



A DIGITAL DESIGN PROPOSITION FOR FlyCo

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PREFACE



This graduation thesis is the final deliverable of the master degree program Design for Interaction at Delft University of Technology. This thick package that lays in front of you is the result of a 6 month during research and design project, performed at FlyCo Studio X, the home base of FlyCo Digitizing. This project enabled me to meet many interesting and inspiring people, travel to Munich inside the Cockpit, push back a 'tripple 7' to the starting lane and let me stroll along the Copacabana beach in Rio de Janeiro in a Cabin Crew uniform. Next to all these dream opportunities, the project let me learn much about myself, the topic and corporate world.

I would like to thank my supervisory team for facilitating this amazing experience. Dirk, thank you for your sharp and honest feedback. Rebecca, thank you for giving me the self-confidence to finish this project with pride. FlyCo team, thank you both for the warm welcome at FlyCo and the FlyCo-App team, useful feedback for my project and designs and most of all, for all the opportunities that came along. Although you are not officially part of my supervisory team, I want to thank you, Maïte, for helping me every week to take a step forward.

It was inspiring to work with you all.

Additionally, I would like to thank my family and friends for listening to my graduation stories and insecurities. Especially I would like to thank my parents. From the day I started studying Industrial Design Engineering you both gave me the opportunity to fully experience these past 7 years with everything that came along. You motivated me to be the best version of myself. Boyan, thank you for inspiring and motivating me when I needed it most. And dear roommates, thank you for your patience and love!

I am very excited to present you my master thesis. Enjoy the read, it is a long, but interesting one!

Wolke Visser

Walls



In this graduation project the goal is to improve employee engagement by design.

Although employee engagement is a term that is used often, there is no clear agreement about what employee engagement actually is and how it can be triggered. In this thesis, employee engagement is discussed and a research is conducted about the topic in a specific context: the turnaround of an airplane. At last, a design will be presented that improves the team feeling between employees involved at the turnaround.

Employee engagement can be defined as the expression of a person's preferred self in task behaviour (Kahn, 1990). Employees experience a sense of meaning (the reward they get for investing time and energy in their work), psychological safety (a sense of trust and security) and availability (having the resources necessary for doing the job).

After the results of the literature review are presented, the internal analysis and exploratory research conducted are discussed.

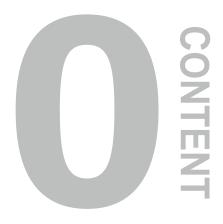
The second study of this project is an internal analysis. FlyCo is facing difficulties considering decreasing employee engagement. While there is a need to improve employee engagement at FlyCo, there is also a strong focus on the operational performance.

Although FlyCo would like to improve employee engagement, the company and influencers inside the business do not have any measuring tools to structurally employee engagement. FlyCo does not measure and show the value of employee engagement at a large scale (yet). It is critical that management realizes that an improvement of employee engagement has a positive influence on the performance of FlyCo. This should be visualized and shared with management and employees. It is important as well that the development of digital tools, which are created to enable employees during their work, should be designed as user centric as possible. This is experienced as challenging in such a large and complex organization.

In the research phase, three studies are conducted focussing on operational domains. The employees working at the turnaround and their characteristics are explored. The turnaround is a complex environment, with a lot of different actors involved, all having their own characteristics, wants and needs. In this thesis the different characteristics of employees working at the turnaround are mapped in order to design to improve employee engagement.

In the external analysis, different important aspects of organizations and their culture concerning employee engagement are collected. The insights are taken into consideration in the development phase of this project.

At last, with all the information collected from the different studies carried out, a design is created. The design goal that was selected is: improve the team feeling between the actors working at the turnaround. Different hypotheses were selected connecting to this design goal. The hypotheses helped to create and validate separate concepts. The concepts created were tested with the employees constantly. The final design, the 'Blue Heart of FlyCo', is a set of functionalities that is included in the existing app-in-app. The Blue Heart of FlyCo collects useful information about the turnaround team members, but does as well create a more user-centred, but digital approach to the employees. FlyCo-App now starts a conversation with the employee, instead of only sending information. In the validation sessions it is concluded that the Blue Heart of FlyCo creates more connectedness, more trust and understanding between turnaround team members.



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The topic of this graduation project is employee engagement. Employee engagement is a term that is used often, but there lacks a clear agreement about what employee engagement actually is. When literature is consulted, it becomes clear what high or low employee engagement can cause. Engaged employees are not only satisfied and happy doing their job, it is much more. Engaged employees are always thinking how their company can be better and are emotionally committed to the organization and its goals. Although the term is used for different applications, there are interesting numbers that reflects its importance.

Only 10% of employed residents in Western Europe and 13% worldwide are engaged (Harter et al., 2016). This is a small number, considering that an engaged employee experiences positive emotions such as happiness and joy (Schaufeli & Van Rhenen, 2006). Engagement does not only cause pros or cons for the individual employee. Research has reliably suggested that organizations stand to benefit positively as well from the development of high levels of employee engagement (Shuck & Reio, 2014). A study by Watson (2014) showed that companies with low levels of employee engagement saw a 32,7% decline in operational outcomes. Xanthopoulou et al. (2007) proved that the higher employees' level of daily engagement, the higher their objective financial returns. Next to this, studies showed that engaged workers are more creative, more productive, are more willing to go the extra mile (Bakker & Demerouti, 2008) and interact positively with customers (Chalofsky, 2010).

These findings show that engaged employees are important for both the organization and the employee. However, there is limited knowledge and practice regarding how to achieve and improve employee engagement.

At FlyCo employee engagement is a difficulty. FlyCo is facing difficult challenges including growing competition and decreasing employee engagement at the operational domains of the company. FlyCo has a specific strategy. While her purpose is to move the customers' world by memorable experiences, employee engagement is key and needs to be improved, especially now the company is digitally transforming.

In this master thesis, employee engagement will be defined and investigated. With the six different studies conducted, limited knowledge about the topic employee engagement and employees of operational domains of FlyCo, is filled. A design is proposed to improve employee engagement at a specific context of FlyCo: the turnaround of an airplane.

1.1 This graduation project

In this graduation project a research is conducted about employee engagement. With results obtained in literature, at the context, and as well inside FlyCo and at other external parties, a design is proposed that aims to improve employee engagement.

Project scope

This assignment is conducted for FlyCo Digitizing department. The context of this project is the turnaround of an airplane and the actors involved. The turnaround is the process of unloading, loading and servicing an airplane for its next flight. Due to the applications developed Digitizing at department for four actors (Team Coordinator, Gate Agent, (Senior) Purser and Captain), the focus of this project is therefore on those users.

Project layout

The project consists of two phases: (1) research & analysis and (2) development. Each phase is elaborated in different chapters. The first phase includes 6 different studies. The studies and their results are building on the outcomes of the previous one. Within this project it is the aim to explore and combine both theory and practice in order to create a design to improve employee engagement. The phases and chapters are visualized in image 1.1.

Research and analysis phase

In this phase an exploration into the field of emplovee engagement is carried Academic literature is used to define employee engagement, create a problem statement and specify dimensions of engagement that are used in this research. Next to the literature review, an internal and external analysis is conducted (study II and VI) to get to know the opinions about employee engagement inside FlyCo. Interviews are conducted with other companies than FlyCo to identify what those companies to improve and stabilize employee engagement. Interviews are carried out with Incentro, Tony's Chocolonely and Transavia to analyse their approach to employees. In-depth research is conducted at the context as well in order to get to know the turnaround, its characteristics and the actors involved (study III, IV, V).

Development phase

In the second phase, development, all insights from the studies are used to create a design to improve employee engagement at the turnaround.

Involved parties

Next to the supervisory team of the TU Delft and the company mentors at FlyCo, an additional party is involved in the project. A PhD candidate is both connected to FlyCo as the TU Delft. Her PhD topic is closely linked to the topic of this graduation project and she was therefore consulted for guidance on a regular basis.

How to read this report

This report is divided into twelve main chapters. Important quotes or insights are highlighted like this:

ANIMPORTANT QUOTE IS HIGHLIGHTED LIKE THIS

And most chapters ends with a concluding page in where the key take-aways of that chapter are summarized.

Additional information and examples are presented in these grey boxes:

EXTRA INFORMATION

Additional information and examples are presented in these grey boxes.

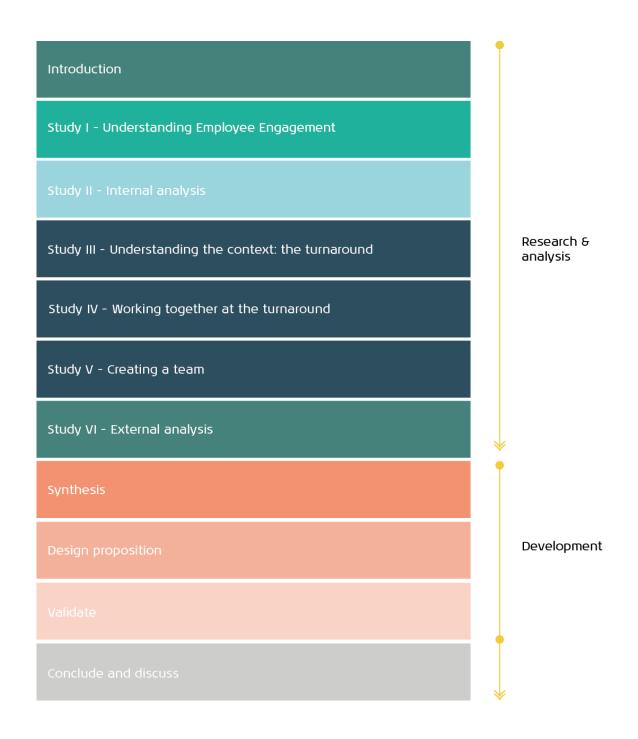


Image 1.1 An overview of the phases of this graduation project and thesis.

BACKGROUND

STUDYI

In order to design for employee engagement at the turnaround, the theoretical background of employee engagement is important. This chapter presents the first study of this project as an exploration into the field of employee engagement. Academic literature is used to define a definition of employee engagement and select what information can be useful for this project. A theoretical model is presented that will be used to help to design for employee engagement.

The research question in this study is:

WHAT IS EMPLOYEE ENGAGEMENT AND HOW CAN IT BE STIMULATED?

2.1 The importance of engaged employees

Before we dig into the definition of employee engagement and its drivers, it is important to understand why an organization would want to improve employee engagement.

In an environment where technology drives people to multitask like never before, cognitive overload and the disappearance of the boundary between work and private life is impacting engagement at work (Derks & Bakker, 2010). It is already introduced that employee engagement is decreasing, resulting in multiple consequences.

Research has reliably suggested that organizations stand to benefit positively from the development of high levels of employee engagement (Shuck & Reio, 2014). Engaged employees are more likely to be productive

(Saks, 2006), remain with their current employer (Harter et al., 2016) and interact positively with customers (Chalofsky, 2010). There is a correlation between employee engagement and success in customer experience (Temkin Group, 2016). Companies that excelat customer experience have one-and-a-half times more engaged employees as company's who lack in customer experience.

Toadd, other results revealed that high engaged employees demonstrated higher psychological well-being and personal accomplishment, where as low engaged employees exhibited higher emotional exhaustion and depersonalization (Shuck & Reio, 2014). At last, Xanthopoulou et al. (2007) proved that the higher employees' level of daily engagement, the higher their objective financial returns.

IT IS NOT ONLY WORTHWHILE TO INVEST IN EMPLOYEE ENGAGEMENT FOR POSITIVE RESULTS FOR THE ORGANIZATION, BUT ASWELL FOR THE INDIVIDUAL EMPLOYEE.

Different studies showed that engaged employees perform better. They do so because of different reasons, and those reasons represent another important factor to improve engagement: the benefits for the employees. Not only organizations benefit from a high engagement level, the employees do that as well. First of all, engaged employees experience positive emotions such as happiness and joy (Schaufeli & Van Rhenen, 2006). They experience a better health (Demerouti et al., 2001) and have the ability to create one's own resources, the so-called resourcefulness (Fredrickson, 2001; Xanthopoulou et al., 2007). At last, Westman (2001) saw that engaged employees perform better due to the fact that they transfer their engagement to others.

"THE PERSONAL ENGAGEMENT IS THE EXPRESSION OF A PERSON'S PREFERRED SELF INTASK BEHAVIOUR"

- Kahn (1990)

Asseen in the results listed here and summarized in image 2.1, organizations can no longer ignore: Engaged employees are better, for their organization and above all, for the people.

2.2 The definition of employee engagement

Literature shows that it is worthwhile to invest in employee engagement for e.g. financial returns, productivity and customer engagement. In order to do so, we should understand what employee engagement is and how it can be triggered. In this section literature is used to define employee engagement, to understand antecedents and select triggers to improve it.

There exists numerous of definitions of employee engagement and there continues to be a lack of agreement on what engagement actually is (Saks & Gruman, 2014). Still, there are some valuable findings on employee engagement. In an ethnographic study of the psychological conditions of personal engagement and disengagement at work, Kahn (1990) was the first who defined personal engagement. He proposed that engaged employees physically, cognitively and emotionally involved in their work roles. Kahn stated that "the personal engagement is the expression of a person's preferred self in task behaviour." Task behaviour describes how employees perform their tasks and whether the environment appears to be responsive to this performance (Task Management Guide, 2018). To describe more easily: when engaged, people can stay themselves within the role they are performing at work. They experience a sense of meaning (the reward they get for investing time and energy in their work), psychological safety (a sense of trust and security) and availability (having the resources necessary for doing the job). On the contrary, Kahn stated as well that disengaged employees will try to withdraw and defence their preferred self, which means that the employee cannot be him/herself and won't show their real personality. The withdrawal of the self can cause job burnout (Lee & Ashforth, 1990).

Reasons why high levels of employee engagement are positive for both the organization and the employee

Organization Employee

More productive employees (shuck & Reio, 2014)

Employees remain longer at organizations (Harter et al, 2016)

More positive interaction with customers (chalofsky, 2010)

More success in customer experience (Temkin Group, 2016)

Higher objective financial returns (xanthopoulou et al., 2007)

Employees experience more positive emotions (Schaufeli & Van Rhenen, 2006)

Better experience of health (Demerouti et al., 2001)

Resourcefulness increases (Fredrickson, 2001)

Transfer of engagement between employees is more active (westman, 2001)

Image 2.1: Reasons why high levels of engagement are positive for the organization and the employee.

Meet Bart - a disengaged employee

Bart is one of the Crew members working at intercontinental flights. After a few years working as a Crew member and not getting the opportunity to grow in his career, he feels bored. He has the feeling that he does not have any influence on the boarding process, while he does have some ideas how to decrease the boarding time. When flying, time passes slowly. He feels that there is no more challenge in executing the tasks as a Crew member and due to this Bart is very happy

when they reach the ground again. Because he had no training about how to sell products, he gets pretty demotivated by not selling any products in the air.

Luckily, he can go home after some flights again. He sometimes thinks

by himself: "maybe it is time to get another job."

Meet Sophie -an engaged employee

Sophie is an engaged employee of FLYCO. She works as a Gate Agent at Schiphol Airport. Every day she wakes up having energy for the day to come and looks forward seeing her 'blue sisters'. In the morning after breakfast, she takes the train to go to Schiphol Airport and after checking her roster she walks to the gate where she needs to work on her first shift. When doing the tasks she needs to do, she is intensely involved. After an hour or so she checks the time and she thinks by herself: "an hour has passed already!" When boarding has finished, Sophie gets a message from a team member who worked at the same turnaround. She tells her that she did a good job decreasing the delay of the departure time of the airplane. That is nice to hear. A training organized by FLYCO helped her getting the knowledge to do that.

Not only Kahn did extensive research on employee engagement. Schaufeli et al. (2002) defined work engagement as something slightly different: "a positive, fulfilling, work-related state of mind that is characterized by vigour, deduction, and absorption." Vigour is a state where a person has high levels of energy and mental resilience. An engaged employee is as welldedicated, which means he or she is strongly involved, is experiencing a sense of significance, enthusiasm and challenge. The last characteristic of an engaged employee defined by Schaufeli et al. (2002) is absorption. Absorption means that an employee can fully concentrate and has difficulties of detaching from work. Although both definitions of engagement have some similarity and overlap, they do differ. Kahn's definition (1990) is e.g. more immersive, deeper and substantial than provided by Schaufeli et al. (2002) (Saks & Gruman, 2014).

Bart and Sophie are introduced on the left page (16) to describe what an engaged and disengaged employee would look like.

Bakker & Demerouti (2008) used the definition of Schaufeli et al. (2002) to create the job demands-recourses (JD-R) model of work engagement. This model states that job resources, which are resources such as social support, performance feedback, skill variety, autonomy and learning opportunities; and personal resources, such as optimism and selfefficacy, have a positive influence on work engagement. A high work engagement then again has a positive influence on the performance of an employee. Job resources can also reduce job demands (which are e.g. the workload and emotional and cognitive demands). The JD-R model has been supported by numerous studies (Xanthopoulou et al., 2007) and is visualized in image 2.2.

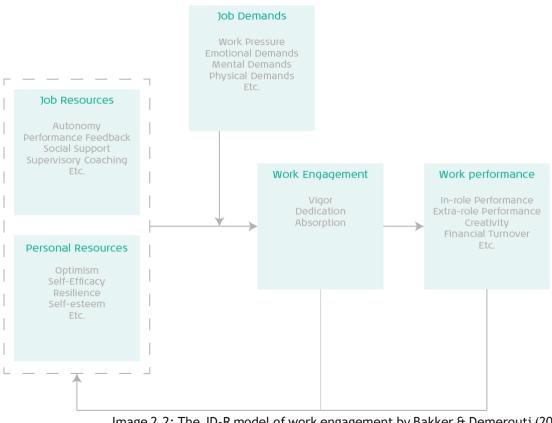


Image 2.2: The JD-R model of work engagement by Bakker & Demerouti (2008).

2.3 Types of engagement

Employee engagement is a very broad topic and when talked about employee engagement in this report it is important to decide which type of engagement is meant specifically. Schaufeli & Salanova (2011) stated that work engagement refers specifically to the relationship between an employee and his/her work, while employee engagement can include an employee's relationship with his/her occupation, job and organization. In this project we talk about employee engagement as a whole.

Saks & Gruman (2014) were able to divide employee engagement into three different types, based on definitions found in literature.

Task (work) engagement

It is plausible that employees will be more engaged when performing some tasks than another. Schaufeli & Salonova (2011) called this kind of engagement task engagement.

Organizational engagement

An employee could be highly engaged with their tasks, but not that engaged concerning their role in the department or organization they work for. This is what Saks (2006) defined as organizational engagement.

Group/team engagement

At last, employees can differ in their engagement with a group/team at work. He/she may be engaged in the tasks performing, but could not be willing to invest his/her full self as a member of the team. This is called group/team engagement (Saks & Gruman, 2014)

Saks & Gruman (2014) decided that an integrative theory of employee engagement was needed in order to bring focus and direction concerning employee engagement in literature. The different types of engagement mentioned above are used and linked with Kahn's psychological conditions influencing engagement. Image 2.3 shows that leadership is directly related to job resources and job demands (JD-R model) and indirectly related to the psychological conditions selected by Kahn, and each type of employee engagement.

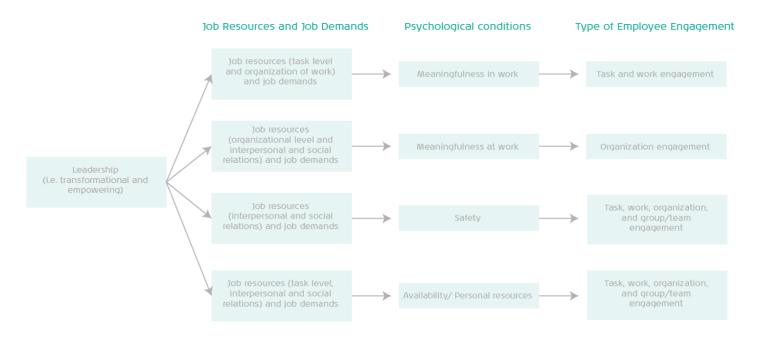


Image 2.3: The integrative theory of employee engagement by Saks & Gruman (2014).

2.4 Definition used in this graduation project

Because Kahn (1990) gives us a holistic and connected perspective (Rich et al., 2010; Shuck & Reio, 2014) and because his definition reflects the connection between engagement and work role performance, this definition is chosen to use in this thesis.

This paragraph provides more detail about the definition of employee engagement and Kahn's psychological conditions.

"PERSONAL ENGAGEMENT IS THE EXPRESSION OF A PERSON'S PREFERRED SELF IN TASK BEHAVIOUR. WHEN ENGAGED, PEOPLE CANSTAYTHEMSELVES WITHIN THE ROLE THEY ARE PERFORMING. THEY EXPERIENCE A SENSE OF PSYCHOLOGICAL MEANING, SAFETY AND AVAILABILITY."

- Kahn, 1990

The three psychological conditions presented by Kahn (1990) influence people to personally (dis)engage. These 'dimensions of psychological conditions' are psychological meaningfulness, psychological safety and psychological availability:

1. The first psychological condition is meaningfulness. This is the feeling that one is receiving a return on investment of one's self in a currency of physical, cognitive or emotional energy. A person who experiences a greater amount of psychological meaningfulness will feel worthwhile, useful, and valuable. An employee will ask him/herself:

"How meaningful is it for me to bring myself into this performance?"

2. The second psychological condition is <u>safety</u>, which is "the feeling to be able to show and employ one's self without fear of negative consequences to self-image, status or career". Social systems that are predictable, consistent, and nonthreatening provide a greater sense of psychological safety (Saks & Gruman, 2014). The second question that an employee will ask him/herself:

"How safe is it to do so?"

3. The last psychological condition is <u>availability</u>, which is the feeling of having the physical, emotional and psychological resources to personally engage at a particular moment. For this, the employee asks him/herself:

"How available am I to do so?"

2.5 Model for design for employee engagement

With the help of Kahn, a model for design for employee engagement is created that will be used in this graduation project.

The dimensions listed in paragraph 2.4 can be influenced by so-called influencers to create more or less engagement. The influencers are listed in appendix A and are used in the model created for design for employee engagement (image 2.4). For example, the sense of return on investment of the self, meaningfulness, can be influenced by task characteristics and work interaction.

All dimensions of psychological conditions are interesting to include in this project, but not all influencers are possible to tackle by design due to the scope of this project.

The dimension meaningfulness is the first dimension presented by Kahn (1990). This dimension could directly be changed by the organization or by the tools used by the employees, and can be influenced by work interactions, task and/or role characteristics. These influencers are visualized as three small triangles inside the large orange triangle of meaningfulness in image 2.4.

The dimension safety is as well interesting due to the fact that the sense of being able to show and employ one self without fear of negative consequences to self-image, status or career is part of the culture of the organization. Kahn stated that intergroup dynamics, interpersonal relationships, leader behaviour and the norms inside an organization are influencers of psychological safety. The gray triangles in image 2.4 represent the influencer of safety.

The dimension availability is the last dimension selected by Kahn. Availability is the sense of possessing the physical, emotional, and psychological resources necessary for investing the self in role performances. Influencers of this dimension are physical and emotional energy, insecurities and the outside life (blue triangles in image 2.4) and are not resources that can all be influenced directly by the organization. Kahn suggested that e.g. confidence is a stable individual difference and is thus hard to influence. Still, design could be used to change for example the experienced physical or emotional energy.

Based on the results gained in the exploratory studies presented in the next chapters, one or two influencers of each dimension of Kahn will be chosen to tackle with design.

With the help of the Integrative Theory of Employee Engagement (Saks & Gruman, 2014), we know which type of employee engagement is triggered by which psychological dimension. The different types per psychological dimension are as well illustrated in image 2.4.

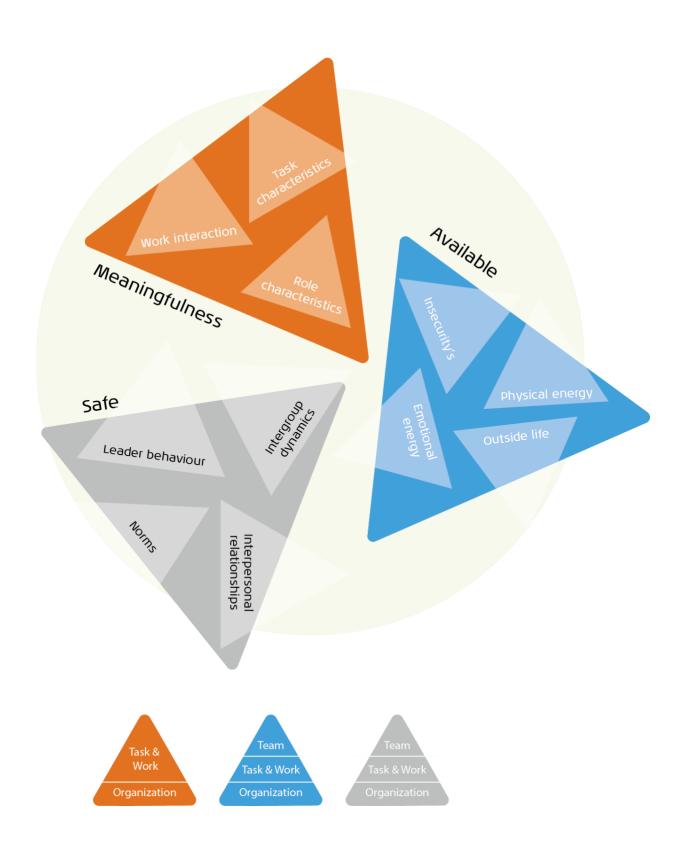


Image 2.4: The model for design for employee engagement based on Kahn (1990) (top) and the types of engagement per psychological dimension based on Saks & Gruman (2014).

2.6 Antecedents and triggers of engagement

The influencers selected by Kahn are useful for this project. Still, other studies are interesting as well to understand which factors influence employee engagement. In general, as seen in the JD-R Model (Bakker & Demerouti, 2008), job resources have been found to be positively related to employee engagement. Furthermore, Crawford et al. (2010) found that the following nine types of resources impact engagement positively: Autonomy, feedback, opportunities for development, positive workplace climate, recovery, reward and recognition, support, iob variety and work role fit. Whileleadership is also identified as an important antecedent of employee engagement (Bakker et al., 2011), individual differences are also believed to predict it (Macey & Schneider, 2008).

2.7 In practice: creating meaningful experiences

Because the employees working at the turnaround of an airplane at Schiphol Airport need to work a lot with digital tools such as applications at an iPad, it is interesting to validate if it is possible to apply/change work tools to improve employee engagement. Work tools are products that are used to accomplished work-related tasks, such as the iPad applications used by Gate Agents (App-X) and Team Coordinators (App-Y). About this, Lu & Roto (2015) stated the following.

In the business-to-business (B2B) setting, tool design is conducted where the purchasers of tools are often different from the actual tool users. Traditionally, and adding to the FlyCo experiences at Digitizing department, purchasing decisions depend more on measurable performance criteria, productivity of systems, and cost efficiency rather than the end users' experience (Nuutinen et al., 2011). Only little attention is paid to how a tool can be designed to elicit positive and meaningful experiences at work (and thus eventually

employee engagement), even though Savioja et al. (2014) already identified that tools play an important role in how meaningful the activity is portrayed to an employee. On the contrary, in business-to-customer (B2C) setting, there is much more emphasis on the user while designing tools.

27.1 Framework for Positive Design for Work tools

Lu & Roto (2015) created the Framework for Positive Design for Work tools. The purpose of FPDWork is to guide work tool designers to define meaningful experiences for employees as the starting point of design. Lu & Roto (2015) combined the Positive Design Framework (PDF) of Desmet & Pohlmeyer (2013) and the mechanisms of meaningful work (MMW) by Rosso et al. (2010).

The substantiate of PDF with MMW creates a workable framework that can be used in designing for work-related context. Image 2.5 shows the PDFWork. Lu & Roto (2015) suggest that the MMW under each element of positive design (virtue, pleasure and personal significance) can be considered as the initial source of experience goal definition. This model could be used in this project to create experience goals before designing.

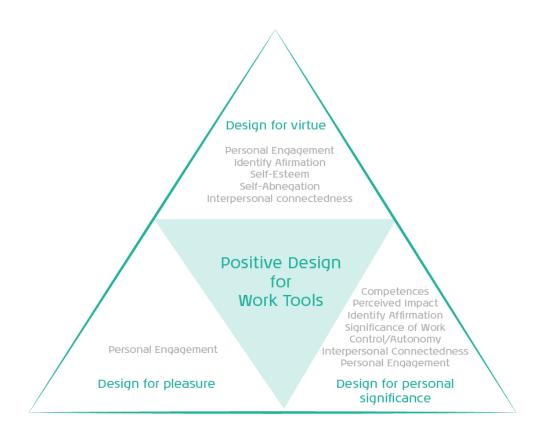


Image 2.5: Positive Design Framework for Work Tools by Lu & Roto (2015).

MECHANISMS OF MEANINGFUL WORK (MMW)

Rosso et al. (2010) categorized seven MMW's that emphasize the psychological processes underlying the experience of meaningfulness in work context. The meaning of work that these mechanisms drive ranges from the fulfilment of the self to self-denial entirely (Lu & Roto, 2015). Meaningful experiences at work are highly related to workers' subjective well-being and have a positive impact on enterprise performance (Lips-Wiersma & Morris, 2011). The seven mechanisms of meaningful work are (Rosso et al., 2010):

- 1. Authenticity: when there is an alignment between one's behaviour and the perceptions of the one's true self.
- 2. Self-efficacy: the belief that one has the power to produce an intended effect or to make a difference.
- 3. Self-esteem: the evaluation of one's own self-worth.
- 4. Purpose: to have a sense of directedness and intentionality in life.
- 5. Belongingness: the drive to form and maintain lasting, positive relationships.
- 6. Transcendence: superseding the ego to an entity greater than the self, "beyond the material world."
- 7. Cultural and interpersonal sense making: understanding how different types of work meaning are constructed in the sociocultural context.

272 Framework for Positive Design

The results of a study by Rothmann (2008) showed that work-related well-being is represented by four separated, but related factors. These factors are occupational stress, job satisfaction, burnout and, importantly, work engagement. To summarize: Rothmann (2008) tells us that work engagement is part of the well-being of an employee at work. If we improve the well-being, the employee engagement will also improve (work engagement is in this thesis defined as part of employee engagement).

In design discipline, Desmet & Pohlmeyer (2013) created a framework that proposed three main ingredients to design for well-being, known as 'Positive Design'. The goal of design for well-being as a general field is to have a lasting positive impact on people's lives. Well-being goes beyond just feeling good at the moment. Products and services do not necessarily contribute to our well-being (or engagement) and the same counts for work tools. A tool can give you a good feeling, but it should contribute to your well-being in order to create engagement.

Desmet & Pohlmeyer (2013) proposed three main ingredients to design for well-being, i.e. Positive Design: design for pleasure, design for personal significance and design for virtue. The framework of positive design can be used to help start selecting experiences and activities before designing in order to design for well-being instead of 'just' for pleasure, significance or well-being.

The framework, that is visualized in image 2.6, shows each ingredient of well-being independently. The intersection of them three is where people flourish. Flourishing is "having a sense of meaning, engagement, interest and purpose in life to truly thrive" (Seligman, 2012). Flourishing people experience relatively more positive emotions than negative emotions (Fredrickson & Losada, 2005).

The three ingredients of design for well-being are discussed in Appendix B.

EXPERIENCE DESIGN

Experience design does not only focus on improving the usability of a product nor on the user interface level. It focusses on the available functions at the very core of the product concept (Lu & Roto, 2015). By just improving user interfaces we cannot reach the basic human needs, which we need to reach in order to create qualitative experiences. The essence of experience design is "to consider the experience before products" (Hassenzahl, 2010). Before designing it is thus important to decide what kind of experience you want to target. These experience goals can be identified with the help of different research methods.

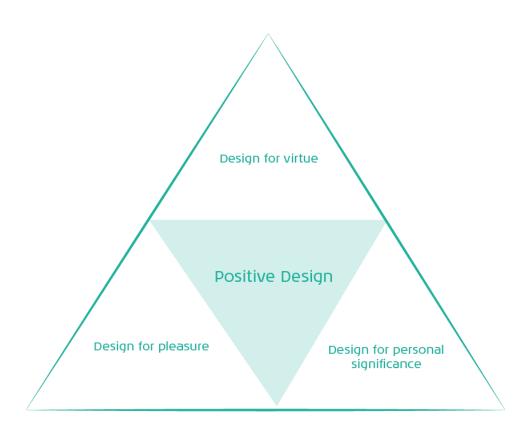


Image 2.6: Positive Design Framework by Desmet & Pohlmeyer (2015).

2.8 Problem statement

A lot of studies have discussed employee engagement in the past, such as the ones discussed in this chapter. The result is different academic perspectives about the meaning, (measurement) and creation of engagement. Leading researchers consider the field sufficiently well developed, but no study is yet assessed to measure the effectiveness of the interventions to improve employee engagement (Knight et al., 2017). As well no study assesses a research about the interventions needed to improve employee engagement. graduation project the aim is to improve employee engagement by design. FlyCo is used as a use case to investigate if it is possible to improve employee engagement at a specific context: the turnaround of an airplane.

The use case: FlyCo

FlyCo has a specific ambition. This means FlyCo "invests in innovation that increases customer intimacy and improves operational performance, aiming for lower and more flexible cost, as well as higher productivity" (FlyCo, 2016). With the help of the 'FlyCospecific-program', FlyCowants to change the organization from a process-orientated to a more customer- centric organization. Although this initiative is very pragmatic, there is limited guidance for the employees and management on how to apply this customercentric behaviour (Oonk, 2018). Luckily, the awareness among FlyCo management of the impact employees have on the performance is increasing (Oonk, 2018).

As part of the digital transformation of FlyCo, the Digitizing programm focusses on innovation and digital technology for employees in its' passenger operations domain, improving day-to-day processes, customer focus, and way of working.

FlyCo believes that an empowered employee with digital tools (apps on a personal iPad) will ultimately result in increased customer intimacy. Although digital transformation is an enabler of the 'FlyCo-specific-program', the employees using the new digital tools are impacted by this large transformation, which contributes to a decreasing employee engagement. Also the highly competitive airline industry, with competition coming from low-cost airlines as well as Middle Eastern carriers offering high service standards, is putting pressure on FlyCo and its employees.

While there is a need to improve employee engagement at FlyCo, there is also a strong focus on the operational performance. Therefore this project aims to improve employee engagement at the turnaround of an airplane. The turnaround is the term used for all processes needed to prepare an airplane for its next flight. Employees working at FlyCo operations can have most impact on the actual performance during the turnaround.

The applications developed at Digitizing Passenger Opperations are designed for employees working at the turnaround.



This chapter starts with elaborating on the definition and antecedents of employee engagement found in literature. Creating engaged employees is extremely valuable for organizations such as FlyCo, especially concerning the (digital) transformation it is currently undergoing. Therefore, the definition and antecedents of employee engagement and useful frameworks are interesting insights to use in this graduation project.

Employee engagement

Employee engagement is key to positive organizational outcomes and psychological well-being. Organizations stand to benefit from the development of high levels of engagement, because engaged employees:

- are more likely to be productive (Saks, 2006):
- remain with their current employer (Harter et al., 2016);
- interact positively with customers (Chalofsky, 2010);
- demonstrate higher psychological wellbeing and personal accomplishment (Shuck & Reio, 2014);
- create higher objective financial returns (Westman, 2001).

Employee engagement is not only valuable for an organization, but as well for the employees. First of all, engaged workers experience positive emotions such as happiness and joy (Schaufeli & Van Rhenen, 2006). As well, they experience a better health (Demerouti et al., 2001) and have the ability to create one's own resources, the so-called resourcefulness (Fredrickson, 2001; Xanthopoulou et al., 2007).

Employee engagement can be described as the "expression of a person's preferred self in task behaviour. An engaged employee experiences a sense of psychological meaning, safety and availability" (Kahn, 1990). There are numerous other definitions of employee engagement, but this definition will be used in this thesis due to its hollistic view.

Employee engagement will be used in this thesis as a term and not work engagement, because employee engagement includes an employee's relationship with his/her occupation, job and organizationasa whole, while workengagement refers only to the relationship between an employee and his/her work (Schaufeli & Salanova, 2011).

Creating employee engagement

Different studies found antecedents and triggers for employee engagement, which are very interesting to analyse for possible use in this project.

- Kahn (1990) created different triggers for each psychological dimension, which are used in the model created for design for employee engagement. The model is visualized in image 2.4 on page 19.
- The JD-R Model shows that job resources are positively related to employee engagement (Bakker & Demerouti, 2008)
- Crawford et al. (2010) found in their study which resources create engagement: autonomy, feedback, opportunities for development, positive workplace climate, recovery, reward and recognition, support, job variety and work role fit.

Frameworks for design

Different useful frameworks are presented in this literature study.

Model for design for employee engagement The psychological dimensions of Kahn (1990) show different influencers that can be of value for increasing employee engagement. In the next chapters one or two influencers of each dimension is chosen based on the exploratory research at the scope of this project.

Every dimension of employee engagement can be influenced by so-called influencers. The influencers are visualized as well in image 2.4.

Positive Design Framework for Work tools Lu & Roto (2015) used the two frameworks Mechanisms of Meaningful Work (MMW) and Positive Design Framework (PDF) in their Framework for Positive Design for Work tools. The purpose of FPDWork is to guide work tool designers to define meaningful experiences for employees as the starting point of design.

Positive Design Framework

Desmet & Pohlmeyer (2013) proposed three main ingredients to design for well-being, i.e. Positive Design: design for pleasure, design for personal significance and design for virtue. The framework of positive design can be used to help start selecting experiences and activities before designing in order to design for well-being instead of 'just' for pleasure, significance or well-being. This framework is valuable because work engagement is part of the well-being of an employee at work (Rothmann, 2008) and work engagement is again part of employee engagement.

Problem statement

While different literature has shown how to improve employee engagement, there is no practical evidence that employee engagement can be improved by design. Due to this missing practical research, this project aims to improve employee engagement by design. FlyCo is used as a use case to investigate if it is possible to improve employee engagement at a specific context within FlyCo: the turnaround of an airplane.



3.1 Overview

The literature study in the previous chapter provided useful insights about how employee engagement can be triggered and what kind of frameworks can help designers to design products or services to do so. In order to refine the theoretical assumptions, different exploratory research studies are conducted for two reasons. First, a practical viewpoint should be added to the theoretical results. Second, it is valuable to see in context which dimensions or triggers of employee engagement are most valuable to trigger to improve employee engagement.

In the next chapters the conducted studies are presented. The studies conducted can be categorized by research about the context and research about the topic.

Research about the context

Three studies, study III, IV and V are done within the context of this project: the turnaround of an airplane. Different actors are shadowed, observed and interviewed and a generative session took place.

With the studies conducted, an overview could be created of what the turnaround is, how different actors relate to each other, what their characteristics are and what motivates the employees. This information was needed in order to understand how to improve employee engagement at this context.

Research about the topic

Two other studies were conducted about the topic employee engagement (study II and VI). The first study is conducted within FlyCo: conversations are done about the necessity to improve engagement with business owners, product owners and other employees working for FlyCo. The second study at done externally. In order to gain a broader understanding of employee engagement, three external studies were conducted at other companies than FlyCo. A small start-up called Tony's Chocolonely, the medium sized enterprise Incentro, and Transavia were analysed.

The studies conducted and the connected research questions for each study are visualized in image 3.1.

In the report, both the words 'actors' and 'employees' are used to describe employees.

FlyCo-specific-program

Study I - Understanding employee engagement (literature)

What is employee engagement and how can it be stimulated?





Study II -Analysing

What is FlyCo's opinion about the importance of employee engagement and need for an organisational change?



Study III - Understanding the context: the turnaround What are the characteristics of the turnaround and the actors involved?



Study IV - Working together at the turnaround

How do the different actors work together at the turnaround? What is a team feeling?



Study V - Creating a team

How can you create a team feeling within a time limited context?



Study VI - Analysing others

What can we learn from others about employee engagement?



Image 3.1: The studies conducted and the research questions used.

The research methods of each study are as well visualized.

The studies coloured yellow are presenting the studies conducted at the context of this project.

3.2 Methodology

Sanders & Stappers (2012) explained that some levels of knowledge are easier to access than others, because there are different levels of knowledge:

Explicit knowledge can be stated in words, such as "I have two appointments today";

Observable knowledge is knowledge that refers to thoughts and ideas of a person;

Tacit knowledge refers to "things we know but are not able to verbally communicate to others";

Latent knowledge refers to "ideas and thoughts that we haven't experienced yet, but on which we can form an opinion based on past experiences." Explicit and observable knowledge (what people say and think) is relatively easy to access by observing how people behave. Therefore observation sessions and interviews are done in this project with the actors involved in the turnaround.

Tacit and latent knowledge is less easy to access than explicit and observable knowledge, but can be accessed by other methods than observations and interviewing. Generative sessions and cocreation are techniques used in this graduation project to uncover what people know, feel and dream. In these sessions it is the goal to uncover people's memories of past experiences because that influence how they behave and feel in a specific moment. Dreams for future experiences also influence the perception of the moment. The path of expression, that is shown in image 3.2, is a process that can be used for exploring present, past and future experience.

Sanders & Stappers (2012) explain the path of expression as follows:

"The experiences at the moment are connected to the past and the future through memories and dreams. The path shows how a person's awareness can be guided in steps by thinking first in the present (1 in image 3.2), then of the past (2), then looking for underlying layers (3) in order to move towards the future (4)."

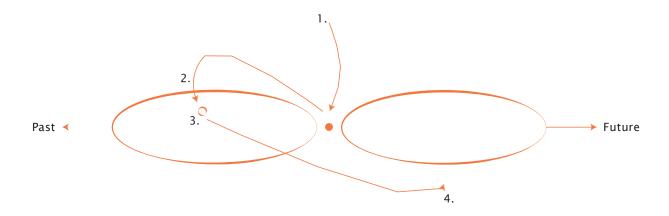


Image 3.2: the path of expression by Sanders & Stappers (2012).

STUDY II



4.1 Research questions and approach

As introduced in the introduction already, the objective of this graduation project is to improve the employee engagement at the turnaround. In order to do so, the company should be analysed and the motivation for FlyCo to improve employee engagement should be distilled. In this study, FlyCo and the Digitizing program are analysed. The research question of this study is:

WHAT IS FIYCO'S OPINION ABOUT THE IMPORTANCE OF EMPLOYEE ENGAGEMENT AND THE NEED FOR AN ORGANISATIONAL CHANGE?

A specific approach is selected to get to know FlyCo and the Digitizing program:

Conversations and interviews are executed with different stakeholders of FlyCo, such as the business owners of the digital applications, as well as the head of design of the Digital Transformation program. Each week the findings were discussed with the FlyCo PhD'er for verification. As well, an observation booklet is used as a tool to write down all insights gained at the office.

THE FOCUS AT DIGITIZING PASSENGER
OPERATIONS LAYS ON DEVELOPING
TOOLS TO EMPOWER DIFFERENT
ACTORS ATTHE TURNAROUND:
THE GATE AGENT, THE TEAM
COORDINATOR, THE CABIN- AND
COCKPIT CREW.

4.2 Results and analysis

FlyCo was founded in xxxx and still operates under the same name. As introduced, the ambition of FlyCo is specific. In the last few decades the competition in the airline industry has grown impressively. FlyCo needs to compete with low cost airlines such as Ryanair, but as well with airlines such as Emirates offering high service standards. With the help of investments in innovation to increase customer intimacy and improve operational performances, FlyCo optimizes its position as a competitive network carrier (FlyCo, 2016). They transport 99 million passengers per year to 314 destinations in 116 different countries (source, 2017).

Digital transformation

The Digital Transformation program is focussing on digitizing FlyCo and creating digital tools for employees working at the operational domains. As part of the program, the Digitizing department is developing applications 'App-X' & 'App-Y', '. These applications aim to empower the employees doing their job better and faster. The focus lays on empowering four specific actors: Gate Agent. the Team Coordinator, the (Senior) Purser and the Captian (as part of the Cabin and Cockpit Crew). The applications that are installed on a personal iPad, empowers them by giving information about their tasks, the passengers and the flights. With the applications it is possible to optimize passenger service, by for example giving the users the option to reseat or rebook the passengers' flight. As well, with the help of the applications, the users have more insights in all information available about the processes occuring during the turnaround. In July 2018 a new app-inapp is launched. 'FlyCo-App' is a new functionality integrated in all applications, focussing on the turnaround optimalization. FlyCo-App provides information to all actors on boarding status and progress, ensuring all actors to have one view on the turnaround performance.

Development

From a design perspective you would say that during the development of applications used by the employees, there is a great emphasis on the users. Due to the focus on higher productivity and lower costs, at FlyCo Digitizing department, the business decides the content of the developed tools, and not the user, nor the developers. This is also influenced by the fact that the positive effects of the designed application is not measured in performance criteria or money (yet). Although this is happening, the company does know this pitfall.

As the business owner of 'FlyCo-App' mentions: "you need a broader vision to understand that a good designed application should be designed with the user instead of for the user. This will result in customer intimacy (thus money) at the end of the road. Unfortunately, not everybody [the decision makers] sees that yet."

Noticed is that the development of new technology inside FlyCo is deliberately started without the employees' knowing: "The future users are relatively old and are perceived as not as flexible as we would like them to be. If we would have included them in the development of the applications from the start, they would not have accepted the change and the applications would not have been developed as far as they are now."

Due to this reason the development of the applications is only little user-centred. User tests are done mainly at the end of the development, when the application is almost live.

Although some employees from passenger operations work with the development teams on the development of the applications, the development of the applications is not only not that user-centred. It is as well not very digital transforming. Some applications developed are rather duplications of tasks that need to happen in real life, and the question wherefore this function is needed to be digital is not asked. "Sometimes you should not duplicate a functionality digitally, but should try to get a solution for the real problem." To give an example: the Cabin Crew needs to assess colleagues by documenting their performance. The digital tool eAssessment is developed, but is only a duplication of a task and the hard-copy forms into an application, instead of a solution to the problem that there are too many questions about a colleague to answer.

DUE TO THE FOCUS ON HIGHER PRODUCTIVITY AND LOWER COSTS, THEBUSINESS DECIDES THE CONTENT OF THE DEVELOPED TOOLS, AND NOT THE USER, NOR THE DEVELOPER.

Declining employee engagement

Although there is growing focus on developing for employees at the moment, the company is still "representative for the phenomenon considering the declining employee engagement level, which can - in addition to the industry setting - be linked to the (digital) transformation it is currently undergoing, creating uncertainty for staff" (Oonk, 2017). As well, the development of a multidimensional 'employee experience' by the Digital Transformation design team creates a lot of resistance from the organization: "At this level, we [designers, developers and employees] want to collaborate in order to create a valuable employee experience from the onboarding of the employees until a leave. Unfortunately, we do not have the mandate, nor the money to start working on it. The top of the organization could give us the mandate, but there are too much power tensions in that area. The company is so influenced by their own management that the company sits still."

Due to the fact that there is no sponsor for employee engagement (and overall: experience) by managers with influence, the circulation of the importance of employee engagement is very low. Although the top of the organizatio1n at times mentions that employee engagement is an important topic, there is not yet acted upon it.

In the past, employee engagement is measured by external parties and at the moment it is tried to spread out the 'employee promoter score'. Although trying, FlyCo is not really measuring the employee engagement scores and therefore it is also not possible to show that a high engagement of employees creates value. If the value of employee engagement would be measured, it is also possible to make value-based decisions on this. In study VI, the external analysis, an elaboration about the possibility to measure employee engagement is given.

On a positive note, the awareness that engaged employees have impact on the results of FlyCo is increasing (Oonk, 2018). From the start of 2018, the Digital Transformation team is focussing on mapping the employee experience as a whole in order to improve it. One step in this employee experience roadmap is the turnaround, an important moment in the work of employees working at the operations. In order to create a better employee well concerning experience, as transformation, this thesis aims to improve employee engagement at the turnaround.



In this chapter the results from the internal analysis are summarized. Different interviews are performed in order to get to know FlyCo and the Digitizing department at FlyCo Studio X. The research question of this study was:

What is FlyCo's opinion about the importance of employee engagement and the need for an organisational change?

About FlyCo

The airline industry is changed dramatically compared to a few decades ago. With the help of investments in innovation to improve customer intimacy and increase operational performances, FlyCo hopes to cope with competition (FlyCo , 2016). FlyCo's has a specific ambition.

Digital Transformation

The Digital Transformation program focussing on digitizing FlyCo and creating mobile applications for employees working at the passenger operational domains. As part of the program, Digitizing department is developing applications to empower the employees doing their job better and faster. The focus lays on empowering four specific actors at the turnaround process: The Gate Agent, the Team Coordinator, the (Senior) Purser and the Captain (as part of the Cockpit Crew). Although there is a growing focus on developing for employees at the moment, the company is still "representative for the phenomenon considering the declining employee engagement level" (Oonk, 2017).

Development of applications

Due to the focus on higher productivity and lower costs, the business decides the content of the developed tools, and not the user, nor the developers. This is also influenced by the fact that the positive effects of the designed applications on employee engagement is not measured in performance criteria or money (yet). At the moment, employee engagement is not measured at the operations, which also does not give the opportunity to show that a high engagement of employees creates business value.

The organization

There is no sponsor for employee engagement (and overall: experience) by managers with influence, and therefore the circulation of the importance of employee engagement is very low. Although the top of the organization at times mentions that employee engagement is an important topic, there has only limited acted upon it.

The awareness that engaged employees do have positive impact on the results of FlyCo is somehow increasing (Oonk, 2018). From the start of 2018 the Digital Transformation team is focussing in mapping the employee experience as a whole in order to improve this experience. One step in this employee experience roadmap is the turnaround, an important moment in the work of employees working at the operations.

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THE CONTEXT: THE TURNAROUND

5.1 Research question and approach

The turnaround of the airplane is the scope of this project. The turnaround is an important phase at the operations of FlyCo and a prominent part of the work of the employees, while it is the process of preparing an airplane for its next flight. For this project, the turnaround begins the moment the airplane draws to a halt and the parking brake is placed ('on-blocks'). It ends when the airplane is off-blocks. In order to design for the employees working at the turnaround, it is very important to understand what the turnaround is, which processes occur, and of course which actors are involved.

In this study, the following research question will be answered:

WHAT ARE THE MAIN CHARACTERISTICS OF THE TURNAROUND AND ITS ACTORS INVOLVED?

In order to answer this research question and understand the context and the needs and wants of the actors involved at the turnaround, shadowing, user observations and interviewing methods are used. Shadowing sessions can provide a rich, comprehensive data set of actions, interdependence and motivations of the observed (Czarniawska, 2007). The observations can enhance the research results with information about mood, body language and culture to create a full picture of the world of the observed person's point of view. The methods are used to understand the actors and how processes and communication are organised at the turnaround of an airplane. Desk research is also conducted. A lot of information is already available at FlyCo, for example about the tasks each actor has at the turnaround.

STUDY III

Different shadowing sessions are organized with the four different actors active at the turnaround. Though there are more actors involved at the turnaround, such as catering and cleaning, the scope of this graduation project is limited to the actors Gate Agent (GA), Team Coordinator (TC), (Senior) Purser (SP) and Cockpit Crew (CC). This scope is chosen because of the digital tools available for these parties and their importance for the turnaround.

Before the day would begin, the observed actors were asked to answer some sensitizing questions. One of the tools used for this is visualized in image 5.1.

At the shadowing/observation sessions the following sub-research questions were selected:

- What processes are active during the turnaround?
 - Which actors are involved and what are their characteristics?
 - Which aspects of the turnaround process contributes to employee engagement?
 - What influence has digitalization on (the engagement of) the actors working at the turnaround?

Een dag van een Gate Agent

Wat doe jij op een normale werkdag? Hoe ziet je dag eruit? Met wie werk je het meest samen? Op welke momenten van de dag zit je er even doorheen en waar krijg je energie van? Vul hieronder in de tijdlijn aan wat je zowel doet op een gemiddelde dag als Team Coordinator van FlyCo.

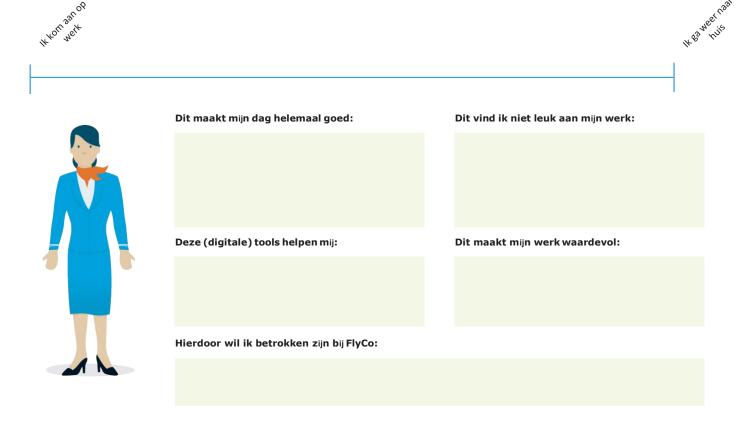


Image 5.1: One of the sentizising tools used before the observations and interviews took place. This form is for the Gate Agent.

5.2 Results

Atthe turnaround, different actors are responsible for different processes at the ground, at the airport and in the airplane. Ground Services (the Gate Agent and Team Coordinator) are responsible for the unloading and loading of the baggage, cargo and (un)boarding passengers. Inflight services (the Senior Purser as part of the Cabin Crew) is responsible for the service to the passengers inside the airplane, (un)boarding passengers, cleaning and catering. Flight Operations (the Captain as part of the Cockpit Crew) is responsible for a safe flight. Image 5.2 shows an overview of the processes taking

place at the turnaround. As you can see a lot of different processes are taking place at the same time, such as preparing the boarding process by the Gate Agent and catering the airplane. In the image the orange phases are processes happening in the airplane or at the airport. The grey phases are processes happening inside the airplane, but are out of scope of this project, or take place "beneath the wing".

FlyCo wants to improve the turnaround by limit the so-called short delays of less than 15 minutes with the help of the applications developed for employee usage.



5.2.1 The Gate Agent (GA)

The Gate Agent (GA) is responsible for passenger boarding at the airport. The responsibility lays not only in a fluent and on time boarding, but as well in offering the best service at the airport to the passengers. Service Agents help the GA with performing the right tasks in order for the plane to leave on time with happy passengers.

A GA is observed and shadowed during her shift, and different GA's are interviewed during this day. The GA shadowed works for FlyCo for almost 25 years. The first 5 years of her career she was active as a Service Agent, where after she was promoted as GA. Her goal is to "have a fun day every day". This GA is a very enthusiastic person and knows the company extremely well.

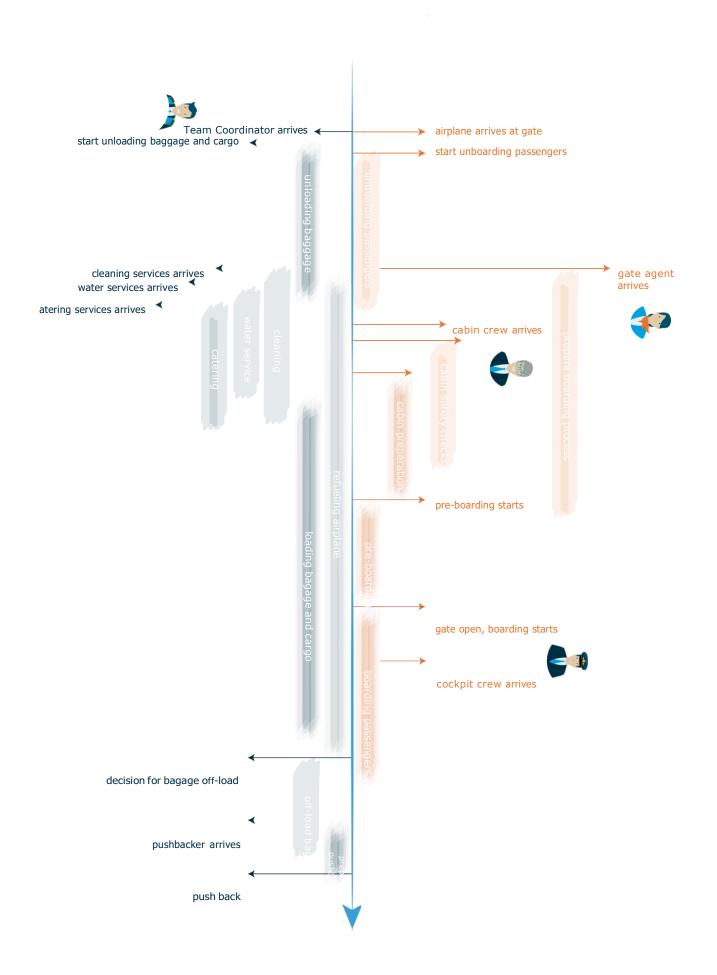


Image 5.2: Overview of all the processes occuring at the turnaround.

Communication and digitalization

The communication between the GA and the other actors at the turnaround mainly happens via portophone. The GA is responsible for communicating all the phone- and portophone numbers of all the actors at the turnaround to the Senior Purser and Captain. If the GA does not communicate the right numbers of for example the Team Coordinator to the (Senior) Purser, a lot of communication can get lost. To hand over the numbers and to walk through the planning a bit together, the GA has a short conversation in person with the (Senior) Purser (SP) and the Captain (CC). After this very short meet and greet, communication only occurs through portophones, although that goes wrong at times: "It happened more than once for the portophone to break down."

The GA is the first touch point for the passenger, that is why he/she needs be very representative and know everything about the flight(s). The GA uses 7(!) different (digital) tools for communication with other parties. Due to this, a lot of GA's do not use the application App-X for doing their job. "If they [the company] do not erase older versions of technology such as the PC, I will not start using my iPad. There are double functionalities, so double work at the moment."

App-X is the application developed at Digitzing Passenger Operations for the Gate Agents. This application gives the Gate Agent all information he/she needs, such as their planning, the locations where they are needed, and it gives the GA the option to help the passenger with questions such as reseating, rebooking and finding their baggage and gate. Although this tool is launced some time ago, the tool is still not always used.

Feeling valued

GA's do not have the feeling that they are contributing to a higher purpose or contributing to FlyCo to perform better. After having an internally organized team day one of the GA's mentioned that she did have a feeling of a purpose within the new formed team. A GA does not often have any feedback moments with the shift leader (their manager).

"They do not know what we are doing or even who we are. How can they review us then?"

"WE CALL THE OTHER GATE AGENTS OUR BLUE SISTERS. WE CARE ABOUT EACH OTHER, ALTHOUGH WE ARE STILL COLLEAGUES."

Being a team

Due to the large number of employees working at the turnaround and efficient planning, the different actors at the turnaround mostly only work with the other actors one single time. The different actors are a team for a very short moment, sometimes only 25 minutes. For a different, next turnaround, the team is completely changed. Also because of the time limit there is a 'stripe-culture'. The higher a GA get in hierarchy (or TC, SP or CC), the more stripes are visible on their uniform. In this way the employees know who to speak to. The GA's do not think that there is a team feeling between the different actors, although at the turnaround a team feeling would contribute to better performance. The GA's mentioned that face to face communication is valuable between actors, as well as between GA's.

"THE OTHERS,-THETC, SP AND CAPTAIN-INEVER SEE AGAIN.
WEARECOLLABORATING FOR AN HOUR AND THAT'S IT."

Because FlyCo wants to improve its performance at the turnaround, every delay needs to be mapped in order to improve the processes. To do this, the 'delay-code' is deployed. Whenever one of the processes at the turnaround goes wrong, it will be communicated to the business by adding a delay-code to the system. For example, when the boarding process is finished too late, the GA will get a delay-code on her name to show the system that boarding went wrong. The GA mentions about this:

"Due to this culture, every other section works within their own 'silo'. We do not want to receive a delay-code, so we work hard to finish our own tasks on time and do not really care if others are not finished yet."

The word 'silo' is used to explain the different departments that operate in isolation from each other.

"FOR THE FIRST TIME EVER WE HAD A
TEAM DAY. NOW IT FINALLY
FELT LIKE WE ARE WORKING FOR A
HIGHER PURPOSE."

Experiences

Due to their long-life experiences as Gate Agents, the involved GA's could provide valuable insights about the turnaround. The insights are summarized in good and bad experiences.

Bad experiences

- There is a very large 'silo' culture at the turnaround between different actors. This is experienced as frustrating.
- Because the actors hardly know each other, they do not know with who they work with and how they need to communicate best. The GA's mentioned that they need to trust the other actors, although they find that difficult. They don't know the others and do not have time to meet them properly.

Good experiences

- Most GA's end their task with a very short conversation at the bridge between the gate and the airplane. The SP and the GA then discuss some problems and wish each other luck. This moment is experienced as valuable and motivating, because it includes giving and receiving feedback.
- Motivating each other is happening through portophone. Especially the TC and the GA communicate about the hand baggage collected at the gate. They do wish each other luck sometimes.



5.2.2 The Team Coordinator (TC)

Two Team Coordinators (TC's) are observed and interviewed during a day at 'Ground Services'. Both TC's work more than 15 years at FlyCo. Both started as a 'belly boy' and were promoted to TC after a few years. Overall, the TC is responsible for guiding his team to load and unload the airplane with cargo and baggage on time and in the right manner.

Communication and digitalization

The Team Coordinator is mostly the first point of call for other actors at the turnaround to solve problems. The TC communicates with other actors only when there are problems at the ground, such as a missing bag, missing catering and missing passengers.

Communication is done with a portophone or mobile phone. The TC's never know with who they speak, except the name. The names of the other actors are mostly written down on their hard copy overview as a reminder.

Digitalization has a lot of influence on the work of the Team Coordinators, especially on older users. Still some think it can help them in doing their job better. A lot of tasks are still done with old technology, such as old programs at a

"ILIKE TO KNOW WITH WHO I AM WORKING WITH AT THE TURNAROUND, BUT IT IS NOT A NECESSATY." desktop computer and printed overviews. The tools provided to the TC's in the past were seven different digital tools which were installed on a mobile tablet. This tablet is not weather proof, so at a lot of rainy days the tablet was useless. Due to the different systems the TC's need to swipe through different programs all the time. The application App-Y, that is developed at Digitizing department, aims to unite all functionalities in one application.

With App-Y it is possible for a TC to make the work easier and less physical for their team members, by changing the planning of the romp in App-Y. As well, a complete overview of the cargo and baggage is shown, and an offload tool is added. With the offload tool it is possible to see if all bags can already be loaded in case of missing passengers.

Feeling valued

Like GA's, the TC's do as well not have the feeling that they contribute to a higher purpose. Autonomy is a resource that makes the work valuable, as well as getting the opportunity to improve current processes and the relationships that are built at the workplace. Motivating others makes the work of the TC's worthwhile. Working in the belly is intense physical work. That is why TC's restructure the schedule that they receive from the planners a lot:

"The guys at planning do not know what really fits into the romp of an airplane. My guys here need to do the real job."

Feedback is a job resource that TC's do not receive at all. Their managers (called shift leaders) are not on the same workplace as they are. The TC's and team members do give each other feedback.

"The shift leaders do not know how well we are doing our job, but we are reviewed by them."

"THE BEST THING OF MY WORK IS TO MOTIVATETHEOTHERGUYS TO DO THEIR WORK BETTER. A CHIT-CHATIS IMPORTANT FOR THAT."

Buiding a team

The TC's do not think that there is a team feeling between the different actors, although at the turnaround a team feeling would contribute to better performance. Some of the TC's think that a team feeling is not necessary for doing the job. "I just want my team to perform well and safe."

TC's are very different compared to the other actors working at the turnaround. The TC's world is a real mans' world with a no-nonsense culture. Although it can look like the TC's do not really care, they can be misunderstood due to different ways of communication.

Experiences

The TC's talked to do have a lot of experience in the field. They mentioned some good and bad experiences which are useful for this project.

Bad experiences:

The relationship between the TC and the Cockpit Crew (CC) is mostly not that strong. The TC mainly thinks that the CC, because of his hierarchy, feels better than the other actors involved at the turnaround. Sometimes that also counts for the other actors.

"At times I try not to talk to the Captain. I deliver the message they need via a stick through the window of the airplane."

Good communication between the actors is very important for the TC. For example, when passengers don't show up, the TC needs to unload the baggage of that passenger. It can happen that thesystem tells the TC that all passengers are boarded, but that in real life not all passengers are boarded yet. If the SP or GA does not inform the TC on time, this results in that the TC has to fix the problem: searching and unloading the baggage of the missing passenger, eventually resulting in the airplane leaving too late.

Good experiences:

- The TC's really want to motivate their team members to do their work right and with some fun.

"The work is very physical: we are outside, no matter which weather. If the GA gives us a heads up, it gives me extra motivation."



5.2.3 The (Senior) Purser (SP)

The (Senior) Purser is the manager of the Cabin Crew working inside the airplane. Depending on what kind of flight the SP is responsible for, the SP has a team of Crew members to help him/her with the tasks inside the airplane. At international flights (ICA), there is a Purser to help the Senior Purser with managing the team. At the turnaround, a SP's responsibility starts with security checks and catering checks in the just cleaned airplane. When boarding starts, all passengers need to be serviced and helped with boarding. During the flight, the Cabin Crew is responsible for the safety and service for the passengers. Two SP's are observed and interviewed in this study about their experiences at the turnaround. Both are working more than 25 years for FlyCo.

Communication and digitalization
The SP has the responsibility for communicating with the GA and the Cockpit Crew (CC).

"DIGITALIZATION IS FINE BY ME, BUT THISIS STILLA JOBWHERE YOU HAVE TO WORK WITH AND FOR PEOPLE. SOMETIMES THERE IS NO SPACE FOR DIGITAL TOOLS." The SP communicates personally with the CC and takes place on board of the plane, but not especially with the other actors. The information that the GA is communicating to the SP face-to-face, such as the portophone numbers, is not a necessity due to digitalization. Still, a short conversation contributes to the knowledge about who you work with.

"FORMALLY I NEED TO COMMUNICATE
WITH THE TC AS WELL, BUT THAT
ONLY COMES TO SAYING WHO I
AM AND THAT I'M READY IN THE
PORTOPHONE."

Digitalization is impacting the work of the SP's a lot. Due to the short period of time to board the passengers and the goal to interact with the passengers personally, the digital tools are hardly used during the turnaround. When preparing, the SP's do use their mobile application, although some SP's are still using printed overviews of the flight, teammembers and the tasks.

The application developed for SP's and other Cabin Crew members is called App-Z. All information about the flight, the tasks and the passengers are communicated via this application. It is possible to view a passenger list, e.g. consisting 'special' passengers as well. Those passengers have special wishes or are important guests. With App-Z it is as well possible to sell seats and check catering. With this app, FlyCo wants to enable the Cabin Crew to create the best customer experience as possible.

Feeling valued

Most of the SP's started this job because they wanted to travel the world. At FlyCo, good work conditions are offered and that is the main goal why employees stay such a long time at FlyCo. Next to that, the job is perceived as very dynamic. At every flight a totally new Crew arrives.

The SP's are reviewed by a 'baseline manager'. Although the SP is the manager in the air, the baseline manager is the manager hierarchical for Cabin Crew. Within App-Z it is possible to give other Crew members feedback about the work they did. This functionality is not used very often yet. Feedback is now more received via official canals like through baseline managers. Because the managers are not flying Crew, sometimes the feedback given is not received as very valuable.

Building a team

The feeling of being a team does apply extremely for the world of the Cabin Crew. Although nobody knows each other at the beginning of the flight, the Crew steps out of their briefing session as a team with a goal. That is mainly the responsibility for the SP.

"I need to create a save environment where my Crew can function at their best. I do that by creating a common goal each flight. When we express our goals, the Crew almost always commits to them."

Although there is a strong team feeling within the Crew, the Crew does not have that feeling with other parties such as the TC's and GA's.

"I am part of the process, but I am receiving and not giving. I wait till it is my time to shine and then I can start to work."

Experienced problems

The SP's talked to have, just like the TC's and GA's, lifetime experience in the field.

Bad experiences

A large silo culture is visible, which is experienced bad, as well as 'silent boarding'. This new initiatives is a new method to decrease the small delays due to boarding time. The GA decides when the boarding will start without checking if the Cabin Crew is ready for this. This new initiative is experienced as very bad by Cabin Crew.

Good experiences

Overall, SP's experience the teamwork inside the airplane as something very good. Although the Crewdoes not know each other at the beginning, they need to work together intensively. Even though the time limit, it is possible to create a team feeling before the Crew departes.

"INEED TO TRUST THE GATE AGENT AND TEAM COORDINATOR FULLY WITHOUT THEM KNOWING. SOMETIMES THAT IS HARD."



5.2.4 The Captain (CC)

The Captian, containing a Captain and a second officer (co-Pilot), are responsible for a safe flight. The Captain is called CC in this report, while all three members of the Cockpit Crew are using the application App-XX.

For this study a relatively young Captain is interviewed and two other Captains are observed during a flight.

Communication and digitalization

The CC is the actor that communicates with other actors the least. When boarding, the first thing he/she does is meet the GA very shortly, where the CC receives the telephone number of the TC. Because the CC does not have a portophone, he/she need to call the other actors to get information or ask the SP for it. Although communication is very important for the CC, because the CC is responsible for leaving on time, there is almost no communication with the TC and GA. As well, the CC calls the communication within the 'team' to be 'flat'.

"If communication takes place, it is flat. It does not deepen into the goal or the wishes of the day of the actors."

The application that is used by the CC for flight-, crew-, and passenger information is App-XX. Next to this application, the CC uses different applications on the iPad, such as Aviobook that contains the airspace maps. From 2016 FlyCo is the first company introducing a 'paperless cockpit' worldwide with the help of the applications introduced.

One of the captains mentioned that FlyCo is changing:

"Although Cockpit Crew is relatively conservative, the CC's are open for new technology now, if it has great value."

"SOME PEOPLE WANT TO SKIP THE MEET AND GREET WITH THE GA.I THINK IT IS ESSENTIAL. IN THIS WAY I CAN MOTIVATE OTHERS AND GET TO KNOW THE PERSON WHO I WORK WITH. IS HE/SHE FEELING GOOD? HOW WOULD HE/SHE LIKES TO COMMUNICATE?"

Feeling valued

In comparison to the other actors, the CC does to have influence on FlyCo's performance. This is mainly thanks to the fact that the CC is ultimately responsible for a safe and on time flight and to the fact that the work is very dynamic. Because of their hierarchy and importance at FlyCo, CC's do feel to have a lot of influence on what is happening. As well, a lot of feedback is given to the CC's. Four times a year they need to show how they perform in a simulator, and once a year a fellow Captain reviews them.

"It depends how you look at it. As a CC, I can have a lot of influence on the operations, by for example strategically deciding to change the off-blocks time beforehand. But I am not the only one who can have influence on a good performance. TC's, GA's and SP's can do the same. But they just don't see that enough."

Building a team

Although the CC does think there is no team feeling between the four different actors, there is a team feeling between CC and Cabin Crew. Because they need to work together for only a few flights and are responsible for the safety of a lot of passengers, they need to trust each other. Trust is therefore seen as a very important factor for creating a team.

Experiences

The CC is perceived as another type of person than the GA, SP and TC. As is explained in this paragraph, does the Captain perceive changes differently than the other actors. The Captain does also have the feeling to contribute and influence the performance of FlyCo.

The Captains talked to could give valuable experiences that can be of inspiration for this graduation project.

Bad experiences

 FlyCo is sometimes perceived as a company which innovates very slowly.

"As FlyCo, we do not mirror ourselves and I think that is a large pitfall. If we would, we would know our weaknesses and I think that is not recognized enough."

"I WOULD DEFINITELY NOT LIKE MY
JOB IF THE COMPANY FLYCO
WOULD NOT BE A COMPANY MOVING
TOWARDS THE FUTURE.
NEW INNOVATIONS IN MY JOB ARE
VERY IMPORTANT FOR ME."

Good experiences

 Due to their influence and position in hierarchy, the Captains have more feeling to be able to influence the operational performance than the other actors involved in the turnaround.

"I can think strategically in my job. For example, I can call the operations centre for a new time slot for leaving if I see that there will be some delay. In this way we can reduce the delay a bit, and that creates happy passengers."

- A short conversation with the other actors is seen as very valuable. As a CC, it is not possible to influence the turnaround as a whole, but only together with the other actors. Some CC see motivation as a very important factor in their function.

5.3 Analysis

In the previous paragraph a lot of valuable information is summed up about the turnaround and the actors involved. With this information it is possible to answer the research questions mentioned at the beginning of this chapter.

What are the main characteristics of the turnaround and its actorsinvolved?

- What processes are active during the turnaround?
- Which actors are involved and what are their characteristics?
- Which aspects of the turnaround contribute to employee engagement?
- What influence has digitalization on (the employee engagement of) the actors working at the turnaround?

Processes

The processes active during the turnaround are mapped. By minimizing the time the airplane is on the ground, operational costs remain limited and therefore the operational result is optimized. Because the processes happening at the turnaround overlap due to the time limit, there are a lot of dependencies. For example, if the airplane is not cleaned and the catering is not finished, the Cabin Crew can't start the safety checks. If they are not finished, the Gate Agent can't start the boarding process. The processes active are visualized in image 5.2.

Actors involved

Because the processes are overlapping, the actors are to a large extend depending on each other. Communication and teaming is very important at the turnaround and often the processes are not so smooth as needed. Although a team feeling is missing, the actors do need each other in order to reach the final goal: leaving on time. In image 5.3 the different actors and their characteristics are visualized. The dependencies are also visibile inside the arrows. In the image, a name is selected for each actor.

The Gate Agent can be seen as the 'Possessor'. He or she has access to all the information due to the large number of tools available. He/She is the only one meeting all actors at the turnaround.

The Team Coordinator can be seen as the 'Executer'. The work the TC's do is very physical and the TC's world is a real man's world with a no-nonsense attitude. TC's are executing the tasks that the other actors are asking for.

The Captain can be seen as the 'Motivator'. The CC is the only actor who has the feeling to contribute to FlyCo, as well due to his/her very large feeling of responsibility. The CC stands high in hierarchy and as well expresses that to the other actors. Therefore, the CC could use his/her position to be the motivator of the turnaround team.

The job of the Senior Purser is to be very well representative to the passengers. There is an extreme silo culture visible for inflight services with a strong own culture. Because the SP's know how to create a team in a time limited context, the SP is called 'the Creator', because he/she has the knowledge to create the team.

Characteristics of the actors working at the turnaround and their dependencies

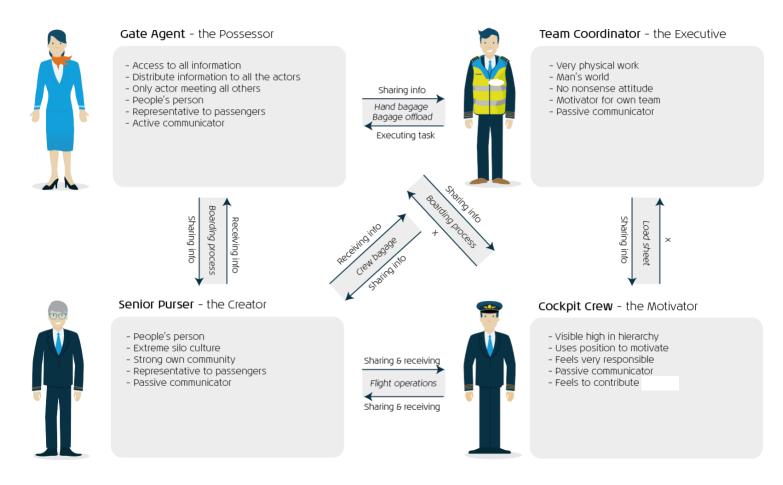


Image 5.3: Characteristics of the actors working at the turnaround and their dependencies.

Communication

There is no contact between different actors, only when needed. This is due to the time limit of the turnaround. As well, the actors only work one time with the same actors. Due to the time limit and the short-term collaboration, there is no team feeling. Although there is no team feeling among the actors during the turnaround, there is a team feeling between the Cabin Crew and Cockpit Crew. Communication is done through portophone, phone and at times face-to-face. The last is seen as most effective and valuable, because then you know with whom you work and how to anticipate problems together. The Gate Agent has the most contact with other actors and next to that, the TC. Digitalization does influence the work of the different actors a lot. The applications developed are used, but not as much as FlyCo would like them to. Mostly because the work of the actors either physically challenging, or customer orientated, the iPad comes second. The tools used by the actors in the past, such as printed overviews and old-fashion PC systems, are still present.

Feeling valued

As explained in the previous paragraphs, no actor except the CC has the feeling to contribute to the overall performance of FlyCo. This could mean that the actors do not have the feeling that they get anything back from their investment in the work they do. They also do not have any feedback moments.

Creating employee engagement

When connecting the results of this study with the findings in literature, aspects that should be triggered to improve engagement are not visible at the turnaround. For example, there are no interpersonal relationships triggering meaningfulness and the physical energy available are very different between an actor starting a shift and one finishing it.

During this study it was possible to identify which influencers defined by Kahn (1990) could and should be triggered (by design) at the turnaround.

Some triggers identified are not possible to influence at the turnaround, such as insecurities of an individual. Still, the results of the study show that all psychological dimensions in the model can be influenced at the turnaround to create more employee engagement, but only with the help of a few influencers.

In image 5.4. the chosen influencers are highlighted.

For the dimension meaningfulness the influencers work interaction and task characteristic are selected.

<u>Work interaction</u> is the feeling of reward by interpersonal interactions with co-workers. This influencer could be stimulated at the turnaround by e.g. creating more possibilities to give and receive feedback.

<u>Task characteristics</u> shows the employee that the job is involved with creativity, challenge, clear procedures and goals. This influencer could create more meaningfulness at the turnaround by e.g. showing the actors that they have influence on the performance of FlyCo.

For the dimension availability <u>physical energy</u> is selected. It is not possible to change the physical energy of the actors after a long day of work, but it may be possible to communicate the energy of the different actors between one another. In that way it might be possible to create more understanding in collaboration between the actors involved.

For the dimension safety two influencers are selected. The first one is intergroup dynamics. These dynamics are defined by a person according to the unconscious playing, characterizing the actors inside a group. This influencer can be used to create more psychological safety. The second influencer interpersonal relationships. Interpersonal relationships allows people to try and perhaps to fail without fearing the consequences. May the culture at the turnaround be changed, this influencer could create more psychological safety as well.

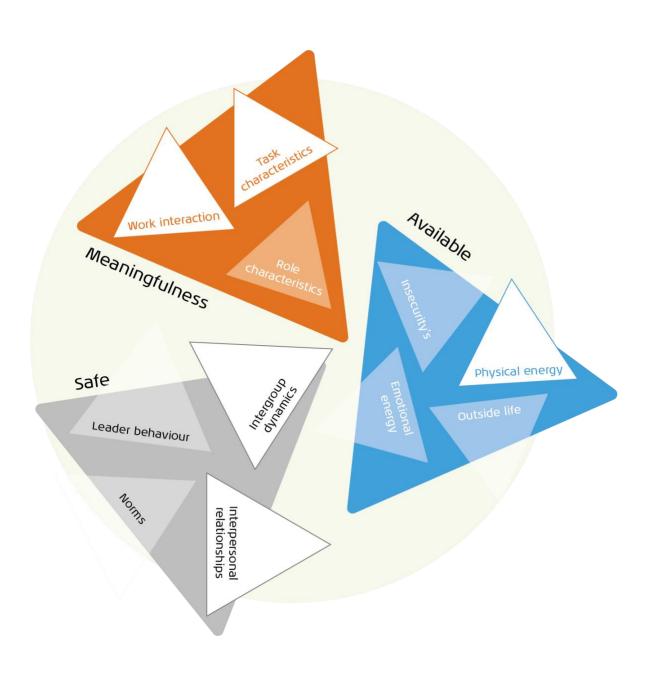


Image 5.4: The small triangles represent the influencers of each psychological dimension defined by Kahn (1990). According to the results of this study (III), it is possible to influence the highlighted influencers at the turnaround.



In the third study of this graduation project the context is analysed. The turnaround of an airplane, the scope of this project, is analysed with the help of shadowing sessions, observations and interviews. For this project, the turnaround begins the moment the aircraft draws to a halt and the parking brake is placed ('on-blocks'). It ends when the airplane is in the air again ('off-blocks'). Though there are more actors involved in the turnaround, such as catering and cleaning, the scope of this graduation project is limited to the actors Gate Agent (GA), Team Coordinator (TC), (Senior) Purser (SP) and Captain (CC) (as

The research questions asked was:
What are the main characteristics of the turnaround and its actors involved?

The turnaround

part of the Cockpit Crew).

At the turnaround, different actors are responsible for different processes at the ground, at the airport and in the airplane. Image 5.2 shows an overview of the processes taking place at the turnaround. FlyCo wants to improve the turnaround to limit the so-called short delays of less than 15 minutes with the help of the applications developed for employee usage.

The Gate Agent (GA)

A Gate Agent is responsible for passenger boarding at the airport. The responsibility lays not only in a fluent and on time boarding, but as well in offering the best service at the airport to the passengers. The GA can be seen as the 'Possessor'. He or she has access to all the information due to the large number of tools available. The GA uses 7 tools, such as applications on a desktop computer and a phone. The GA is the only actor who always

meet all other actors working at the turnaround, because the GA stands at the gate where the Cockpit Crew (CC) and Cabin Crew (SP) arrives, and where the Team Coordinator (TC) picks up hand luggage. The job of a GA is specifically service orientated. The world and work of the GA's is visibly different than the world of the other actors.

The Team Coordinator (TC)

The TC is responsible for guiding his teams to load and unload the airplane with cargo and baggage on time and in the right manner. The Team Coordinator is mostly the first point of call for other actors at the turnaround, mostly to solve problems. The TC communicates with other actors only when there are problems at the ground, such as a missing bag, missing catering or missing passengers. The TC can be seen as the 'Executer'. The work the TC's do is very physical and the TC's world is a real man's world with a no-nonsense attitude. TC's are executing the tasks that the other actors are asking for.

The Senior Purser (SP)

The (Senior) Purser is the manager of the Cabin Crew working inside the airplane. The SP is mainly waiting for information until the Crew can start doing their job. At the turnaround, the SP and Cabin Crew only do the security checks inside the airplane and when the boarding starts, their real responsibility starts. The SP is most in contact with the Cockpit Crew and at times with the GA. The job of the SP is to be very well representative to the passengers. There is an extreme silo culture visible at inflight services with a strong own culture. Because the SP's do know how to create a team in a time limited context, the SP is called 'the Creator'.

The Captain (CC)

The Cockpit Crew, containing a Captain and a second officer (co-Pilot), are responsible for a safe flight. The CC can be seen as the 'Motivator'. The CC is the only actor who has the feeling to contribute to FlyCo, as well due to his/her very large responsibility. The CC stands high in hierarchy and as well expresses that to the other actors. Therefore, the CC could use his/her position to be the motivator of the turnaround team.

Analysis

Valuable insights are obtained in this study about the turnaround. A lot of processes are active during the turnaround and therefore the dependencies between actors are very large. Unfortunately, there is almost no (face-to-face) contact between different actors, only when needed. As well, the actors mostly work one time in their lives with the same actors. Due to the time limit and the short collaboration, there is no team feeling between the actors. There is as well no feeling of contribution to the performance of FlyCo. Although there is no team feeling among the actors, there is a team feeling between actors inside each group. Communication is done through portophone, times face-to-face. and at Digitalization does influence the work of the different actors a lot.

When connecting the results of this study with the findings in literature, aspects which should be triggered to improve engagement are not visible at the turnaround. Some influencers identified by Kahn (1990) are not possible to influence during the turnaround, such as insecurities of a person. But, during this study it was possible to identify which influencers could and should be influenced (by design) at the turnaround. In image 5.4. the chosen influencers are highlighted.

WORKING TOGETHER AT THE TURNAROUND

STUDY IV

6.1 Research question and approach

After analysing the turnaround and its actors, it appeared that collaboration between the different actors is key and that the communication is at times not that good. Being a team appears to be very important. In this second study about the context, the focus lays on working together at the turnaround, uncovering what teaming is for the different actors and how teaming could be stimulated.

The research question of this study is:

HOW DO THE DIFFERENT ACTORS WORK TOGETHER AT THE TURNAROUND, AND WHAT IS A TEAM FEELING FOR THEM?

In this study, a generative session (image 6.1) is conducted with four participants, each participant representing one actor. The generative session is a technique used to uncover what people know, feel and dream (Sanders & Stappers, 2012).

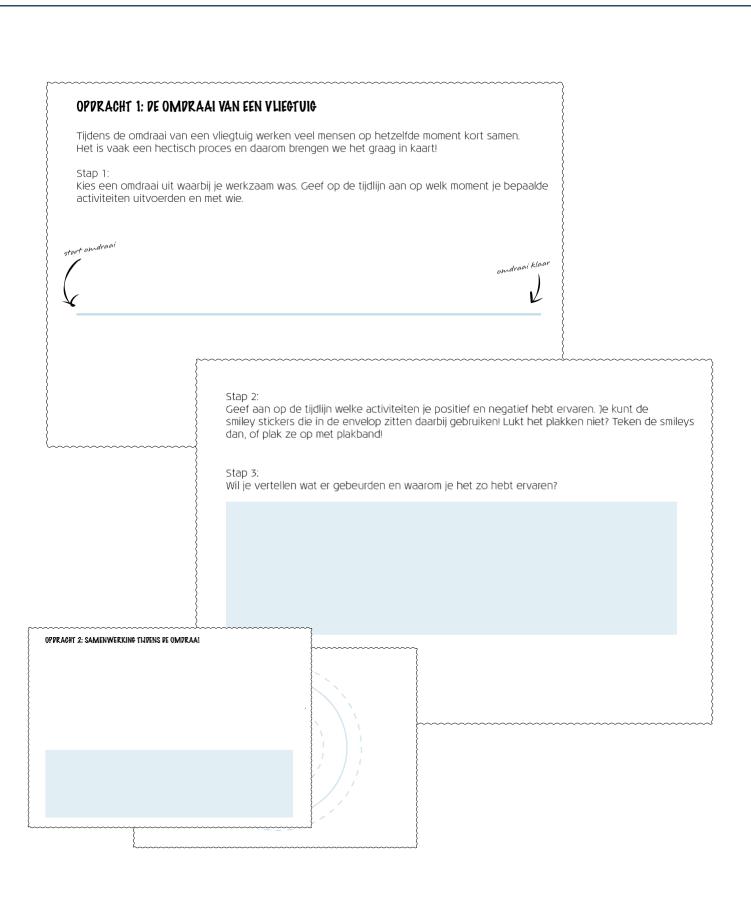
In these sessions it is the goal to uncover people's memories of past experiences because that influence how they behave and feel in the moment. In this session the focus lays on the experiences during the turnaround concerning communication and teamwork.

Before the generative session took place, the participants were asked to fill in a sensitizing booklet, which is visualized in image 6.. With this booklet the actors are warmed up for the session.

During the session, the participants were asked to describe their experiences in specific situations with the help of images and questions, such as positive and negative experiences during the turnaround in the past, the collaboration between different actors and the description of the ultimate future turnaround. As well, a short co-creation moment was planned in which a discussion took place about creating optimal collaboration between the actors.



Image 6.1: The generative session took place with four participants, each participant representing one actor.



6.2 Results

At the generative session a Gate Agent (GA), a Team Coordinator (TC), a Senior Purser (SP), and a Captain (CC) attended. Three out of four attendees are 'nevenfunctionarissen'. This means that they are working at the operations, but they also work parttime at Digitizing department. Due to this, the actors are somewhat biased about new technology and possibilities.

It became clear that none of the actors work together on one whole turnaround. Due to efficient planning, it almost never occurs that the same actors work on the arrival and the departure of the same airplane. The arriving Cabin and Cockpit Crew leave the airplane at arrival, and a new GA and TC arrive when the Cabin Crew is gone. Concerning teaming, the departure processes are mainly important. Due to this, this project will further focus on the departure processes of the turnaround.

At the moment, the turnaround is experienced

Current and past experiences

as 'one chain'. All different processes and actors are dependent on one another. If something goes wrong, all actors and processes are influenced by that. In terms of communication a lot goes wrong because of tooling. For example, the portophone does crash now and then, and the TC is sometimes not understood because of all the noise of the airplane outside. Still, good verbal communication is essential for a good flight handling, as well as having trust in the system and in a good collaboration. A lot of complex processes are happening during the turnaround. Due to the large dependencies and the time constraints, a lot of stress is visible. As the results of study III has

shown already, the actors do not know each other and that they are therefore more connected with their direct colleagues than with the team at the turnaround. It at times

happens that actors snap at each

other without a very clear reason. This is why combined face-to-face communication with communication via a portophone is preferred. To know with who you work is valuable in order to know how to react or proact.

Future experiences

After asking the participants to explain their future experience of the turnaround with the help of images, the explained the ideal future turnaround like the following interaction vision: it would feel like being in the flow, inrhythm, smooth and easy-like. It would create a boost of energy.

Communication should go in person, but as well via portophone or iPad. Important is that personal contact is still possible. The turnaround would start with a short meet and greet with all actors and would be finished as well with all actors involved.

Just like communication, it is important to have a shared purpose in the process. The different actors have a very strong individual goal at the moment, but those goals at times differ from each other. It is then not strange that the actors do not work together.

"IF EVERYBODY IS WELL INFORMED AND HAPPY, YOU CAN BE IN A GOOD FLOW, EVEN IF DISRUPTIONS TAKE PLACE. THAT IS A NICE TURNAROUND PROCESS"





Communication via a (digital) tool —





Communication via – face-to-face

Image 6.2: The dots represent the participants' idea of teamwork and communication in the present (orange) and future (blue).

"THE DIFFERENT ACTORS DO STILL WORK IN THEIR OWN SILO AND THAT NEED TO BE CHANGED. WE NEED TO WORK TOGETHER"

In image 6.2 the results of the question to map different extremes is visualized. Asked is to put the orange dots (today) and the blue dots (the future) on the line where it represent their idea of teamwork and communication. As can been seen is that the actors think that they do not work individual, nor as a team during the turnaround at the moment. In the future they would want to work as a team more clearly. Communication does now happen via tooling and in person. In the future that should be combined as well, with a bit more focus on communication in person.

Image 6.3 shows the words used by the participants to describe a team. Mainly, words like 'shared goals', 'communication' and 'collaboration' are mentioned.



Image 6.3: Words used by the participants of the generative session to describe a team.

6.3 Analysis and scale-up

The results obtained in this generative session are adding up to the results obtained at the observation sessions. A lot of information was already identified during the interviews, but some new valuable insights are obtained:

The turnaround is experienced as a stressful, time limited moment where complex processes occurs and where dependencies between actors are very large.

Due to planning, the actors hardly see one another again. That is why teaming has to occur in a very short timeframe.

Good communication and having a shared purpose or goal is key in order to create a team feeling.

Knowing the frustrations and difficulties of the other actors would make collaboration easier.

Face-to-face contact is valuable for actors, although this moment should be short and combined with communication via digital tools (portophone, iPad, telephone).

All actors do share one thing: they have a 'blue heart'. They are proud to work for FlyCo.

6.3.1 Questionnaire

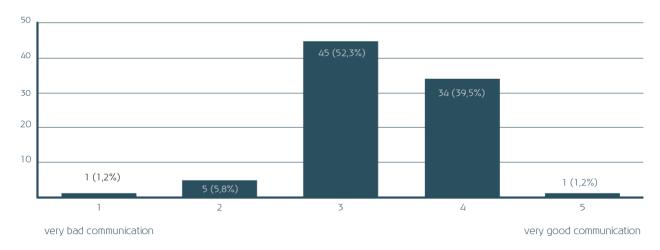
This and the previous study are conducted with 14 people working at the turnaround. It is important to check if these results are applicable for a larger population. To scale-up the results, a questionnaire is conducted with 86 respondents varying from Gate Agents (27), (Senior) Pursers (52) and Captains (7). Unfortunately, the Team Coordinators were not able to respond to the questionnaire.

The questions asked and the results are visualized in graphs in image 6.4 untill 6.9.

The respondents could choose an answer between 1 and 5: e.g. from very bad communication (1) to very good communication (5). The respondents were asked to clarify their answers for each question as well.

The respondents are working for FlyCo between 10 and 35 years.

How do you experience the communication during the turnaround on average?



How important is face-to-face communication for you during the turnaround?

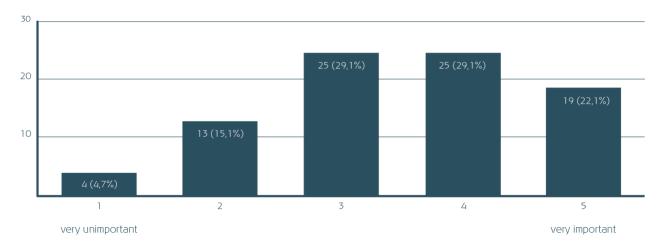


Image 6.5.

Is there a team feeling between different actors working at the turnaround? Think about the actors Purser, Team Coordinator, Gate Agent and Captain.

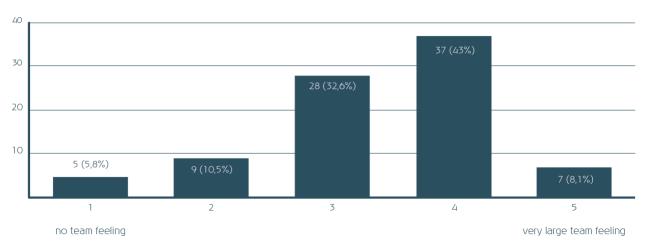


Image 6.6.

Is digitalization impacting the way you work at the turnaround positively or negatively?

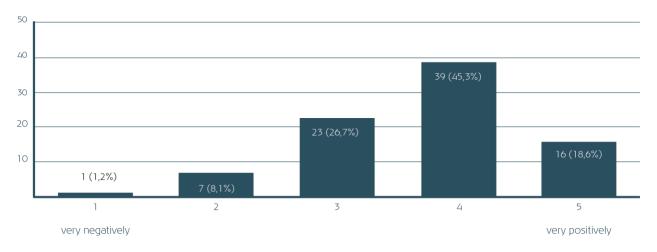
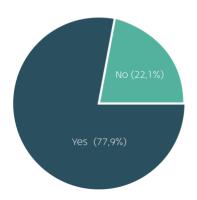


Image 6.7.

Would you like to increase the team feeling between the different actors involved in the turnaround?



Do you prefer communicating at the turnaround with a tool, via face-to-face or both?



Image 6.8.

Image 6.9.

As can been seen in the results presented in the images, is that the insights obtained in the previous studies are representative for a larger population at the turnaround. Still, some interesting insights are found:

Communication

At the moment, the communication between the actors is experienced so-so (image 6.4). Face-to-face communication is experienced as important (image 6.5). 52,3% chooses a 3 out of 5 for how good the communication is at the moment, and 29,1% chooses a 4 in importance for face-to-face communication.

"We know the minimum of information. It is ridiculous that the passengers are more informed than we are." - CC

"Mostly, good communication can occur just because of yourself. If you set clear agreements with the others involved and communicate on time, then there is no problem." -GA

"Communication depends very much on the persons who you work with." - SP

"Face-to-face communication creates more comprehendible collaboration." - TC

"If there is clear information and we get all the information needed, I don't need face-to-face meetings." - SP

Team feeling

At the moment, there is a larger team feeling than expected (43% of the respondents choose a4out of 5 for team feeling, image 6.6). Although this is the opinion of the respondents, 77,9% wants to improve team feeling (image 6.8)

"Conflicting interest have negative consequences for the results." - GA

"Between the GA and the TC there is more team feeling than with the SP and CC." - SP

The respondents were asked as well to name one word that respresents a team. The results are shown in image 6.10.



Image 6.10: a word-web with all the words mentioned by the respondents when asked to describe a team in one word.

Digitalization

A lot of respondents did not work yet with digital tools other than the PC.

Due to overload of communication and binary tools, the participants did not all yet try to use the new application available for them. Still, digitalization is impacting the work at the turnaround positively (image 6.70). It is prefered to communicate face-to-face with a tool (50%, image 6.9).

"I use the iPad not that much, but I do see positive developments." - TC

"Internet connection is very important, it fails a lot times." - SP

"With the help of digitalization the information is available on time and this makes it easy to anticipate on problems." - GA

Differences

With these results it is possible to check if there are large differences between the different actors in this population. The stereotype characteristics mentioned in the previous study are visual in these results as well. Unfortunately, the opinions of the different actors were probably more based on personality than on their role inside FlyCo. For example, some Senior Pursers mentioned that there is no teaming, but other Senior Pursers mentioned the contrary.

The up-scale results still show that the findings found in the previous studies are representative for a larger population employees working at the turnaround.



In this second study about the context of this project, a generative session is done to get to know the four actors working at the turnaround a bit more thoroughly. It is seen in the previous study that the actors need to work together and that they are very dependent on one another, still there is no team feeling. In this study the research question asked istherefore:

How do the different actors work together at the turnaround, and what is team feeling for them?

Generative session

During a generative session the participants were asked to describe their experiences in specific situations with the help of images and questions, such as positive and negative experiences during the turnaround in the past, the collaboration between different actors and the description of the ultimate future turnaround. As well, a short co-creation moment was planned.

The results obtained in this generative session are adding up to the results obtained at the observation sessions. A lot of information was already identified during the interviews, but some new valuable insights are obtained:

The turnaround is experienced as a stressful, time limited moment where complex processes occurs and where dependencies between actors are very large.

Due to planning, the actors hardly see one another again and work only on the departure or arrival of an airplane, not on a whole turnaround. That is why teaming has to occur in a very short notice.

Good communication and having a shared purpose or goal is key in order to create a team feeling. At the moment the different actors have very strong department goals, which do not match with one another.

Face-to-face contact is valuable for actors, although this moment should be short and combined with communication via digital tools (portophone, iPad, telephone). Combined face-to-face communication with communication via a portophone is preferred, because it is valuable to know with who you work is valuable in order to know how to react or proact on one another. Knowing the frustrations and difficulties of the other actors would make collaboration easier.

All actors do share one thing: they have a 'blue heart', they are proud to work for FlyCo.

Questionnaire

This and the previous study are conducted with 14 people working at the turnaround. It is important to check if these results are applicable for a larger population. To scale-up the results, a questionnaire is conducted with 86 respondents varying from Captains (7), (Senior) Pursers (52) and Gate Agents (27). Unfortunately, the Team Coordinators were not able to respond to the questionnaire.

At the moment, the communication between the actors is experienced so-so. Face-to-face communication is experienced as important. 52,3% chooses a 3 out of 5 for how good the communication is at the moment, and 29,1% chooses a 4 in importance for face-to-face communication.

At the moment, there is a larger team feeling then expected (43% of the respondents choose a 4 out of 5 for team feeling). Although this is the opinion of the respondents, 77,9% wants to improve team feeling.

Due to overload of communication and binary tools, the participants did not all yet try to use the new application available for them. Still, digitalization is impacting the work at the turnaround positively. It is prefered to communicate face-to-face combined with a tool.

The scale-up results show that the findings found in the previous studies are representative for a larger population of employees working at the turnaround.

A TEAM

7.1 Research question and approach

It appeared in the previous studies that the Cabin and Cockpit Crew are professionals in creating a team within a short moment. Because team feeling is lacking between the different actors working at the turnaround, it is of value to understand how teaming between Cabin Crew members or Cockpit Crew members is happening. Both teams do meet one another an hour maximum before departure, but within this short period of time, the individuals do form a team with the unknown colleagues. Because of this finding, this study analyses the Cabin- and Cockpit Crew is analysed by 'being part of the team'. The research question asked is:

HOW DO YOU CREATE A TEAM WITHIN A TIME LIMITED CONTEXT?

To answer this question the writer of this thesis is immersed in the real work. As a real Cabin attendant, it was possible to be part of the process of the creation of the team, as well as being part of the team. The research method used was "Empathy experience" (Userfit Tools, 2012). "With empathic modelling the designer/developer tries to put themselves in the position of the disabled user" (Hoss and Roopani, 2017).

STUDY V

7.2 Results and analysis

Being part of the team creates the possibility to immerse in the work of Cabin Crew. The whole process of one shift is analysed and contains different steps:

Meeting and briefing

The different Cabin Crew members do not know one another before the shift starts. An hour before the passengers will board, the Cabin Crew has their briefing. In this briefing, the Senior Purser is responsible for creating a team. He/She asks questions like "What are we going to reach today?" and "What will be your contribution to this team?" The Cabin Crew members enter the briefing room as individuals and leave the room as a team.

2. Together time

After the briefing session, the team will walk to the gate, where they are board on the airplane. In this process the Cabin Crew gets to know one another a bit more personally. They check unconsciously how to react or proact on the team members during work. Questions to check physical and emotional state and way of working are therefore asked.

3. The real work

Before boarding, the Cabin Crew is responsible to do some tasks inside the airplane, like some technical checks and catering preparation. When working, the 'concentration mode' is on.

CABIN CREW MEMBERS DO NOT KNOW ONE ANOTHER BEFORE THEIR SHIFT STARTS. THEY ENTER THE BRIEFING ROOM AS A INDIVIDUALS AND LEAVE AS A TEAM.

After work

Because Cabin Crew can be away for some weeks, the Crew working on same flights do have time to meet with each other at destination. Especially because they are at new places in the world, the Crew meets with each other to have dinner and to go on touristic trips.

As is seen is that teaming for the Cabin Crew, but as well for the Cockpit Crew, does mainly go automatically. This is also due to the selection process at FlyCo. Both Cabin as Cockpit Crew members are naturally social and open people and hard workers. They are passionately about their work and definitely have a strong 'blue heart'. According to Froehlich (2018), the Cabin and Cockpit Crew are 'passion sharers'. At the moment, the almost 10.000 Crew members have years of experience. That is why they know how to work with different people each time very well.

To answer the question how to create a team in a time limited context: the teaming occurs definitely due to the very specific briefing moment between all Cabin Crew members. By mapping the personality and emotional and physical state (unconsciously), the other know with whom she/he works for that coming shift.

At the end of this graduation project it was possible again to dive into the world of Cabin and Cockpit Crew. With this additional study the writer of this thesis was able to work as a Cabin Crew member for 22 hours in total (two flights). In this way, it was possible to another time immerse in the real work. New insights were obtained, while elaborate conversations were done with the Senior Purser, Purser and Cabin and Cockpit Crew of the flights.

What is seen is that the employees working in the air are hard working employees, doing their best coping with the large time pressure. While the hierarchy is visible for both Cabin as Cockpit Crew, new digital tools are also only used when leaders (SP's) ask their Crew members to use them. While the work of Cabin Crew is very customer focused, App-Z (the application developed for Cabin Crew) comes second.

What is seen as well is that there is limited knowledge about the work the other actors do during the turnaround.



The Cabin and Cockpit Crew are professionals increating a team within a few minutes. Because a team feeling is missing between the different actors working at the turnaround, it is of value to understand how teaming between Cabin Crew members or Cockpit Crew members is happening.

In this study the Cabin and Cockpit Crew are analysed by 'being part of the team'. The research questions asked is:

How do you create a team within a time limited context?

The research method used in this study is 'Empathy experience' (Userfit Tools, 2012).

Results

Being part of the team gives the possibility to immerse in the work of Cabin Crew. The whole process of one shift is analysed as well as at destination. At the end of this project, another mini study is conducted by travelling as a Cabin Crew member also on twoflights.

The fast teaming occurs mainly due to the very specific briefing moment between all Cabin Crew members. By mapping the personality and emotional and physical state (unconsciously), the other know with who she/he works for that coming shift.

An hour before the airplane should be boarded, the Cabin Crew has their briefing. The Cabin Crew members enter the briefing room as individuals and leave the room as a team. In this briefing, the Senior Purser is responsible for creating a team during this briefings session. He/She asks questions like "What are we going to reach today?" and "What will be your contribution to this team?

What is seen as well is that there is often no much knowledge about the work the other actors do during the turnaround.

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EXTERNAL ANALYSIS

STUDY VI



Now the context and the actors involved are mapped, it is valuable for this graduation project as well to understand how employee engagement is created in other environments. Three companies, a small start-up called Tony's Chocolonely, the medium sized enterprise Incentro, and airline Transavia are analysed. These mini studies are conducted both for inspiration as to check if the results found in literature are indeed applicable in real life context.

In this study the following research question is asked:

WHAT CAN WE LEARN FROM OTHERS ABOUT EMPLOYEE ENGAGEMENT?

In each company one or more employees and/ or leaders are interviewed.

8.2 Tony Chocolonely

8.2.1 Set up

For this interview Rense was interviewed at the office of Tony's Chocolonely at the 'Westergasfabriek' in Amsterdam. Rense is "Choco Superstar" at Tony's Chocolonely. Three months ago, Rense started at the company to open a new Tony's Chocolonely store at the 'Beurs van Berlage' in Amsterdam. In this interview it was possible to get to know Rense and Tony's Chocolonely, herecalled Tony's, and the creation and protection of their engaged employees.



Tony's Chocolonely is a Dutch chocolate brand that fights for a 100% slave free world. In a few years the company is grown to be the market leader of chocolate in the Netherlands. Due to this rapid growth, their communication about the importance of employees, the very inspirational brand and growing reputation, it is very useful for this project to interview an employee at this company.

The following questions are asked during this interview:

- How can you feel that employee engagement and well-being is important for the company?
- 2. How do you notice that Tony's is putting their employees first?
- 3. What does Tony's do to improve employee engagement and well-being?
- 4. Does Tony's use digital tools for this?
- 5. How important is well-being on the work floor for you?
- 6. Could you describe the work culture of Tony's?
- 7. What is it that makes you feel part of this organization?
- 8. Do you feel valued at work and what does this stimulate?
- 9. How does Tony's facilitate teamwork and communication?

8.2.2 Findings

Questioning about Tony's employee engagement and employee well-being, the company states that the well-being of their employee is number one: "Crazy about chocolate, serious about people". They not only mean that they are serious about their goal to erase slavery from the chocolate industry and help cocoa farmers with their production, they as well mean that they are serious about their own people: their employees.

Tony's tries to engage with the employees from the start of their career at the company. A lot of small details make the employees feel at home: a couple of weeks before the start at Tony's the employees receive a hand-written message that tells them that the current employees are looking forward for the employee coming to Tony's. When starting, "everybody comes to you to meet you. I'm not only engaged with Tony's, but Tony's is as well engaged with me." There is no 'silo culture' when talking about the work atmosphere. "It is possible that your desk is next to the desk of the CEO or CFO, which creates a feeling of a flat organizational structure in the company." Next to that, workplaces are switched every half a year.

There are different aspects which gives Rense the feeling that Tony's tries to be engaged with its employees. Feedback is a job resource which is very visible in this company and visibly creates engagement. Every two weeks an employee has a "walk in the park" with his/her supervisor, which is called a "Ketchup". Not only feedback is a topic of conversation. Personal goals, losses and events are also being discussed.

Performance is communicated among the whole organization at the Monday Morning Meetings, as well if the performance is in decrease.

Being yourself and part of the team are also important feelings that are needed in order for Rense to feel engaged with Tony's. Not being laughed at for being yourself is a very important feeling that an employee needs in order to feel part of the organization.

Tony's has four core values which are visible at the work place and communicated among the organization directly. A 'wilful' culture creates that "everybody thinks for themselves", you have the freedom of doing what you are good at. The next value is 'enterprising'. "Everybody is an entrepreneur inside this organization and that creates constant results and a good collaboration of initiatives." The third and fourth core values are 'fun' and 'critical'. Although all employees like living their live, they are critically about what results are delivered. If you do not deliver what is asked, they are "friendful critical and dare to speak to one another."

In the interview with Rense it became clear that the Tony's team is very important for Rense to be engaged. "I come to my work because this feels as my home, although the Tony's are not specifically my friends. Good colleagues who help each other is very stimulating to feel at home."

"ICANBE FULLY MYSELF AT THE ORGANIZATION, ALTHOUGH INEED TO WORK HARD."

8.2.3 Key insights Tony's Chocolonely

- The company Tony's Chocolonely believes that, in order to create employee engagement, the employees need to be able to give input in the organizations purpose. Special meetings facilitate the possibility to have a saying in the organizations' path and success.
- A silo workplace culture is avoided to create the feeling that every employee is of value inside the organization.
- Although there is a boss, he does work at the same work spot as a normal employee. There is a flat organizational structure.
- The possibility to give (and receive) feedback is an important aspect of the employee engagement at Tony's Chocolonely.
- To be able to be yourself contributes to the feeling of being part of the organization.
- Teaming is also an important aspect impacting employee engagement.

Incentro

8.3 Incentro

8.3.1 Set up

For this mini study at Incentro two persons are interviewed. Edwin, managing director of Incentro Rotterdam, and Coen, managing consultant, are interviewed. Due to time limit at Tony's, itwaspossible to ask more questions here than with the interview at Tony's Chocoloneley. The questions asked are added in appendix C.

Incentro is an innovative online service provider founded in the Netherlands twelve years ago. Nowadays, seven branches are placed in the Netherlands, one in Spain and one in Kenya. Incentro has about 300 employees. Incentro is chosen to be Best Workplace in the Netherlands in 2012 (1st), 2014 (3rd), 2015 (3rd), 2016 (3rd) and 2017 (1st) (Great Place to Work Institute, 2018). The Great Place to Work Institute initiatives research and recognize leading organizations worldwide, especially about workplace excellence and people's management.

The company Incentro is chosen to be used for a mini study in this graduation project due to its very good performance on workplace excellence.

Incentro calls their employees Incentronauten.

"INEVERY DECISION WE MAKE, WE THINK ABOUT THE CONSEQUENCES FOR THE EMPLOYEE. DOES IT CONTRIBUTE TO THEIR HAPPINESS?"

8.3.2 Findings

The mission of Incentro is 'digital happiness'. The whole organization is organized such to achieve this. The believe is that if employees are happy, the results will follow and thus eventually creates content clients.

At Incentro the philosophy of Eckhart Winston is applied. Mr. Winston believes that if you are a company that is growing larger than 60 employees, you should split the company in two different branches. That is what happens at Incentro as well. Every branch (location) has its own expertise.

What is very interesting at Incentro is that every branch of Incentro is fully autonomic. This means that every branch is responsible for its own strategy and results. Everything should be done by the employees themselves, such as forging new relationships and partners and as well hiring new personnel. Basically, every branch is a small company connected, following these agreements:

- Every branch needs to score a 7,5 on average on employee happiness.
 Every week the employee happiness is measured.
- Every branch needs to be financially healthy.

As is clear, self-direction is very important at Incentro.

As an 'Incentronaut' you are part of the whole Incentro organization. Due to the small size, the branches create that the employee is more bound to the organization. Freedom is as well a very important job resource at Incentro. Freedom is created because a lot of trust, responsibility and decision making is given to the Incentronauten. "At the end of the day, they are responsible for the choices they make and the results they deliver." Engagement is important for Incentro, but it is not the main goal. The main goal is happiness, and "engagement contributes to happiness."

For Incentronauten it is very important to have a say in the future of Incentro. Incentronauten have a lot of influence on the goals of the whole company and especially the branch where they work at.

At Incentro, the organization is flat and structured in cells. Every cell is a team that has its own expertise. The believe is that every team works on its best when it contains of 6 to 10 people. If the teams are bigger, the teams will be unwieldy. As said, the cells are self-directive. The teams need to organize their own marketing, finances and projects. "It is very cool to have this freedom at work. We are entrepreneurs in the safe environment of Incentro."

Coaching is organized internally, but sometimes external parties are invited to give trainings. Different models, such as 'holacracy' and 'sociocracy' are used as inspiration inside the organization.

Incentro is constantly busy to improve the happiness of the employees. Incentro does this by measuring the happiness of their Incentronauten.

"When you measure happiness, you stimulate a conversation and the possibility to give feedback." Measuring is done with the help of a digital tool called Moodforce, an application created by Incentronauten. Other applications are used to measure the happiness as well. Different parts of happiness are measured, such as having a purpose and being the master of your project.

The culture of the workplace can be described best when asking clients. A client has said: "The quality Incentro delivers is good, but it is so much fun to work with an Incentronaut. You see that it is one when you see him passing by." Incentronauten work together constantly. "We want to build a future with our employees, together, that is most important."

Incentro believes that if you want to grow and keep engaged employees, you should definitely not organize everything at one centralized organization.

"IN ORDER TO BE SUCCESSFUL, SELF-DIRECTED TEAMS ARE VERY IMPORTANT. AUTONOMY ISNUMBER ONE. FOR EXAMPLE, A CENTRALIZED HR-DEPARTMENT IS NOT PART OF THAT"

8.3.3 Key insights Incentro

- Self-defectiveness and freedom has great influence on happiness and employee engagement.
- Measuring happiness creates a culture in where it is possible to talk about what is going wrong and how to solve (cultural) problems.
- Feedback moments among employees and from supervisors visibly create engagement.
- Having autonomy as an employee/team is most important to be engaged.
- To be part of a team is very important to feel at home.

8.4.1 Set up

In this mini study Mattijs ten Brink, CEO of Transavia, and Tanny Teijema, VPOperational Development, are interviewed. Transavia is a 50-year-old airline and counts about 2.000 employees. Transavia is a subsidiary of FlyCo. This airline is studied because she can be compared with FlyCo and because of the visible communication to the outside world importance about the of employee experience. Because of the large focus on employees, this company can have very inspiring insights for this project.

Questions were asked based on the CEO's performance at the conference PEGA World 2017 (Pega, 2018) and based on the knowledge about the Transavia Experience Platform. In his speech at the conference, the CEO explained Transavia's vision on employee engagement.

The questions asked are added in appendix C.

8.4.2 Findings

Employee engagement at Transavia

During the interview Mr. ten Brink explained the company's vision on employee engagement. Before he was CEO, other leaders never openly discussed the topic, but Mr. ten Brink definitively wants to improve employee engagement. He thinks that "people can do much more then they think, if they are stimulated." As well, he compares the choice between customers and employees as a choice made when your house is burning. "If I would really need to make a choice between the customer and the employee in such a situation, I would definitely choose the employees. They are here tomorrow still, and you need them; the customer could be gone. New customers can be found anywhere, but employees not."



Although Mr. ten Brink thinks that it is necessary to improve employee engagement, he thinks that, at the end, the employee is personally responsible for it. Still, the organization needs to realize that the organization should create all the circumstances needed for an employee to be engaged.

Creating engagement

Different developments take place within Transavia to create another culture in where employees are intrinsic stimulated to do their job (right):

- Leaderships training days and inspiration days are organized to show leaders inside Transavia, as well leaders working at the operations, how to change their behaviour from a leader who decides into a leader who facilitates.
- The organizational structure is changed from a hierarchical structrue to a circle hierarchy. Therefore the executive committee is as well erased.
- Transavia is, just like Incentro, trying to give their employees more input in the organizational purpose. The teams at Transavia, as well at the operations, are not self-directive, but self-organized. Within jointly established goals the employees are free to do their job how they would like to do it.

At the operations, Transavia wants to create a broader feeling of the employees being responsible for the output of the performance of Transavia. By giving the employees as much as information as they need with the help of digital tools such as the Transavia Experience Platform, Transavia wants to give the decision power back to the employees and therefore as well the responsibility.

"THE CAPTAIN SHOULD USE ALL THE INFORMATION AVAILABLE TO MAKE IMPORTANT DECISIONS HIMSELF, CONSULTING OTHERS INVOLVED. WHEN DECIDED, HE HAS TO FEEL RESPONSIBLE FOR HIS ACTIONS AND EVALUATE IF THAT DECISION WAS THE RIGHT ONE TO TAKE."

Measuring Employee Engagement

A few years ago, Transavia decided to create a measuring method for employee engagement. Before, Transavia was measuring the happiness of the passengers with the model 'passenger experience index' (PXI). Now, a model for measuring the happiness of the employees is implemented as well. With the 'employee experience index' (EXI) it is possible to connect performance with the engagement level of employees. The EXI as well creates the possibility to make business cases based on the value of employee engagement. For example, it is now possible to predict how much of influence the engagement has on the sales and on passenger experience and visa versa. The EXI is measured each year very elaborately and every month within different populations inside Transavia.

"THE EMPLOYEE HAS TO SEE THAT BEING ENGAGED STARTS AT HOME."

Developing digital tools

The impact of digital transformation is as well visible at Transavia. The silo-culture, which is very visible at the turnaround at FlyCo, is as well visible at the operations of Transavia. "Employees as well think in 'us' against 'them' instead of doing it together."

With the development of digital tooling Transavia tries to identify what is needed to create a better collaboration between different sides of the company and different parts of the turnaround. "It should be understood by all that there is one goal to achieve. They have to do it all together." With the Transavia Experience Platform, all the different employees, from service agents behind a desk at headquarters to Crew members in the airplane, have the same view on the information about passengers, employees and flights. Although the platform is very valuable, it is difficult to create a foundation for it at the operations. "We involved the users of the platform very much during development, but when launched, the employees were turned off due to our communication. To make it is a success, you have to keep the conversation running."

In order to create more employee engagement, three main things are important according to the interviewees at Transavia.

- 1. A sponsor is needed at the top. If the CEO is not communicating that employee engagement is important, nothing will change.
- A good foundation is as well needed to improve employee engagement. At the workplace the topic needs to be discussed constantly.
- The employee engagement should be measured in order to connect value to it. With the help of for example the EXI it is possible to make value-based decisions.

8.3.4 Key insights Transavia

- Being an employee-focused company is as well possible for a large company.
- To create another culture more focussed on the employee, a sponsor at the top is needed.
- Input in the organization's purpose appears to be important for employee engagment at Transavia.
- Transavia is measuring employee engagement with their own model called 'Employee Experience Index (EXI)'. Transavia connects the results from the EXI with business cases. In this way it is possible to make decisions based on employee engagement.
- The development and roll out of digital tools in the operations appears to be difficult at Transavia, like at FlyCo, due to the difficulty in involving the future users.



In this chapter the results of the external analysis are presented. Three companies, a small start-up called Tony's Chocolonely, the medium sized enterprise Incentro and Transavia are analysed, both for inspiration and to check if the results found in literature are indeed applicable in real life context.

Findings

The vision on employee engagement All three companies have a specific vision on employee engagement and differs from FlyCo. The companies communicate and act upon the vision that engaged and happy employees are very important. At the end, engaged employees deliver the best results. All companies have employee engagement as one of their core values. Because of the open communication from the top of the organization, the organization is changing towards an employee centred organization in stead of only a customer centred one. In order to reach this, the hierarchy of the organizations are changed from a vertical to a flat or cell-like hierarchy. The believe is that, in order to be employee centred, leaders should facilitate their team members instead of making decisions for them. A theme inside the companies as well is the way the employees are stimulated to give input in the organization's purpose. By creating the possibility to do so, the employees feel more engaged.

Measuring engagement

Both Incentro and Transavia are measuring the employee happiness with their own developed tool.

Incentro is using an application called 'Moodforce' that helps to measure the happiness of the employees. The employees are asked each week to map their happiness at the company. If the happiness scale is below 7.5, leaders act upon this. Because the happiness is measured and the results are communicated among the employees, the topic is discussed and therefore as well improved.

Transavia created their own method 'Employee Experience Index' to measure the employee engagement. With the help of this value it is possible to select business cases connected to the employee engagement scores and the PXI (passenger experience index). The connection of the employee engagement value with business value is very important in order to change the organization and to get mandates at the top of the organization.

Creating engagement

The following insights are obtained in this external analysis:

- In order to create employee engagement, the employees need to be able to give input in the (purpose) of the organisation.
- A silo workplace culture is avoided in order to create the feeling that every employee is of value of the organization.
- A flat organizational structure is needed as well.
- The possibility to give (and receive) feedback is an important aspect of the employee engagement.
- To be able to be yourself contributes to the feeling of being part of the organization.
- Teaming is also an important aspect in creating employee engagement.
- Self-directiveness and freedom is of great influence on happiness and employee engagement.
- Measuring happiness and communicating the results creates a culture in where it is possible to talk about what is going wrong and how to solve (cultural) problems.
- Having autonomy as an employee/team is most important in order to be engaged.
- Creating another culture more focussed on the employee needs a sponsor at the top.



After analysing the subject employee engagement, the turnaround and the actors involved thoroughly, this chapter consists of the synthesis phase of this graduation project. All information gained is analysed and key topics are selected in order to create a design to improve employee engagement at the turnaround.

9.1 From insights to design

As is clear, is that the turnaround is a very interesting and complex environment with a lot of different actors involved, all having their own characteristics, wants and needs. In order to start designing to improve employee engagement, it is important to distillate the most important insights of the exploratory research and the internal and external analysis, and select a design goal. In the previous chapters the findings of each study are elaborately presented.

The following insights from study III, IV and V are interesting for this phase.

No team feeling

There is no team feeling between the different actors involved at the turnaround. This is due to different reasons:

- Large silo cultures exist between the worlds of the GA's, TC's, SP's and CC's. Every actor works for their own goals, not really acting on the needs of the other actors.
- There is almost no possibility to communicate face-to-face due to time constraints and communication via portophone or phone often goes wrong as well.
- Due to efficient planning and the large number of employees working at FlyCo, the actors do only work with one another one time. It happens that the actors do not ever see each other again.

- A large hierarchy is visible between actors. The more stripes an employee has on their uniform, the higher their rang and the more respect is expected.
- Although there is no team feeling between actors involved, the actors do have a team feeling with their own direct colleagues. This team feeling is extremely visible between Cabin (and Cockpit) Crew members.

Feeling of contribution

All actors, except the CC, do not have the feeling that they contribute to the performance of FlyCo. Although the work of the employees is very valuable, they do not have the feeling that their contribution has any influence of the performance of FlyCo as a whole. This is not a strange thought. There are so many employees working at FlyCo at the turnaround (+/- 18.000 employees), that the influence of one individual is hard to measure.

Large blue heart

Employees working at the turnaround, as well as employees working at the offices of FlyCo, have a large 'blue heart'. They are proud to work for FlyCo as a brand and do receive respect from their peers because they work for FlyCo. A large number of actors working at the turnaround have life time experience in the field. It is not an exception that an employee works for FlyCo for 30 years.

Large dependencies

At the turnaround the actors involved are very dependent on one another. If something goes wrong at the beginning of the turnaround, such as catering, it is possible that all actors are penalized. This can result in the airplane leaving too late.

Large time-constraints

While FlyCo wants to overcome competition, the business decided that the turnaround needs to go as quick as possible. Due to those decisions,

the time-constraints at the turnaround are very large. Processes need to be finished in a short period of time without any delays. Almost all problems summed up above are the result of large time-constraints at the turnaround.

Digital transformation

The new digital applications developed for the actors are not used as intended (yet), because the old tools are not erased from the actors' processes and rituals and because the employees are not trained to use the new tools properly.

No feedback moments

No actor except the CC had a feedback moment with their superior about their performance after the large reorganization called HPO. This reorganization started in 2016.

The insights from the external analysis are interesting for this phase as well. The insights from this study are summarized in paragraph 8.5 and are taken into account in creating the design goal.

9.2 Design goal

The turnaround and the actors involved are analysed, and the results from the internal and external analysis are taken into account in selecting a design goal.

In paragraph 6.3 it is shown that different influencers found by Kahn (1990) can be tackled to improve employee engagement, such as work interactions, task characteristics and interpersonal relationships. In the exploratory studies it is seen that the actors lack in team feeling, and that a team feeling is important in order to create employee engagement. The missing team feeling is creating a lot of (and almost all) problems at the turnaround. Therefore it is decided that the design goal of this graduation project is the following:

"IMPROVE THE TEAM FEELING BETWEEN THE DIFFERENT ACTORS (GATE AGENT, TEAM COORDINATOR, (SENIOR) PURSER AND CAPTAIN) WORKING AT THE TURNAROUND."

The following hypotheses are selected in order to start designing concepts:

- 1. The team feeling will improve when the performance of the team is communicated.
- 2. By connecting different actors online, the team feeling will be improved.
- 3. A (digital) stand up meeting will improve the team feeling.
- 4. By selecting a goal together, the team feeling will be improved.
- 5. Giving a compliment improves the team feeling.
- 6. When knowledge about the work of others improves, the team feeling will grow as well.

While this project is conducted for Digitizing department, it is decided that the final design of this graduation project will be in form of a new application or a functionality inside an existing application developed at FlyCo.

The aim of the design is to show FlyCo the importance of employee engagement and a possible cultural change.

PROPOSITION

10.1 Design process

This paragraph provides a short overview of the design process. After synthesis, a brainstorm session was organized with three other designers: the head of design of the FlyCo Digital Transformation department, a designer of FlyCo and an external designer deployed for FlyCo. After this, several rounds of iterations on the concepts were done based on insights gained from feedback from real users. The users were consulted constantly during the concept development.

10.1.1 Brainstorm session

After presenting the most interesting insights from the research at the brainstorm meeting, three main questions were answered during the brainstorm session:

- How can you create a team feeling between the different actors?
- 1. How can you create a feeling of having a purpose?
- 3. How can you create more positive interaction between the actors in this time-limited context?

A lot of valuable insights were gained during the session. In image 10.1, the insights are shown categorized. The most valuable ideas are included in the first concepts. Due to confidentiality not published in this report.

10.2 Concept iteration

Based on all the findings of the previously presented studies, different concepts are created and tested in context. While different decisions are made during the design process and a lot of different concepts are made, the concepts are visualized on the next pages. The concepts and their properties are discussed more elaborately in appendix D.

Image 10.1: all ideas from the brainstorm session categorized.



After concept testing, it is decided that the design will be implemented in the existing FlyCo-App functionality. This app-in-app is installed in the carrier applications App-X, App-Y, App-Z and App-XX.

The different concepts evolved due to testing the ideas with real users. While creating different concepts, every time the functionalities and interactions were tested with the help of mockups on an iPad and on paper. The different concepts are tested and validated with 15 future users.

10.2.1 Features

Some ideas in the different concepts did succeed and others did not. In this section, a short summary is given of the different ideas evolved.

Blue Heart

The blue heart, which is as well used in the final design, is already created in the first concept, but the function of the blue heart changed through the concept developing. First, it is used as a visual to show the user what their personal addition is in the performance of FlyCo and their connectedness with other team members. Later, the blue heart represents how well the process is going by showing a beating, or not beating heart. The blue heart became an important aspect in the user interaction.

Performance feedback/contribution

In the first concept, the user is communicated with his/her performance in numbers, such as the total passengers boarded, teams created and hand luggage collected. In later concepts, the performance feedback is evolved and used. When testing this idea with future users, some performance information appears very valuable

for the user, and some performance information did not. All different users (GA, TC, SP and CC) should receive specific information based on their role and interests.

Teamwork and team members' profile

One of the main reasons why there is no team feeling between the different actors involved, is due to the time limit and missing information about teammembers. In each concept, the team information is visualized and this feature evolved into a functionality that shows the user proper team information and as well gives options to communicate with other team members and ask them for help.

FlyCo-App beingsmart

FlyCo-App is smart at the moment (current app-in- app) in a sense that it consists all information about the processes occurring at the turnaround. FlyCo-App gives predictions, but does only send recommendations at times. In the new design, FlyCo-App is designed as a smart system more extensive: e.g. when the user is near the gate, the user will receive a notifications in where he/she is asked to check in.

Profile

A user profile appeared to be needed. In first concepts, a profile is used to communicate received information and compliments. In the last concept, the profile function is erased, while the carrier apps do already have a profile included and is therefore binary.

Giving feedback

When testing different concepts the 'giving a compliment' option appeared to be very valuable for users. Therefore this option is as well added to the final design, although the feedback does not only include an option to give positive feedback, but as well tips or comments.

Check-in and -out

While it is unclear for actors involved who of the other actors involved in the turnaround are already working on their tasks or not, check-in and -out features were tested. While it is useful to see if other actors are involved already, the users do not want to check in manually every time. Therefore, a functionality will give the option to check in automatically. Checking out will go without any interaction. When the turnaround is finished, the users receive an overview of their contribution and a possibility to give feedback.

Selecting a goal

When testing, it became clear that the goals of each silo (the world of the GA, TC, SP and CC) are not that different from one other. It is difficult for the actors to be creative in choosing different goals each day. Connecting silo's needs to be stimulated in another way other than communicating the goals to each other. Selecting a goal is not implemented in the final design.

View as

The view as option is created in order for the user to see the tasks and problems of the other actors involved in the turnaround. This option is evolved over time as well, and is still partly used in the final design.

10.3. Interaction vision

A good interaction with the concept is necessary in order for the user to use the functionalities, and as well to reach the ultimate goal: Improve the team feeling between the different actors involved at the turnaround.

In different concepts, different interactions are tested. The interactions were tested by simulating the interaction that would take place. Users were asked to work with the concept and asked about their experience. At first, an interaction vision was chosen and tested. The interaction needed to be like "being in the flow, in rhythm, smooth and easy-like". Unfortunately, the interaction vision tested was not reached and it was seen that a different interaction was needed in a stressful and time-limited process. After a brainstorm session it was decided to change the interaction vision to:

THE MOMENT WHEN YOU FEEL RELIEVED AND RELAXED AFTER ASTRESSFULL AND UNCERTAIN SITUATION.
THE SIGH OF RELIEF

10.4 Final Design

After testing and iterating elaborately, the last step in the design process is the creation of the final design. In this paragraph the final design is presented.

The final design is a series of functionalities collected in 'the Blue Heart of FlyCo'. The design is visualized in image 10.3, but will be explained thoroughly while the buttons inserted in FlyCo-App consists of various options, smart notifications and an interaction that can't be visualized in one image.

The story of Kim, a Gate Agent at the turnaround of flight 0927 to Inverness, and her use of FlyCo-App with the integrated Heart of FlyCo is visualized on the next pages.

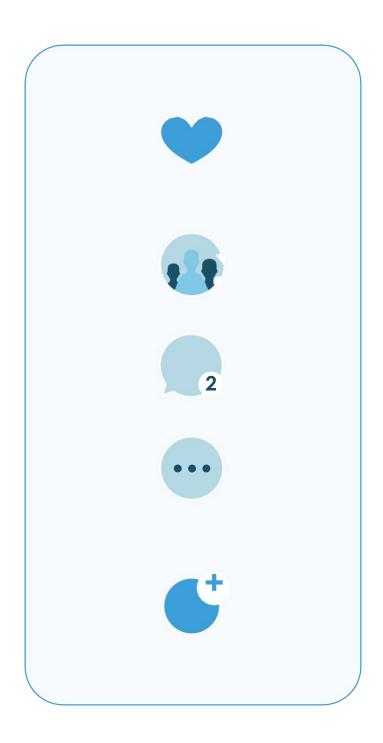


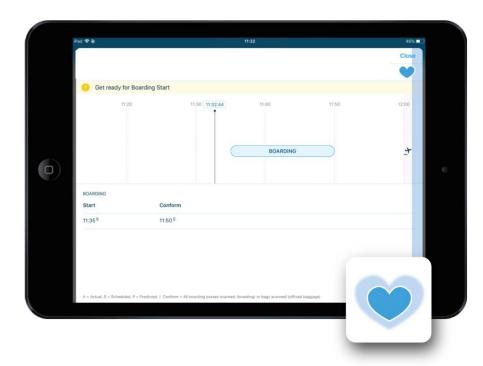
Image 10.3: the final design: functionalities collected in the Heart of FlyCo.

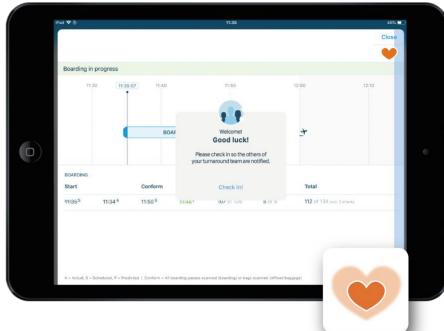
Kim, the Gate Agent for flight 0927 to Inverness, UK, arrives at the gate for her shift. When she arrives, she sets up her iPad while she needs App-X for passenger info and FlyCo-App for a good overview of the turnaround.

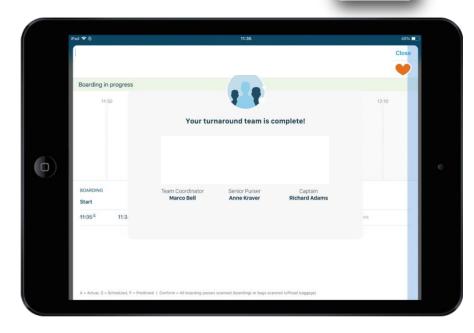
In FlyCo-App, the Blue Heart is always visible and beating when the turnaroundisin progress. It is a nice feeling for her to have all information available and reachable in one click.

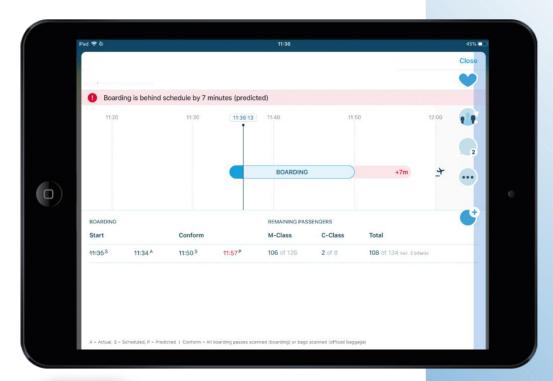
When she is getting ready to start boarding, the Blue Heart notifies her with a message. The Blue Heart beats faster than regular, and it turns orange. When she pushes the Orange Heart, the message tells her that she needs to check in. She checks in, so the other turnaround team members know she is reachable.

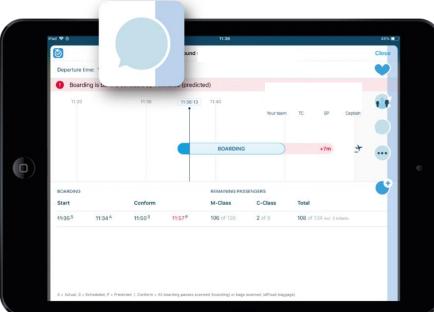
When all other turnaround team members are checked in, Kim is notified again. She now knows that she can contact the team members when help is needed.





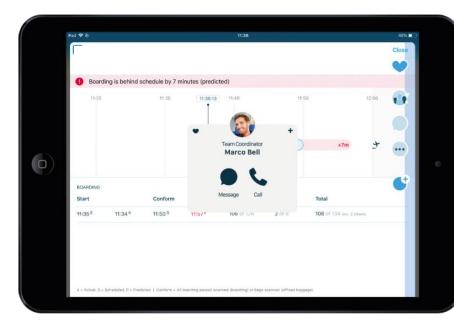






The boarding has started, but Kim has some problems with collecting the hand luggage. Because there are some problems, the boarding gets behind schedule.

She opens the Blue Heart menu for team information to contact the Team Coodinator of this flight.



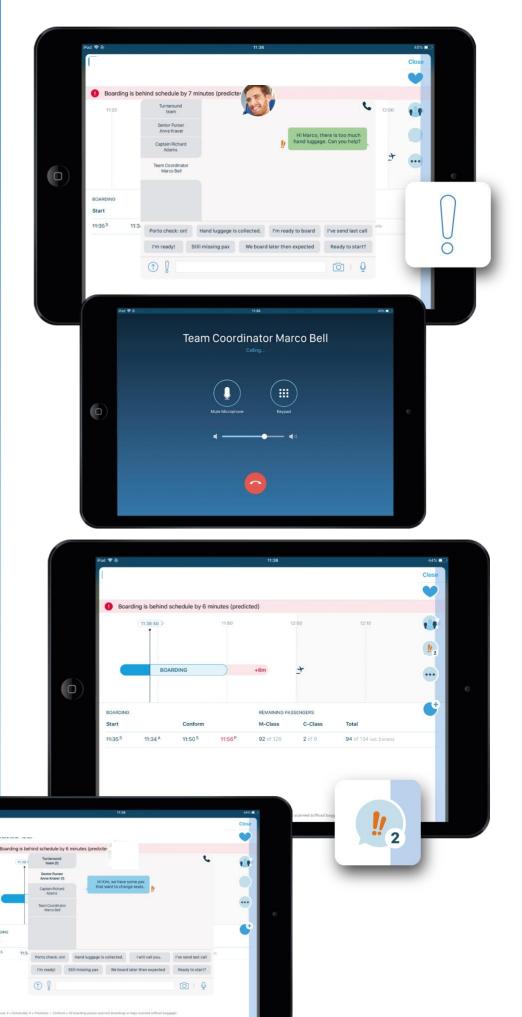
Getting in contact with the turnaround team members is easy. Previously, the TC was not always reachable due to the noise outside and the unreliable portophone. Nowadays, Kim can contact Marco via a chat or call function.

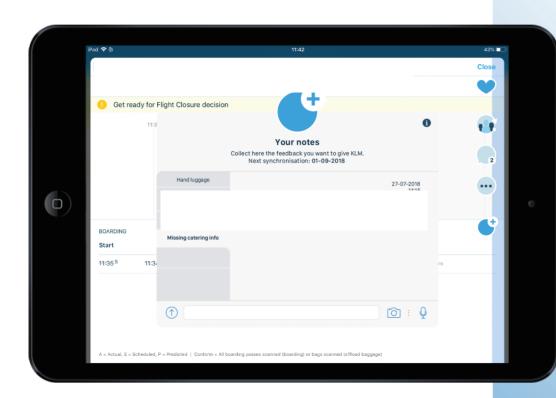
While the line of passengers that want to ask questions is growing, Kim has no time to type a long message to Marco. Luckily, there is this option to select common used messages. The chat functionality does learn what messages are used regularly by the user and show those options to Kim. It is as well possible to add regularly used messages by Kim herself. When the message is urgent, an extra option helps Kim to notify Marco with sound also.

Marco is probably not using his iPad at the moment, and therefore Kim calls Marco directly with the iPad. Their earphones makes it easy and concisely to keep in contact.

Kim is not the only one having problems during the turnaround. The Senior Purser, Anne, needs some help. She has send Kim a message with 'high priority', which is now visible at the menu in a beating motion. The message is not only visible at the menu, the iPad will also produce a sound.

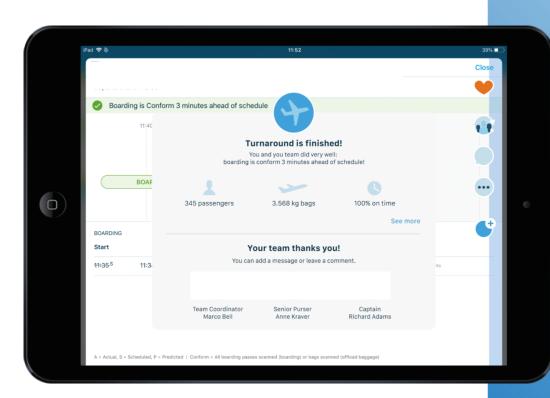
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At times, Kim notices s omething that she would like to share with FlyCo. For example, at turnarounds it ocured that the catering was always late. Therefore she adds a note to her The notes. notes are send to FlyCo's b u s i n e s s when Kim

chooses for that. She can add and as well erase messages which are just ramblings of the mind. She can now finally give some input in the organization.

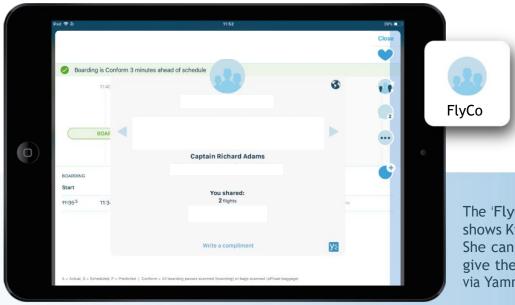


The the turnaround is finished and knows how the notification, FlyCo-App shows as well gives her the option give to compliment or comment one the team members she worked with.



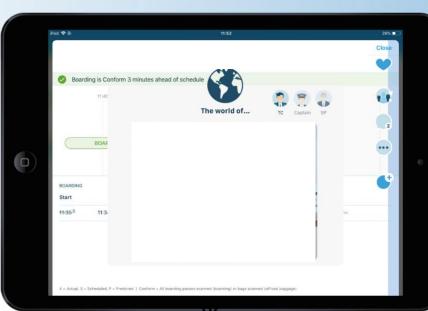
While it take some time to give a compliment or feedback to other team members, FlyCo-App gives Kim some preselected options. It is as well possible to write a comment.

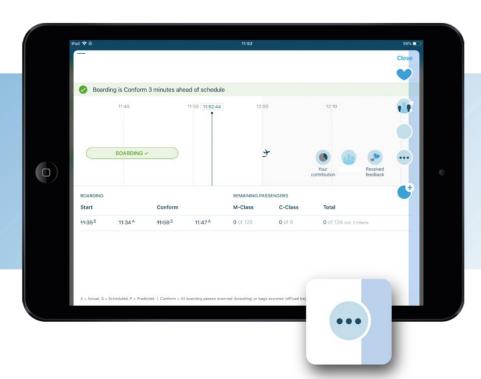
In the 'more' menu, it is possible to see more options that show valuable information to Kim. >

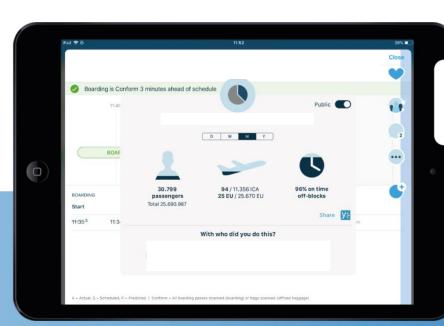


The 'FlyCo'ers you worked with' option shows Kim with who she worked with. She can scroll through her collegues, give them a compliment and connect via Yammer. <

An extra option is 'the world of'. Here, the work of other team members is shown with a movie. The movies are updated every month with a new episode.



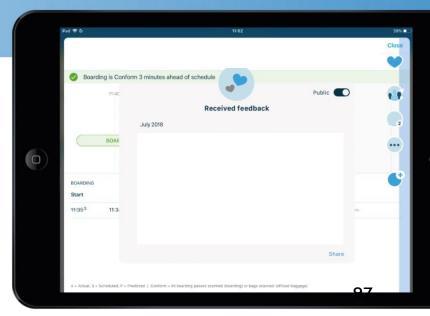






The performance is not only communicated after the turnaround, it is as wellpossible to view all collected data in the menu.

At the end of the turnaround, when Kim is finished, she receives some compliments. She can view the compliments as well at the menu.





10.5 Decisions in final design

The final design presented in the previous pages is different than the last concept shown in paragraph 10.2. The last iteration was tested and there were some interesting insights gained from this, finally resulting in the final design.

The following decisions are made based on the insights. Important aspects of the last iterations are added or changed resulting in the final design.

Smart FlyCo-App

As is visible in the use of the design the 'Blue Heart of FlyCo' by the Gate Agent Kim in the previous pages, the functionalities proposed are 'smart'. The design knows where the user is, if the turnaround is progressing correctly and/or finished on time and if it is time to give any feedback. At times, notifications are shown, but only when the user touches the orange colored heart that is beating faster than normal.



More functionalities

One of the last decisions that is made is that the most important extra functionalities, that should stimulate interesting interactions to improve engagement and/or create a team feeling, are changed. The functionalities are visualized in image 10.4.

It is decided that 'your contribution' is important for users and will be kept in the final design. The option shows the users what their contribution is and that it influences the results of FlyCo. The users need to have a sense of possession of these results, while they are afraid that their managers would use their details to review their performance. Therefore, an option is added to select if the results are visible private or public.

My profile and settings are erased, while the design will be implemented inside an application that already has those functionalities.

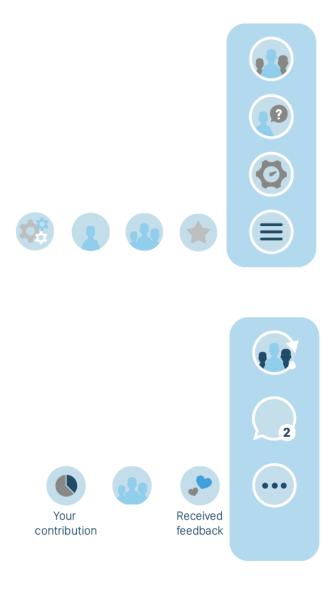


Image 10.4: the menu's of the last concept (top) and the final design (bottom).

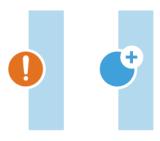


Image 10.5: the 'panic' button of the last concept (left) and the replaced 'notes' button of the final design (right).

The overview of the previous turnaround team members is kept in the final design and is called 'FlyCo'ers'. Results of testing show that an overview of previous colleagues is very useful and important in the feeling of being part of a team and of FlyCo, although this information is as well just seen as nice-to-know.

Communication

Being able to communicate without any problems is very important at the turnaround. While it occured that the individual team members were not able to contact other team members for help, the last concept consisted a 'panic' button where they were able to leave a high-priority message to the other members of the turnaround team. The other members would see the message at the button of the menu (see image 10.5). When testing, it became clear that it is more important to call instead of message the team members when there is help needed. Therefore, only an extra 'high priority' button is added in the chat-screen, and as well the option to call immediately.





View as / the world of

During research it was seen that turnaround team members do not know what others' work consists of. Because of this, a lot of misunderstanding appears during collaboration. The 'view as' functionality was added to give the user the possibility to view others' work and problems occuring. The results showed that only the video was a useful option to communicate problems and the content of the work of colleagues, while the problems were not viewed. The option to 'view the world of' is added to the 'FlyCo'ers' view and is not a separate functionality anymore. Movies will be renewed each month.

Your notes

Your notes (image 10.5) is a new functionality in the design. During testing it became clear that the users do now not have any possibility to give feedback about the application, organizational processes or team members. At the moment, feedback is sometimes given about other team members, but the procedure is so outdated that the compliments and/or negative feedback will be received after a few weeks.

The 'notes' functionality should give the user the possibility to add any ramblings of the mind to the system, where the system asks if the notes should be send to the business of FlyCo after a few weeks, or should be erased. In this way, the user can collect valuable feedback about the system and has a sense of giving input in the organization's purpose. The user can as well give feedback to the teammembers. At the end of the turnaround, FlyCo-App will directly ask the user to give a comment or compliment.

Visuals

The icons created for the design evolved over time. Some icons were not clear enough or were connected to other functionalities. In the final design, the icons inside the menu are redesigned and now supported by text (see image 10.4).





VALIDATION

Although the concepts are tested elaborately in the concept development phase, the final design is as well evaluated with future users. The goal of this validation is to validate the design, check if the design goal is reached, but as well to understand which aspects of the design are most important and should be implemented first.

For the validation, different future users (2 SP's, 1 TC, 1 CC and 2 GA's) are asked towork with the Blue Heart of FlyCo. The functionalities, interaction and implications were discussed.

11.1 Design goal

The design goal 'improve the team feeling between the different actors working at the turnaround', is reached. This can be said due to different findings:

Team information is communicated directly and experienced as such. Short lines of communication are created by the option to message a colleague or call them directly via iPad and connected earplugs. Within team information, realistic profile pictures are essential. Avatar visuals should only be used if employees do not want to share their real picture. Avatars are at times experienced as unprofessional.

The performance of the team is communicated automatically when the turnaround is finished. When the user wants to look up their personal data, such as total flight hours, it is possible to view personal analytics. A shared performance creates the feeling to be more connected.

The physical presence is communicated as 'checked-in' to all the team members. These messages give the user more trust when to start collaboration.

The possibility to search for team members with who an employee worked with before creates a smaller feeling of anonymity, while it is easier to connect and view shared contribution. As well, the possibility to 'get to know the others' world' is important in creating a better understanding of the work of others, and therefore as well experienced as creating a better collaboration. While it is not possible to let 15.000 employees do an internship in other sectors of FlyCo, it is at least possible to let them view a video every month.

11.2 Functionalities

The final design consist of different functionalities, which are already explained in chapter 10. In the validation sessions it was possible to decide which functionalities are most important to include in FlyCo-App. The functionalities that are of most importance in creating a team feeling are already positioned in the design based on importance, but are hereby discussed in order of importance as well.

Turnaround team

Communication about who you work with is of most importance for the feeling of being part of a team. Before a team feeling is created, it is essential to know with who you need to collaborate. As well, a grasp in the world of your colleague is necessary to create understanding about one anothers' tasks and problems. The last can be viewed in the functionality 'FlyCo'ers', but needs to be placed on a more accessible position.

Communication

Communication is essential in order to create a team feeling. At the moment, communication can get lost due to old-fashioned ways to communicate, like portophone and desktop computer programs. In the new design, communication is made easy. Messages can be send, as well with high-priority, and the possibility to call with the application is introduced.

Your notes, received and given feedback In the external analysis it is found that in order to be engaged and feel part of a team, the employees should be able to give input in the organization's purpose and should be able to give and receive feedback about the processes and about team members. In the 'notes' functionality that is introduced, this possibility is created. The notes of each employee can be send to the business, after the user was able to select most important insights which are not emotionally written or a snapshot. The notes option is always there, ready for the user if they have any rumblings from the mind. As well, the possibility to give and receive feedback directly to and from team members as compliments or comments is created. In the validation both functionalities are seen as very important in order to create a team feeling and a honest work culture.

Your contribution

In the literature review, the external analysis and the analysis at the context, it became clear that it is valuable for employees to see their own impact on the organization. Although the users see the data as valuable, the majority finds it only 'nice to know'. it is important to understand if the users see this more as 'I'm being watched' than as information that is valuable for their own purpose. Therefore it is important to dig deeper into the implications of implementing analytics and data which is communicated to the users. There are users that are particularly worrying that their data and performance can impact their career at FlyCo if their data is public available.

FlyCo'ers

The last functionality that is part of Blue Heart of FlyCo and important to add, but is less important to include directly, is the 'FlyCo'ers' functionality. This functionality creates a smaller feeling of anonymity, but is seen as 'nice-to-know' information as well. Especially the 'world of' option inside this functionality is important to include. The different silo's are connected when there is more knowledge about the work of employees of different sectors. This is mentioned by the future users interviewed as well.

11.3 Interaction

The interaction with the new design should create a sigh of relief in a stressful and uncertain situation. The interaction vision is tested by asking the future users to imagine to use the concepts in a time-limited context, while it was not possible to test during a real turnaround. While all functionalities are easy to reach and minimized to the essential, the interaction is perceived without any hassle and easy-like. The Blue Heart of FlyCo is perceived as a kind addition that starts a conversation with the employee, instead of only sending information. Due to specific movements of the menu, simulated with the help of animation programs, the Blue Heart is perceived as human-like. Different future users explained that the functionalities consists exactly what they need, but some functionalities are just nice-to-know, such as data about their contribution and information about previous team members.

CONCLUSION LIMITATIONS RECOMMENDATIONS

12.1 Conclusion

The goal of this graduation project was to improve employee engagement at a specific context at FlyCo: the turnaround of an airplane. While the topic and the context are both complex, different studies are carried out to understand employee engagement, the company, turnaround and employees involved. The result of this graduation project is six studies and a final digital design, that is inserted in an existing application and improves the team feeling of the actors involved at the turnaround. Three out of six studies are exploratory research, the latter is a literature review and an internal and external study about employee engagement.

In the literature review it became clear that the topic employee engagement is complex. There is no common understanding yet about what employee engagement is, while there are multiple definitions and frameworks used in literature. In this thesis the definition that is used is from Kahn (1990). The psychological dimensions created by Kahn were helpful to create focus in the project, to nudge in the right direction and to scope the exploratory research. The theoretical background is concluded with a model that is created based on the findings in literature. The model for design for employee engagement visualizes the dimensions and influencers of employee engagement. The model is visualized in image 2.4 at page 19.

Also at the business of FlyCo, there is no clarity about employee engagement. Within FlyCo, employee engagement is a term which is perceived as vague and is mostly used for multiple implications, such as how adopted a new developed digital tool is and a way to predict upcoming strikes of employees.

Although FlyCo would like to improve employee engagement, the company and influencers inside the business do not have any measuring tools to structurally address engagement. FlyCo does employee measure and show the value of employee engagement at a large scale (yet). It is critical management realizes that improvement of employee engagement has a positive influence on the performance of FlyCo. This could be visualized for example through a 'value mapper', and shared with management and employees. It is important as well that the development of digital tools, which are created to enable employees during their work, should be designed as user centric as possible. This is experienced as challenging in such a large and complex organization.

The exploratory studies zoomed into the context, the turnaround of an airplane. The turnaround is a complex environment, with a lot of different actors involved responsible for many different processes, all having their own characteristics, wants and needs. In this project the different characteristics are mapped in order to design for the different actors involved. While FlyCo has a long history, the employees working at the turnaround have a large history as well. Most employees have long experiences and wired habits. Changing the mindset of the employees, which is at times needed in order to compete with growing competition

nowadays, is a challenge. The wired mindset can create a rejection to change, interfering a digital and cultural transformation. Mapping the characteristics of the employees working at the turnaround resulted in demographic insights about the different employees. The results made it easier to understand the wants and needs in order to design to improve employee engagement.

The results of the external analysis show valuable insights about employee engagement at other organizations than FlyCo. A focus on employees is not only possible in small organizations. Transavia, part of the FlyCo group, and one of the companies that is analysed, has a clear focus on employees. The believe is that employees are as important as customers (or even more), and that an organization can only start believing the importance if there is a sponsor at the top who acts upon this believe. It is as well necessary that the (positive) influence of employees on the performance of the company is measured and mapped in value. In the external analysis, different important aspects of organizations concerning the employee engagement collected. The insights are taken into consideration in the development phase of this project.

At last, with all the information collected with the different studies carried out, a design is created. The design goal that was selected is: improve the team feeling between the actors working at the turnaround. Different hypotheses were selected connecting to the design goal. The hypotheses helped to create and validate different concepts. The concepts created are tested with the future users constantly. It was easy to reach the actors involved for testing, while the actors GA, SP and CC are approachable in the rest areas during work. The TC's were more difficult to approach without an appointment. The concepts were animated to simulate the interaction. After concept development, the final design is created and as well validated with different future users. The final design is presented in chapter 10 and is a set of functionalities collected in the

'Blue Heart of FlyCo'. The Blue Heart of FlyCo is inserted in the application FlyCo-App, that is live since July 9th this year. The Blue Heart of FlyCo collects useful information about the turnaround team members, and creates a more user- centred, human-like, but digital approach to the employees. FlyCo-App as a smart appin-app now starts a conversation with the employee, instead of only sending information. In the validation sessions it is concluded that the Blue Heart of FlyCo creates more connectedness, more trust and understanding between turnaround team members.

12.2 Limitations

This project offers a new design approach and a demographic study about employees working at FlyCo. It is acknowledge that there are some limitations to be considered in both the research phase as the development phase of this project. The limitations of this project are discussed below.

Literature review

In the first study conducted in this graduation project, a literature study about employee engagement is conducted. The main goal of this study was to understand employee engagement, the definition, importance and influencers. While there is an overwhelming amount of literature available about this topic and comparable other themes, such as employee well-being, information or insights might have been missed. Still, the created theoretical background is sufficient for this project.

Exploratory research

The studies that are conducted about the context of this project, the turnaround of an airplane, focussed op mapping the characteristics of the environment and the employees involved. While there are numerous employees working at or influenced by the turnaround, it is very difficult to understand them all. Such a large amount (+30.000) of employees are not possible to reach. Although this is hard, in this research it is tried to reach as many people and collect as many opinions as possible. Members of sounding boards are asked to take part of the research for a broader opinion and a survey is published to reach more employees. Some employees observed are so-called 'nevenfunctionarissen'. This means that they are working in the operations, but at some days they also work at the office. The employees analysed are due to this possible biased about coming new technology and possibilities, but do as well have more interesting insights to share while they represent the employees working at the operations.

Another limitation is that the data that is collected, analysed and synthesised is done by one researcher. This could have resulted in biased interpretations. An additional research and data analysis should be carried out on a larger scale to verify the results.

Internal analysis

The internal analysis carried out was an analysis that basically lasted the whole project. While the researcher worked at the Digitizing department, as part of the FlyCo-App team, she was capable of getting to know the company relatively easv. Still. development team is only a tiny part of the organization. The conversations were conducted with the business as well, but the internal analysis is mainly based on observations and conversations listened to. The internal analysis could be broaden by start interviewing all stakeholders in the turnaround processes.

External analysis

In the external analysis three companies were analysed. With some luck it was possible to interview the CEO and the VP Operational Development of Transavia. The interviewees are very important in the organisation and the results obtained can therefore be seen as valuable and representative. Still, at Incentro and Tony's Chocolonely, employees with different backgrounds and roles are interviewed. The various backgrounds and roles could had influence on the validity of the insights. More interviews should be carried out with people with comparable roles in order to create more valid insights. The results obtained give a good look into other possible approaches concerning employee engagement and are used as inspiration in the development phase.

Concept development

Seven concepts are created and tested and did all contribute to the final design. Although it is seen that the development and adoption of a design would be best achieved if co-creation would be organized, this was not possible due to time limit. Twenty-five employees with various roles (GA, TC, SP, CC) are asked to evaluate the concepts. Co-creation was simulated in those interviews about the concepts presented. If it is decided that the proposed design will be implemented, it is essential that more future users are reached to test the functionalities. An approach of implementing the functionalities is proposed in 'future research' in the next paragraph.

In the concept development phase, the concepts are unfortunately not tested in a life turnaround. Due to time limit and the impact it could have on real performance, it was not possible. Of course, the final design needs to be tested at a life turnaround in the future.

Limitations within FlyCo

In order to create 'wild' ideas, different limitations were not taken into consideration while developing the final design. For example, the unions of the crew of FlyCo do have large influence on what FlyCo can or can't collect or publish concerning the privacy of employees. Little things such as using a personal profile photo could be prohibited by the union to use. Those issues are not taken into consideration while designing, and therefore it is possible that some ideas are not possible to realize in real life. Furthermore, it is not considered if data that is shown by the Blue Heart of FlyCo is possible to collect and display in the application. It is necessary to look into the data that is needed and look into possible needed back-end information and possibilities.

Some of the limitations presented here are also useful to for future research and implementation. In the next paragraph, the next steps are discussed.

12.3 Recommendations

In chapter 11, validation, it is already discussed which functionalities of Blue Heart of FlyCo need to be implemented first. In image 12.1 the different functionalities and the sequence of implementing are visualized. Based on the validation sessions the functionality 'turnaround team' was experienced as most valuable and impacting on the team feeling, wherafter communication and giving and receiving feedback. Your contribution and FlyCo'ers were experienced as not so important, but as information that is 'nice to know'. The smart notifications need to be implemented right away.

Furthermore, it is recommended that the limitations of this project are taken into consideration when implementing the final design. A new approach is hereby suggested to better consider and anticipate on the wants and needs of the employees involved.

A new approach: a personalized change

The suggestion is that a new study has to be carried out focussing on the different kind of employees involved at the turnaround. The focus would be on the capability of an employee to handle change, in stead of the roles or tasks an employee has in the process. The explained steps below would be an ideal approach to improve employee engagement, because employees are involved in the change and will as well get a personalized treatment. Hereby an explanation of the approach:

1. Information gathering

At first, a new research has to be carried out. In this research it is the goal to generate different employee profiles based on the different employees working at the operational domains of FlyCo. The employee profiles are based on the capability of an employee to handle change. A survey in the whole organization will be carried out.

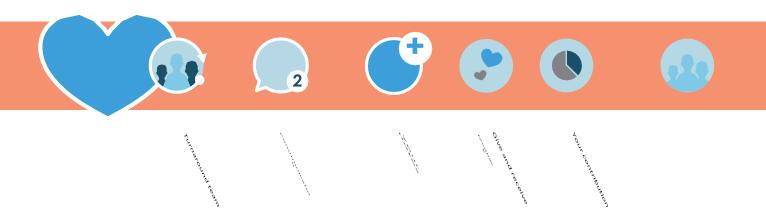


Image 12.1: Recommendation about which functionality of FlyCo Blue Heart to implement and test in order of importance.

2. Data analysis: group based on availability to handle change

When analysing the data, it will become clear which employees are capable to handle change and who are not. In this step different employee profiles will be generated and every individual employee will get a profile based on the general profiles generated.

3. Create digital tools, personalize and implement

The applications needed will be developed like it is currently done, but the first versions will be tested only with employees capable of change. These employees are chosen based on their employee profile.

Another possibility is that the application is rolled out in the whole organization at once, but that employees receive different front-ends based on the employee profiles. Not everybody is capable of or wants to use the complete new application right away. This idea is based on the research of Yuan (2017).

A last recommendation for the future implementation is that it should be validated if the business of FlyCo is ready to receive feedback from employees on a constant basis. Results show that employees need and want to give feedback about processes and tools (in order to create employee engagement). Before implementing this possibility, the business needs to be organized such to handle the received feedback. The constant feedback needs to be analysed and feedback on this feedback needs to be given as well. It is also needed to dig deeper into the implications of implementing analytics and data that is communicated to the user due to privacy matters.



12.4 Personal reflection

Although reflecting on this project and experience will continue in the coming weeks and year, this paragraph consists of a personal reflection. It feels strange to write this final chapter, because it feels like I'm not finished yet. I can say that this project was a great learning experience. The project was an exploration in the Design for Interaction field, but as well in other elements of Industrial Design Engineering.

The project started with a broad assignment about employee engagement. While I did not know what employee engagement was exactly, I consulted literature immediately. It took me a while to understand how to use literature properly, but finally it really help me creating a better assignment and research questions. I was not looking forward to create the theoretical background, but at some point I started to like reading the interesting findings other researchers obtained about the topic. It really helped me creating the final design. Through the whole project I was able to consult literature for help.

The exploratory research, which resulted in three different studies, was very rewarding. The employees working at operational domains were very friendly. It was hard to uncover the real motivation and difficulties of the employees at FlyCo. Luckily I got the opportunities to dive into the context by observing and experiencing the real work. Traveling to Rio de Janeiro was the top of the bill and very informative for the design process. By spending so much time with the future users, I not only dressed like one, I became one.

The external analysis was another interesting part of this project. With the help of my mentors at FlyCo I was able to interview the CEO and VP Operational Development of Transavia. It was an honour to talk with such inspiring leaders. The results really created a new view for me on employee engagement inside large organizations.

At last, the development phase of this project was much fun. Creating, testing, animating: All aspects of design that I really like. I'm very detailed and therefore I'm never really finished with creating the 'final' design. I would like to develop the final design further if there would be more time.

What I learned in this project is that it is very difficult to co-create in such a large organization. It is not possible to include all final users in the development of digital tooling, although that would be ideal. What I learned as well is that it is not possible to improve employee engagement in 6 months. The topic is very broad and only a little part of employee engagement is tackled. In the future FlyCo should try to tackle all influencers of employee engagement in their designs.

I'm very happy that I am able to present my findings to FlyCo and the business. It gives me a great feeling that my ideas will be used and do not disappear on the bookshelves.

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