable than the process and the tools.
- Invite a scrum master after running the board for a while, to optimize the board.
- Make a clear definition of what should be placed on the epic statement, which informs other colleagues. It is very helpful to put a picture on the epic statement for people to emphatize with the project.

A first set-up of the concept was defined based on the insights from the meeting.

The physical whiteboard

The basis of the concept is to have an overview of the status of all OGSM projects on the whiteboard in the beginning of the CX department, so that there is a clear view of what projects are running or planned in the department. These are placed on the whiteboard of the CX department, which is divided into three areas of the project, preparation, in process and lastly results. From the initiation of a project, the project is being displayed on the board, so that early help can be offered. Then, once a project has started, it is visible for everybody where the project stands in the process. Lastly, once the project has finished, it is placed in the results area on the right. Then, the department can also show their pride of what projects have been finalised.
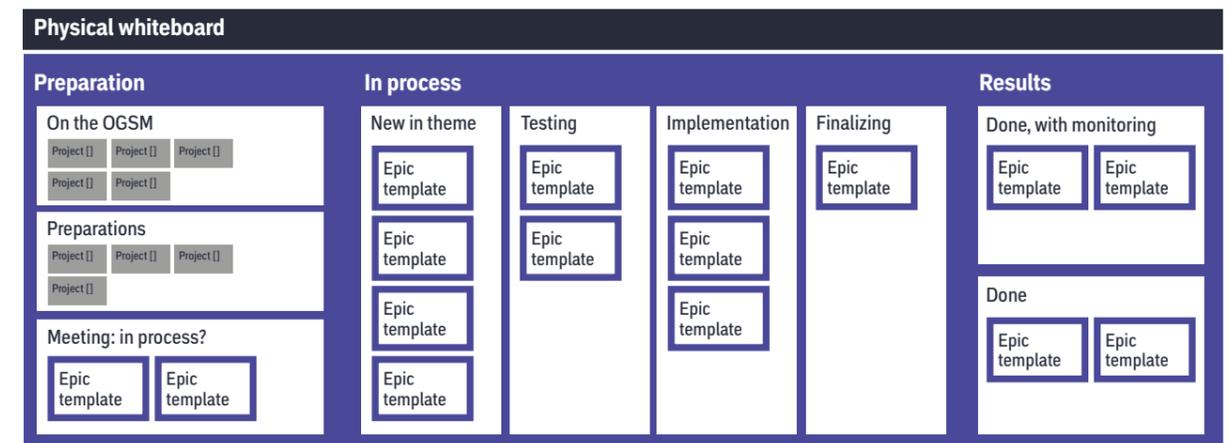

Figure 21: The lay-out of the full proposal of the physical board that can be placed on the whiteboard.

The different areas on the board are described on the following pages. However, around the board itself, a social support aspect is added, to create the interaction with the board and active participation. This is being done in two ways, by a process meeting, and by giving people the capabilty to comment to projects.

Biweekly, there will be meetings with the department around the board. During this meeting, the department will update the board. The department mutually decides whether a project can move from one area to the next. Deciding together ensures that the project has been well-defined

and that all important preparations and finishing touches per area are fulfilled. Naturally, not the entire department will be discussing along with decision making, but only when there are crucial remarks on the decision making, comments can be made

The other social support option is for people to place comments on the projects. On every epic template (explained on the next page), there will be space for people to ask questions, comment, or give tips. This will make the board interactive, even outside of the meetings, so that people reach out to each other for help and support.

Three areas of the physical board

The first area is the preparation phase, which contains three steps.

1. The first step is to **place a project on the board once a project has been put on the OGSM**, but has not been prepared or started yet. This will give a clear overview of all the projects that the department wishes to initiate, since they are all already on the board.

2. Once the department aims to start a project, it will move to the preparation phase. This phase can be compared to the 'stage-setting elements' as described in the literature chapter 4.3 It is important to **start off a project with clear starting elements**. These include aspects as problem definition and involving the right people in the beginning. This means making sure the basis for starting a project is defined.

3. The last phase is to **put the project on an epic statement to have an overview of the important details of a project** (described below). This step is to decide together with the department if the project can move to the 'in process area'. Deciding together gives a feeling of ownership and pride.
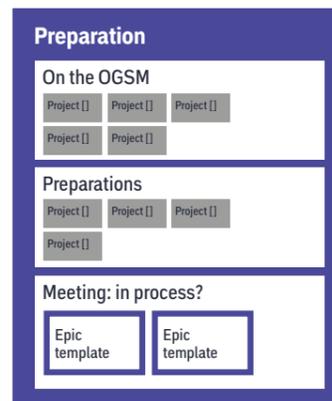

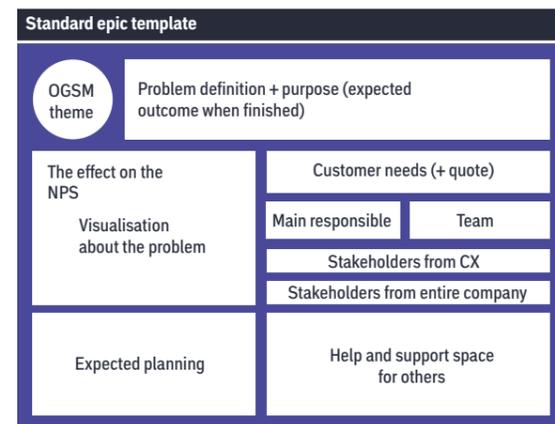Figure 22: The lay-out of the proposed preparation phase.

Figure 23: The concept set-up of the epic template, based on the Project Canvas set-up (Project Canvas, 2016).

The second area on the whiteboard, is the 'in process' area. This area contains four different steps.

1. Once the project has been approved by the department to start, and the epic template has been generated, the project moves to 'new in theme' to start generating a solution for the project.

2. The next phase is to test the solution whether it works as it has been defined, and whether it is the best fitting solution, covering the entire

The epic statement is an A4, containing some basic information and details about the project. This small overview will give people some information on the topic if they are watching the board, so this will quickly inform employees at the department about a project. The input is based on the 'project canvas' (Project Canvas, 2016). The input from the project canvas has been minimised. The most suitable information has been decided based on the advice of the former portfolio manager, and the insights from the qualitative interviews.
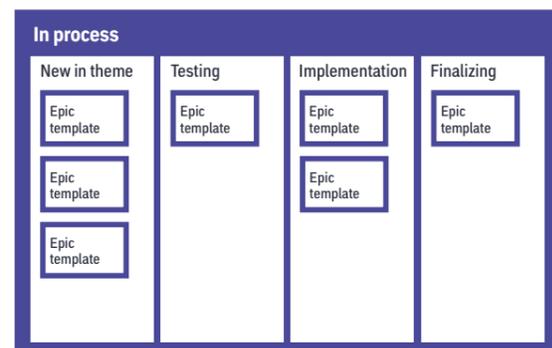

Figure 24: The lay-out of the proposed in process phase.

customer journey.

3. Once the testing phase has confirmed that the solution is effective, the project moves to the implementation phase to realise and implement the project in the customer journey.

4. At last, the project is finalised, only the finishing touches are left.

The third area on the whiteboard is the 'results' area. When a project is finished, it will move to this area. This will be the place where the projects can stay for a longer time, to show to others as pride of the department. The project can be completely finished, or finished with someone still monitoring the project. The project can stay here for a longer period, until many projects have finished. Then, some projects can be removed again to prevent the board being too full.
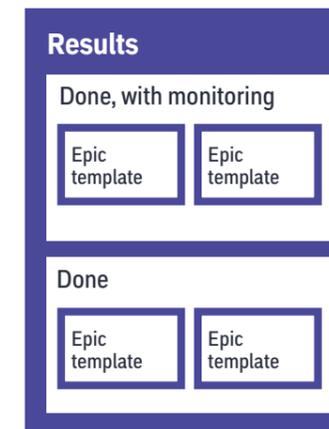

Figure 25: The lay-out of the proposed results phase.

Test meeting

The concept set-up was tested for the first time in a one hour session with the CoX team. The meeting resulted in extremely useful insights for the final advice for this concept

During the test meeting, all six members present gave their feedback on the concept. The most important insights are the following:

- The concept should fully connect to the different phases as they have been described in the CX Way of Working, to have a consistent approach.
- The physical board is already quite complex. When starting with a physical board, it might be better to start with a more minimalistic version.
- Doing biweekly meetings sounds like it is very often, especially with projects that have a long lead time, perhaps this can be monthly.
- The social support element is a very small aspect in the whole board, and feels a bit extra, like it is something that people would eventually not use. It might be better to separate the social support and the physical board into two concepts.

One of the team members of CoX is involved in the portfolio management project team. This project team has already taken quite some steps in the process.

Since the portfolio management project team is already working on specific content for their project, adapting the concept based on their insights would not be most relevant. It would be more relevant to provide the project team with the most important insights, argumented by literature. Especially since the decisions for this concept are made by using literature insights, while their decisions are made based on their own experiences.

A meeting with him was valuable to see what decisions the project team had made, contrary to my proposal. The aspects of these contrary decisions which are most relevant for them to change according to my research, are described in the advice. This gives the CX department insights in the reasoning behind the choices and their relevance.

Since the project is already far in their process, the meeting made it clear that it was preferred that I would explain the most important advice aspects based on the results from the research, so that these aspects could be brought into the discussion. These were the following aspects:

- The CX Way of Working phases should be used in the board. These phases are start-up, research, solutioning, testing, implementation and monitoring. All these steps already have their own descriptions of the steps to be taken before a phase can be completed. For these steps templates will be made by the project team to fill in.
- To go from one phase to another phase, a 'tollgate' is the approval moment.
- The start of a project will be based on 'customer priorities' (appendix 12) instead of the current existing OGSM projects. During the start-up and research phase, the outcome always has to show how the specific project fits to a customer need. This ensures that each project will be based on solid research.
- The project team wants to put everything on an online Jira board, so that it can be shared with other departments as well, so no physical board.
- A discussion point in the project team is about when the project should be placed on the board. Since multiple people prefer the project to be placed on the board only when the project is actually starting.

For the iteration, these points should be taken into account. The iteration will be an advice, explaining why certain aspects should be in a certain way.

Final advice for the concept

The concept can be used as a basic set-up for the CX department to use. However, since there is already a project team working on this concept, the most important advice points from the board are defined below for the project team to take into consideration.

Having a physical board

The concept must be physical and is preferably also placed online. Having the physical board is very important. This is based on the insights from the BCW and from the knowledge management literature. Having a physical board will create a stimulating office environment. This might be a conversation starter for employees to have a discussion about. Furthermore, it is also very accessible. Since it is hanging at the office walls, so it cannot be avoided. This small barrier is very important for realising change. This will also make it very accessible for people to see whether they can help with a project.

Dividing the board in three areas

The three blocks are in fact the before, during and after phase. These three areas are for a specific reason all very relevant to place on the board.

1. The first area is before a project has started off completely. The steps that should be placed on this area, based on the CX Way of Working, are **the start-up and the research step**. Having the projects on from the beginning was recommended by the former portfolio manager, based on the fact that this will make sure that the entire department can see the project, and jump in with their expertise from the beginning. This will give input from the entire department on the project from the very start, which will help in a better defined start of the project.
2. The second area is during the project. This area is very informative for the department to see where projects are running. For instance, this helps to see if a project takes very long to proceed which allows the department to offer help quickly. This area gives the department a clear overview. The phases of the CX Way of Working that are implemented here are **the solutioning, the testing and the implementation step**.
3. The third area is when a project has finished. Based on the behaviour change techniques, this is very suitable, because it is rewarding for people. Having recognition for finalising a project, and showing your project gives a sense of acknowledgement. Furthermore, when people from other departments come in to the office, it is a quick way to show what the department has realised already. The phase of the CX Way of Working that is implemented here is the **monitoring step.**

Have a meeting around decision making to move the project from one area to another

The three areas on the board have very clear starting end ending points. Making decisions about when a project will go from one area to the next one during the meetings around the board, will give a sense of responsibility for people and a feeling of acknowledgment. It also makes sure that projects are well-defined before they go to the second area, and that the project has been finalised correctly before they go to the last area. Having a strict regulation around these decision moments will ensure that these areas are well done. At last, not everybody should need to contribute to the decision making. What is most important about these decision making processes, is that if people really think there is something missing in the project to continue, this could be mentioned.

Epic template with information

Having the broader information on the project by an epic template will help with emphatizing with a project, and obtain more information on it. For many projects it is not very clear what the exact plans are, who is working on the project, what it is really about and when it will be finished. Having this small A4 overview on the project will be a very quick update for all the people in the department, without the need to ask about it.

It should be the job of one person to be responsible for the board

To keep the board up to date and to make sure that the information on it is documented online as well, these should be one person responsible. This will make sure that the board will be refreshed continuously, that people come prepared to the meetings and that there is a leader during the meetings.

In conclusion, this concept is a concept with great potential, which is confirmed due to the fact that there is already a project team working on this concept. To ensure that the insights of this research can be used in the project team for portfolio management, the most important insights from this thesis have been described in five points.

Concept 2: Small rotating communities of practice

After a second consideration, the small rotating communities of practice were the most optimal solution for the problem. This would currently suit better within the department according to the CoX team. Therefore, this is the concept that will be developed further to have the most impact within the CX department.

8.3.1 Theory behind the concept

The term of the Community of Practice (CoP) is originated in learning theory. Etienne Wenger, anthropologist, has introduced the term when he was studying apprenticeship as a learning model. The concept and how it works has existed for a longer time, but the term is quite new (Wenger and Snyder, 2000). The CoP has three basic principles which it leans on. People in a CoP should have the same **domain**, the same **practice** and share the same **community** (Wenger, 2011).

"Communities of Practice are groups of people who **share a concern (domain)** or a passion for something they do and **learn how to do it better (practice)** as they **interact regularly (community)**" (Wenger, 2011, p. 1).

• Firstly, the domain of interest should be the same. The CoP should be bonded with people with the same interest in the discussed theme. Not only should people have the same domain, it is important that they also have a passion for

this domain. People in the domain should desire to learn from one another.

• Secondly, people should be included in joint activities and discussions. There should be discussions between people. Interaction and discussion are highly relevant in the CoP

• Thirdly, people should practice the same discipline. This is relevant due to the fact that people should have gained expertise in the same direction.

These three elements are a necessity and are therefore at the basis of a community of practice.

The form of the CoP can be very diverse. The groups can be very small, but they can also be very large. Some communities have members from only their own department, while others have members from different departments or even different companies. The CoPs can be very local, or can be divided around the globe. There are no specific limitations about the form of the CoP (Wenger, 2011; Wenger and Snyder, 2000).

The CoP walks through five stages in process.
1. Identifying issues or questions – In the beginning, there needs to be a topic that a discussion should be held about. This can be any topic of interest. This topic is something that needs more diving into, and therefore a community will be set up.
2. Recruiting members – The second step is to gather people around the topic who have an interest in the topic and want to discuss this topic. These members are hereby recruited.
3. Learning and sharing – Next, the members of the CoP share knowledge with each other, their experiences around the topic and the skills they have gathered. These will help

each other improve their practices. This stage in the process is the moment where te actual meetings take place. The meetings themselves have a process themselves to walk through.
4. Implementing changes in practice – members have learned from each other, and now use their input in practice to realise change
5. Reflecting and sharing results – The community is done, but people will still spread what they have learned with others. (ERLC, 2016)

For the CoP within the CX department, the fourth step can be removed in the process. Since it is relevant to share the results first with the CX department, so that everyone can focus on implementing changes in practice and ensure that the insights from the CoP are used.

Three factors that are very relevant for the success.
• All people should have a passion for the domain
• Leadership: having a facilitating role
• Time: it is a constant challenge to use time effectively.

During the CoP meeting, the goal is to have topic-focused exchange of ideas, organizational and individual capability development, relationship development.

The CoP is nowadays gaining its popularity as tool to co-create knowledge with the community (Triste et al. 2018). Wenger et al. (2011) also describes in its model for value creation that it is important to first promote value creation, whereafter you assess it. This can be compared to a diamond, like it is described in the double diamond method, where first a diverging phase explores all the options, whereafter you converge to define direction (British Design Council, 2019). This process can be used for the meetings themselves, which is the third stage in the process of the CoP.

When translated to a meeting, first the question or statement is defined, whereafter people can explore broadly for solutions. Then, the exploration is analysed, whereafter there is an assessment phase to explore the best fitting solution. At last, this result is presented to others. The figure below shows the steps taken in the process of a CoP.
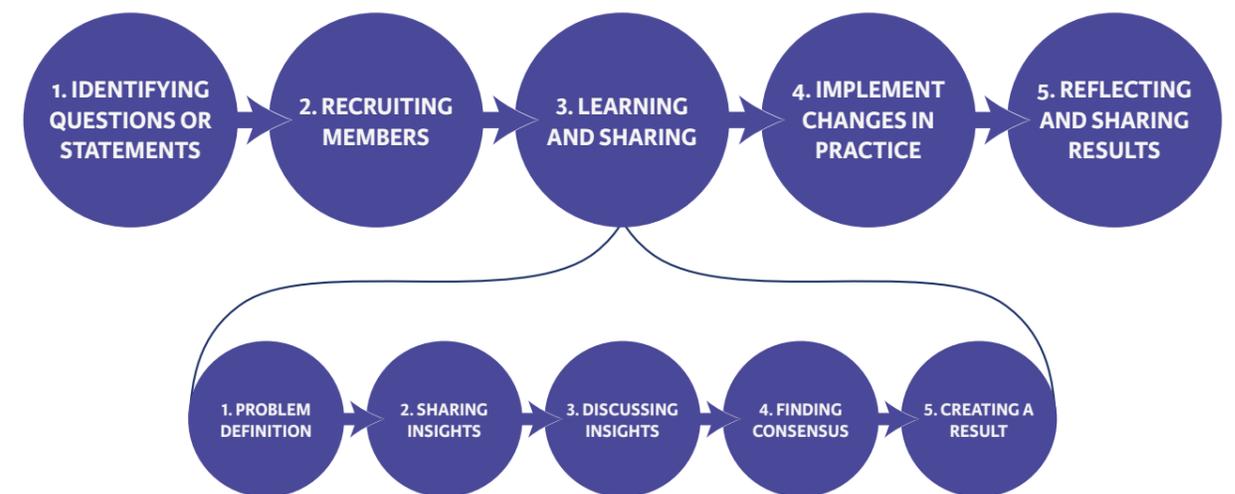

Figure 26: A visual overview of the process of a CoP, including the steps that can be taken in the meetings.

8.3.2 Insights first testing round with the CoX team members

In the first testing round, a basic description of the concept was given (see appendix 13). During the test meetings with the CoX members, every CoX member gave their first comments on the five concepts and their ratings. These comments are useful for the further development of this concept.

- Consider **the form of how to organise the meetings**. The meetings can for instance be randomly arranged by asking IT, Data and Tooling to arrange a system. But it is wise to think about a way to form groups. You could also ask people on which theme they would like to have a deeper discussion.
- **The structure of the meetings** is very important. What is **the specific theme** that you are going to discuss about? There could for instance be a connection with the CX demo. The CX demo is meant as a basis whereafter people can find deeper connections about the subjects, which is currently lacking. Perhaps this community could be a basis to have the deeper connection after the CX demo.
- People who are excited about these forms of groups will actively participate. However, often there are also people not very enthousiastic about these types of meetings. **How do you make sure that everybody wants to participate**?
- There are **only a few moments where the entire department is brought together**, these moments might be an opportunity to connect this concept to.
- There is never a question or statement being posed at the CX demo, while **you could present a helpful question for a project that you are working on in the CX demo**. This might be a nice starting basis for the concept.
- There should be **a clear cause to the meeting**, what is the meeting for and how will you use it?

8.3.3 The concept set-up

After the input from the CoX team members, a first concept set-up was defined. The concept consist of four different stages. These stages will be continuously repeated between the CX demo. This means that every six weeks, the communities of practice will rotate, and the stages will start again from the beginning. The next pages show an overview of the four stages in one image. The stages are based on the literature on the CoP. The stage of implementing change in practice has been left out, since this is a task for the entire department.

1. Identifying questions or statements - at first, every team identifies a question or statement to share with the CX department. This question or statement will be shared in the CX demo. This is a question or statement where the team would like to receive feedback on from the other teams, or where they do not know the answer on themselves.
2. Recruiting members - the questions or statements will be divided over the people of the CX department.
3. Learning and sharing - in the community groups, people will get to share their experiences on the topic and what knowledge they have gained on the subject. The people in the groups learn from each other by sharing their insights, wherefrom they can come to an agreement on what they believe is the best fitting solution to the problem.
4. Reflecting and sharing results - at last, the insights are being shared with the CX department, so that all people who did not participate in the group can also learn from the insights.

The pages thereafter dive deeper into the four stages.

STAGE 1

2 questions / statements per team

During the CX demos, every team presents two statements/questions, resulting in twelve questions and statements in total.

STAGE 2

12 topics divided over 12 groups of 5

The twelve questions and statements are divided amongst the people of the CX department, everyone particpates. Forming groups of five people: the communities of practice.

STAGE 3

Diverging and converging

5 weeks with 20 min coffee breaks

Every thursday at three o'clock, the community of practice has a coffee break to take a step in the process. Meaning five steps of diverging and converging.

STAGE 4

forming the departments building blocks

The outcomes of the discussions during the coffee breaks are written on building blocks, which will then be placed within the office for all the people to see.
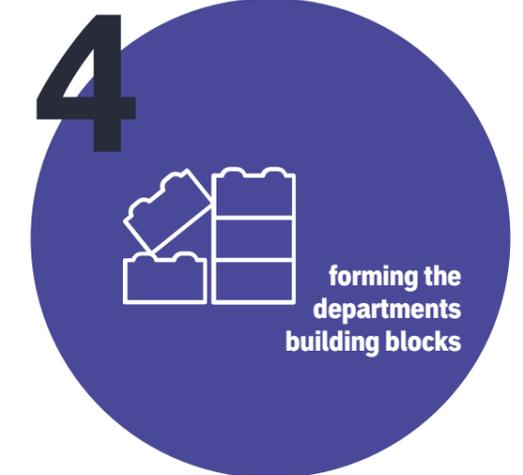
STAGE 1

2 questions / statements

per team

Stage 1: Identifying questions or statements to present at the CX demo

As the insights from the CoX team showed, it is important to have a clear theme or subject. Also, having a connection with an existing moment with the entire department could be very valuable.
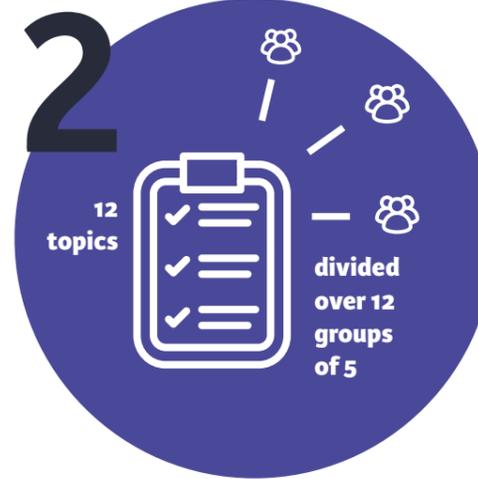
Furthermore, as the behaviour change techniques have described, a goal with an action planning is a way to make sure the behaviour is changed. Therefore a clear structure for the process of the rotating communities is valuable.

Therefore the starting point of the concept will be in the CX demo, to have a connecting moment with the entire department. Within the CX demo, every team will propose two questions and/or statements. The knowledge context of the topics can be very diverse. My proposal to offer a form of structure, is to limit the themes that can be used for the questions or statements to the OGSM themes and the process themes (see figure 27). All the six teams will have to prepare two questions or statements about these themes before the CX demo. During the CX demo, these two questions or statements will then be presented to the other teams. This will result in twelve questions or statements being presented every CX demo. These will then be the discussion topics for the next period until the next CX demo.

Process themes			OGSM themes	
Start-up sponsorship success defintion background project setup outline business case and KPIs planning	**Research** customer needs, pains and gaps staff needs, pains and gaps journey and service insights competition map / benchmarking define challenges, kpis and targets	**Solutioning** solution exploration viability/feasibility estimate initiative refinement initiative hypothesis and KPIs	**Positioning and brand** Clear brand promise Future proof positioning **Offer and booking** Sustainable proposition Customer oriented offer **Airport** Customer health and clearance Bagage journey Transfer journey **Flight** Premium comfort Sustainable catering Customer care and control	**Personalized interaction** Clear and relevant communication Recognize and know me **Care and recovery** Easy recovery Customer centricity Staff behaviour **CX** 2030 vision and strategy CX maturity and professionalization Data and GDPR
Testing MVP/POC initiative business case impact estimate on customer needs, pains and gains	**Implementation** funnel refinement analyzing portfolio backlog development business change	**Monitoring** measure realized benefits evaluate outcomes improve desgin / product lessons learned		

Figure 27: The optional themes (OGSM and process) used as basis for the CoP.

STAGE 2

12 topics

divided over 12 groups of 5

Stage 2: Recruiting members and forming the communities

When the questions and statements have been defined, the next step is to form communities. Since all teams will come up with two questions or statements, this results in twelve questions and statements in total. With 60 people in the CX department, this would result in groups of about five people per question or statement.

The group composition can be done in two ways.
1. Employees can be classified differently for every new group formation. Therefore, the IT, Data and Tooling team could for instance set up a system to classify people differently every time. People will then be divided differently every time. The downside of this option is that people might not be put with the specific theme they are most interested in or have most expertise in.
2. People can fill in their top three. Then the people will be divided into group based on their preferences, by a preference-based group generator. This should be done closely after the CX demo, so the groups can be made directly.

When everybody is divided in groups, the meetings can start.

STAGE 3

Diverging and converging

5 weeks with 20 min coffee breaks

Stage 3: Learning and sharing during the weekly community meetings

For offering structure to the meetings, it is useful to have fixed moments to meet up with your community. The barrier should be low, therefore I suggest to implement the meeting as a coffee break. People will feel social pressure to participate if the entire department works together on the project. Then it will be an obligation for people, but it will also be exciting and educational for them. To ensure that everyone participates, it is critical to have support from management, who must also actively participate in steering the department to participate in the communities.

The meeting itself must have a clear structure as well. Therefore, to analyse the topic well, a fixed setup of the meeting with clear questions is useful. Therefore, I propose to walk through the steps of diverging and converging, as described in chapter 8.3.1. It helps give structure to the meetings, and focuses on the root cause of the problem.

STAGE
4
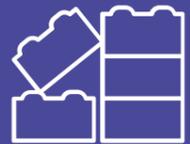
forming the
departments
building blocks

Stage 4: present discussion results

The meeting has a clear cause, which is to find consensus about the topic that your community is working on and to learn from one another. But the question remains, what will be done with this result? Eventually, the output is useful for the community, but also for the entire department. Therefore it is relevant to think about how the results will be presented.

The discussion topics are about the OGSM and about the process. These themes offer a stucture, and a basis for the CX department. You could refer

to these themes as being building blocks for the CX department where they can rely on. If this basis is strong and settled, other steps will go more fluently. A possible way to present the results in these buildig blocks, is by giving it a symbolic value as actual blocks that are built in the office. An option to present this is by writing the results on large blocks, which together build a tower, something looking like a Jenga tower. This will then be a physical object placed at the CX department, where the blocks will resemble the topics. The sides of the blocks will be writable so that people can write about the topic. This is also stimulating according to the behaviour change techniques to change the environment or add an object to it.

These building blocks will then remain at the department for the following weeks, until the new topics must be written upon the tower.
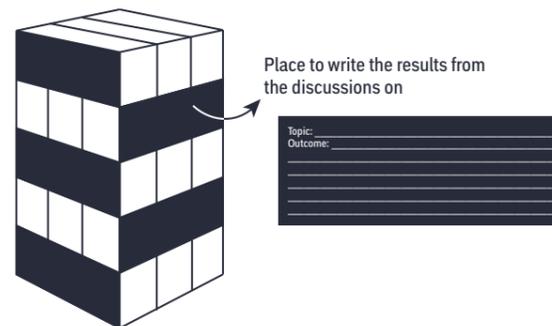

Place to write the results from the discussions on

Topic: _____
Outcome: _____

Figure 28: The tower representing the building blocks.

8.3.4 Assumptions and hypotheses

Assumptions are defined in the dictionary as: "A fact or a statement taken for granted" (Merriam-Webster, n.d.). To define the concept as described above, multiple assumptions have been made. These are based on literature findings, interviews and my experience with the team so far. However,

for these assumptions, it is not clear yet how these will play out within the CX department. Therefore, these assumptions should be tested, to quickly gain insights into specific, but crucial elements of the concept (Reis, 2011). The figure below shows the most significant assumptions that need to be true to ensure that the concept will indeed work in practice, with their corresponding reasoning.

Assumptions	Derived from:
1. CoP ensures that employees apply their knowledge in the entire department.	"…informal networks of people with the ability and the passion to further develop an organization's core competencies already exist. The task is to identify such groups and help them come together as communities of practice." (Wenger and Snyder, 2000, p. 144)
2. CoP is an effective method to share knowledge with each other within five weeks of time.	"CoPs have played an important role in the context of Knowledge Management (KM) especially for sharing common knowledge … and to break down the barriers to knowledge flow across organizations." (Young, 2010, p. 35) Use the time between the two CX demos (brainstorm input).
3. The CoP is adopted when it is perceived as a positive resource instead of a mandatory activity.	"It (the CoP) has an identity defined by a shared domain of interest. Membership therefore implies a commitment to the domain, and therefore a shared competence that distinguishes members from other people." (Wenger, 2011, p. 1)
4. The CoP meetings offer people the structure to share knowledge.	"But a new organizational form is emerging that promises to complement existing structures and radically galvanize knowledge sharing, learning, and change." (Wenger and Snyder, 2000, p. 139)
5. The multidisciplinary insights from employees ensure that people learn from each other.	"…the diversity of knowledge in a CFT positively influences performance due to the various perspectives each member brings to the team." (Daspit et al., 2013, p. 35)
6. A facilitator is needed to give structure and support to the meetings.	"The involvement of a facilitator is perhaps one of the most frequently observed features in the subsequent studies of CoPs, some of which link the success or failure of the group to this role." (Li et al., 2009, p. 6)
7. Showing information physically at the office is an easy and accessible way of sharing insights.	"The physical workspace is where such human interactions take place and it can support knowledge sharing/creation if it is well-designed." (Young, 2010, p. 25)

The defined assumptions are still a bit vague and untestable. For discovering how the assumptions will play out in the CX department, testable hypotheses need to be formulated. Testing these hypothese helps in quickly validating whether the assumption is true or not, and what needs to change to make sure that the concept fits best within the CX department. This process helps to make sure that the concept is a success before it is further developed. Instead of testing the entire process and knowing whether the process fails or not, these small elements are tested. Optimising elements of the concept is easier than optimising the entire concept as a whole.

Stage	Hypotheses	Based on:
1	1. Employees have questions or issues where they would like to have input on from other teams.	Qualitative interviews
	2. The employees preferably define their question or statement based on a broad range of options.	Qualitative interviews
	3. Employees can define questions or statements to present in the CX demo.	
2	4. Employees want to choose their topic of interest to discuss by themselves.	Assumption 1
3	5. Twenty minutes is a sufficient amount of time to have an effective meeting.	Assumption 2
	6. Five different meetings are enough to walk through the process of the CoP.	Assumption 2
	7. Employees are willing to meet weekly for this process.	Assumption 3
	8. Walking through the process with steps of diverging and coverging gives the separate meetings structure to have an effective meeting.	Assumption 4
	9. Having clear guidelines per meeting ensures the time is used efficiently.	Assumption 4
	10. Notes will help in recapping the information from the week before to begin efficiently.	Assumption 4
	11. The CoP supports alignment between the different teams.	Assumption 5
	12. The CoP ensures people learn from each other.	Assumption 5
	13. A facilitator ensures the meeting is supervised in a structured way.	Assumption 6
4	14. All the outcomes of the CoP should be shown physically in the office.	Assumption 7
	15. There should be a template for the showcase at the office.	Assumption 7
	16. There should be an object added to the office where the shared knowledge is put on.	Assumption 7
	17. All the outcomes of the CoP should also be placed online.	Assumption 4

Validating the concept

In the previous subchapter, the assumptions and hypotheses have been defined. The next step is to test the hypotheses to give answers to the assumptions. Testing these will help to give insight in whether the form that was created, is most optimal.

8.4.1 Method

For validating the concept, three different test rounds have been executed. These test rounds were focused on gaining information about the assumptions and hypotheses.

The first two test rounds have been executed with six people. Having six different people would make sure that in all the tests rounds, one person of each team of the CX department was included. The third test round has been executed with three people from three different teams of the CX department.

A second test round has been executed with people outside of Flyco. This was chosen for two reasons. Firstly, there were many cancellations for the test round. There were two test meetings planned with people from all six the different teams, but due to these cancellations, the amount of people was reduced to three. Secondly, I believed that this test could also be executed with people outside of Flyco. The goal of the meeting was to see whether people learned from one another, and whether it helped people get aligned with each other. This question is not necessarily one to be answered from within the CX department of Flyco.

The purpose of the three tests together was to discover how the CoP can and should be used within the CX department, based on the hypotheses and assumptions that had been set up. However, the three tests had different focus areas (see figure 29)

The first two tests aimed to last about 15 minutes per session, some tests ran a bit late. The third test lasted for one hour. A general overview of the three tests is given below, in appendix 15, the set-up of the three tests can be found.

The first test focused on the structure of the meetings, the timing needed for the meetings, and what guidelines were needed. At the discussion was raised if all information should be shared with everyone.

TEST 1: focus on community groups

TEST 2: focus on showcase at the office

TEST 3: experiment walking through the process

The second test used the insights from the first test to iterate on the concept. Most importantly: not all information should be placed and shared at the office. This test focused on how the office trigger should be defined, how the online documentation should look like. During the test meetings, discussion gave many insights.

The third test used insights from both tests to iterate on the entire concept, which was a form of a solution test. During the test, the whole concept was walked through, with questions in between. This gave insights into how the process would play out in real-life.
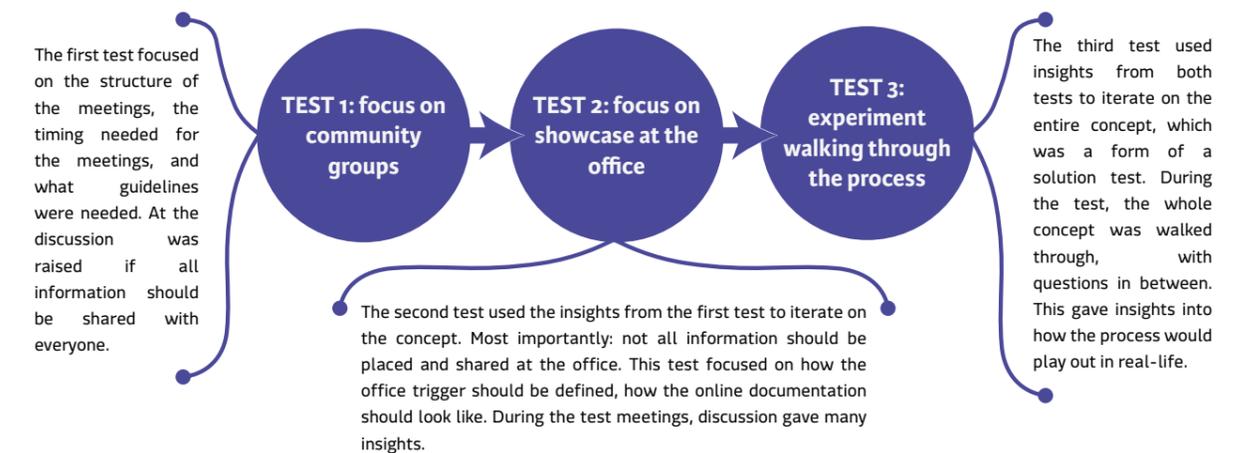
Figure 29: Set up of the testing rounds, and an overview of how the tests influence each other.

8.4.2 Hypotheses

The three tests were analysed based on the assumptions and hypotheses. From these test results, answers could be given to the posed hypotheses. Further test results and more elaborate answers to the hypotheses can be found in appendix 14.

Hypotheses

Test outcomes:

Hypotheses	Test outcomes
1. Employees have questions or statements where they want input on from other teams.	Employees can think of multiple questions and statements, however, the framing of directions must be indicated to have a clear idea of what is meant to do.
2. The employees preferably define their question or statement based on a broad range of options.	It is beneficial to provide instructions to the various themes for which statements and questions can be defined. It should, however, not be limited to these options, but rather serve as guidelines to ensure that no teams are excluded from the process.
3. Employees can come up with questions or statements to discuss.	There should be clear guidelines for the questions, but these questions should also be posed in team formation to make sure people can come up with topics.
4. Employees want to choose their topic of interest to discuss by themselves.	It works supportive for the employees to be divided with a preference-based group generator.
5. Twenty minutes is a sufficient amount of time to have an effective meeting.	It is more efficient to use half an hour of time for the meetings.
6. Five different meetings are enough to walk through the process of the CoP.	Five different meetings is enough, the CoP can decide themselves about possible additional meetings.
7. Employees are willing to meet weekly for this process.	People are willing to meet weekly for the meeting. However, meetings need to be planned in time. Even then, there might be low attendance due to last minute cancellation from people working against deadlines. An incentive from management might therefore be relevant.
8. For effectiveness and structure, people should walk through the process with steps of diverging and converging.	The structure of diverging and converging throughout the process, is seen as a good structure.
9. Having clear guidelines per meeting ensures the time is used efficiently.	There should be clear guidelines included. Starting with many guidelines, so that people know what to do and learn how the process works. Once the process has been walked through multiple times, it will go automatically.
10. Notes will help in recapping the information from the week before to start efficiently.	Starting with both the recap of the week before and the goal of the current meeting, helps to start the meeting effectively.
11. The CoP supports alignment between the different teams.	The participants agreed that the process helps to get aligned. A clear structure to define the best fitting solution is helpful.
12. The CoP ensures people learn from each other.	The CoP supports knowledge sharing and learning.
13. A facilitator ensures the meeting is supervised in a structured way.	A facilitator is needed to support the participants in an effective meeting.
14. All the outcomes of the CoP should be shown physically in the office.	Not all the outcomes should be placed at the office, since this would be an overload of information. There should only be a short summary of the results at the office which triggers people to look for the online documentation.
15. There should be a template for the showcase at the office.	Having a complete template for the showcase is not completely necessary, but having instructions which should be placed on the trigger might be helpful.
16. There should be an object added to the office where the shared knowledge is put on.	No extra object is needed. Better use can be made of the office space.
17. All the outcomes of the CoP should also be placed online.	The insights from the meetings should be structured and documented online in a central environment which everybody uses. It might therefore be a good idea to start in Teams.

Based on the results from the hypotheses, the assumptions could be answered. More elaborate answers to the assumptions can be found in appendix 14.

The hypotheses have been tested in the three testing rounds. Based on the answers of these hypotheses, the assumptions could also be answered. The insights from the testing rounds, and the answers of the hypotheses and assumptions give direction to the iteration of the concept. The testing rounds showed what elements of the concept should be changed to assure that it is most fitting for the CX department of Flyco.

Assumptions	**Test outcomes:**
1. CoP ensures that employees apply their knowledge in the entire department.	It is encouraging for people to know that their knowledge is helping others, but at the same time knowing that other people are also working on your questions or statements. A concept of give and take.
2. CoP is an effective method to share knowledge with each other within five weeks of time.	The CoP is indeed an effective way to share knowledge in five meetings of half an hour, provided that a structure is being offered for the meetings with clear steps to walk through.
3. The CoP is adopted when it is perceived as a positive resource instead of a mandatory activity.	The defined topics should be interesting for the other teams, so that people are willing to contribute. But there should also be an incentive to contribute, perhaps from management, since people prioritise their deadlines over these meetings (hypothesis 7).
4. The CoP meetings offer people the structure to share knowledge.	The employees of the CX department desire to have a structure for sharing knowledge, and believe that this might indeed be a good starting structure.
5. The multidisciplinary insights from employees ensure that people learn from each other.	People can indeed learn from different functions, so the multidisciplinary insights are valuable. When a preference-based distribution is made, it is useful to check for a distribution based on multidisciplinarity.
6. A facilitator is needed to give structure and support to the meetings.	A facilitator ensures that all people have their say. But he/she also reminds the group on the goal of the meeting continuously, and of the time left in the meetings.
7. Showing information physically at the office is an easy and accessible way of sharing insights.	The office should be used to show a small summary of the results, so that people who are interested can dive into the topic. This will make sure that there is no overload of information in the office.

Chapter 8.5

Key take-aways

Many insights were gathered in this chapter. The chapter first started with one concept, whereafter the decision was made to switch to another concept.

**The first concept is to create a stimulating collaborative space.**
This concept focuses on using the office space as a stimulator to encourage people towards effective knowledge sharing. This is a concept with high potential, since it came forward from both literature research in behaviour change and in knowledge management. Furthermore, the project team of portfolio management is currently working on this project as well. This confirms the value of this concept, and how desired this direction is for Flyco. Since this project team is working on specific content for this project, it was chosen to look for a direction where a concept can bring even more extra value. Therefore, the concept has been delivered as advice for the project group. The final advice delivered for Flyco on the concept are five most important elements which came forward in the research. Therefore it is highly recommended for Flyco to use these points in their project team of portfolio management.

The second concept is to create communities of practice, fitting for the CX department
This concept focuses on sharing knowledge in small community groups. Therefore, first a question or statement is raised within one of the CX teams. This question or statement is shared with the CX department, and therefrom community groups are formed with people interested in this topic. The community groups learn from and share with each other what knowledge they have gained in this topic. Eventually, the insights from the groups are shared with the CX department. In the generated concept, there are many assumptions. These asssumptions were tested to see where the concept still needed improvements. The outcomes of these tests will be used as a basis to iterate the concept further on. The next chapter describes the iteration that has been done on the concept.

Delivering the Solution

Chapter 9 describes the final concept proposal for Flyco. This concept has been iterated upon based on the insights from the test rounds, which have given insights into the hypotheses and assumptions. A final set-up is described throughout the chapter. In the end, the limitations, recommendations and reflection on the design requirements are given.

Chapter

09
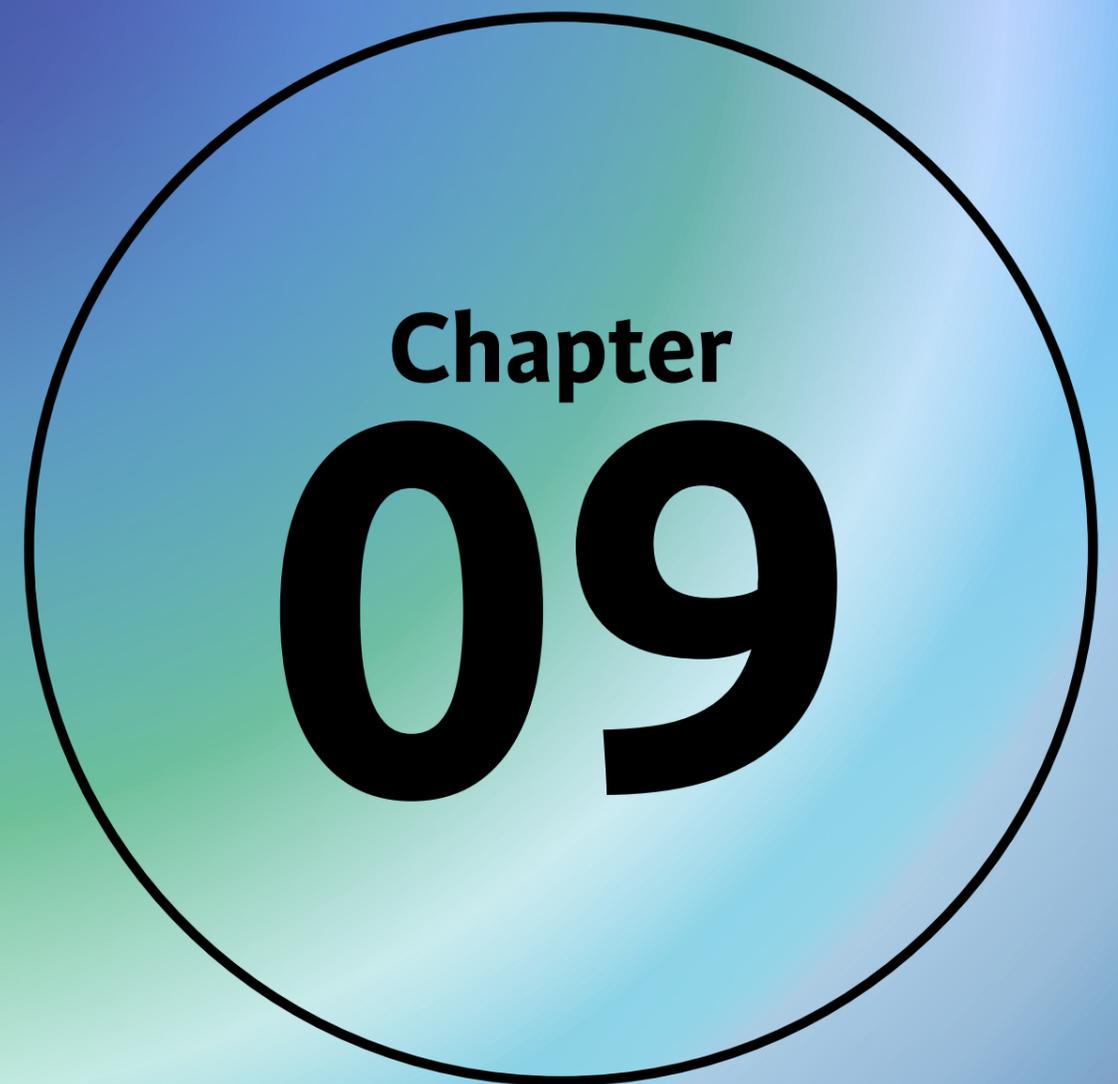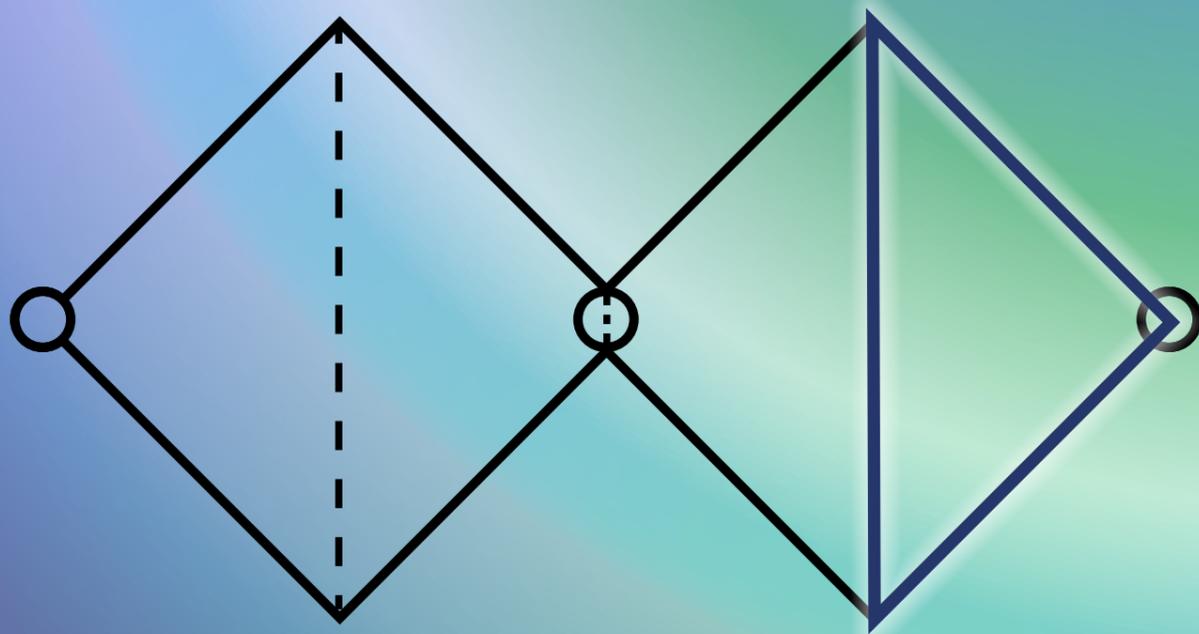
Introduction into the CoP

The concept has been defined, and tested. The following chapter provides the iteration on the concept, which is the suggested outcome for the CX department to use. This subchapter gives an overview of the description, and users. The concept is based on the theory of the Community of Practice from Ethienne Wenger (2011).

The context

The process is designed for the CX department of Flyco to support knowledge sharing between the different teams, which will result in more optimal collaboration. The CoP is an add-on to the week of the employees, since an extra moment of half an hour is used per week for the process. Nevertheless, the steps are not only applicable to the CX department of Flyco, but could be expanded outside of this scope. The concept its main goal is to share knowledge and learn from each other. The concept has proven to also work outside of Flyco. This means that Flyco can expand the process throughout the entire company, or can even use it outside of the company. For having easy access to the concept, there could be the consideration to implement the CoP with an hybrid option. This would make adoption even easier.

The purpose

The main purpose of the CoP is to support the CX employees through a process of simple steps to share knowledge with colleagues and this helps employees discover the value of other peoples input on your teams problems, supporting collaboration within the department. The CoP offers a structure for the department to continuously learn from each others insights. This is done by starting with a problem from one team, whereafter a comunity that is interested in this topic will walk through different steps to find the best fitting solution

based on existing knowledge in the CX department. The strength of this concept is in the fact that the solutions are generated within the CX department, much closer then where people might have expected people to find answers to their problems.

The characteristics

The CoP is a process to help employees to improve the collaboration between the different teams. It supports in employees getting out of their team silo's and broaden their scope. The process of the CoP offers this structure to the employees, where knowledge can be shared within the CX department. Due to the possibility to engage in a CoP of your interest, people can feel more confidence through the idea that their expertise and experience can help others. This positive stimulation ensures people are willing to continue their participation in the CoP. This is also wat keeps the CoPs running in general, the intrinsic motivation to help others with your expertise, while keeping in mind that it also helps yourself by gaining more expertise, and your team through the fact that others are helping you too. This is also where the process leans on, the interchange of knowledge.

The added value

The CoP is a valuable process to share knowledge and learn from other people's knowledge.

For employees

The concept supports the learning organisation. Through the CoPs, employees are constantly learning from outside of their own team. Learning from each other is valuable to keep growing as a person in your profession. However, knowing other people are learning from your expertise, gives people confidence and motivation in their work, which is positive for the work spirit (Petri, 2010).

For the customer

Very importantly, by ensuring the cross-functional collaboration is improved through more effective knowledge sharing, the people in the CX department will get more aligned with each other, which improves the customer journey for the customer through more consistency in the back-end.
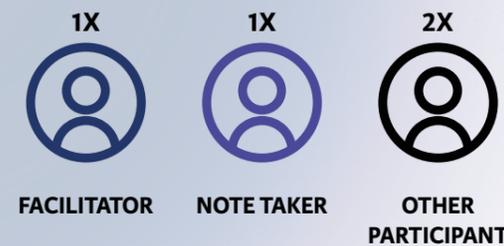
Users

The CoP always consists of multiple members. The amount of people that join the CoP is dependent on how many people preferably discuss the specific topic. The minimum group size for a CoP is four people, to make sure there are multiple perspectives on the topic.

In the CoP, there are three types of people. You have one facilitator, one person taking notes and other members are participants. It is convenient if the facilitator is also the problem owner, to ensure that the framing of the problem or statement is

correct, and to help the discussion stay within its framing during the meeting so that the participants do not go too far off theme. The person taking notes will fill in the online templates for every meeting. This will make sure that all the important insights are directly documented in the online environment in Teams, so that other people can directly find these insights. The participants are all the people interested in the topic, who want to learn more about the topic or/and share expertise on it.

It might frequently be the case that there is a larger amount of people interested to discuss the topic. When this situation occurs, the group will be split in smaller groups. These groups should contain at least three people and maximum of five people. When the allocation is done to divide the groups, there should be taken into account that each group contains people from multiple teams, to have a multidisciplinary perspective. However, when there are multiple groups discussing the same topic, there should also be a moment where the insights from multiple groups are combined again. Such a situation therefore requires extra meetings in the process. In this situation, the groups are merged again after consensus has been found on the topic. The insights from the different groups are then gathered to find consensus once more with the entire group.

MINIMUM GROUP SIZE

1X	1X	2X
FACILITATOR	NOTE TAKER	OTHER PARTICIPANT

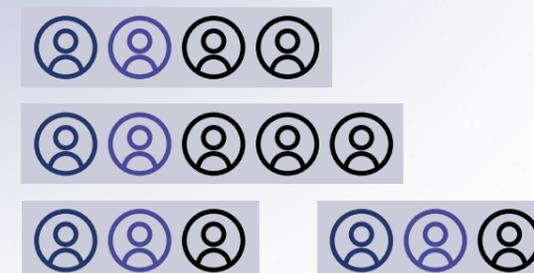### GROUP DIVISION WITH MORE PEOPLE

Figure 30: An overview of how groups will be divided in the CoP.

The user scenario

Below, an overview is given of the process that the user walks through in the entire concept.

1. IDENTIFYING QUESTIONS OR STATEMENTS
Every team prepares one question or statement where they would like to have feedback on, or what the team cannot figure out themselves.

2. RECRUITING MEMBERS
Every employee fills in their preference for the topics they want to discuss. People will be divided in groups based on this preference.

3. PROBLEM DEFINITION
The most important aspects of the problem definition are being framed to ensure a clear framing for the rest of the process.

4. EXCHANGING EXPERIENCES
People share their experiences, skills they have gained and insights into the problem framing

5. DISCUSSING INSIGHTS
The shared experiences are listed and discussed. They are rated with the vALUe method to see which solution has most potential.

6. FINDING CONSENSUS
Based on the overview of the ratings, the best fitting solutions come out. Therefrom, the group checks which solution fits best with the problem definition.

7. PREPARING THE OFFICE TRIGGER
Every team prepares a trigger for the office, which contains the most important elements. Other people can see the further information online.

8. SHARING THE RESULTS
The results are shared by placing the trigger at the office, and sending a notification that a new topic has been finalised.

Steps and tools in the process

The steps that are described in the user scenario all contain different methods and tools for the employees to use. This chapter explains all the methods and tools per step. The visuals describe how the templates for the methods and tools could look like.

Step 1: Identifying questions or statements

The questions and statements could be about multiple different themes. Organisational, process, OGSM or ad hoc topics are all welcome to be introduced. Since coming up with questions can be challenging in the beginning, an overview with possible directions is posed on the online environment for inspiration. Once the teams have defined multiple questions or statements already and have run through the process, this might not be needed anymore.

The question or statement will be presented to the CX department in the CX demo. Thereby, one slide is added to every teams presentations, since the last slide will now contain the question or statement.
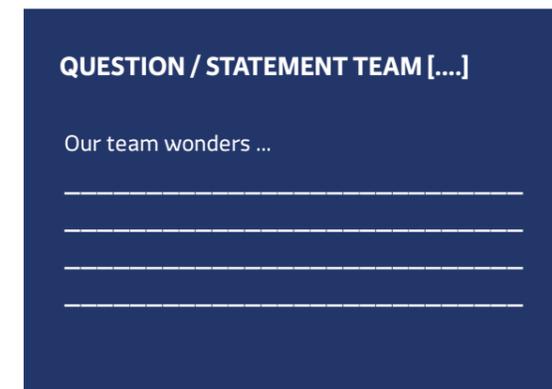
QUESTION / STATEMENT TEAM [....]

Our team wonders …

_____
_____
_____
_____

Figure 31: Final slide for the presentation of every team from the CX department, containing the question of statement the team has.

Step 2: Recruiting members

People are more willing to participate in the CoPs, when the topic they have to discuss is one of their own interest. Therefore, a preference-based group generator should be used. Either a existing online tool can be used, or a new tool should be programmed by the IT, Data and Tooling team. Important in this generator is the following:

- The groups should be generated based on people's preference. People can choose themselves if they will only give preference to one theme or multiple themes.
- When people have multiple themes, the groups should be generated, keeping into account that people from different teams are included to ensure multidisciplinary insights.

PREFERENCE-BASED GROUP GENERATOR

1. INPUT

Input here…	+
[name]	① 2 ③ 4 5 6
[name]	1 ② 3 4 5 6
[name]	1 2 3 4 5 ⑥
[name]	1 2 3 4 ⑤ 6
[name]	1 ② 3 4 5 ⑥
[name]	1 2 3 ④ 5 6
[name]	1 2 3 4 ⑤ 6

People fill in their preference topic, and from which team they are.

Figure 32: First step of the preference-based group generator.

2. GENERATOR

Minimum group size: **4**
Number of groups: **6**
Distribution of teams: **x**

Start

The generator divides the group in groups with a minimum size of four people, six topics means six different groups, and makes sure that there is a distribution of people from different teams.

3. RESULT

Topic 1	4	Topic 2	5
[name] [name] [name] [name]		[name] [name] [name] [name]	

Topic 3	5	Topic 4	4
[name] [name] [name] [name] [name]		[name] [name] [name] [name]	

The people are divided into groups based on their preferred topic, and people from different teams.

Figure 33: Second and third step of the preference-based group generator.

3. Meetings: Learning and Sharing

Below, the different steps that are done throughout the meetings of the CoP are described. These tools give guidance and structure to the process, so they can be done by anyone and to have a consistent way of working.

0. Tasks and structure every meeting

Every meeting lasts for half an hour. Since there is a set time frame to the meeting which is also not too long, every meeting should have a clear structure. Therefore, the meeting will start with three minutes where the group will be reminded of the discussion topics of the week before, and the goal for this meeting. Then there will be 24 minutes

to do the tasks for the meeting. In the end there will be three minutes to describe the key aspects from that meeting. To ensure the goal is clear, the results should be a filled in a template during the meeting.

Every CoP, one person is appointed as facilitator and one as documenter. The facilitator makes sure the meeting is guided through the steps smoothly and keeps track of time. The documenter makes sure that the insights and most important discussion points in the meeting are well-documented in the online environment during the meeting, therefore, the templates can be used.

1. Problem definition

The first step is to define the problem in a structured way, to ensure the framing is defined for the rest of the process. This step also ensures the purose of the outcome of the CoP is described. Therefore, the WWWWH method is performed (Tassoul, 2006). This should be documented so that it van be used later. The starting point is the provided question or statement. The following questions should then be defined, see figure 34.

TEMPLATE 1: PROBLEM FRAMING

What is the problem?	Who has the problem?
Why is it a problem?	How did this problem come about?
What has been done to solve the problem?	What is the goal of the solution?

Figure 34: Template first meeting: problem framing.

2. Exchanging experiences

The second step is to exchange knowledge, learnings, stories, past experiences with the problem and expertise. The time that is left for the time meeting should be divided by the amount of people that are in de CoP. The facilitator then has to keep track of time per person for them to share knowledge. Each participant then gets the chance to share their stories, experiences, expertises and resources with the group. In the end of the meeting, it should be decided whether enough insights are gathered on the problem, or whether another week meeting should be planned to share knowledge.

TEMPLATE 2: EXPERIENCES

Person 1: [name]

Person 2: [name]

Person 3: [name]

Add person: **+**

Figure 35: Template second meeting: experiences.

3. Discussing insights

The third step is to discuss the shared insights from each other, to look for the value per insight. Therefore, the vALUe method is a useful tool to use (Tassoul, 2006). It helps to describe the insights. First the list with the overview of insights should be reviewed. Then every insight should be judged:

- What are the advantages of the insight (A)?
- What are the limitations of the insight (L)?

- What are the unique elements of the insight (U)?

This gives an overview of the value per insight.

TEMPLATE 3: vALUe

Insight 1: [title]
Advantages:
Limitations:
Unique elements:

Insight 2: [title]
Advantages:
Limitations:
Unique elements:

Insight 3: [title]
Advantages:
Limitations:
Unique elements:

Insight 4: [title]
Advantages:
Limitations:
Unique elements:

Figure 36: Template third meeting: vALUe method per insight.

4. Finding consensus

The fourth step is to find consensus on the best fitting solution to the problem. Therefore the decision should be based on two main aspects:

- Which solution is best fitting for the department at this current time?
- Which solution is the best result to the initially set problem statement and goals?

Since all the documenation shows an overview of all the ratings, the best fitting insights can be simply copy pasted to these questions.

When multiple solutions are rated best, and people cannot yet find consensus, the method of Dot Voting is a final option (Tassoul, 2006). With this method, every member of the group will get a number of tokens to place on the solution that they believe is the best. The amount of tokens should be decided based on the amount of solutions, for instance one quarter.

The multiple solutions to the problem or statement will then still be placed within the online documentation, but only the best fitting solution will be presented as trigger at the office, and proposed to the problem owner as best fitting.

5. Preparing the office trigger

The fifth step is to define the trigger that will be placed in the office, which is a short summary of the input from the CoP. Therefor the following aspects should be placed
- Problem statement
- Solution in one sentence
- First action points to take

4. Sharing results

The outcomes of the meeting will be placed online. Since the note taker has kept an overview of the thing that have been discussed in the meeting, there is an overview of insights in the online environment. The physical trigger is to be placed at the office itself. Therefore, the current space offers many options. My proposal is to use the pillar in the entrance of the office.

Design evaluation

The design has been chosen based on the design criteria that have been defined in chapter 5. This subchapter describes how the final design aligns with the initially set design criteria.

The design is subsequent to the behaviour change techniques.

In the proposed solution, there are multiple aspects of the behaviour change techniques included. The basis of this concept stimulates creating social support between employees. The design focuses on offering a structure to create moments where knowledge from one another is spread across the department. The employees are given the possibility to ask questions to the department, where others will help answering these. But at the same time you contribute to the questions of others, stimulating this system of social support.

By having the trigger containing the solution placed in the office, the environmet will change, which corresponds another behaviour change technique, where the office can work as a stimulating space.

At last, I believe that this concept can also work very rewarding, in another way than the physical one. As described in chapter 4.4, knowing that other people learn from your expertise, gives people a high self-esteem and a feeling of confidence. This can also be seen as rewarding, as people also mentioned in the co-creation session in chapter 7.1.

The design stimulates knowledge sharing between all the different teams.

The concept focuses on combining multidisciplinary perspectives in a community group, using the preference-based group generator. Furthermore, the community groups have five planned meetings per theme, whereafter people can apply for another community group again. This ensures that people will change group regularly, and be joined with other teams regularly too.

The design focuses on tacit knowledge instead of only on explicit and result-oriented knowledge.

In the testing rounds, it was very clear that people desired to talk about process and skill knowledge for the questions and statements. Especially learning from someones expertises was desired. The design can focus on both tacit and explicit knowledge, depending on the desire of the employee. Since the concept focuses on sharing experiences, discovering different skills of people, it is highly recommended to use for tacit knowledge. However, when people might be having more interest in explicit knowledge for a meeting, this is possible too.

The design is a low barrier for the employees to make sure implementation succeeds.
Participating in the CoPs is based on preference by the employees. Meaning that the employees choose by themselves whether they would like to contribute to the process, making the barrier low. Furthermore, since the meetings only last for half an hour, and all the test participants mentioned they were willing to spend this amount of time, it appears to be a low barrier.

The result of the design is a stimulation in alignment between employees.
As the third test revealed, the meetings are valuable for getting aligned with one another. Due to the process of clear steps. Even when people do not get aligned, through a process of dot voting, a decision will be made. Perhaps then not all employees are on the same page, but most of them are. Having small steps of getting aligned with each other, is a step in the right direction of one uniform department.

The design moves the focus towards a group focus instead of an individual focus
Eventually, the design is meant to show the CX department the value of the insights and perspectives of other employees. The meetings are already focused on the group. But eventually, when the value is seen in sharing knowledge with each other, this will preferably steer the entire CX department towards a group focus.

Referring to the research question

The initially posed research question was "How can Flyco improve the consistent implementation of customer needs throughout the customer journey through more effective collaboration between the different teams of the CX department?"

One of the initially framed problems was that the teams are siloed from each other. There is no awareness of what other people outside of their own team are working on. This concept helps bridging these silos, by ensuring people from different teams are put together in a community group. In the test meeting already proved this, since people already gained new insights into each other's employment and background, while this was not even the focus of the meeting.

As described in the introduction and context chapter of this thesis, integration of design on the offered services is required for ensuring the customer needs are consistently implemented, to achieve a seamless customer journey. By ensuring people get more aware of what other people are working on, there is more role awareness on who to involve. Since people get aligned through the concept, people will get on the same page. But also by facilitating the option for people to raise questions to the department when help from other teams is required, a more integral way of working is achieved. These three points will help different factors needed for more integration in the department.

The goal of the concept is also to make people aware of how valuable knowledge from other employees in the department is for you. This preferably results in people wanting to collaborate more too, by seeing the benefits. When this is achieved, hopefully Flyco will continue by developing the other four concepts as well.

Limitations and recommendations

Since the thesis project has a clear deadline, the design also has its limitations, and recommendations for the company to continue on. These are described in this chapter.

Limitations

Voluntary participation
The design was initially intended to be obligated. However, as the test meeting showed, it would be best based on voluntary participation, so that people could be classified in a topic of their own interest. This, however, would mean that it is dependent on the will of the employees. This should therefore be discovered when truly implemented. To ensure participation, my recommendation would be to show the benefit of active participation.

Continuous determination of questions and statements is challenging
The concept is based on the questions and statements, which were seen as hard to define for people. Therefore, the process must be walked through multiple times to have more feeling of how it works.

People cancelling meetings
As the tests revealed, even when people are willing to participate, people do still cancel meetings last-minute to focus on deadlines. This will probably be a continuous process, since people will always be busy working towards deadlines. Perhaps a stimulation from management might be the solution to this limitation.

Recommendations

Extra testing and iteration sessions
Since the design has not been tested in full process, but only in a simulation of the process for the experiment, it is highly recommended to do a testing round in real-life by implementing the concept and iterating upon it. From there, further improvements can be made, but then at least the first step towards knowledge sharing has been made.

**Focus on behaviour change techniques from management**
In this research, behaviour change techniques have mostly been specified towards the employee, while the techniques for management can add extra value and steer behaviour change even more. The research for directions of behaviour change have already been defined in this research. Therefore, only the final design for management should be generated.

Steer on cross-functional collaboration, focusing on most important customer needs
A recommendation for management themselves is to truly steer on cross-functional collaboration instead of on individual performance. People can remain responsible for their own domain, but in the meantime be working on a total different domain where there is more improvement required according to customer data. I believe that this will improve the customer experience best, ensuring the lowest point in the journey are optimised with a lot of manpower at once.

Concluding the Project

Chapter 10 gives a final conclusion on the entire process of this thesis. Therefore both a personal reflection and a process reflection are described.

Chapter

10
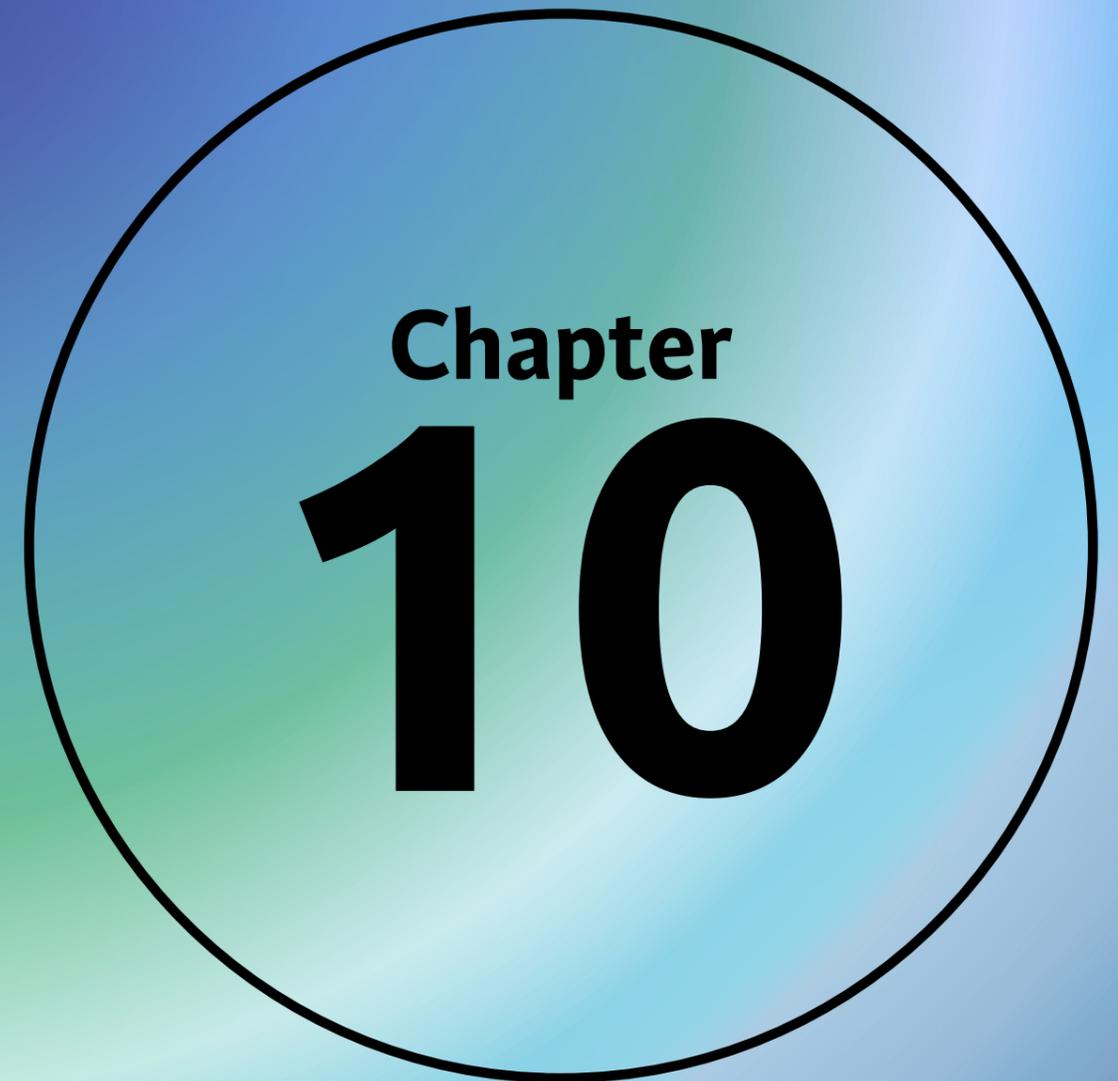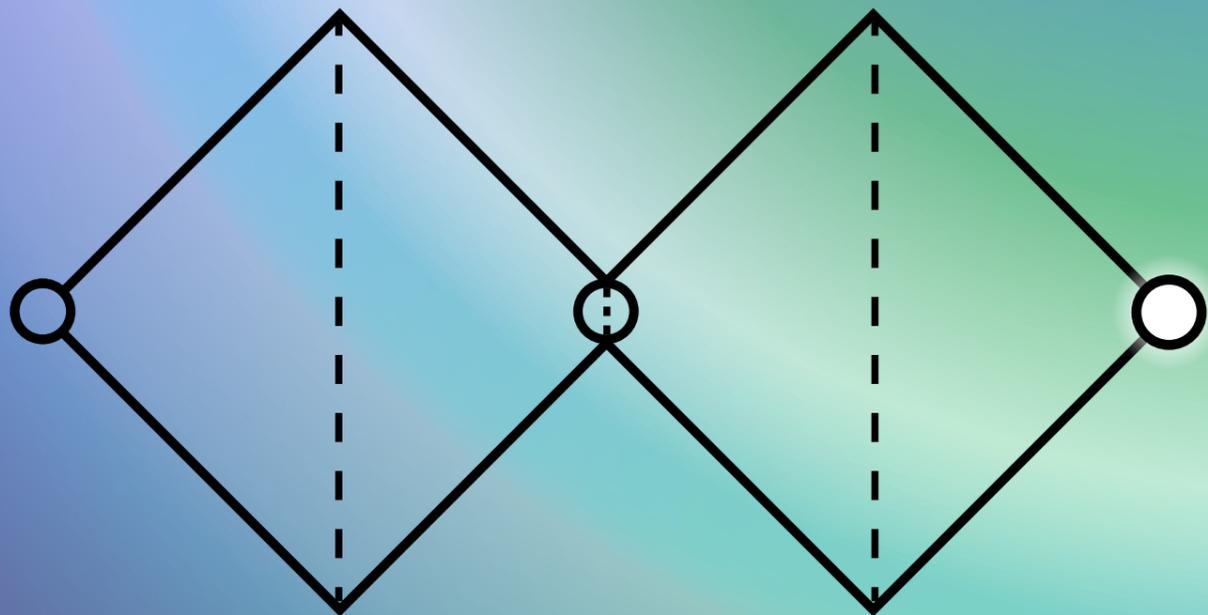
Reflection on the process

This chapter describes a reflection on how the process went and what lessons I have learned throughout the project.

Organisational question

During the process, I discovered that this was a different type of project than I had encountered before in my studies. The raised question was more organisational. This was already mentioned by Gert-Hans in the beginning, but I did not think it would be so different. However, this was quite a challenge, since I have not had that much experience in this area. Nevertheless, I believe that having a project this different was challenging but also extra fun and educational. I think I have learned so much throughout this process about a corporate, collaboration within a corporate, and how an organisation works. These are all elements that you never encounter when you are working for the university. During the project I really noticed that I am very optimistic, while when working in a company, things have become clear to not be working. That was quite challenging, but helped me learn a lot.

New way of testing

The process resulted in a different result than I would normally have in the end of a design project. Therefore, another way of testing was recommended to use, which was one from the lean start-up methodology. This method did not test the whole concept, but would be testing the assumptions behind the concept. I had never heard of this way of testing before, which was therefore challenging to discover. In the end I discovered what was meant with this way of testing. I think it is a valueble method for my further design projects, since it give very quick insights into how the concept works. In the beginning, when I had to use this method, I did not know the slightest of how it worked, and I had a real hard time understanding what I needed to do. But now that I understand, this will definitely be a method to use in my further carreer.

Trust the process

I think this is a very important aspect to mention. Throughout the process, every moment that something went wrong, or when I got lost, I did not follow the process anymore. Eventually, the process will lead to good results, if you ensure to follow it with good structure. During the process, I continiously tried to keep track of the process, but I noticed that sometimes I just got lost and needed some guidance to find my track back. I think it is important for my future carreer, to continuously put emphasis on this for myself to ensure good results.

Personal reflection

This project has been a big learning lesson for me. In this chapter I describe the two most important lessons I have learned throughout the project.

I would like to start by saying that I am very happy with the result of this master thesis, and I feel that I can be proud of what I have delivered.

Individual assignment

One of the reasons that I was looking forward to the graduation project, is to have a project where I could work on all by myself. I have to say, I would not have thought that it would be so challenging. Since I had to do everything myself, and make all the decisions myself, I had some struggles as well when I felt like I was stuck. I have learned that I am very resilient throughout the process, since many times I just decided and continued. However this was not always the case. I tried to approach the project very structured, and with good reasoning, but noticed that when I lost track of my reasoning, I also lost track of what I was doing. Especially the moment when I did not receive any feedback for a few weeks, I noticed this could get me quite stressed on what I was doing, and how I could finish the project in time. I think what is most important for me, is to (yes I am going to say it) trust the process. I need to make sure that I have finished my steps correctly before I continue. I tend to go too fast through the steps which sometimes get me off track.

In making decisions, what was also challenging is finding the balance between when I needed to argue every step, and when I needed to go for my intuition as a designer. Since I felt like making sure every step was argumented gave me structure. However this is not per se always required. This is an aspect where I should continuously reflect on. So to conclude, I should trust the process, stick to the structure of the process and ensure that I have finished my steps correctly before I continue.

Personal development

The project was very challenging for me as I already described since it was an organisational question where I was not yet very developed in. Where I had the idea throughout the project that it was a very difficult one to convince the deparment on, and especially the SVP, I now know that I am in it for the ride and do whatever it takes to create a good result. Throughout the process, I was never sure whether I could convince the department of my insights and my results. But I kept on working because I wanted so badly that my result would be effective. Therefore, I kept on working very hard to realise something desired and accepted by the department. I think the last presentation moment for the entire department was the biggest surprise for me. I had never expected the department to react as positive as they did. Throughout the process, Carlijn has more often mentioned that I was doing a good job, but I did not fully believe it. While now in the end, I believe that I actually did a good job. So I think this project gave me more confidence in my capabilities as a designer.

Chapter 10.3

References

A

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. MIS Quarterly, 25(1), 107.

Allen, J., Reichheld, F. F., Hamilton, B., & Markey, R. (2005, September 27). Closing the delivery gap. Bain & Company. https://www.bain.com/insights/closing-the-delivery-gap/

B

Bhalla, V., Caye, J. M., Dyer, A., Dymond, L., Morieux, Y., & Orlander, P. (2011). High-performance organizations: The secrets of their success. Boston, MA: The Boston Consulting Group.

British Design Council. (2019, September 10). What is the framework for innovation? Design Council's evolved Double Diamond. Design Council. https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond

BCG. (2021). Optimizing and Digitizing Airline Operations with Artificial Intelligence. BCG Global. https://www.bcg.com/industries/travel-tourism/airline-industry/optimizing-digitizing-airline-operations

C

Chaffey, D. (2021, February 1). OGSM model: A strategic framework for top-down vision realization. Smart Insights. https://www.smartinsights.com/marketing-planning/marketing-models/ogsm-model-framework/

Chang, C. L. H., & Lin, T. C. (2015). The role of organizational culture in the knowledge management process. Journal of Knowledge Management, 19(3), 433–455.

Clarke, D., & Kinghorn, R. (2018). Experience is everything: Here's how to get it right. Viitattu, 15, 2018.

Creswell, J. W. (2014). The selection of a research design. In Research design. Qualitative, Quantitative, and Mixed Methods Approaches (p. 22). SAGE Publications.

Cross, R., Parise, S., & Weiss, L. M. (2007). The role of networks in organizational change. The McKinsey Quarterly, 3, 28-41.

D

Darroch, J., & McNaughton, R. (2002). Examining the link between knowledge management practices and types of innovation. Journal of Intellectual Capital, 3(3), 210–222.

Daspit, J., Justice Tillman, C., Boyd, N. G., & Mckee, V. (2013). Cross-functional team effectiveness. Team Performance Management: An International Journal, 19(1/2), 34–56.

de Long, D. W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. Academy of Management Perspectives, 14(4), 113–127. (OP DOCUMENTS)

Denison, D. R., Hart, S. L., & Kahn, J. A. (1996). From Chimneys to Cross-Functional Teams: Developing and Validating a Diagnostic Model. Academy of Management Journal, 39(4), 1005–1023.

E

Edmondson, A. C., & Harvey, J. F. (2018). Cross-boundary teaming for innovation: Integrating research on teams and knowledge in organizations. Human Resource Management Review, 28(4), 347–360.

Edmonton Regional Learning Consortium (ERLC). (2016, May 24). Community of Practice. Community of Practice. https://www.communityofpractice.ca/

F

Fisher, N. I., & Kordupleski, R. E. (2019). Good and bad market research: A critical review of Net Promoter Score. Applied Stochastic Models in Business and Industry, 35(1), 138-151.

G

Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. Journal of Knowledge Management, 6(1), 23–30.

Gupta, B., Iyer, L. S., & Aronson, J. E. (2000). Knowledge management: practices and challenges. Industrial Management & Data Systems, 100(1), 17–21.

H

Heijne, K., & van der Meer, H. (2019). Road map for creative problem solving techniques. Amsterdam University Press.

Henke, J. W., Krachenberg, A. R., & Lyons, T. F. (1993). Cross-Functional Teams: Good Concept, Poor Implementation! Journal of Product Innovation Management, 10(3), 216–229.

Holland, S., Gaston, K., & Gomes, J. (2000). Critical success factors for cross-functional teamwork in new product development. International Journal of Management Reviews, 2(3), 231–259.

K

Katzenbach, J. R., & Smith, D. K. (2005). The discipline of teams. Harvard business review, 83(7), 162.

King, W. R. (2009). Knowledge management and organizational learning. In Knowledge management and organizational learning (pp. 3-13). Springer, Boston, MA.

Kiron, D. (2017, September 1). Why Your Company Needs More Collaboration. MIT Sloan Management Review.

L

Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. Journal of Marketing, 80(6), 69–96.

Li, L. C., Grimshaw, J. M., Nielsen, C., Judd, M., Coyte, P. C., & Graham, I. D. (2009). Evolution of Wenger's concept of community of practice. Implementation science, 4(1), 1-8.

Lietz, P. (2010). Research into questionnaire design: A summary of the literature. International journal of market research, 52(2), 249-272.

M

Mankins, M., & Garton, E. (2017). How Spotify balances employee autonomy and accountability. Harvard Business Review, 95(1).

Mattessich, P. W., & Monsey, B. R. (1992). Collaboration: what makes it work. A review of research literature on factors influencing successful collaboration. Amherst H. Wilder Foundation, 919 Lafond, St. Paul, MN 55104..

McDonough, E. F. (2000). Investigation of Factors Contributing to the Success of Cross-Functional

Teams. Journal of Product Innovation Management, 17(3), 221–235.

McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. Field methods, 15(1), 63-84.

Merriam-Webster. (n.d.). Assumption. In Merriam-Webster.com dictionary. Retrieved September 7, 2022, from https://www.merriam-webster.com/dictionary/assumption

Meyer, C., & Schwager, A. (2007). Understanding customer experience. Harvard business review, 85(2), 116.

Michie, S., Atkins, L., & West, R. (2014). The behaviour change wheel. A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing, 1003-1010.

Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. Implementation science, 6(1), 1-12.

N

Nazim, M., & Mukherjee, B. (2016). Knowledge Management in Libraries: Concepts, Tools and Approaches. Chandos Publishing.

Niedderer, K., Mackrill, J., Clune, S., Lockton, D., Ludden, G., Morris, A., ... & Hekkert, P. (2014). Creating sustainable innovation through design for behaviour change: full project report.

P

Parker, G. M. (2003). Cross-functional teams: Working with allies, enemies, and other strangers. John Wiley & Sons.

Petri, L. (2010). Concept Analysis of Interdisciplinary

Collaboration. Nursing Forum, 45(2), 73–82.

Project Canvas. (2016). Project Canvas. https://www.projectcanvas.dk/

R

Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses.

S

Sleeswijk Visser, F., Stappers, P. J., Van der Lugt, R., & Sanders, E. B. (2005). Contextmapping: experiences from practice. CoDesign, 1(2), 119-149.

Suri, H. (2011). Purposeful Sampling in Qualitative Research Synthesis. Qualitative Research Journal, 11(2), 63–75.

T

Tabrizi, B. (2021, September 9). 75% of Cross-Functional Teams Are Dysfunctional. Harvard Business Review. https://hbr.org/2015/06/75-of-cross-functional-teams-are-dysfunctional

Tassoul, M. (2006) Creative Facilitation: a Delft Approach, Delft: VSSD.

Triste, L., Debruyne, L., Vandenabeele, J., Marchand, F., & Lauwers, L. (2018). Communities of practice for knowledge co-creation on sustainable dairy farming: features for value creation for farmers. Sustainability Science, 13(5), 1427-1442.

Turkulainen, V., & Ketokivi, M. (2012). Cross-functional integration and performance: What are the real benefits? International Journal of Operations & Production Management, 32(4), 447–467.

Turner, D. (2014). Qualitative Interview Design:

A Practical Guide for Novice Investigators. The Qualitative Report.

W

Wall, S. and Lepsinger, R. (1994). Cross-functional obstacles. Training, May, 125–126

Wenger, E. (2011). Communities of practice: A brief introduction.

Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. Harvard business review, 78(1), 139-146.

Wenger E, Trayner B, de Laat M (2011) Promoting and assessing value creation in communities and networks: a conceptual framework. Netherlands Ruud de Moor Center Rapport 18:60

West, R., & Michie, S. (2020). A brief introduction to the COM-B Model of behaviour and the PRIME Theory of motivation. Qeios.

Work Institute. (2022). 2022 Retention Report: How Employers Caused The Great Resignation.

Y

Young, R. (2010). Knowledge management tools and techniques manual. Asian Productivity Organization, 98, 1-98.