Exploring deep personlisation in pre - flight experience

Differentiation of personalised services based on personality traits to enhance customer intimacy

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Table of content

Preface

This project was initiated by the airline company to explore the possibility of creating personalised service based on travelers' personalities. Personality traits have been widely utilised in education and career domains, but were never in aviation industry. This triggered my curiosity and interest. This project presented me with a great opportunity to explore the role and significance of design in a particular field. This graduation thesis report communicates the result of six-month research and design project "exploring deep personalisation - in pre-flight experience".

I would like to thank all the people who have been a part of this journey.

About the project

This is a TU Delft Master graduation project, is cooperation with an airline company. In this project, the airline wants to increase its customer intimacy by considering customer's personality for personalisation.

Project introduction

Nowadays, many companies have been working on creating personalised services by using the general data such as reason for travel and approximate age. However, with enriched data such as personality type, comes a greater level of insight that can lead to more deeply personalised services and products. The airline company is looking to explore different possibilities in their products or services by using personality traits theory to analyse and use the data in a more meaningful way.

There is existing use of personality traits in the market, such as education, job recruitment, but none of them was used in the aviation industry to enhance their customer experience.

The framework is used as a starting point in this project to explore the possibilities of creating different products and services. This project is seen as an extended version of the previous framework, to tailor products and services that adapt to the unique needs of each passenger based on personal- ity data.

Research gap

The research problem becomes, "what is the next context to apply the personality-driven design principle developed by Mengqi (2017)?"
Within the context, what personality dimension are the most relevant in order to develop new products or services and what type of products or services characteristic can be most efficiently be modified in order to tailor them for the personality of a custom-er?

Assignment

The final solution would be products or services that provide the users momentous experiences. To be more precise, tangible concepts or services would be carried out in the end. Such digital products or services can express the strategy of airline company and to reach the goal of increasing customer intimacy. The airline company can use the result as a starting point to create more personalised services and make the data meaningful.

Executive summary

The airline company aims at providing their customers the best and the most attentive services in order to enhance customer intimacy. Understanding a passenger's personality enables an airline to know the passenger's concerns and interests. In this project titled ' Exploring deep personalisation in pre-flight experience ', the airline company wants to enhance its customer intimacy by tailoring its value proposition based on each customer's personality with products or services. It is known that the increase of customer satisfaction and brand loyalty is positively related to customer intimacy (Coelho & Henseler, 2012). Providing a personalised service by using personality traits as a tool in different context is seen as a potential way to enhance customers' satisfaction.

The main outcomes of this project are two new services which were tailored based on travelers' personalities (big five personality model, Goldberg, 1990). According to the concept evaluation results, personality can be used as a starting point to create services that enhance customer intimacy. Furthermore, the project identified different intervention opportunities for the airline company to create services during the traveling journey for people with different personalities.

In the project, the overall trend of aviation, the brand value of the airline company and its focus group in the market were first studied to find a viable starting point to explore personalised service. The scope in this project focused on providing personalised services during the pre-flight experience of business travelers. An in-depth understanding of real customer was essential to draft strategies and provide a more personalised service. A passenger experience research was conducted by using contextmapping method with 13 business travelers to gain deeper understanding of their latent needs. The result showed that having a smooth flight experience enable traveler a better performance for their business trip. Therefore, the goal is to create an hassle-free pre-flight experience in the flight journey for business travelers. In order to achieve the goal, five service interventions opportunities

were identified during the journey to reduce the hassles.

Next, the mood change of travelers and the relation between their personality and behaviour was conducted. The occurrence of an emotion always points to the presence of a personal concern. People can have different emotions in reaction to the same stimulus, because their concerns are different. (Frijda, 1986,p. 351) The 13 participants were categorised on the basis of big five model to find the pattern of mood change. Furthermore, a literature study was done based on the original description of personality. (Goldberg, 1990) The result showed that the needs and concerns in certain context during the journey were dominants by certain personality traits.

Five services were created for travelers with different personality traits during the flight journey. The ideas were testing with 12 business travelers at the premium lounge to validate the needs and concerns in certain context during the journey.

Finally, the needs and concerns framework for different personality traits during the pre-flight journey was identified and it would be used as a principle to create new services.

An idea generation session was also done together with relevant stakeholders in the airline company. An online survey was conducted with 25 business travelers to explore the phase in which the traveling journey will be the starting point to create personalised service. The result showed that travelers wanted the service being personalised at the phase of preparation and transporting to the airport. Therefore, three scenarios were created on the basis of concerns and needs framework to develop new personalised services. Several ideas were generated and the service intervention touchpoints for different personality traits were identified. Conscientiousness trait was chosen as the main trait to demonstrate how service can be tailored differently for high and low trait.

The design outcome, two new services designed for high / low conscientiousness travelers showed how service can be differentiated based on different personalities. The "Nexter" concept provides low conscientious travelers a hassle - free experience which enables them to be on time for the flight; whereas, the "Cultural tips" concept provides high conscientiousness travelers a hassle - free experience to prepare comprehensively for visiting new destination.

The concepts and intended interactions were validated with 13 frequent business travelers. Evaluating the concepts is seen as a way to evaluate the needs and concerns framework which used as a principle to create new services. Results show that people with the same personality traits respond positively towards the proposed services. People with same personality traits have similar needs and concerns. Therefore, the results suggest personality traits can be used as a starting point to differentiate service provided to customers. However, to make the service more personalised to customers, more behaviour data needs to be collected.

Further research for " Nexter " concept, the preference of visual style and how it influences people's perception of time can be further explored. It is also a potential personal assistant. Besides, the research for "cultural tips" concept may be expanded to other personality traits and create different experiences, such as openness to experience. The service for different personality traits in different intervention touchpoint is also worth exploring.

Aviation context

1

The aviation industry has brought about a (techno-logical) revolution since the first flight took off. This ever-growing, more than century old industry forms the focus of this project. The concepts relevant to the work presented in this report, are introduced in this chapter. This chapter also explains the personalisation service and passenger need trends. The gap between custom- ers' expectations and available airline products is identified.

1.1 Growing demand in aviation sector

The research from International Air Transport Association shows that passenger traffic will nearly double to **7.8 billion by 2036.** (IATA, 2017) This reveals the growing demands for global connectivity. This is not only a legislative challenge, but also forces the airline companies to develop futuristic strategies to be able to successfully meet the essential demands of customers.

1.2 Global passenger survey

According to the 'global passenger survey', **85% of the passengers** want airlines and airports to offer them more personalised and customised travel experiences. Passengers would be willing to share their personal data to make it happen. (Global passenger survey, 2016)

1.3 Personalisation needs

It may be inferred from the data presented in the previous sections that personalised services are needed for airline companies and for passengers. While personalised services lead to a greater efficiency for the airline companies, it also leads to a better and a more intimate interface between the companies and its customers, thus promising to be advantageous to both the parties.

1.4 The gap in the aviation industry - in terms of personalisation

The goal of creating a personalised service is more feasible and can be realised easier than ever owing to the opportunities to innovate with the digital know-how that we possess today. However, the research conducted by IBM (IBM travel experience, 2017) showed that only 3% of the airline companies of the world qualify as innovators, which implies that most of the companies are not yet able to bring digital solutions and innovations to the industry.

There is an obvious gap between what customers expect, which is personalised products or services, and what airline companies can provide. Although such a big gap is a challenge for most of the airline companies, it is a big market to enhance the companies' revenue.

More importantly, the airline companies need to not only **understand what the traveler needs and prefers, but they also need to be able to provide the services at the right time and through the preferred channels.** The goal seems to be simple but how to remain consistent through every touch- point and understand the traveler through the whole journey is complex.

Company context and analysis

2

The airline company has always prided and committed itself to customer satisfaction and global connectivity. The commitment to plan long term and include the customer needs in its plans forms the crux of the branding strategy of the airline company, and has been a key to its survival in this competitive market. The definition of project scope, hence, demands a thorough analysis of the present value of the airline comapny and its approach. The aim of this chapter is, therefore, to understand its brand value, its target group in the market, and which part of the flying journey would be a viable starting point to explore what personalised services can be provided.

2.1. Company positioning and mission

The airline company wants to compete on customer intimacy

The renowned business strategists Michael Treacy and Fred Wiersema reveal that a successful company does not aim at being everything to everyone, instead aims at mastering one of the three value disciplines is the way to win customers: operational excellence, product leadership and customer intimacy. These three are the most generic strategies, followed by companies all over. (The Discipline of Market Leaders,1997).

Customer intimacy involves paying attention to the needs of individual customers. Being able to offer personalised services and customised services could be ways to increase the customer intimacy.

The airline company wants to create momentous experiences for its customers

The strategy of customer intimacy is closely connected with long-term objective of the airline company. The goal of the company strategy is to ensure that its customers to feel recognized, comfortable and touched during their traveling journey.

In order to reach the goal, there are three segments that the airline company has been working on. First, through the marketing initiatives - building positive and impressive images, such as advertisements and events. Second, through products and services - providing services through digital channels and in the flights. Third, through people - bring services that exceeds expectation by flying attendants.

> "*People will not remember what you did or said, but they will always remember how you made them feel.*"
>
> *by Maya Angelou (American Writer)*

2.2. Company analysis

Business Travelers is a valuable target group

The business travelers contributed to airline company xx% of the revenue 2016. 17% of these travelers are airline program members, which implies that they frequently interact with such airline. Therefore, the frequent business traveler is a valuable group and is chosen as the starting point of study to explore what personalized service can be provided to increase their intimacy with the company.

Customer needs from marketing research

Three passenger categories are established, namely "A good start", "Recharging in the skies" and "Let me work. In table 2.2., the customer needs and different types of traveling scenarios are explained. This informa- tion is relevant for setting sales targets, advertising and direct communication with passengers.

These three categories were mapped out in the matrix shown in figure 2.3. In the matrix, the horizontal axis represents the purpose of the trip, and the vertical axis represents the flying distance. The results showed that people who traveled for business purpose were covered by those three categories. Therefore, from financial and marketing

point of view, business travelers will be selected as target passengers.

| Category	Demands and needs
A good start	This category is mostly formed by **function-minded travellers** and **busy ambitious travellers** from Europe. Their flights could be either for business or personal purposes. They fly domestic or continental routes and mostly tend to take direct flights. They **want a pleasant start** to their journey.
Recharge in the skies	This category is mostly formed by male function-minded travellers from Asia, such as China, but also from Americas and Europe. Their flights are more for **business purposes** and intercontinental. They need a **perfect work environment** and **resting place.**
Let me work	This category is mostly formed by **travel lovers**, for whom flying is exciting and fun. Some classify themselves as **premium brand or service seekers**. They are mostly fly for work and for short, medium or long distances. **Connectivity** and **work** are key in this demand space.
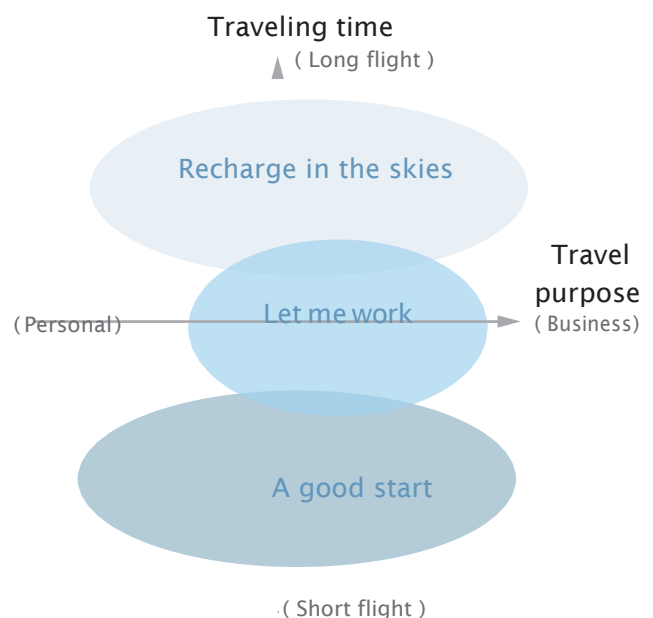
Figure. 2.3. Different types of travelers airline company focsing on

Services currently being provided during flight journey

Having a comprehensive understanding of what services the airline company already had helps to identify the part of the journey that would be valuable to explore new services. Figure 2.4. shows the services that airline company currently provides to its customers during a the journey.
Most of the services are provided at the stage of booking, at the airport and in the flight. Less services are provided in the stage of preparation, transportation and on arrival at the destination. The less explored stages will be considered and regarded as a potential area when developing new

services for customers to provide different experiences.

The flight journey is currently being divided into pre-flight and in-flight and post-flight experience. Pre-flight experience is defined from the moment a ticket is booked till the moment before getting on the flight. With the branding strategy of creating momentous experience through digital products and services, pre-flight experience is identified as the research scope in this project.
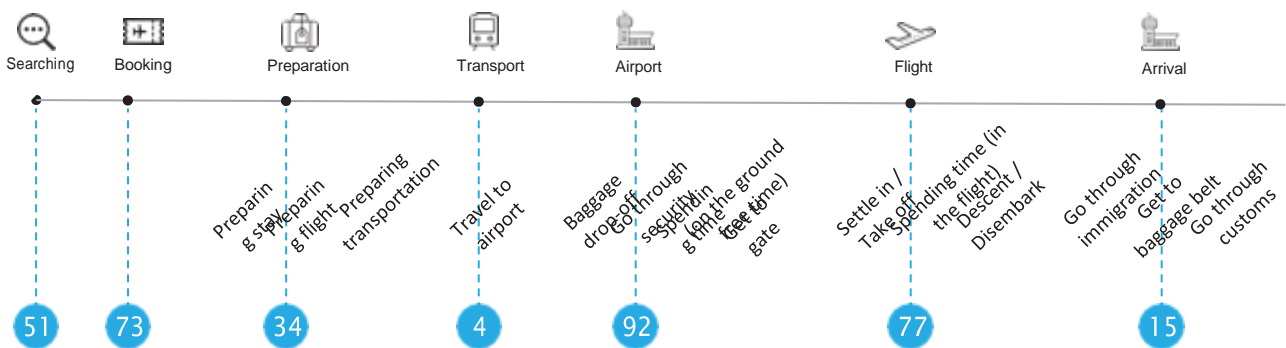
Figure. 2.4. The amount of products and services provided by airline company through the flight journey

2.3 Conclusion and Research direction

The airline company has a clear aspiration to be the most competitive airline company in customer intimacy, as far as branding and marketing strategy making is concerned. However, personalised service is a brand new field for them and a lot still remains to be explored. Personalised service is an overall experience that can be provided over the entire customer journey.

In this project, the pre-flight experience of business travelers is chosen as a potential starting point to explore how personalized service can be provided to enhance the customer intimacy. In order to

provide the relevant services, users' needs and behaviours need to be understood and studied. The passenger experience research will focus on how their personality traits and mood influence their experiences and behaviours.

In the chapter 3, the personality traits model will be introduced. Passenger experience research is conducted and the result will be explained in chapter 4 and 5.

Understanding the personality trait

3

The goal of this project is to understand how to differentiate services based on different personality traits in order to increase customer intimacy. In this project, the Big Five model has been chosen as the basis (Mengqi Yuan, 2017) to understand the needs and behaviour of business travelers with different personalities during the pre-flight experience.

The concepts of personality traits and what is big five model will be introduced in this chapter. The goal of this chapter is to have an understanding of personality traits and what has been built in previous project that can be further developed or used in the following research so as to develop new services for different passengers.

3.1 Personality trait

The research conducted by Ryckman (2004) defines personality as a "dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations. People do react fairly consistently in a variety of environmental situation, these generalized patterns of response or ways people dealing with the world can be called personality." (Kassarjian, 1971). There are numerous ways of defining personality. All the definitions, though, ultimately conclude that personality is a response pattern.

Lewin (1936) formulated the Equation interactionist theory, which expresses the behaviour as a function of personality and environment. **That means, knowing someone's personality gives clue about how that person is likely to feel and act in a certain situation. Behaviour is a function of personality and environment.**

$$B_{ehaviour} = f_{unction} \left(p_{ersonality} + e_{nvironment} \right)$$

3.2 The big five model

The Big Five personality traits model was developed to be able to better relate the personality and behaviour. Researchers found many different words were actually pointing to a single dimension of personality.

These "Big-Five" factors are as follows:
1. Surgency (or Extraversion)
2. Agreeableness
3. Conscientiousness (or Dependability)
4. Emotional Stability (vs. Neuroticism),
5. Culture.It has also been interpreted as Intellect (e.g, Digman & Takemoto-Chock, 1981; Peabody & Goldberg, 1989) and as Openness (eg, McCrae & Costa, 1987).

Openness to experience
" Does he/she enjoy new experiences? "

Conscientiousness
" Does he/she prefer plans and order? "

Extraversion
" Does he/she like spending time with others? "

Agreeableness
"Does he/she put other people's needs before theirs?"

Neuroticism
" Does he/she tend to worry a lot? "

Goldberg(1990) grouped those 15,000 english words, and formulated five dimensions (Big Five), namely **Openness to experience, Conscientious- ness, Extraversion, Agreeableness and Neuroti- cism.** These dimensions explain the variations in our personalities. Goldberg also gave a basic descrip- tion of each dimension (Table 3.1. Goldberg, L. R. (1990). An alternative "description of personality")

Trait	Description
Openness to Experience	Curious, original, intellectual, creative, and open to new ideas.
Conscientiousness	Organized, systematic, punctu- al, achievement oriented, and dependable.
Extraversion	Outgoing, talkative, sociable, and enjoys being in social situations.
Agreeableness	Affable, tolerant, sensitive, trusting, kind, and warm.
Neuroticism	Anxious, irritable, temperamen- tal, and moody.

Table 3.1. An alternative "description of personality"

3.3 Measurement of personality trait

Ten questions were developed as a way to identified travelers' personality in the previously conducted research titled "deep personalization" (Mengqi Yuan, 2017). In this project, the ten questions were first tested with business travelers to make the questions more relevant to business traveling context, followed by identification of their personalities.

Alternate possibility to measure person- ality :

A data company collaborating with the airline company, wants to develop a Neural Network model to recognize and predict the personality of a profile based on the Big Five model. The data company is currently translating this model to a airline company specific on-site creatives that can be used in our A/B-test.

The development of that test is currently underway. If successful, it would not be necessary for customers to answer questions for their personalities to be identified.

3.4 Personality driven design principle

The personality driven design principle is a systematic way of understanding how to approach passengers with different personalities and inspire personality-driven product and service innovation. It was created by the graduate student, Mengqi Yuan in IDE last year. The framework was based on the big-five personality theory (Goldberg, 1990) and it will be used as a tool in the later stages of research presented in this report and idea gener- ation stage in this project.

3.5 Conclusion

The online personality measurement is not mature enough, therefore the modified 10 personality measuring questions for business traveler will be used in research to identified travelers' personality.

The personality driven-design principle will be used as a tool to identify participants' personality traits in the later passenger experience research and as a tool to develop new services.

Project define → User research → Idea generation → Evaluation

10 questions (measuring personality)

Personality design-driven principle
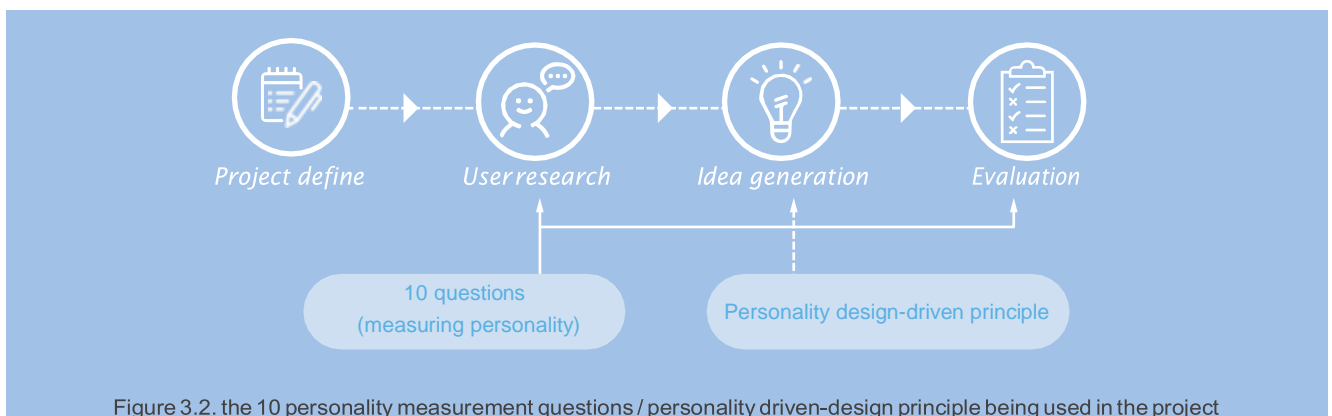
Figure 3.2. the 10 personality measurement questions / personality driven-design principle being used in the project

Passenger experience research

4

An in-depth understanding of the real customers is necessary to be able to draft strategies to provide a more personalised service to customers with varying personalities. Passenger experience research and the result of the flight journey experience will be discussed in this chapter.

The goal of this chapter is to gain deeper understanding of business travelers' latent needs and further define what would be the opportunities to provide different services.

4.1 Research setup

The passenger experience research was conducted by using contextmapping (Visser, F.S., Stappers, P. J., 2005) research method to gain a deeper under-standing of business travelers' behaviour, their latent needs and how they experience during flight journey.

Research goal :
Understand business traveler's pre-flight experience, behaviour and latent needs in order to define

service design opportunities in the flight journey.

Research question :
(1) What are business travelers' pre-flight experiences ?

(2) How do business travelers prepare their trip?

(3) How do they experience the journey ?

(4)What role does an airline company play during their preparation stage ?

The deep personalisation research conduct by Yuan (Mengqi Yuan, 2017) showed that travelers' behaviour will be influenced not only by their trip goal and people they travel with but also by their personality and mood. Therefore, the research will focus on the relation between personality and mood change during the journey.

Material preparation → Recruit → Data collection → Data analysis → Conclusion

Figure. 4.2. The passenger experience research process

Material preparation

Research tool:

Booklet : The pre-flight experience of business travelers was gathered by using the passport-looking style booklet, which contained 5 tasks to sensitize travelers' experiences when going on business trips. The tasks started from preparation phase to transportation and then spending time at the airport before getting on the plane. Emotion capture tool was included in one of the tasks to define the peak high and low moments for business traveler during their flight journey.

Mood journey map: This evaluation tool aimed at understanding travelers mood change during the flight journey which was used in the generative interview session. Participants were asked to rate their feeling at each phase of the journey, after that they were asked to explain their concerns and reasons behind.

Figure. 4.3. The booklet
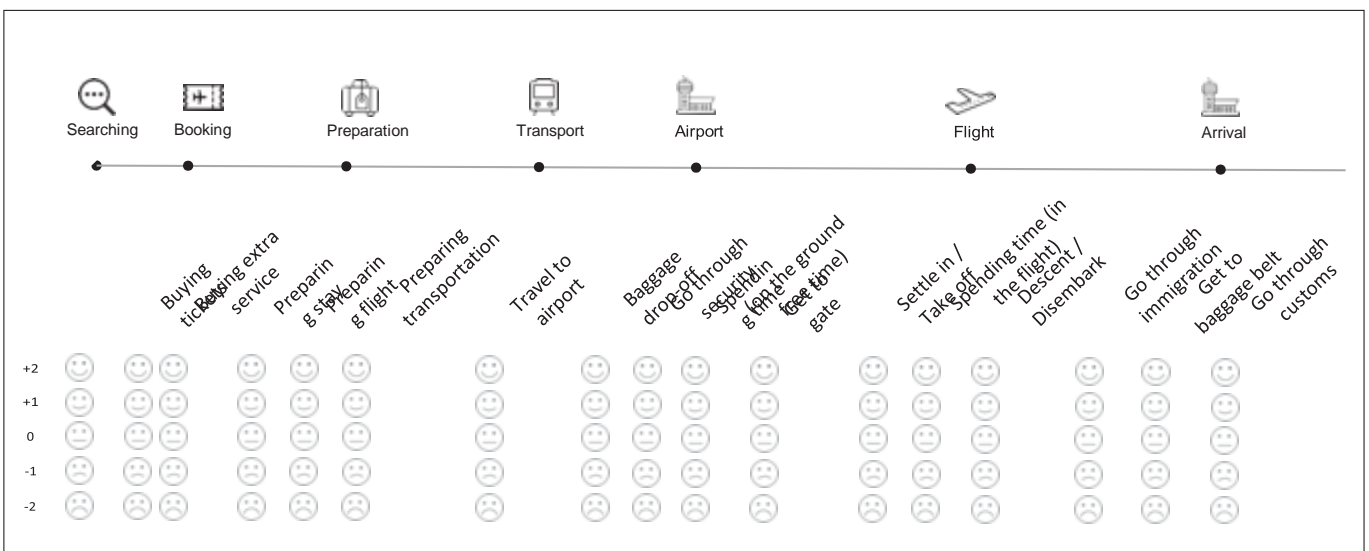
Figure. 4.4. The mood journey map

Recruit

In this project, people who make business trips more than 4 times per year were defined as frequent business travelers. The group of partici-

pants consisted of the employees from the airline company as well as friends or acquaintances who work in different companies. This provided the insights from different types of business trips in different industries.

In figure4.7. showed the business flight of different

participants ranged from long flight to short flight.

Age

25   60

Traveling

alone   with companion

Frequency

1 time / year   10 time /year

Staying period

a day   a week   a month   a year
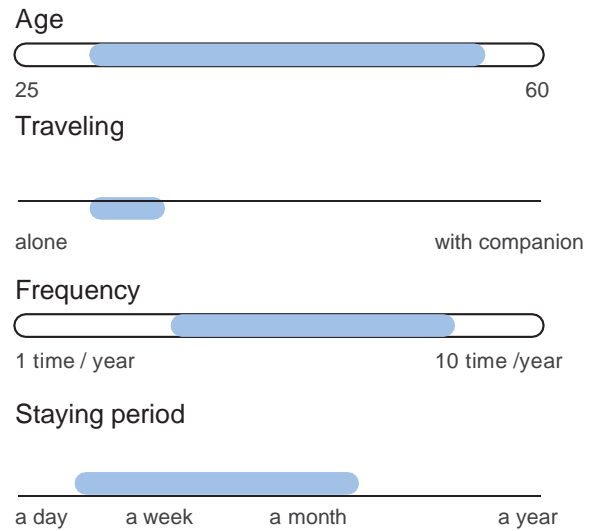
Figure. 4.5. The criteria of recruiting participants

	Age	Nationality	Job position	travel frequency (times /per year)
P1	32	TW	Urban planner	6
P2	29	TW	Sale manager	5
P3	37	NL	Business manager	6
P4	46	NL	Business analyst	12
P5	56	NL	Business analyst	6
P6	35	NL	Product manager	8
P7	41	NL	Designer	20
P8	29	NL	Manager	10
P9	45	NL	Manager	6
P10	31	TW	Engineer	7
P11	34	CN	Engineer	10
P12	34	IR	Buiness Engineer	5
P13	29	NL	Product manager	5

Table. 4.6. Background of participants

Traveling time
(Long flight)

(Personal)

Travel purpose
(Business)

(Short flight)
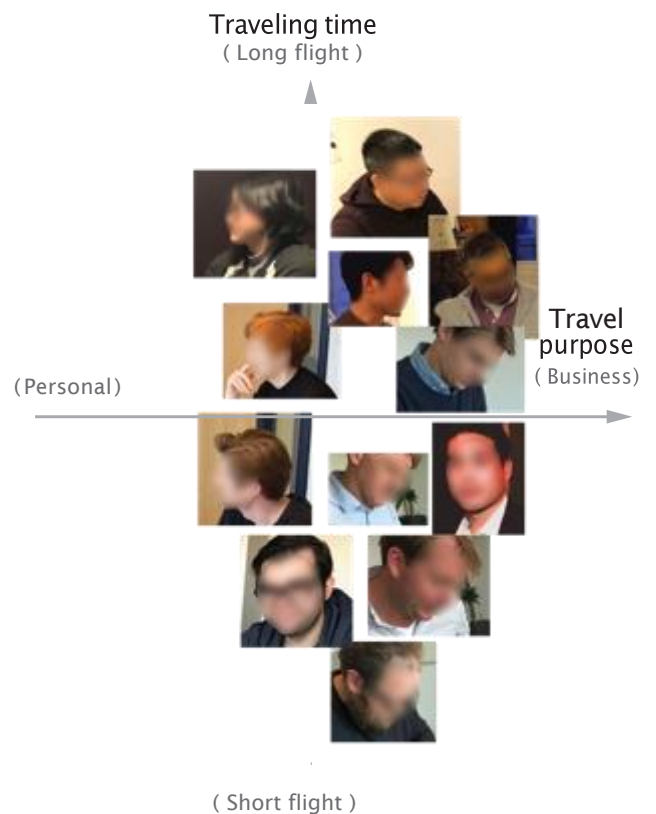
Figure. 4.7. Different types of business flight

Filling in booklet :
The participants were asked to filled in the sensitizing booklet a week before the in-depth interview was conducted. Due to time limitation, some people in the airline company were not able to fill in the booklet a week before. A simple version of sensitizing material was provided a day before the interview which helped to evoke their flight experience.
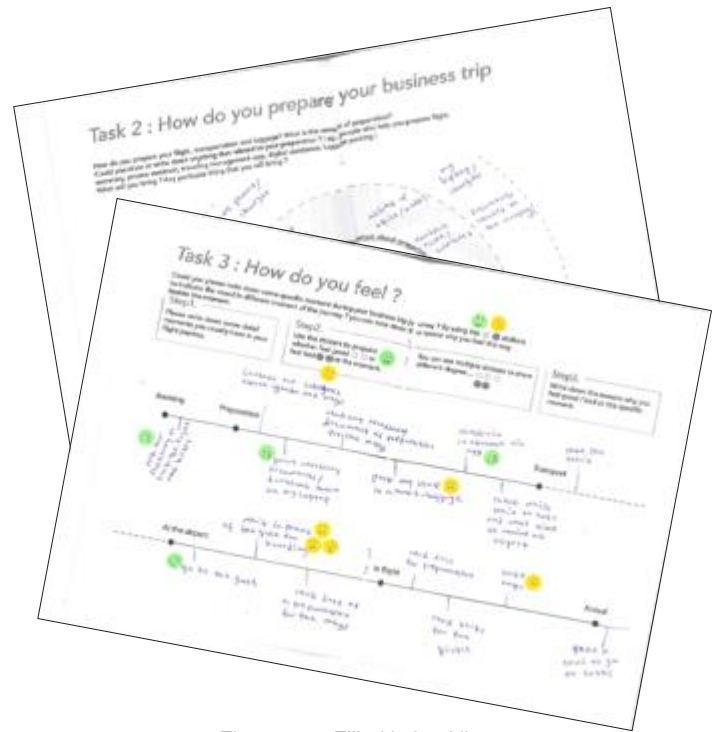
Figure. 4.8. Filled in bookllet

Interviewing :
An in-depth interview was conducted with the 13 participants a week after the booklets were filled in. Creative materials, such as stimuli cards which showed pre-flight related scenarios, lego set to simulate different scenarios, and a blank mood journey map trigger the recreation experience were used. Supported by the material of the booklet, and with laddering interview techniques, the goal of this phase was to understand the behaviour and the reasons behind passengers' reactions.

In the generative interview, the participant walked the researcher through his/her experience from the start of the air travel journey, which was preparation phase, to the end, which was arrival at the destination. A mood journey map of every participant was created together with the researcher. They were asked to reflect back on the experience and explain the positive and negative moments during the journey. With the journey mapping, we gained a deeper understanding of the process that passengers went through when traveling with the airline service.

Figure. 4.9. Interviewing

Data analysis

The qualitative data gathered from the booklet and in-depth interviews were captured through statement cards. Every insight from the participants was put down on a statement card. The statement cards with the original quote and the researcher's interpretation are shown in figure 4.10.

The statement cards were used for immersing the researcher, which is called "immersion for inspiration only" (Sanders & Stappers, 2012). This path gave a first glimpse of passengers' experience and the problems they encountered.

The statement cards were spread out, compared, and searched through for finding patterns and clusters. The corners of business travelers and how they experienced business trips identified five opportunities to provide service during the trip. The findings will be introduced in the following sections.
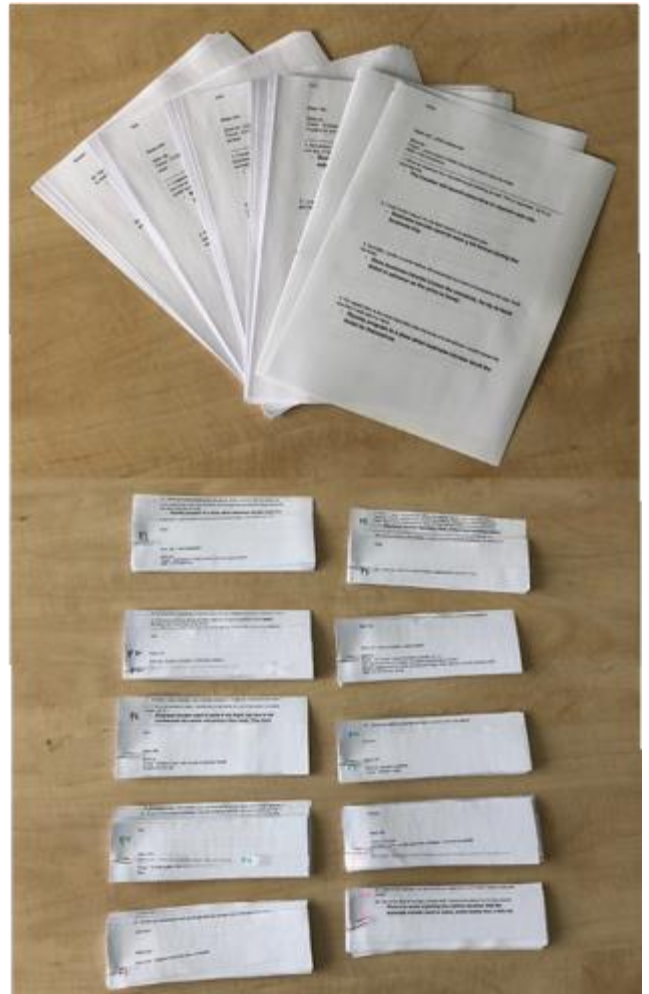

Figure. 4.10. Statement cards

Figure. 4.11. Statement cards cluster

4.2 - The flight journey of passengers (business traveler)

The overall journey of business trip

From the passenger experience research, a customer journey map provides a high-level overview of the factors that influence the user's experience by showing information other than facts, for example, user's touchpoints, quotes or commentary. Most importantly, it is constructed from the user's perspective.

The timeline starts from the moment business travelers were informed to go on trips until their missions completed, which was also the purpose of the trip, as shown in figure 4.12. For business travelers, the aim of the trip was to arrive at the destination at the expected time and complete the mission.

The vertical axis represented the mood change of the journey, whereas on horizontal timeline indicated different tasks business travelers had been through during the trip, in which work related tasks were shown in red text, and flight related tasks were shown in blue.
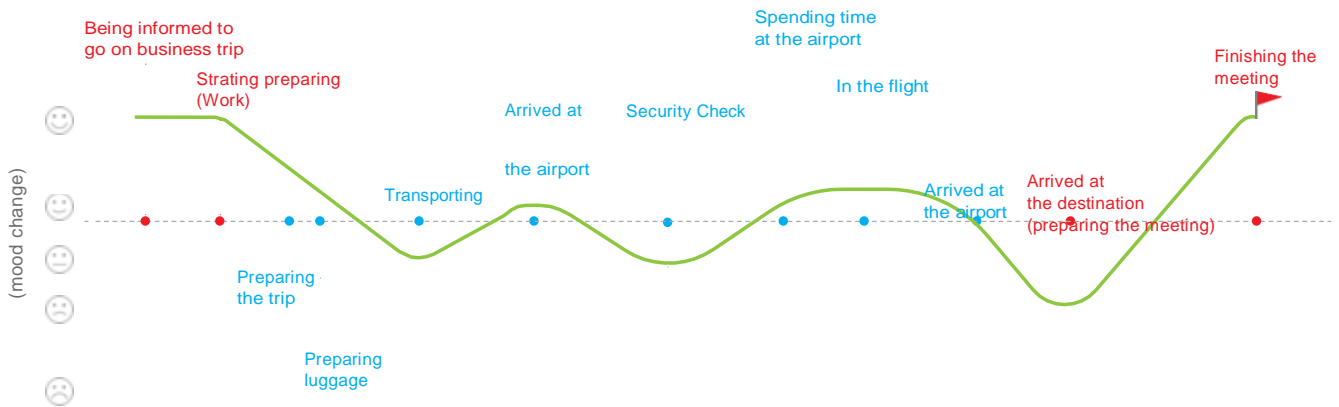
Figure. 4.12. The customer journey of business trip

The goal of the business trip

For business travelers, the goal of the business trip was to achieve the mission, which related to the work itself, such as having a nice performance in the meeting, and an airline company becomes their travel partner, enabling a smooth travelling experience. Therefore, the goal is to create a hassle-free pre-flight experience for business travelers. In figure 4.13. , the blue circles indicated activities which have potential to be improved.

Currently, most of the airline companies do not regard these stages as their responsibility, since it is not directly related to flight. However, to receive personalised service, customers expect their whole traveling journey to be taken care of. Therefore, if the services from airline companies expand to different parts of the journey, the trust between customers and airline companies will be built as well as the customer intimacy can be increased.

> "*I think the airline company for me is a part of my business trip, and also an important part of the trip. I use this time also to prepare my work, prepare my mind also for my next day. I feel they are not just a tool but a partner in my trip.*"
>
> *- Participant 11*

"Providing business travelers a more smooth pre-flight experience in the journey is actually helping them to achieve the goal of business trips. "
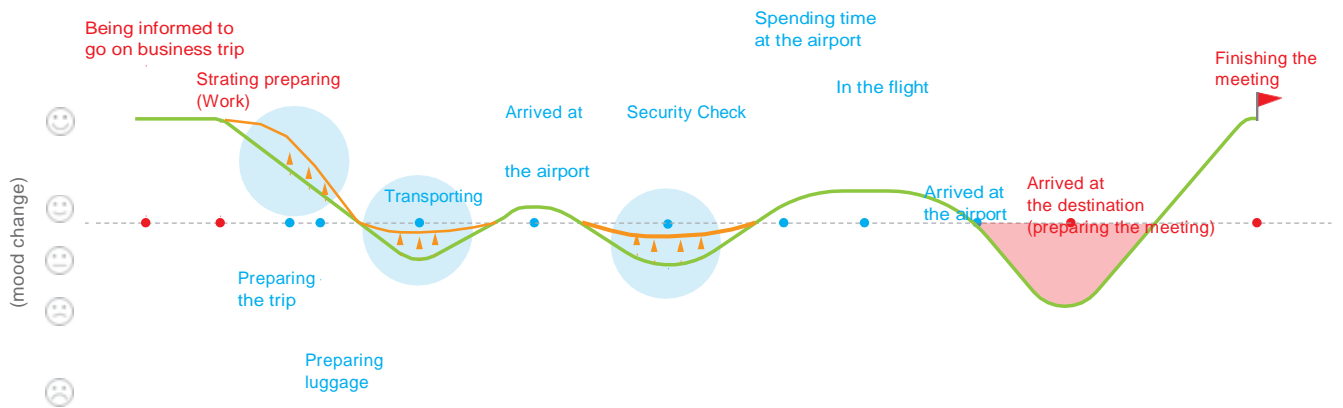
Figure. 4.13. The journey of the whole business trip - potential improved area

Goal : Create a hassle-free pre-flight experience for business travelers.

4.3 Positive and negative moments of the passenger journey

In the journey map, the participants' concerns that contributed to positive and negative moments were identified. The positive and negative moments are analysed according to when it took place, and also taken into account of how they related to the different stages of the pre-flight experience. Details of positive and negative moments are explained in this section.

It is important to understand that in this qualitative study, the numbers of participants are only relevant to provide an impression of the result of the data that were collected. The focus of understanding the results should be put on investigating the reasons behind the positive and negative moments (Polaine, Lovlie, & Reason,2013). Therefore the passenger experience research was conducted with the combination of the in-depth interviews to investigate the patterns of behaviours related to different personalities.

Positive moments during the journey

Business travelers felt positive when the process of the trip was smooth and efficient. They were

able to make the best use of their time rather than wasting time in waiting. Some positive moments also came from feeling recharged as well as productive, such as treating themselves a nice meal or a cup of nice coffee in the trip, keeping their exercise habits on the trip to reduce the stress.

The graph on the right

shows the positive peak moments that business travelers experienced during the business trip.

Strating preparing
(Work)

Arrived at
the airpor

Transporting

Being informed to
go on business trip

Preparing
the trip

Preparing
luggage

1.

2.

3.
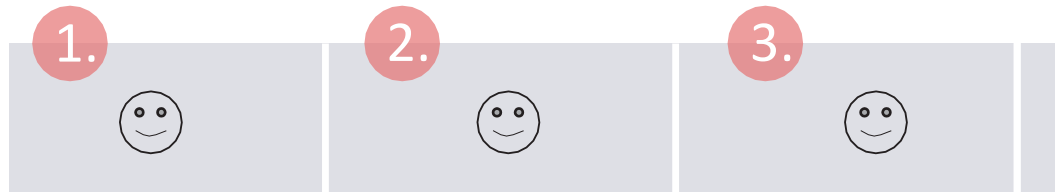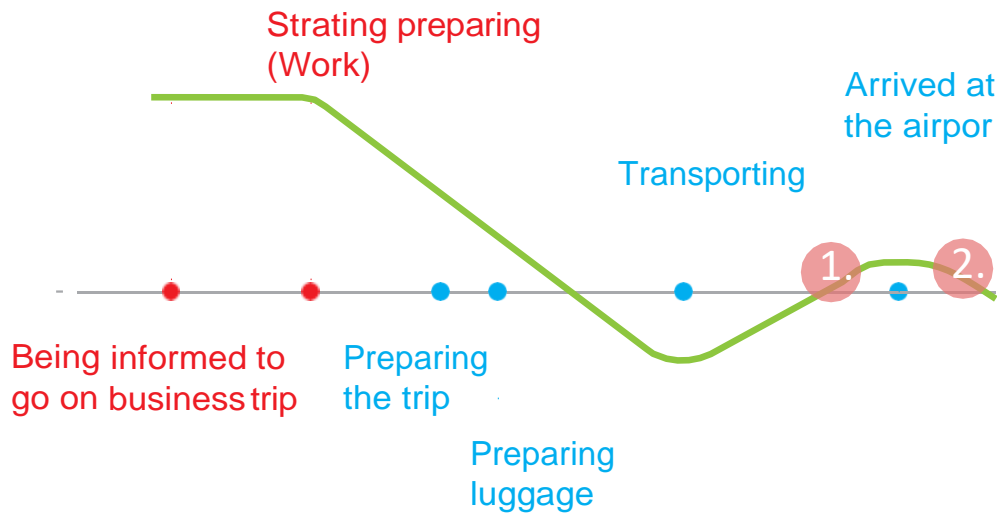
Reasons of feeling positive

Smooth experience of checking in

Travelers with fast pass feel satisfied about passing through the security efficiently.

After going through the security, they tend to look for a cup of nice coffee, coke or other drinks.

Behaviours

After arriving at the airport, travelers went to the gate directly. The experience is very smooth and they do not have to spend time waiting. They like the efficiency.

Travelers who are in the royalty program and having the fast pass for the security are able to go through it more efficiently without waiting.

Travelers tend to get themselves something to drink after settling down from all the hassles.
They feel more relaxed and recharged after a cup of nice coffee or coke.

Spending time
at the airport

Finishing the
meeting

Security Check

In the flight

Arrived at
the destination

Arrived at

the airport

(preparing the meeting)

4.

5.

6.
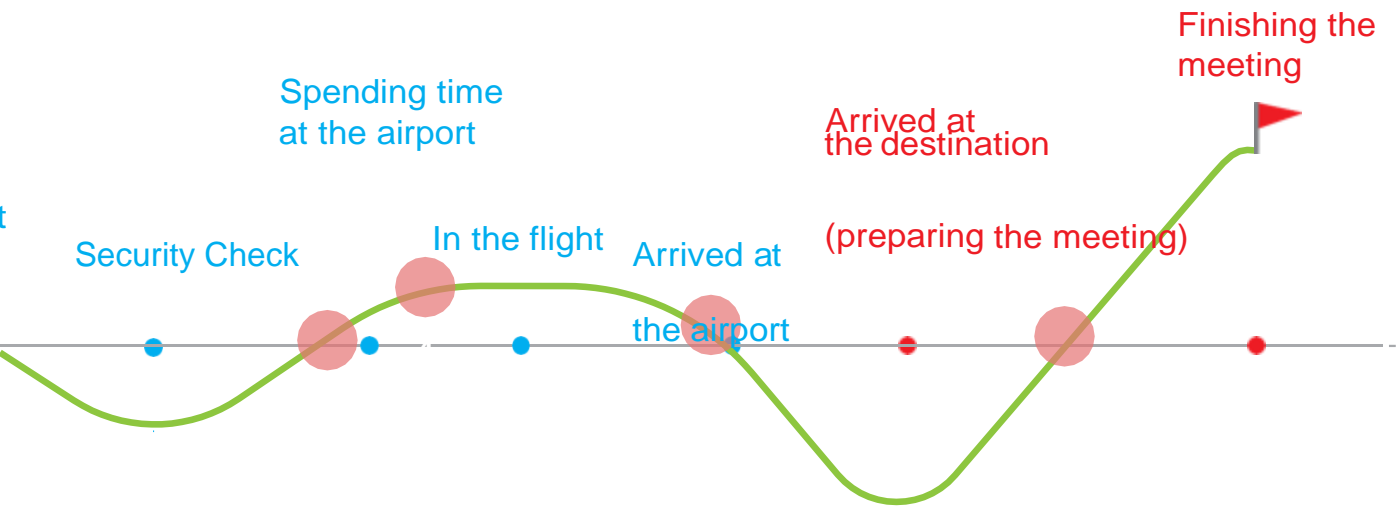
While waiting, travelers
enjoy their private offline
moment.

Doing sports or keep their
sports habits during
business trip.

Rewarding themselves
during the trip.

Some travelers enjoying
the private, offline
moment while waiting in
the airport. It's a little
break from their normal
busy life.

Travelers do sports
during their business trip,
as it makes them more
productive, creative and
feel fresh.

Travelers spend some
time to go exploring the
city or having a nice meal
with colleague. It's a way
to relieve their stress and
help them prepare their
work.

Negative moments during the journey

Business travelers felt negative when they were cramped for time. Time was the biggest concern when going on a business

trip. If the waiting time was spend over their expectation, the stress level increased and had negative feeling. Travelers tried to optimize their process in order to be more efficient.

The graph on the right shows the negative peak moments that business travelers

experienced during the business trip.

Strating preparing
(Work)

Arrived at
the airpor

Transporting

1.

Being informed to
go on business trip

Preparing
the trip

Preparing
luggage

1.

☺ >> ☹

2.

☹ >> ☹

Concerns

Travelers are afraid of forgetting to bring the stuffs they need.

Travelers are afraid of missing the flight.

Behaviours

Travelers tend to prepare more and spend more steps about thinking through the details during preparation.
They are too many little thinking moments during the preparing phase.

They tend to check the schedule frequently in order to make sure that they calculating the right buffer time. They make a guess about the time it will take during the security check.

Wish & Needs

Travelers want to "be memorized". They do not want to pay lots of attention to rethink the details

Travelers want ot be "in control", which means having transparency about the information. With the transparency they feel less stressed.

Finishing the
meeting

Spending time
at the airport

Arrived at
the destination

Security Check

In the flight

Arrived at

(preparing the meeting)

the airport

3.

😞 >> 😞

4.

😐

5.

😐
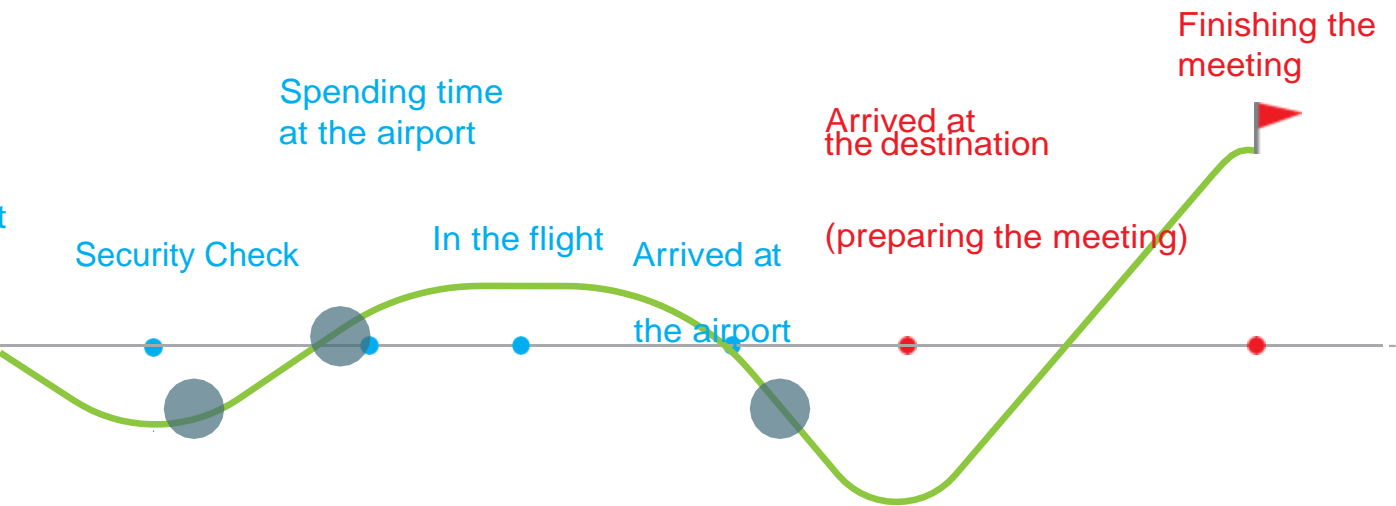
Travelers do not want to spend time waiting in the security, as they might missing the flight.

Travelers are afraid of not having enough privacy when trying to work, as their document might be seen.

Travelers are afraid of not being able to have connectivity in the destination, which is a new city for them.

Some travelers tend to queue up with similar travelers (business purpose), to safe time for the security. Besides, they tend to get themselves prepared before the security check to be more efficient.

Travelers try to find a less crowded place or a nice and cozy place to work. They want to be more productive.

They tend to pre-charge their mobile either at home, in the airport or on the plane. Make sure they are fully prepared when arriving at the destination.

Travelers want to "be recognized" during the security check, as it would be more efficient and faster.

Travelers want to "be efficient, productive" and make the best use of their time.

Also they want to have connectivity, such as internet and charger to improve their productivity.

Travelers want to "be prepared" and have all the access to be able to contact people they need to contact.

4.4 Define the intervention opportunity

What are the design opportunities during the pre-flight journey

With the understanding of how business travelers experienced and positive / negative moments during the whole journey, five opportunities were identified as potential area to explore and create design interventions so as to enhance customers experience.

Figure 4.16. shows the pre-flight experience of business travelers in which five design opportunities were indicated. The journey starts form preparation, transportation to spending time at the airport to boarding the flight. In each of the phases, all the activities that business travelers undertook were listed. These activities can be regarded as potential area for airline company to create design intervention.

| Preparing trip | Preparing lug |

Checking schedule
Checking destination
Arranging flight ticket
Managing all the trip information
Reading aircraft information
Choosing the seat
Checking in
Preparing luggage a night before
Preparing entertainments (eg:books, music)
Checking the weather
Checking with col
about the

+2
+1
0
-1
-2

Feeling annoyed
(Lots of little thinking moments while preparing)

1.

Opportunity in different context

A **Preparing for the trip and luggage**

There were so many steps and little thinking moments that people needed to go through when preparing. Sometimes travelers just forgot things as they were too busy to remember to bring everything.

Figure. 4.16. The intervention opportunity during the pre-flight journey

Transport

ggage

Preparing themselves
(mind & physical)

Preparing transporting

Taking the
transportation

eague
seful information

hecking the local currency

Bringing contact lenses

Bringing toilet bags

Preparing formal dress

Bringing sports stuffs
(people who has exercise habits)

Preparing their mind for the trip
(destress)

Choosing transportation tool

Calculating buffering time

Afraid of missing the flight

Feeling annoyed
(Lots of little thinking moments while preparing)

Feeling insecured
(no transparent information)

1.

2.

B Preparing for the transportation

Some travelers checked the transportation information frequently,
calculated the buffer time to make sure having the right information.
Making sure the plan is correct and having transparent information were
important for them to have the in-control feeling.

Airport

| Bggage drop (for long haul) | Going through security | Get to the gate |

Check in luggage

Having fast pass

Optimizing the security checking time

Expecting to know the waiting time of the queue

Having negative feeling while waiting.

After sceurity, stress level decrease

Having a cup of nice coffeee (drink)

Looking for a place to work (privacy to read documents)

Looking for a place to relax (less crowded, deam light)

+2
+1
0
-1
-2

Feeling efficiency (smooth check in)

Feeling satisfied (having fast pass)

1.

2.

Feeling insecured (the time is unpredictable)

3.

Feeling relifed (after the security)

3.

Feeling insecured (to find the right place to work / relax)

4.

C **After passing through the security**

After passing through the security, people felt relieved and wanted to treat themselves cups of nice coffee. (recharging themselves to get some energy) This could be the moment to provide people service when they were relaxed.

D **Guidance at the airport**

People felt stressed or tensed when looking for a place to work or relax but failed to find one. Some guidance at the airport was expected and to be tailored by their needs.

Figure. 4.16. The intervention opportunity during the pre-flight journey

Spending time at the airport

Having food

Going shopping at the tax-free shop

Talking to poeple

Enjoying the offline moment

Waiting in the queue for boarding

4.

Feeling relifed
(enjoy the offline moment)

E Waiting at the airport

Some people enjoyed exploring different services at the airport even though they were familiar with the place. Looking for something new provided them different experience from routine.

From the passenger experience research, business travelers' behaviour and their traveling experience were understood. During the journey five opportunities were identified to be the potential touchpoint to provide services. However, in order to provide more personalised service, people with different personalities will have different concerns. In next chapter, a more in depth analysis based on different personalities and mood will be conducted to show how those five design intervention opportunities relate to different needs and concerns in different personalities.

Exploring passengers' concerns and needs in different personality in different context

5.1 Exploring the needs and concerns in different personality traits through literature reviewing and passenger mood journey research

5.2 Exploring the needs and concerns in different personality traits through design

5.3 Identify service framework in the pre-flight journey based on different personality

This chapter will focus on investigating the concerns and needs of a passenger with a particular personality through literature review, mood journey research and design intervention testing. The Big Five based research findings, discussed in Chapter 3, have been used as a reference for the concerned study. A framework of concern and needs based on different personalities in the pre-flight journey has been dentified from the study.

5.1 Exploring the needs and concerns in different personality traits through literature reviewing and passenger mood journey research

The occurrence of an emotion always points to the presence of a personal concern. This explains why different people can have different emotions in reaction to the same stimulus : because their concerns are different (Frijda, 1986,p. 351) In the following research, the mood journey map was used as a tool to investigate how people with different personality traits experienced in different contexts.

Following from the passenger experience research conducted in Chapter 4, the mood journey map of 13 participants is shown in figure 5.1. In the graph, the thick pink line represents the average mood journey of 13 participants. Besides, overall there was no empirical pattern shown during the journey. However, if the mood journey were to be catego-rised based on different personality traits, some patterns and insights could be found.
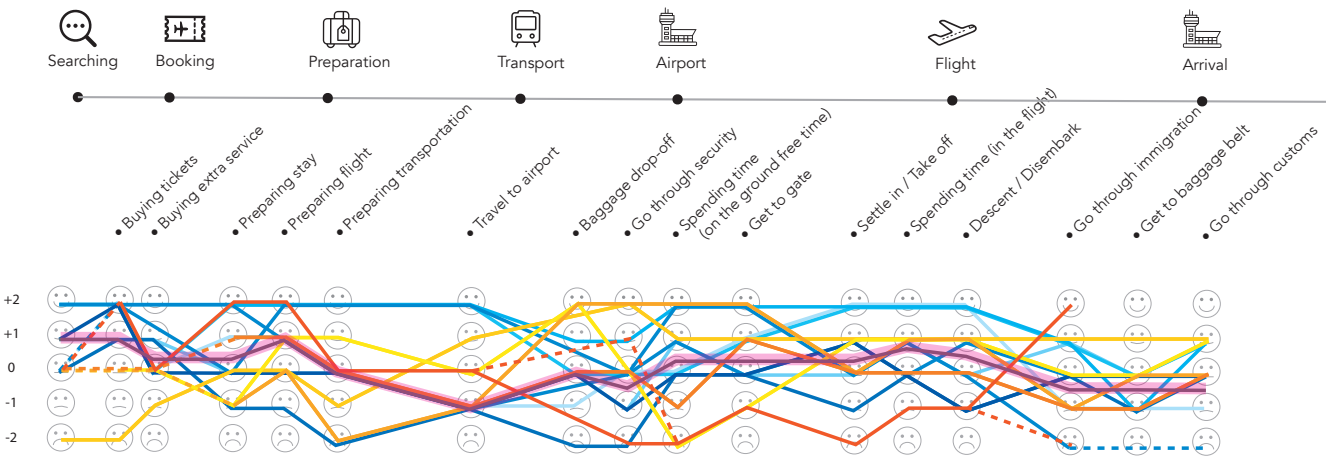

Figure. 5.1. - The mood of 13 participants in flight experience for business trip

In the following section, the mood journey will be analyzed based on participants with different personality traits, in which the needs and concerns will be identified.

High conscientiousness

From passenger experience research, 5 out of 13 participants were found to have high conscientiousness traits. Figure 5.2. shows the mood journey of people who have such traits.
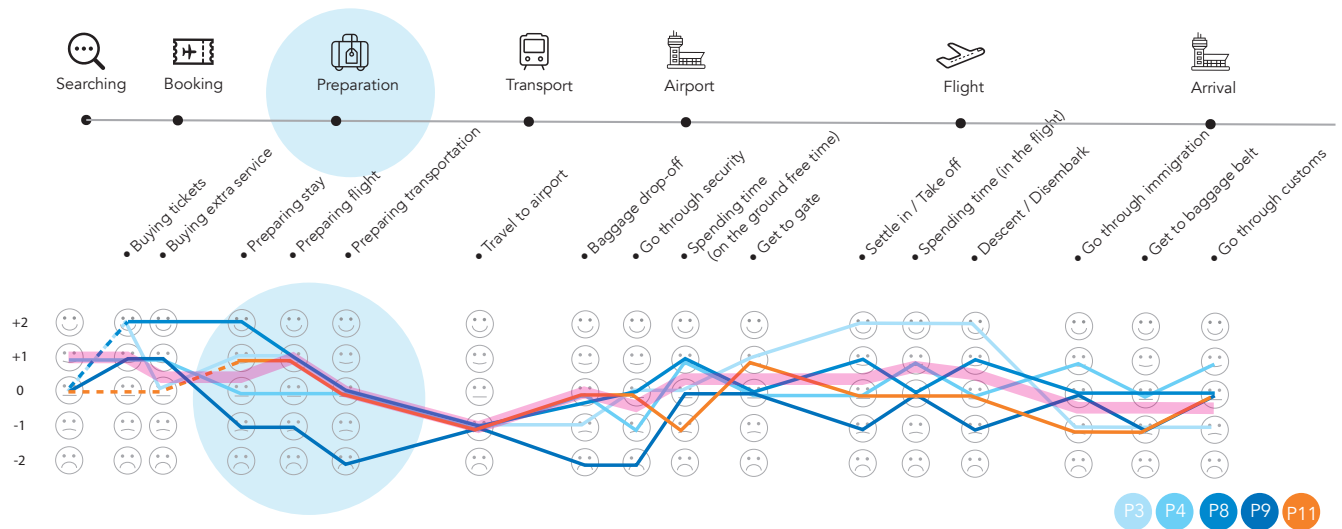

Searching · Booking · Preparation · Transport · Airport · Flight · Arrival

Buying tickets · Buying extra service · Preparing stay · Preparing flight · Preparing transportation · Travel to airport · Baggage drop-off · Go through security · Spending time (on the ground free time) · Get to gate · Settle in / Take off · Spending time (in the flight) · Descent / Disembark · Go through immigration · Get to baggage belt · Go through customs

+2 +1 0 -1 -2

P3 P4 P8 P9 P11

Figure. 5.2. Mood change of high conscientiousnes travelers

Literature :

- Goldberg(1990) indicates conscientious individuals are organized, show self discipline and behave dutifully.

- High scores on conscientiousness indicate a preference for planned rather than spontaneous behaviour. (Costa, P. T., ; McCrae, R. R.,1992).

- Consciousness individuals want to be right. (Preston Ni, M.S.B.A., 2014)

- Conscientiousness implies a desire to do a task well.(Goldberg, 1990)

- Complimenting high conscientiousness people's accuracy, completeness, adherence to procedures, and attention to detail can positively contribute to their well-being. (Preston, 2014)

" I think mainly in the packing and to decide what cloth to take, because it can be very warm in the southern France. So I was always like okay it is warm or not warm. To be honest, it is annoying."

- from participant 4

" In the morning, I calculate 3 to 5 times about the train, whether it is gonna be on time, or did I calculate it right. Will I be there on time. I want to make sure that I am able to be on time at the airport."

- from participant 3

Concern & needs : Want to be right, acknowledged, structured, prefer plan

Conscientiousness
Agreeableness
Openness to experience
Extraversion
Neuroticism

Low conscientiousness

From passenger experience research, 3 out of 13 participants were found to have low conscientiousness traits. Figure 5.3. shows the mood journey of people who have such traits.
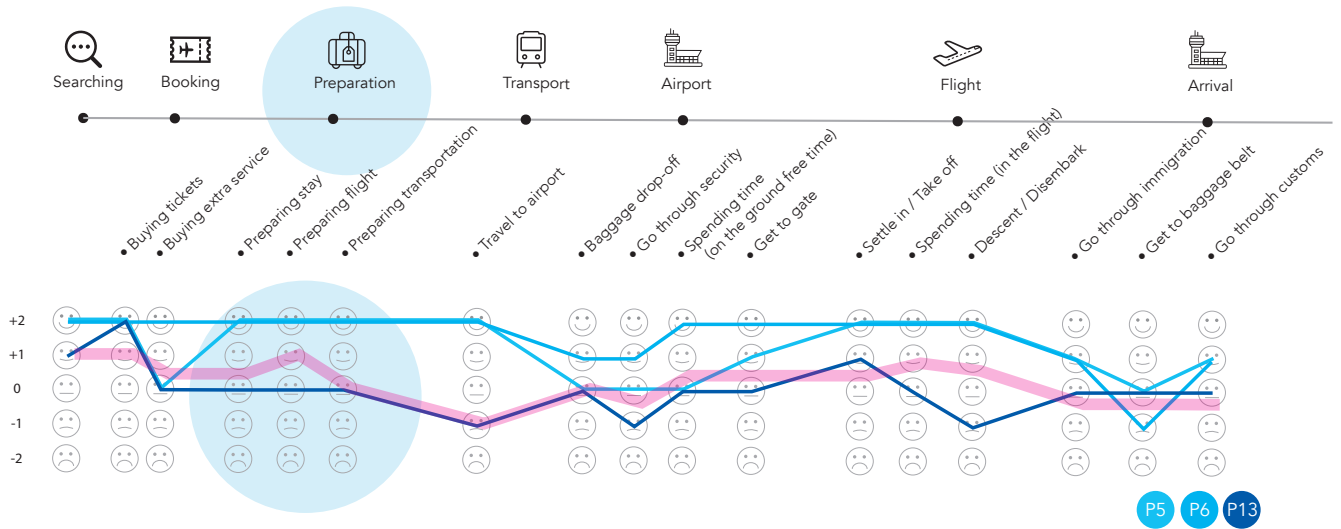
Searching • Booking • Preparation • Transport • Airport • Flight • Arrival

Buying tickets • Buying extra service • Preparing stay • Preparing flight • Preparing transportation • Travel to airport • Baggage drop-off • Go through security • Spending time (on the ground free time) • Get to gate • Settle in / Take off • Spending time (in the flight) • Descent / Disembark • Go through immigration • Get to baggage belt • Go through customs

P5 P6 P13

Figure. 5.3. Mood change of low conscientiousnes travelers

Literature :

• Dislike routine. Do not always conform to norms and regulations. Inconsistent. Easily distracted. Change direction and focus frequently. Can be unrealistic. (Preston Ni, M.S.B.A., Communication Success with four personality types)

• Low conscientiousness is associated with flexibility and spontaneity, but can also appear as sloppiness and lack of reliability (Toegel & Barsoux, 2012).

• Low levels of conscientiousness are strongly associated with procrastination.(Dewitt, 2002)

• People who score low on conscientiousness tend to be laid back, less goal-oriented, and less driven by success.(Costa, & McCrae, 1992).

" Preparing the luggage a night before is too much for me, normally I prepare half an hour before I leave. "

- from participant 6

" Preparing transportation is something that I usually forget. "

- from participant 13

" Sometimes I feel like if I prepare more I feel more stressed. "

- from participant 5

Concern & needs : less effort during preparation, less but to the point information, spontaneous, procrastinating, tend to be late

38

From research, it showed that 7 out of 13 partici-pants were measured having low agreeableness traits. In figure 5.4. shows the mood journey of people who have such trait.
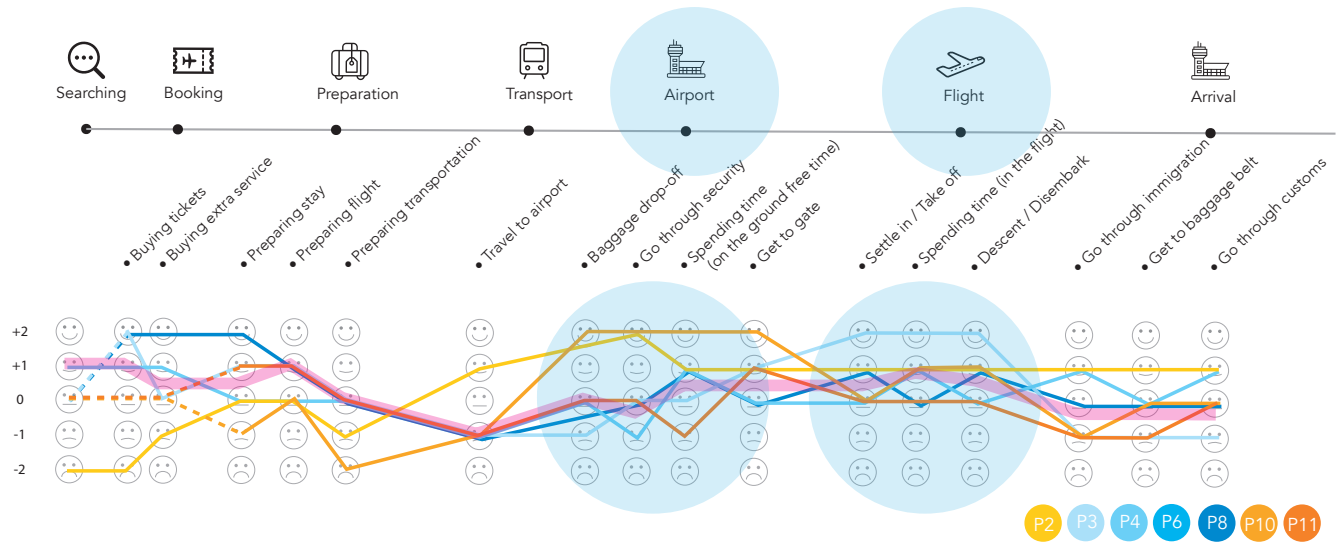
Figure. 5.4. Mood change of high agreeableness travelers

Literature :

• Individuals who score high on agreeableness tend to be tolerant, trusting, accepting, and easily moved (McCrae & John, 1992); these qualities make it difficult for them to stand up for their interests in conflict situations.

• To let them know how much you appreciate their willingness to problem-solve with you is impor-tant(Preston Ni, M.S.B.A., 2014)

• Be sure to let them know you notice their sacrifice and efforts is important. A warm display of appreciation is important as well.(Preston Ni, M.S.B.A., 2014)

Concern & needs : Be tolerant, their sacrifice being appreciated, tend to help others

Conscientiousness

Agreeableness

Openness to experience

Extraversion

Neuroticism

Low agreeableness

From research, it showed that 3 out of 13 participants were measured having low agreeableness traits. In figure 5.5. shows the mood journey of people who have such trait.
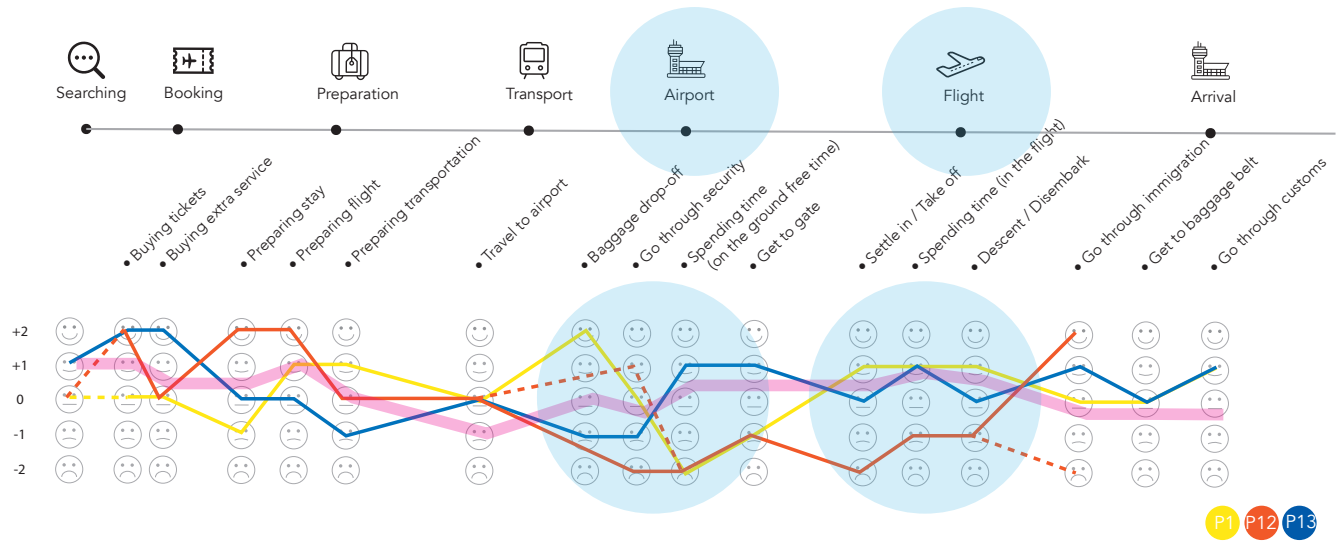
Searching · Booking · Preparation · Transport · Airport · Flight · Arrival

Buying tickets · Buying extra service · Preparing stay · Preparing flight · Preparing transportation · Travel to airport · Baggage drop-off · Go through security · Spending time (on the ground free time) · Get to gate · Settle in / Take off · Spending time (in the flight) · Descent / Disembark · Go through immigration · Get to baggage belt · Go through customs

P1 P12 P13

Figure. 5.5. Mood change of low agreeableness travelers

Literature :

• Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being, and are less likely to extend themselves for other people. (Bartneck, Hoek & Mubin, Mahmud, 2013)

• Low agreeableness personalities are often competitive or challenging people, which can be seen as argumentative or untrustworthy (Toegel, G., ; Barsoux, J. L., 2012).

" I am looking for place that is no one around, and safe environment. The other part is about the privacy. People always look at you, so I hate. "

- from participant 12

" For now, I do not trust any system , the company do not think for you, they just want to steal money from you. They really don't taking care of you. (Talking about the pushing advertisement information) "

- from participant 1

Concern & needs : Focus on their self - interest, do not want to be bothered by others, need private space

High openness to experience

From passenger experience research, 3 out of 13 participants were measured having high openness to experience traits. In figure 5.6. shows the mood journey of people who have such trait.
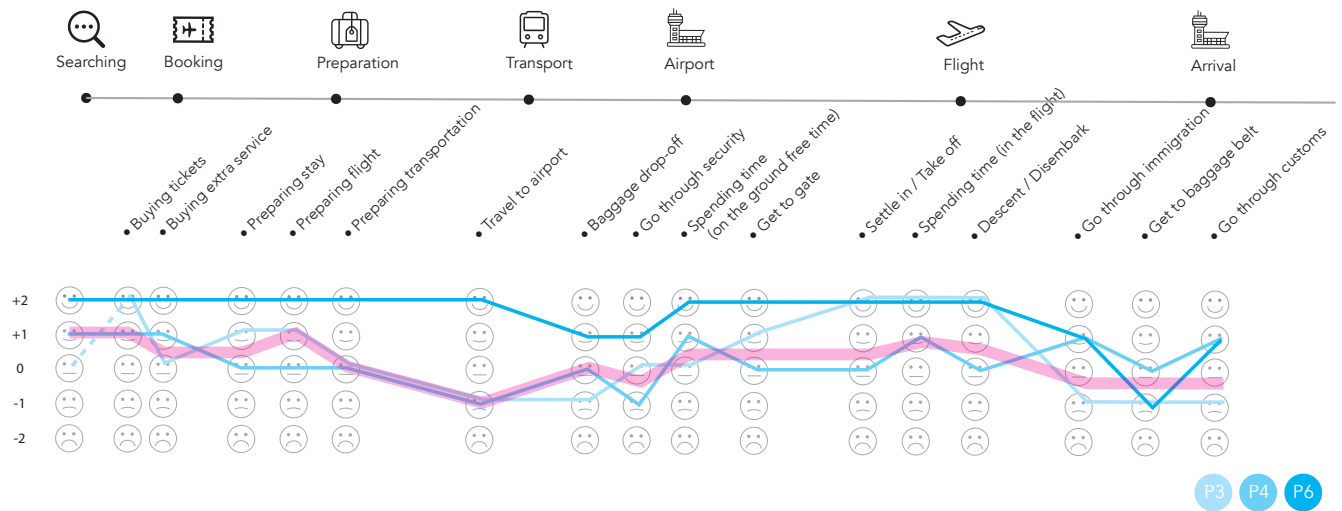

Figure. 5.6. Mood change of high openness to experience travelers

Literature :

- Openness has moderately positive relationships with creativity, intelligence and knowledge. (Goldberg, 1992)

- Using a lot of examples, demonstrations and visual aids to effectively communicate with high openness personalities.(e-how, Effective Communication With Different Personality Types).

- Individuals with high openness are open to explore ideas related to the conflict situation, and their creativity and willingness to change goals. (David Antonioni, 1998)

" After arriving at the airport, I sometimes read books, listening to music, exploring the airport to find something new. "

- from participant 6

" I travel several years , but I still feel positive about the airport. I never feel bored. I always try to find something new. "

- from participant 4

Concern & needs : open to new ideas, tend to try new services

Other traits

Conscientiousness

Agreeableness

Openness to experience

Extraversion

Neuroticism

In the research, the mood journey of people who are neuroticism and people who are extraversion do not have an obvious pattern between high and low traits. People with low openness to experience cannot identify patterns either. However, it doesn't mean that such traits are not relevant in the context. The needs and concerns are identified through literature review.

It may be the limitation of this research that the emotion of people in such traits will only be brought out under certain circumstances, such as disruption, flight delay or other scenarios, but are nevertheless valuable to conduct further research.

Insights

Conscientiousness

1. **People with high conscientiousness experienced more negatively than people with low one at the preparation phases.**

The mentality of want to do things right makes high conscientiousness people feel more intense. However, low conscientiousness people feel more relaxed because they simply do not put too much effort in their preparation.

2. **There was a considerable difference between how high and low conscientiousness people prepared.**

High conscientiousness people prefer having a plan, structured information and tend to look ahead, whereas low conscientiousness people tend to be more spontaneous, dislike routine, plan trip one step a time.

Openness to experience

1. **People with high openness to experience had a more positive experience than the average travelers through the whole journey**

Such people feel more anticipated during the journey. Even though business trip is a routine for them, they tend to seek new experiences or new services for their trip.

Agreeableness

1. **People with high agreeableness had a more positive experience than people with low one while waiting at the airport and in the flight.**

High agreeableness people feel more relaxed in such phases as they have higher tolerance. However, low agreeableness people tend to be stressed once they are bothered by things not related to their own value.

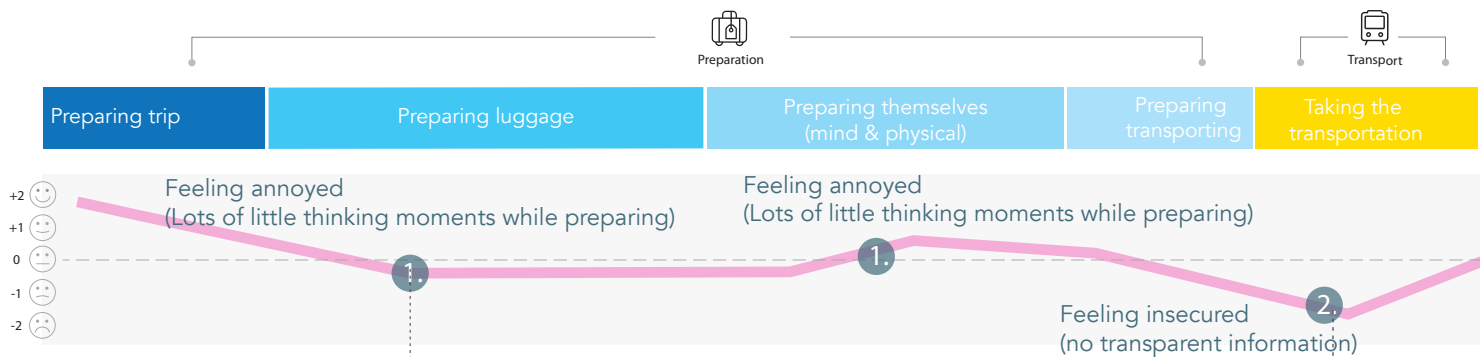2. **Different attitude toward other passengers' concerns**

During the flight journey, high agreeableness people tend to help others whereas low agreeableness care more for their own value.

Conclusion

In passenger experience research, mood journey map was used as a tool to identify the concerns and needs in different traits and establish their relevance with respect to various contexts. **The concerns and needs of conscientiousness are most relevant to the context of preparation; agreeableness and extraversion are the more relevant to the context of spending time at the airport as well as in the plane; openness to experience and neuroticism are relevant through the entire flight journey.**

42

How do 5 opportunities (in chapter 4) link to different needs and personality traits

Five opportunities were defined in the passenger experience research together with the mood journey research. Few assumptions and design interventions will be tested with customers at the Schiphol lounge.

Preparation

Transport

| Preparing trip | Preparing luggage | Preparing themselves (mind & physical) | Preparing transporting | Taking the transportation |

+2
+1
0
-1
-2

Feeling annoyed
(Lots of little thinking moments while preparing)

Feeling annoyed
(Lots of little thinking moments while preparing)

1.

1.

2.

Feeling insecured
(no transparent information)

Opportunity in different context

A

Preparing for the trip and luggage
There were so many steps and little thinking moments that people needed to go through when preparing. Sometimes travelers just forgot things as they were too busy to remember to bring everything.

B

Preparing for the transportation
Some travelers checked the transportation information frequently, calculated the buffer time to make sure having the right information. Making sure the plan is correct and having transparent information were important for them to have the in-control feeling.
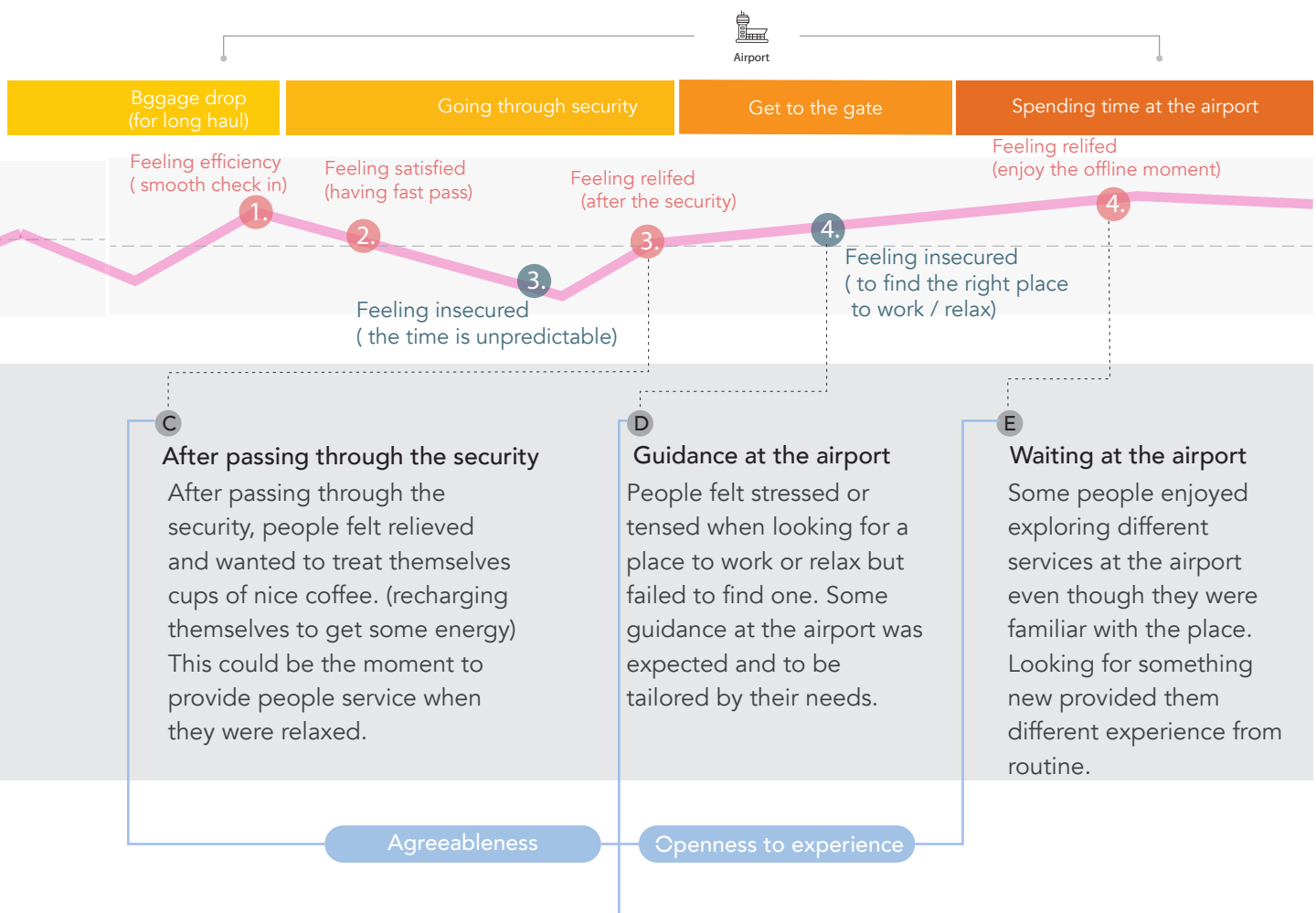
Conscientiousness

Is conscientiousness - personality character relevant the most during the preparation stage ?

High conscientiousness :
Do they need other digital assistant to help them prepare the trip?

Low conscientiousness :
Do they need some last moment service in case they forget to bring things?

High / low conscientiusness :
Do they need support for the arranging the transporting & calculating buffer time?

Airport

| Bggage drop (for long haul) | Going through security | Get to the gate | Spending time at the airport |

Feeling efficiency (smooth check in) — 1.

Feeling satisfied (having fast pass) — 2.

Feeling relifed (after the security) — 3.

Feeling relifed (enjoy the offline moment) — 4.

3. Feeling insecured (the time is unpredictable)

4. Feeling insecured (to find the right place to work / relax)

C

After passing through the security

After passing through the security, people felt relieved and wanted to treat themselves cups of nice coffee. (recharging themselves to get some energy) This could be the moment to provide people service when they were relaxed.

D

Guidance at the airport

People felt stressed or tensed when looking for a place to work or relax but failed to find one. Some guidance at the airport was expected and to be tailored by their needs.

E

Waiting at the airport

Some people enjoyed exploring different services at the airport even though they were familiar with the place. Looking for something new provided them different experience from routine.

Agreeableness   Openness to experience

Is agreeableness and openness revelant the most during the spending time at the airport and in the flight ?

High / low agreeableness:
Do people need guidance in the airport to help them find the right place to work or relax ?

High / Low openness to experience :
Would people appreciate the small delightment message?

High / Low openness to experience:
Would people be open to receive new service that helps them relax?

44

5.2 Exploring the needs and concerns in different personality traits through design

Evaluation of five design opportunities with business traveler at premium Lounge

From passenger experience research (in chapter 4), some opportunities to enhance travelers' experience were recognised. The mood journey research showed that people with different personalities looked for different services in different contexts. Consequently, some assumptions were made and tested at the premium lounge to verify and make the needs more concrete.

Goal

To test design interventions with the real users as a validation of assumptions in 5 potential opportunities and to determine whether the designed service meet the demands of people with different personalities in different contexts.

Participants

12 passengers in total were chosen as participants at premium lounge. All of them are frequent business travelers who fly more than 5 times per year. They are from US, UK, NL, India, Luxembourg and aged between 20 and 60 years.
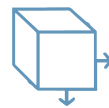
Context

The idea testing was conducted at the international premium lounge with 12 business travelers. Conduction of the test in the lounge enabled people to evoke their flight related experience and it helped people to image the context in which the services were used.

Measuring personality → *Showing scenarios* → *Explaining ideas* → *Asking feedback*
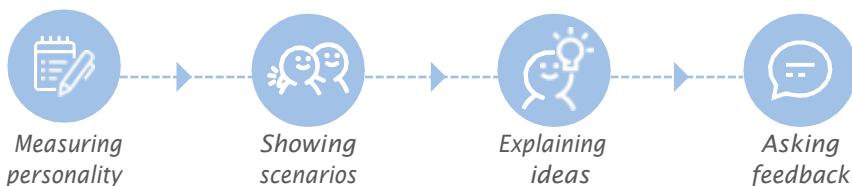
Figure. 5.8. The testing process

Preliminary ideas and test result

Preparing trip	Preparing luggage	Preparing themselves (mind & physical)	Preparing transporting	Taking the transportation	Baggage drop (for long haul)	Going through security	Get to the gate	Spending time at the airport

A   B   C   D   E
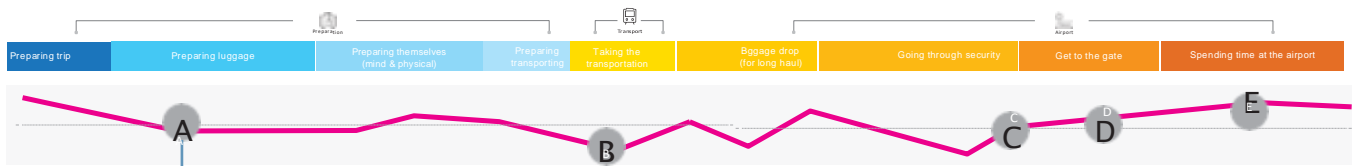
Idea - 1: Preparing reminder

Assumption :

People with high-consciousness tend to spend more effort preparing as they want to avoid forgetting anything important. Those little thinking moment make them feel annoying; whereas low-conscientiousness people do not put too much effort preparing stuff, and they are more likely to miss the important stuff.

Intervention design:

High / low conscientiousness travelers will try reminder service to help them reduce the hassle involved in preparation for travel ?
High / low conscientiousness travelers would like to create their own reminder list ?

" No, I always bring my stuff, I can do that in my sleep."
" It's my routine, for me I bring my basic list, so I don't need it."

- High conscientiousness traveler

"This is helpful, as my last trip I forget my credit card, I think it's a great idea, especially for people who travel a lot, sometimes we just forget. I would like to build my own list for each flight, because I travel internationally, it would be different stuff."

- Low conscientiousness

Figure. 5.9. Prototype of preparing reminder

Insights

• High conscientiousness people do not need support for their routines.
• Low conscientiousness want to be reminded and get support.
• Past experience influences their need toward the service.

| Preparing trip | Preparing luggage | Preparing themselves (mind & physical) | Preparing transporting | Taking the transportation | Baggage drop (for long haul) | Going through security | Get to the gate | Spending time at the airport |
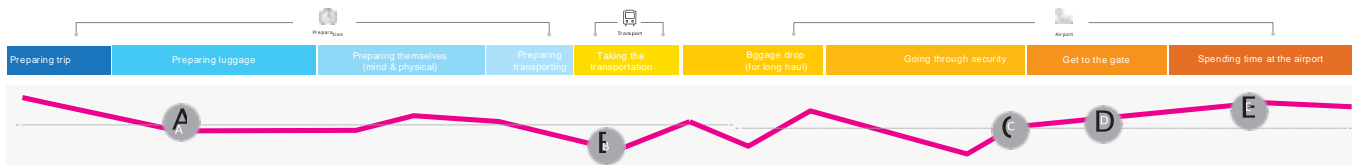
Idea - 2: Transporting - buffer time calculating

Assumption :

People need transparent information to feel in control. Having information about the security check waiting times help them plan better. Low conscientiousness people don't prepare as meticulously for their travel. The service provide here reduces their preparation hassle.

Intervention design:

Low conscientiousness people will appreciate the service which help them prepare ?
Visualisation of the timeline helps increase the awareness of time ?

Figure. 5.10. Prototype of buffer time calculating

" *This would be great, if I can know how long would be there, I would probably spend less time at the airport. I would trust it. In the U.S., I usually drive myself.* "

- Low conscientiousness traveler

" *Particularly, the security check, car, taix. In general, I think it's good, as I try to figure it out anyway so it's good.... maybe you can provide me the standard one, and if I want more time I can add up myself.* "

- Low conscientiousness traveler

Insights

• Low consciousness people appreciated the service provide them all the information for getting to the airport.
• The visualised timeline helped people prepare and plan.

| Preparing trip | Preparing luggage | Preparing themselves (mind & physical) | Preparing transporting | Taking the transportation | Baggage drop (for long haul) | Going through security | Get to the gate | Spending time at the airport |
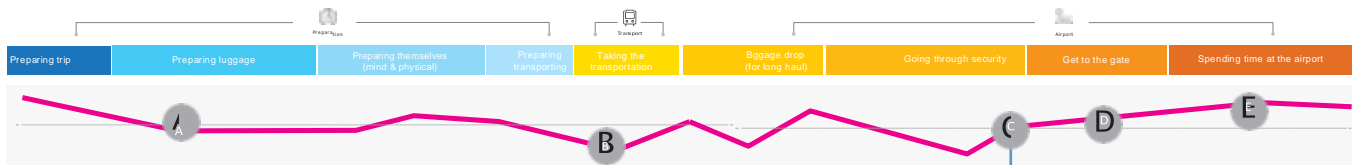
Idea - 3: Warm delightment

Assumption :

After passing through the security, people feel relieved and would like to treat themselves with a cup of nice coffee.

Intervention design:

With warm notifications, people with high openness to experience would feel more connected to the brand, and feel they were treated special?

> "*The information is not so important, but show the location would be"*
> *- High openness to experience traveler*

> "*It's very small thing, everything is available as soon as you pass through the security check. It's very mall thing to be put in. It won't make a big difference. "*
> *- High openness to experience traveler*

Insights

• Warm reminder will not make big difference in terms of customer intimacy.

| Preparing trip | Preparing luggage | Preparing themselves (mind & physical) | Preparing transporting | Taking the transportation | Baggage drop (for long haul) | Going through security | Get to the gate | Spending time at the airport |
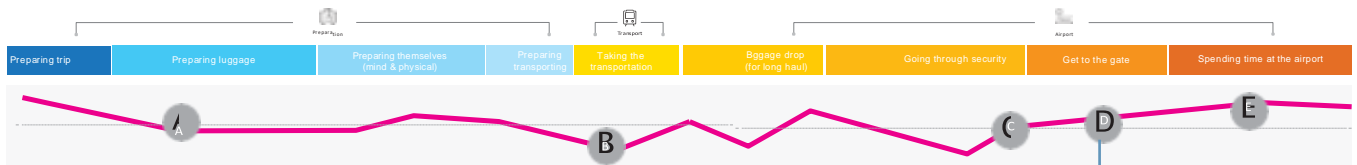
Idea - 4: Guide me to work or relax

Assumption :

Low agreeableness people feel stressed or tensed easily when they are not able to find a nice place to work or relax. They expected some guidance at the airport to help them find the right place.

Intervention design:

Providing an interactive airport guidance by using mixed reality for low agreeableness people and help them to find place which meet their demands ?

> "*I would like to see the location, I missing a lot at the airport, I need the guidance. Many time I ask the ground service people they do not know the location. "*
>
> *- Low agreeableness traveler*

> "*That would be awesome. Because half of the time, we've been walking through the airport trying to find out where is less crowded. The problem of the map doesn't tell the area of the map could be over 500 people, do go there. Something more interactive would be better. "*
>
> *- High agreeableness traveler*

Insights

- An interactive guidance at the airport is needed for everyone, not just for low agreeableness people.
- Asking questions about users' needs is essential in order to provide more personalised services.
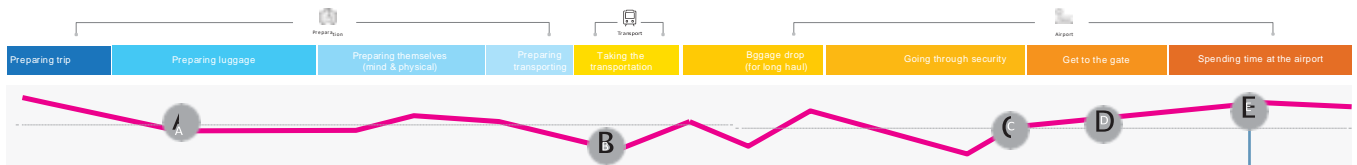
Idea - 5: Small game to get away from routine trip

Assumption :

High openness to experience people would like to try different services which enable them to experience differently from the routine. They are more open to new service and would like to explore different things at the airport.

Intervention design:

A small game is provided to high openness people to explore the airport. Will they have the intention to try ?

"*I would probably try…, I would simply say do you want to play a game while you wait for the flight, few games, sudoku or crosswords, something like that is always good.*"
- *high openness to experience traveler*

"*Small and interesting game would be nice, I would like to try.*"
- *high openness to experience traveler*

Insights

• High openness travelers would like to try new services, as long as it's not too much effort.

5.3 Identify service framework in the pre-flight journey based on different personality

With the passenger experience research, literature reviewing, mood journey mapping research as well as insights from different design intervention testing in the lounge, all the needs and concern were mapped out during the pre-flight experience. With such framework, the needs and concerns at different phases of the pre-flight journey were identified. The framework will be used as a tool to develop different service based on different personality in certain context.

Within the five traits, openness to experience is most relevant when providing new services; the needs in the preparation phase is most relevant to conscientiousness trait; extraversion and agreeableness traits would be more obvious when dealing interpersonal interaction; neuroticism traits would be more obvious when disruption occurs.

Opportunity in different context

Preparing trip

High Openness
- Explore new services
- Different experience
- Explore the destination
- Have visual communication

Low Openness
- Follow their routine (their original schedule)
- Want to have concrete information

High Conscientiousness
- Prefer planned, organized, structured
- Feeling of acknowledgment

Low Conscientiousness
- Prefer spontaneous, dislike routine

High Extravertion
- Meet new people

Low Extravertion
- Achieve goal without too much interpersonal interaction

High Agreeableness
- Share experience
- Help others

Low Agreeableness
- Focus on their self-interest
- Do not bothered by commercial pressure

High Neuroticism
- Need proactive information when disruption occurs
- Need a personal solution when disruption happens

Figure. 5.14. Concerns and needs of different personalities in the pre-flight journey

Preparation

Preparing luggage

**Preparing themselves
(mind & physical)**

A. Preparing for the trip and luggage

There are so many steps and little thinking moments that people need to go through when preparing. Sometimes, people just forget things as they are too busy to always pay attention to details.

B. Preparing for transportation

People have to check the transporting methods back and forth and calculating the buffering time when preparing the transportation. The transparent information is important for them to have feeling of in control.

• Re-confirmed information
(If things are different from before)

• Follow their routine
(their original schedule)

• Want to be memorized
 (don't have to rethink details)

• Complimenting their accuracy

• Do things right and pay attention to details

• Feeling that organizing everything properly

• Want to be memorized (don't want to
 spend too much time preparing)

• Less but to the point information

• Be able to choose

• Have control when something unexpected happened
• Need comfort and accompany

Preparation

Transport

| Preparing transporting | Taking the transportation | Bggage drop (for long haul) |

Opportunity in different context

C. After passing the security

After passing through the security, people feel relief and would like to treat themselves cups of nice drinks. This is the right moment to provide people with nice service to create customer intimacy.

High Openness

Low Openness

- Follow their routine (their original schedule)
- Re-confirmed information (If things are different from before)

High Conscientiousness

- Want to do things right
- Tend to looking things ahead and plan things

Low Conscientiousness

High Extravertion

Low Extravertion

High Agreeableness

Low Agreeableness

High Neuroticism

- Need proactive information when a disruption occurs
- Need a personal set of solution when disruption happens

Figure. 5.14. Concerns and needs of different personalities in the pre-flight journey

Airport

Going through security	Get to the gate	Spending time at the airport

D. Guidance at the airport

People feel negative easily when they are not able to find the right place which meet their demands, eg, for working or relaxing. They need some guidance at the airport to help them find the right place.

E. Waiting at the airport

Some people would like to explore different services which help them to experience differently from the routine.

	• Explore new services • Different experience	• Explore new services • Different experience

	• Follow their routine
	  (their original schedule)
		• Follow their routine
		  (their original schedule)

• Want to do things right
• Complimenting their accuracy

• Less but to the point information

		• Meet new people • Be the center of attention
• Achieve goal without too much interpersonal interaction		• Spend time alone • Private space

• Keep harmony • Appreciate their sacrifice	• Share experience • Help others	• Keep harmony • Appreciate their sacrifice

• Want private space
• Make the best use of their own time (spending on their own stuffs

• Need proactive information when a disruption occurs
• Need a personal set of solution when disruption happens

Idea generation
& Defining design direction

6

This chapter focuses on how to differentiate services based on different personality traits by using the concerns and needs framework (developed in chapter 5) to enhance customer intimacy. An online survey was conducted with 25 business travelers to explore the phase in which the traveling journey will be the starting point to create personalised service. An idea generation session was held together with relevant stakeholders in airline company to explore the potential directions and services that can be created based on different personality traits. The insights, design requirements and service intervention touchpoints will be used as a criteria to create the final concept.

One personality trait was selected for the final concept development and show that the service can be provided differently in such trait.

6.1 Explore the design context

Online survey with business traveler

An online survey was conducted with 25 business travelers to investigate the phase of the pre-flight journey in which they would expect personalised services.
The result showed travelers expected to have personalised service at the stages of trip prepara-

tion and the commute to the airport.

On the other hand, the result from passenger experience research (chapter 4) also showed that travelers' emotions tended to drop and become more negative at the stages of preparing the trip and reaching the airport. The demands from online survey with business travelers showed that people appreciated personalised services at the stage when they felt more negative. Therefore preparing

the trip and transporting to the airport will be chose as the main context to develop new services. However, people with different personalities may have different concerns in the same context. The concerns and needs framework developed in chapter 5 will be used as a guideline to create different scenarios in the idea generation session.
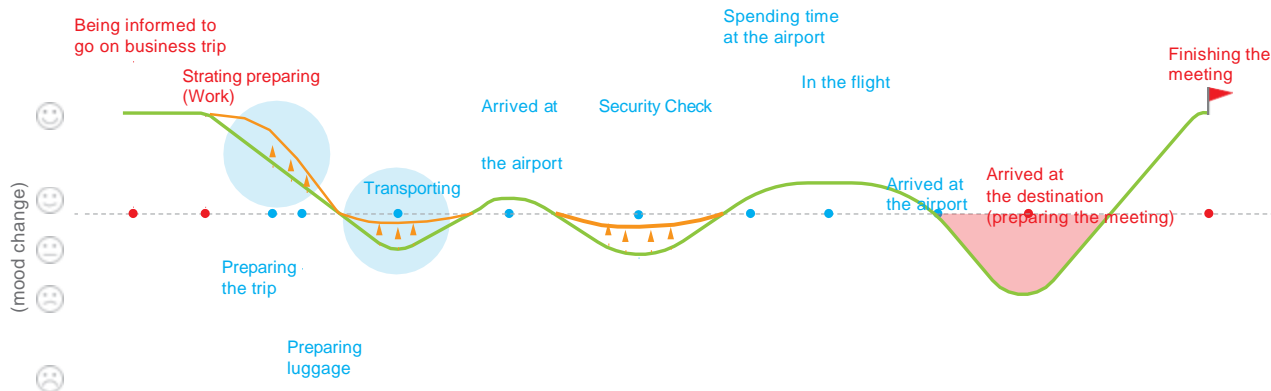
Figure 6.2. The flight journey of business travelers
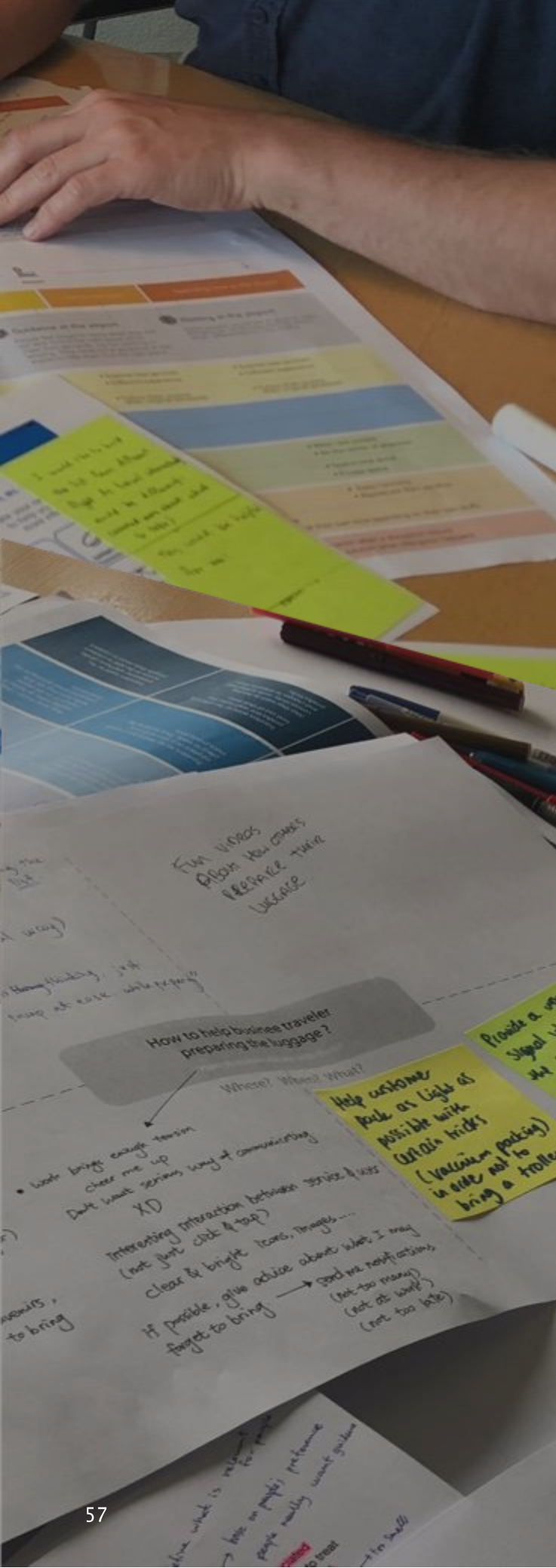
6.2 Idea generation

Idea generative session

The idea generative session will focus on creating services within the context of preparing the trip and transport to the airport.

Goal

How to use the concern and needs framework developed in chapter 5 to create service and explore the possible design directions during the preparation phase.

Who

Relevant stakeholders in the airline company participated in this session. Personalisation strategists from customer experience, and user experience designers form digital development team.

How

Three storyboards were created to use as tools to develop ideas, and using how to question during the brainstorming sessions. At the end of the sesion, the value proposition canvas was used to develop the potential services.

3 scenarios for exploring the services

Three scenarios were created to help develop ideas during preparation phases. For each scenario, 'how to' questions were formulated to explore the services. In the sesion, tools such as personality-de-sign driven principle (Mengqi, Yuan 2017) and preparation images stimuli cards were given as inspiration tool to help people develop ideas.

1. Experience Explore

Always have a fresh mind when going on a business trip. Being positive, want to try new things and have new experiences.

Preparing the trip	Searching fo the opportunity	Plan in the schedule	Looking forward to it
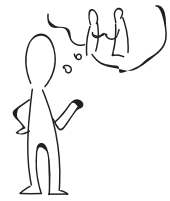
Needs : Explore new experience, meet new people, share experience with others.

How to provide high openness and extraversion people new services in their business trip ?

2. Efficiency seeker

Travel to everywhere around the world and always have a tight and busy schedule.
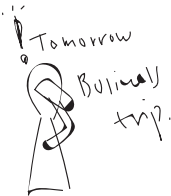
Get a short notice about the business trip	Strat preparing the trip	help them prepare more efficiently and accuratly	Ready to go
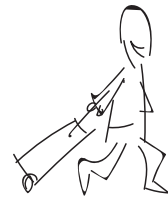
Needs : To be memorised, be able to choose, be efficient

How to help high or low conscientiousness people preparing trip / transport /luggage?

3. Doubt remover

Get tensed and stressed easily when unexpected situation occurs. Need transparent information to feel calm and in control.

Bad weather ! Start worring about their flight.	Get tensed easily.	Want to see the latest information.	Receive suggestion or other options
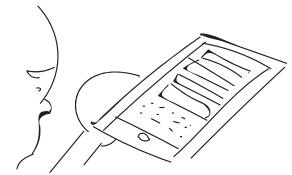
Needs : Provide proactive information to meet travelers expectation, need comfort and accompany

How to remove the doubt from neuroticism and low agreeableness people when things not on schedule ?

Design Requirements

· Small trigger

Do not cost too much effort.
Using a small trigger to create different experience instead of asking customers to put lots of efforts when trying new services. Small things that include passengers travelers can create delightments easily, eg, travelers being recognized by crew members and greeting them. Such an experience can be created with the help of a digital platform.

· Partner with experts create different experiences

Nowadays technology companies like google or other social media platforms, such as Instagram and Facebook, etc. are expanding their service to other domain to enhance customers' satisfaction. An airline company could pair up with experts from these companies to provide more dynamic service to its customers. Providing service beyond customers' expectations can bring them delightments and surprise, which would aid enhancement of intimacy.

· Expand the service to different parts of the journey

Preparing transportation is currently not within the service scope of airline company. The airline company can regard themselves in a role that facilitates and guides travelers to the correct information and makes them feel being taken care of.

· Create a service loop for customers

Airline company looking ahead for the customers' needs and documenting their behaviour data are ways to create personalized service. Service can be provided and tailored more personally based on customers' past experiences and their behaviour data stored in the system.

Service intervention touchpoint in different personality

People with different personalities have different concerns and needs in the journey. Therefore different interventions are needed in order to provide personalised services. In the next section, the traveling journey timeline shows the way people with different personality traits prepared for their trips as well as their needs and concerns. The potential touchpoints to provide service were indicated.

The touchpoint for each trait:

Conscientiousness

High

Preparation Transport Airport Flight Arrival Destination

Service

Low

Preparation Transport Airport Flight Arrival Destination
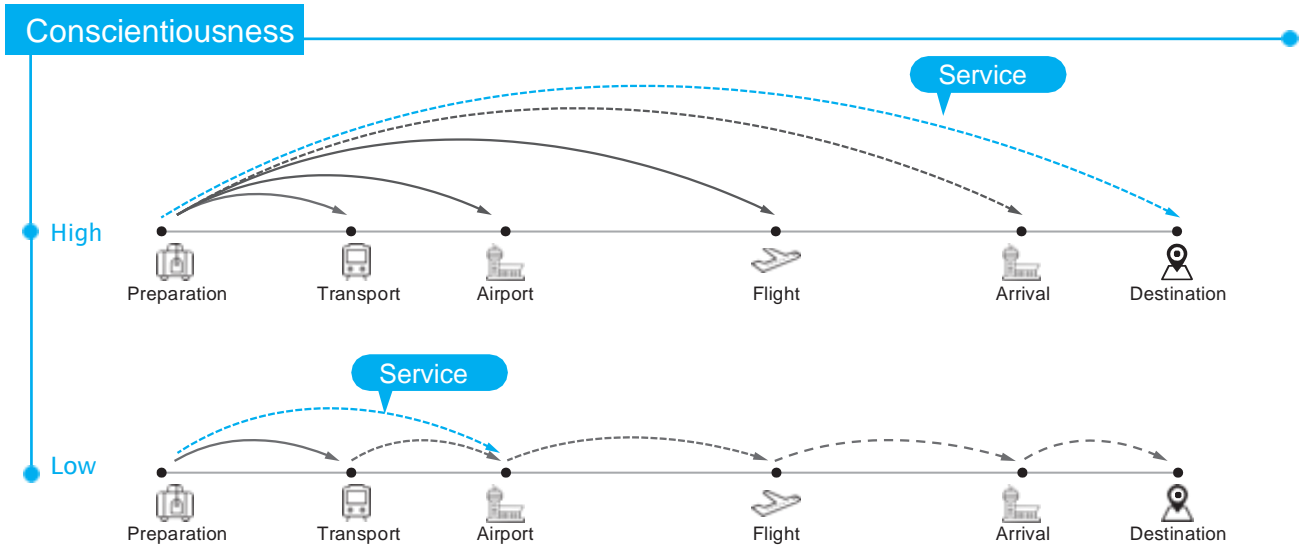
Figure 6.3 Service touchpoint in Conscientiousness trait

People who have high conscientiousness tend to look ahead when preparing their trip. The service can be provided to help them prepare for the final destination as this might not always be routine for them. Such service enables them to prepare more comprehensively. On the other hand, people who have low conscientiousness tend to prepare one step a time. The service can be provided to encourage them prepare one step ahead to reduce the risk of being late.

Agreeableness

High

Preparation Transport Airport Flight Arrival Destination

Service Help others Help others Help others

Low

Preparation Transport Airport Flight Arrival Destination

Service Personal value Personal value Personal value
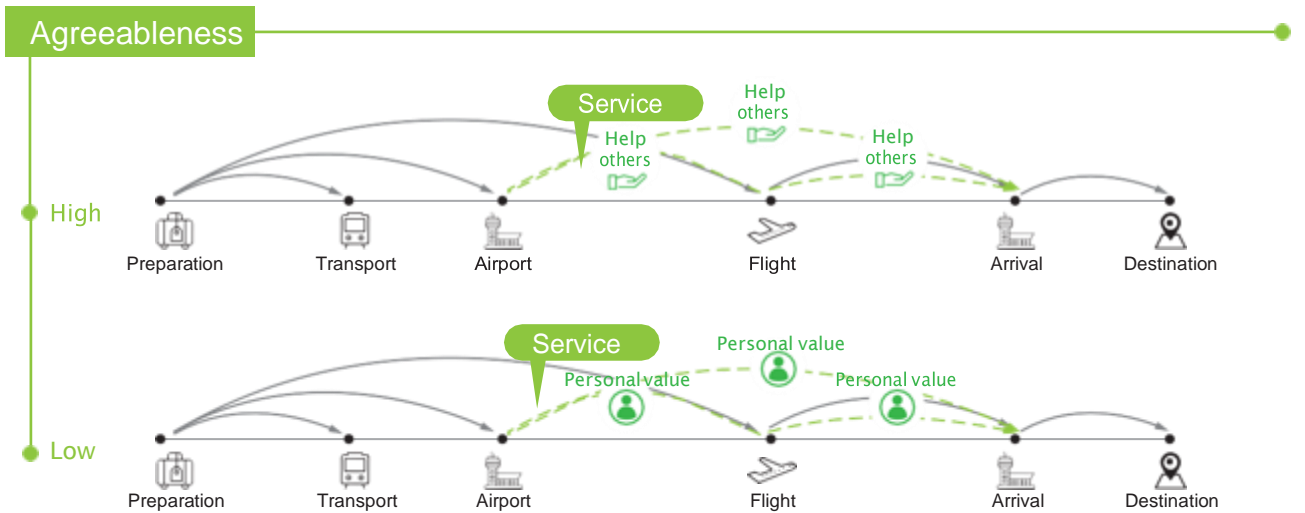
Figure 6.4 Service touchpoint in Agreeableness trait

People who have high agreeableness tend to seek for harmony, they are more willing to help, wherever needed. The service can be provided where more interpersonal interactions between different customers can take place, such as at the airport or in the flight.. On the other hand, people who have low agreeableness tend to feel bothered easily, private space is important for them. They tend to focus on their own value more. The service can be provided at the airport or in the flight where privacy may have more demand.
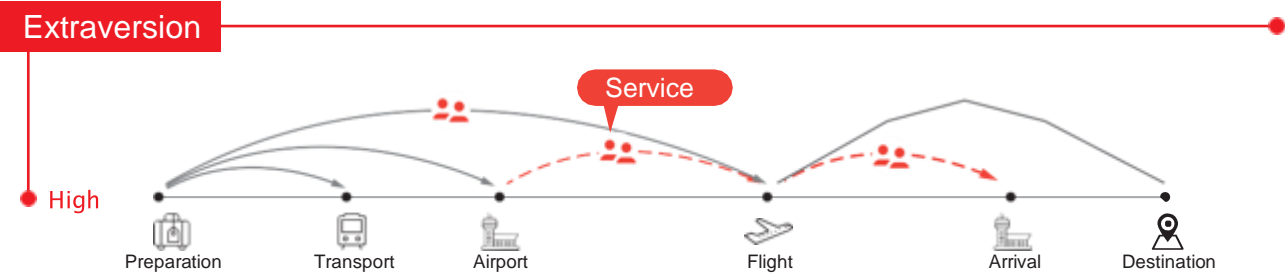
Figure 6.5 Service touchpoint in Extraversion trait

People who have high extraversion enjoy interacting with other people, and meeting new friends creates positive experience for them. The service can be provided at the airport or in the flight where they have more opportunities to interact with other flyers. However, people who have low extraversion tend to look for their own privacy, and they want to achieve their goal without too much interpersonal interaction. Therefore, they appreciate not being bothered during their journey.
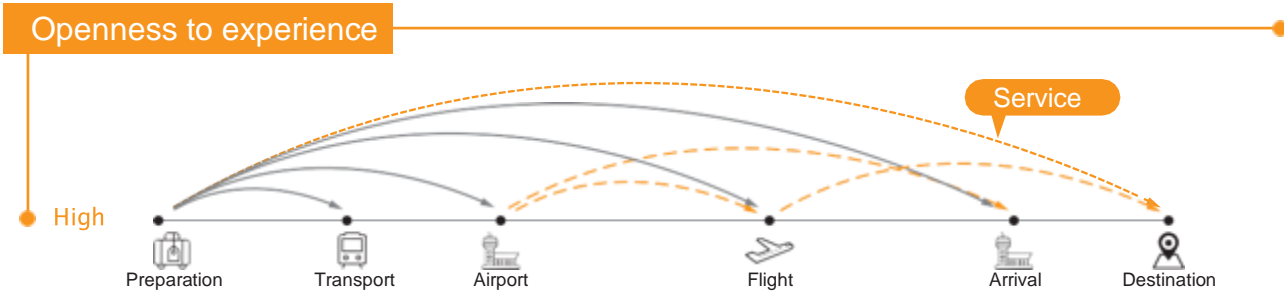
Figure 6.6 Service touchpoint in Openness to experience trait

People who have openness to experience tend to look for new experience that takes them away from the routine. They are willing to try new things along the journey. The service can be provided in many phases during the journey, as long as it does not take too much effort. On the other hand, people who have low openness to experience want to follow their own routine, therefore a new service might result in a negative feedback.
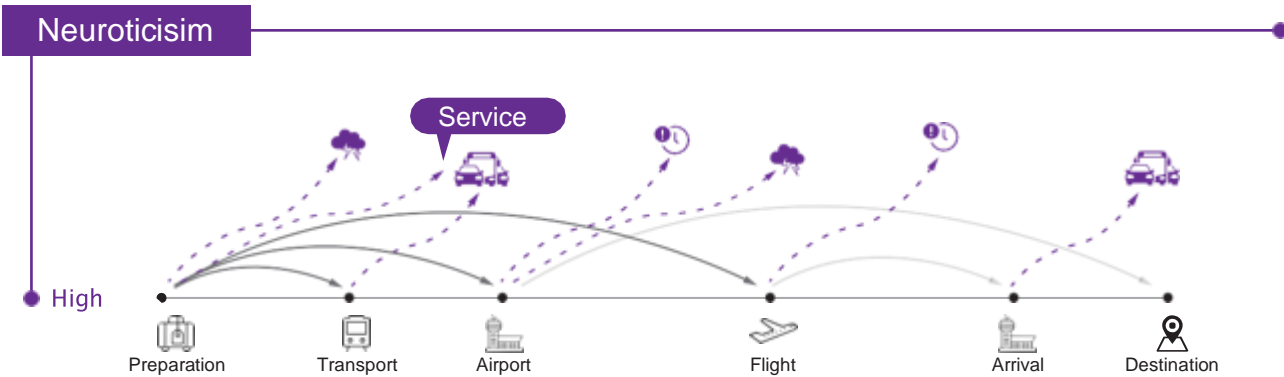
Figure 6.7 Service touchpoint in Neuroticism trait

People who have high neuroticism tend to worry a lot and feel anxious easily. Things such as weather, time or transportation may be reasons that trigger their worries. The service can be provided to calm them down as to reduce the anxious feeling in the journey.

6.3 Define final design direction

Many ideas and directions were generated in the ideation session. However, in order to show how service can be created differently based on different personality traits, one dominant trait was selected to further develop concepts.

Following form the online survey, preparation was chosen as a starting point to create personalised service. The research from passenger's mood journey map (chapter 5) showed that during prepa-

ration phase people experienced most differently between high conscientiousness and low conscientiousness, which assumed that the needs and concerns in such trait is the most relevant at the preparation phase. Figure 6.8 showed the mood journey of conscientiousness trait. Therefore, the concept design will focus on how to differentiate the service for high and low conscientiousness people in the preparation phased.
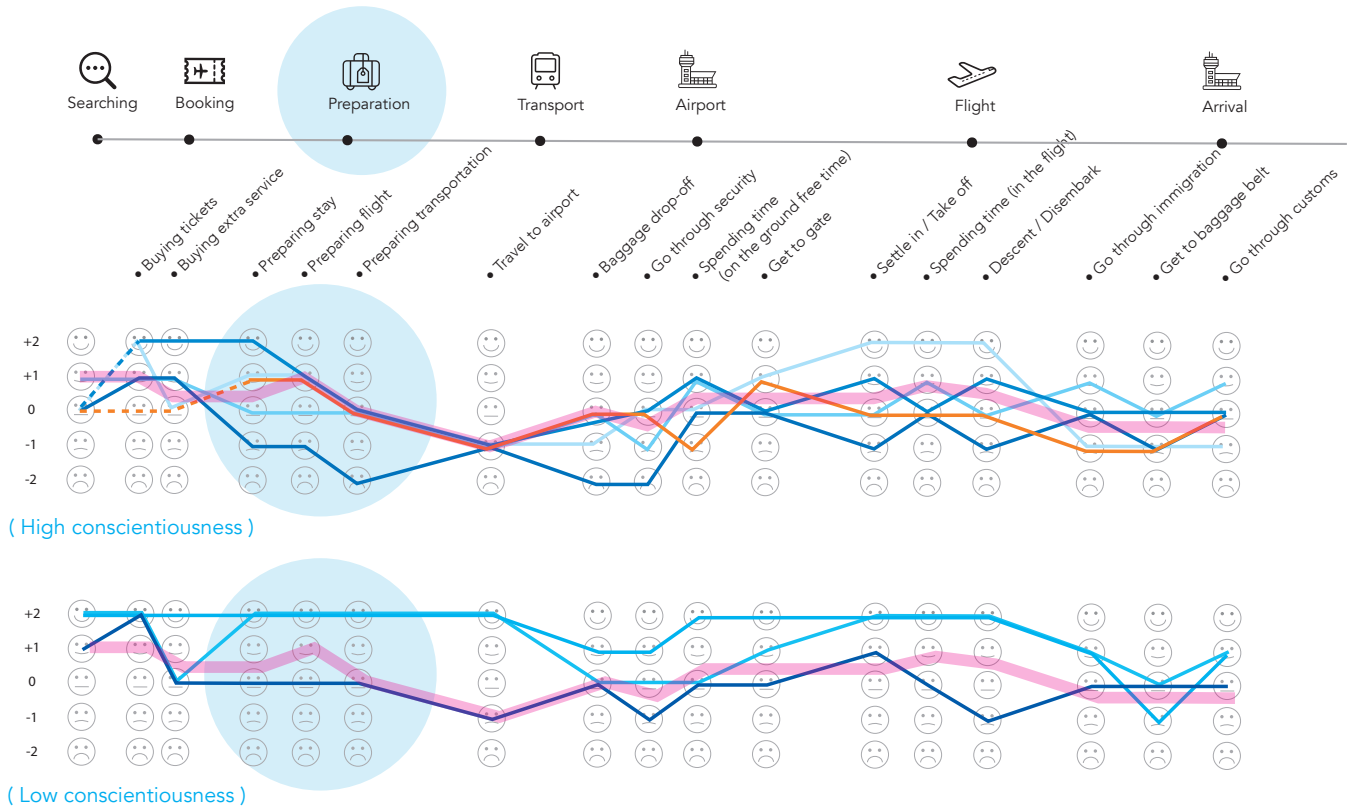
Figure 6.8 Mood journey map of conscientiousness travelers

Design direction
How to differentiate the service for high and low conscientiousness people in the preparation phase.

Problem and service opportunity define

In preparation phase, the way high and low conscientiousness people prepared was quite different. The section below explains how people prepared, how they felt and what were the concerns and problems in high / low conscientiousness trait. The design goal of the service for high / low conscientiousness trait will be defined.

High conscientiousness

Low conscientiousness

- -

High conscientiousness people

Service

| Preparation | Transport | Airport | Flight | Arrival | Destination |
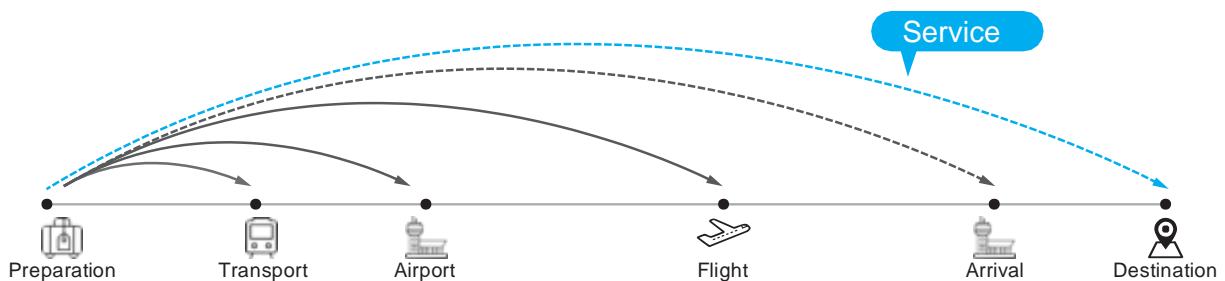
Figure 6.9 Service touchpoint for high conscientiousness people

· Concerns and needs

People who have high conscientiousness tend to have preference for planning, (Goldberg,1990), organisation, self-discipline, dutifulness (Costa, P. T. ; McCrae, R. R.,1992) and right accomplishment of things (Goldberg, 1990 / Preston Ni, M.S.B.A., 2014). They think ahead, plan more, and look for detailed information in order to be right. Besides, they try to optimise their routine and look for information when facing uncertainty or unfamiliar things, such as visiting a new destination, new countries, meet new people.

· Problem define

Feel tensed easily, as their mindset want to do things right. More hassles occur when things are not routine or things they are not familiar.

· Design goal

Help them to be more prepared when visiting new destination. Giving triggers to stimulate nice interaction and first impression when meeting new people in business trips.

Service

| Preparation | Transport | Airport | Flight | Arrival | Destination |
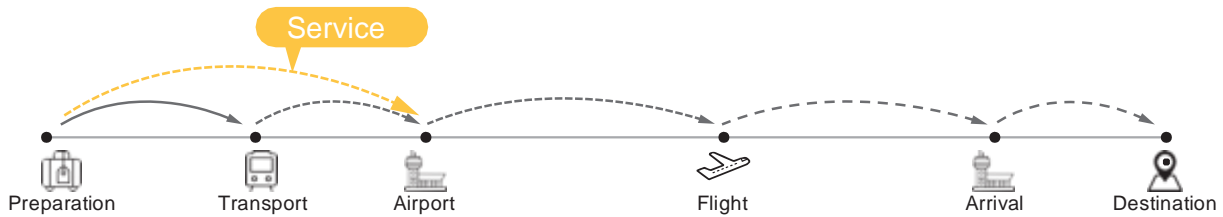
Figure 6.10. Mood journey map of conscientiousness trait

· Concerns and needs

People who have low conscientiousness tend to be spontaneous (Toegel & Barsoux, 2012), dislike routine (Preston Ni, M.S.B.A.), laid back, less goal-oriented (Costa, & McCrae, 1992) and procrastinating (Dewitt, 2002). They tend to prepare one step a time and do not want to take too much effort while preparing. They think less than high conscientiousness people do. However, the chance of missing the flight is higher than other people.

· Problem define

They feel more relaxed during the journey as compared to high conscientiousness people. However, they are at a higher risk of missing the flight.

· Design goal

Encourage people to be more engaged in preparing timely commute to the airport so as to reduce the risk of missing flight.

Conclusion:

Business traveler → Hassle-free pre-flight experience → Achieve the goal of business trip

Openness to experience

Conscientiousness

Agreeableness

Extraversion

Neuroticism

High • The service can be provided to support them when facing new situation or condition they are not familiar with.

Low The service can be provided to encourage people to engage in the preparing transportation.

Have nice impression and interaction with new colleague.

Be on time for the flight.

Concept development & Final design

This chapter introduces the concepts designed for high / low conscientiousness travelers to show how service can be differentiated based on different personalities. The intended interactions and assumptions were validated with frequent business travelers. The final design was iterated based on the feedback from user testing and will be introduced at the end.

7.1 Concept development

A well-prepared trip increases business travelers' performance and productivity.

What service can be provided differently based on travelers' personality in pre-flight experience? First, traveler's personal data will be recognised by the airline company and their personality will be identified. Though how to recognize personality was not within the scope of this project, the result from deep personalisation project in 2017 showed that people are willing to answer small questionnaires and provide personal data to receive more personalised service (Mngqi Yuan 2017). The services in this project were created based on the foundation of previous research result that customers' personalities may be recognised. The service will be integrated in mobile application of the airline company. The service will be introduced to travelers digitally after they check-in online for their flight. The service will be provided differently based on their personality type (high / low conscientiousness).
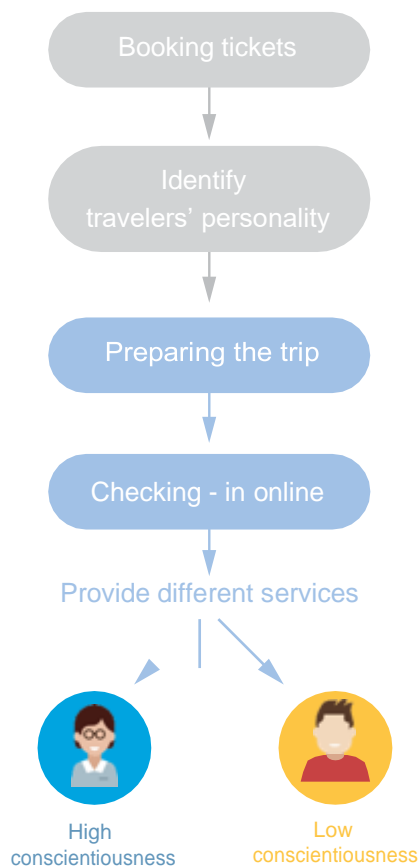
Figure 7.1. Service being provided after checking-in online

Check-in online → Provide different service

Preparation

Transport

Service
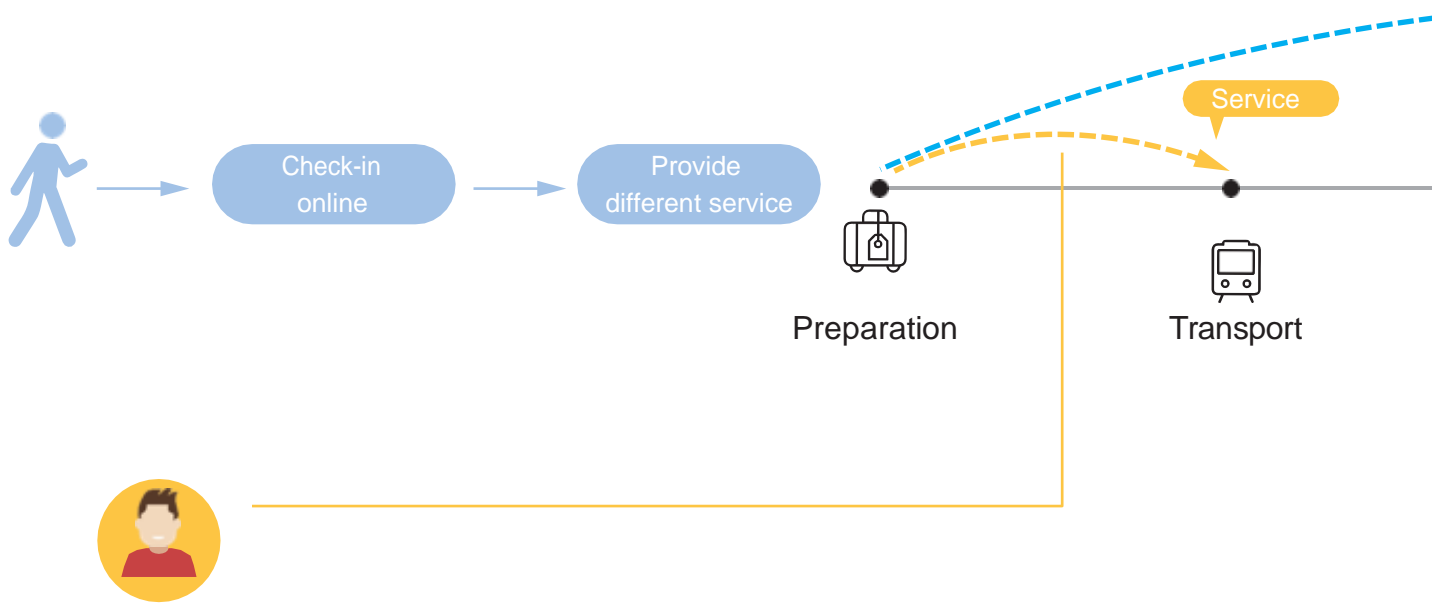
Low conscientiousness traveler

Concept for low conscientiousness traveler : Nexter

Encouraging people to be more engaged in preparing transportation to reduce the risk of missing flight by creating an effortless and simple preparing transport experience. After checking-in, what to do next ? "Nexter" uses different triggers to raise travelers' awareness of time and enable them to prepare one step further. It utilises visual and interactive communication interfaces to encourage people to be more involved in preparing transportation to the airport.

Features

Recognise travelers → Provide trigger to increase time awareness → Remind traveler

After checking-in online, travelers trip purpose and destination will be recognised. The service for low conscientiousness travelers will be introduced by using visual and simple elements to trigger their awareness of time. The service visualised and integrated all the information travelers need from their location to the gate (airport). The service simplify the information and facilitate travelers to the right program they need. At the end, the system would send reminder to travelers to enhance their awareness of time.

Service

Airport   Flight   Arrival   Destination
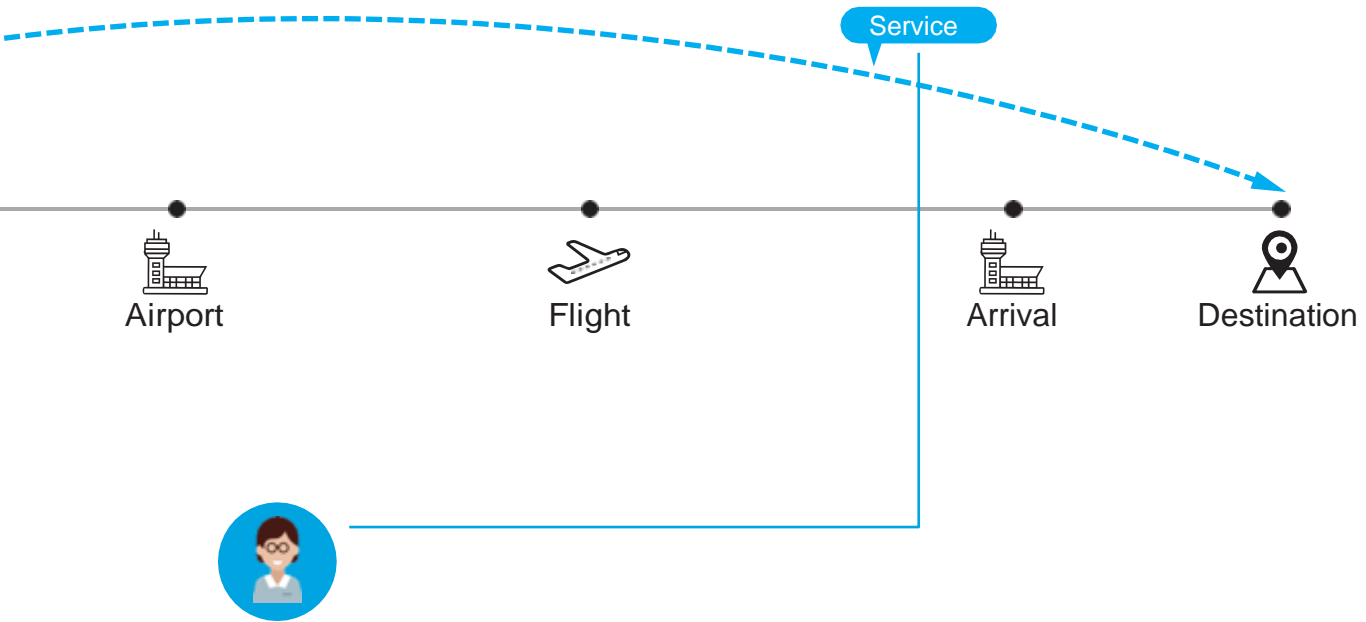
High conscientiousness traveler

Concept for high conscientiousness traveler : Cultural tips

Many steps in business trip are already routines for the high conscientiousness travelers. What is not, when they visiting a new destination? "Cultural tips" provides a service that facilitates high conscientiousness people to think ahead and help them reduce the hassle of preparing for new destination. Sharing useful cultural norms enables them to be more prepared and helps them create a nice impression when meeting new clients. Sharing local information helps them be more prepared, plan ahead, document the travel history and makes them feel acknowledged.

Features

Recognise travelers   Provide trigger to stimulate   Document their
                                a nice interaction   travel history

After checking-in online, travelers trip purpose and destination will be recognised. Then the service for high conscientiousness travelers will be introduced. The service provides the information of cultural tips in a structured way and share "local phrase" and "local news" which is a tool to trigger different interaction. A nice interaction helps to develop a nice business relationship. The travel history page showed how many adventures that travelers have been through, and such information make traveler feel more connected to the brand.

Low conscientiousness

The concept designed for low conscientiousness traveler : "Nexter" - helps travelers prepare transportation will be introduced. The service is provided after traveler checks-in online. The goal of the service is to help low conscientiousness travelers be aware of time and reduce the risk of missing the flight. The intended interaction and concept features were visualised and integrated in the design shown below.

Drag attention

Be aware of time

1
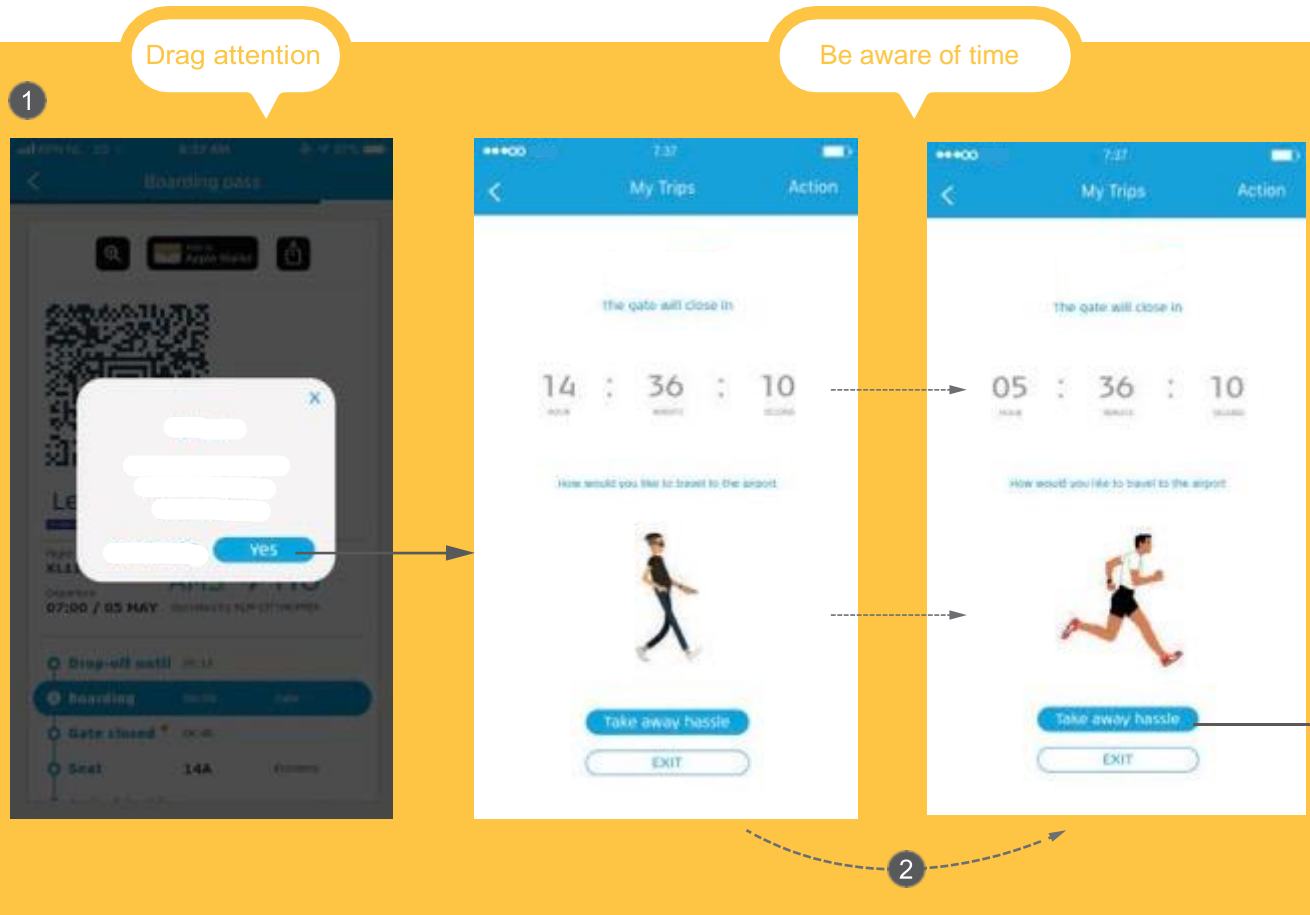
After check-in, the service will be introduced.

2

The dynamic information : ''counting down" shows how much time left before gate close; "walking man" (animation) changes based on the time left. If the time is getting closer to gate close, the small walking man show dramatically behaviour.

The information intend to trigger people's awareness of time and encourage them to use the service of preparing transport by pressing the button "take away hassle".
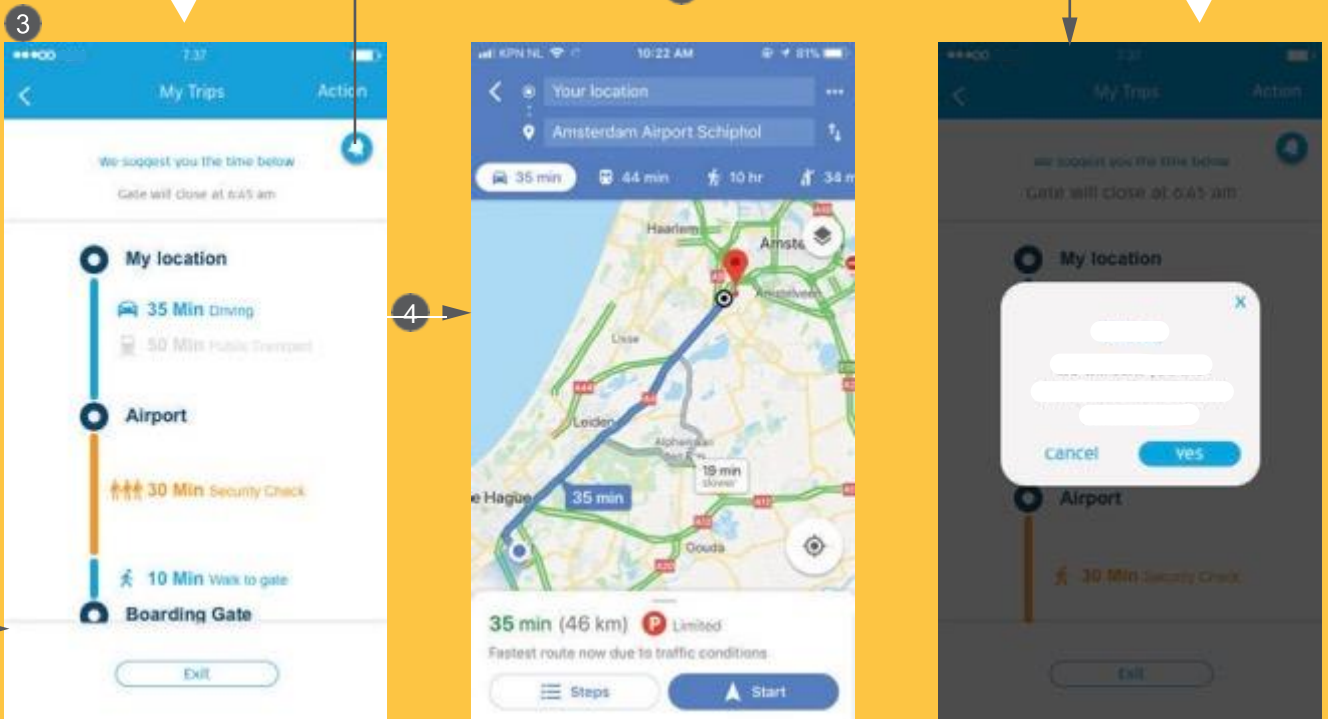
3

The suggested transport methods are provided based on traveler's location. All the information that would help travelers be on time for flight is integrated and visualised in the "transport timeline" from location to airport and to the gate. This information provide a standard overview for the travelers to plan.

4

With the timeline, travelers are able to access different programs by click on the transport method (icons).

5

The reminder function is provided to enhance travelers' awareness.

The concept designed for high conscientiousness traveler : "Cultural tips" helps travelers prepare for different cultures will be introduced. The service is provided after checking-in online. The goal of the service is to help high conscientiousness travelers be familiar with the destination and reduce the hassle of searching for all the information they need about a new destination. The intended interaction, concept features were visualised and integrated in the design shown below.

High conscientiousness

Drag attention

Show cultural tips

trigger different interaction

1
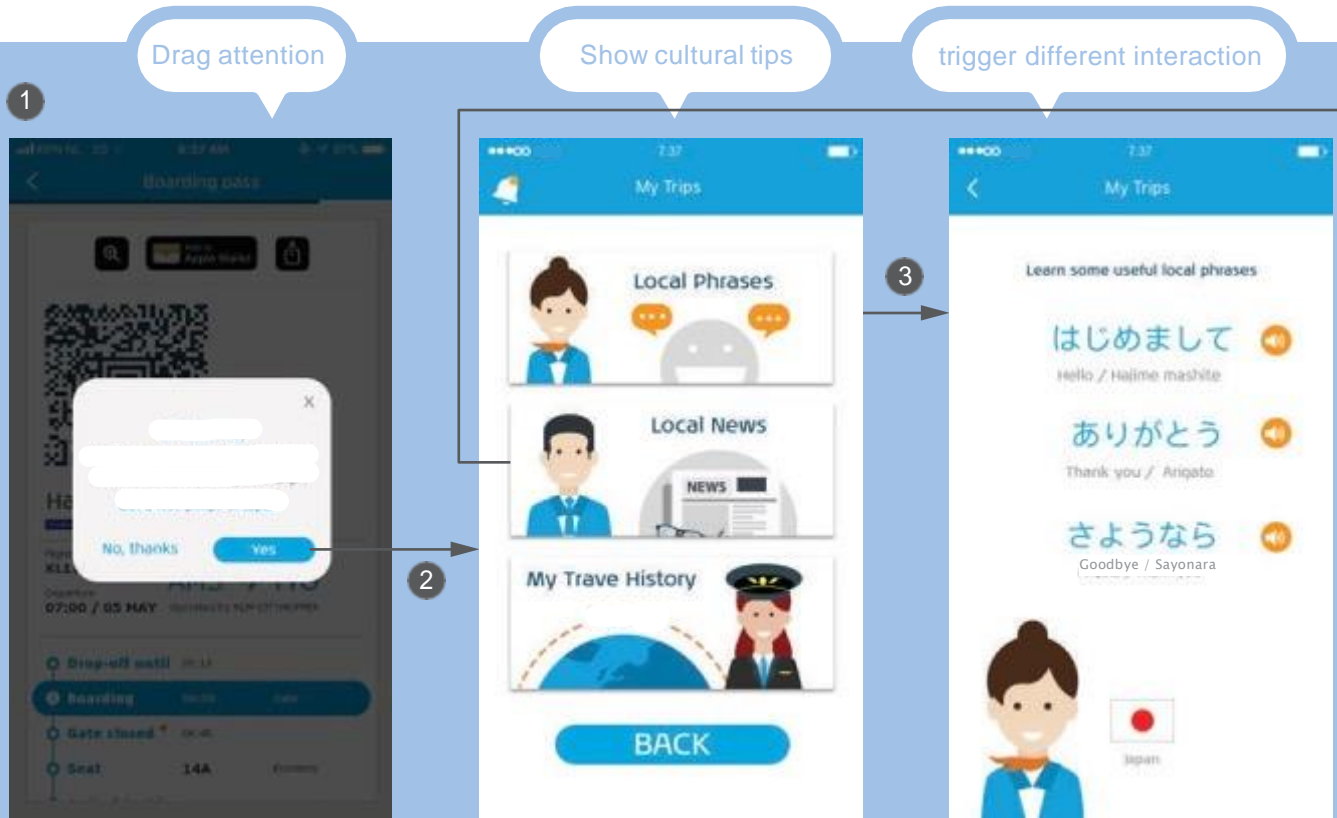
After check-in, the service will be introduced.

2

The information of cultural tips, such as "Local phrases" and "Local news" enables travelers to be more familiar with their destinations. It helps them to be more prepared and reduces the intense feeling of facing unfamiliar things and want to do things right.

3

"Local phrase" is an interactive way of learning new local greeting phrases. It is simple, easy and user-friendly.

trigger different interaction
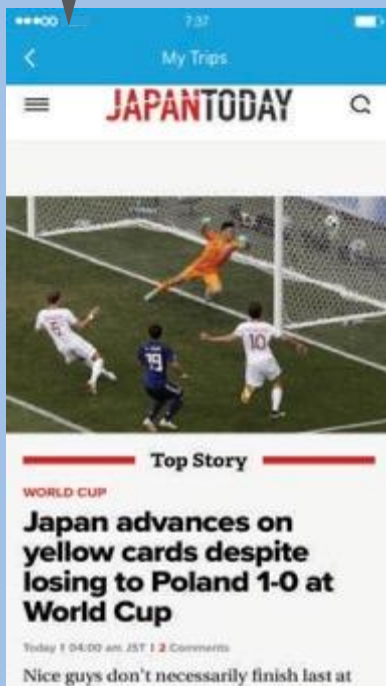
Remember travelers

4

"Local news" helps travelers to be more familiar with the destination. It is also a conversation starter when business traveler meet their new colleagues / clients.

5

Travelers are able to look back at trips they have undertaken with the airline company on travel history page. Intended to make them feel more connected to the airline company.

7.2 Concept refinement

Concept refinement is aimed at determining the aspects of concepts that would need further improvement. The concept for high / low conscientiousness were tested with six business travelers in total. Two of the participants worked in airline company and the other four in miscellaneous industries. Having participants from different background helped receive a more comprehensive feedback.

The goal of the testing is to understand whether both concepts are relevant and would be used by target users. The insights would be used as improvements in final design. The assumptions of both concepts were listed in each section. Digital prototypes were provided to show the intended interaction and to verify the assumptions. I was in the role of facilitating people through services and explaining the scenarios. Participants were ask to think aloud during the test; meanwhile, a navigation blueprint was given to participants to indicate which aspect of the prototype is positive / negative for them. A personal interview was conducted afterwards to gain deeper insights. The interviews were recorded for the further analysis.

Low conscientiousness

Assumption

The "Nexter "concept for low conscientiousness business traveler was designed based on the assumptions:

1. People are finding a service help them enhance the awareness of time (reduce the risk of missing the flight).

2. The "counting down" time element is a trigger to remind people about the time.

3. The "small walking man" is a trigger that motivate people to plan their trip.

4. The "take away hassle" button triggers people to try the service.

5. People find planning timeline helpful in their travel preparation.

6. People think the function of guiding them to the right program is helpful and reduce the hassle.

7. People think the reminder system will help them to be more punctual.

User test with low conscientiousness traveler: " Nexter " concept

" The lovely character (small walking man animation) gives me the sense of time passing. "

" I will reopen the app to see what the character will change, if I am in different phase of the trip. "

"take away hassle button" didn't give me any clue until I tap on it "
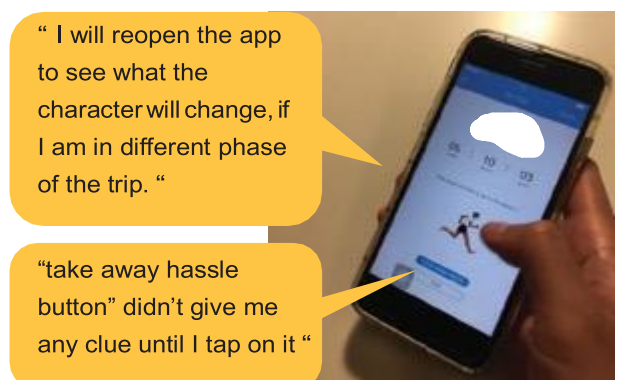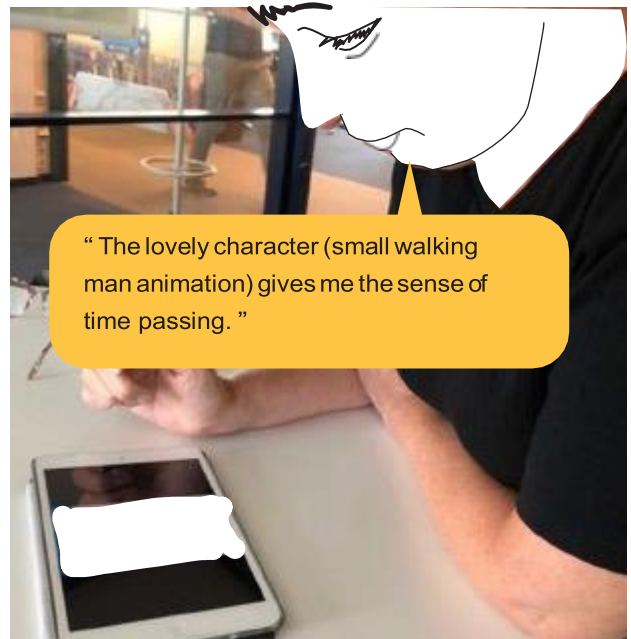
" At first, I don't know the information can be clicked in. "

" This is real time assumption ?(security check), the information need to be clear"

" This reminder / notification funcrion would be nice to support me, especially sometimes you just forget about the time. "
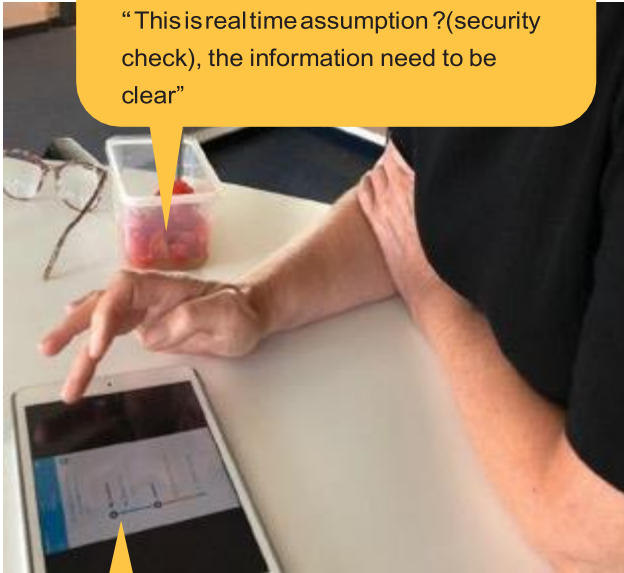
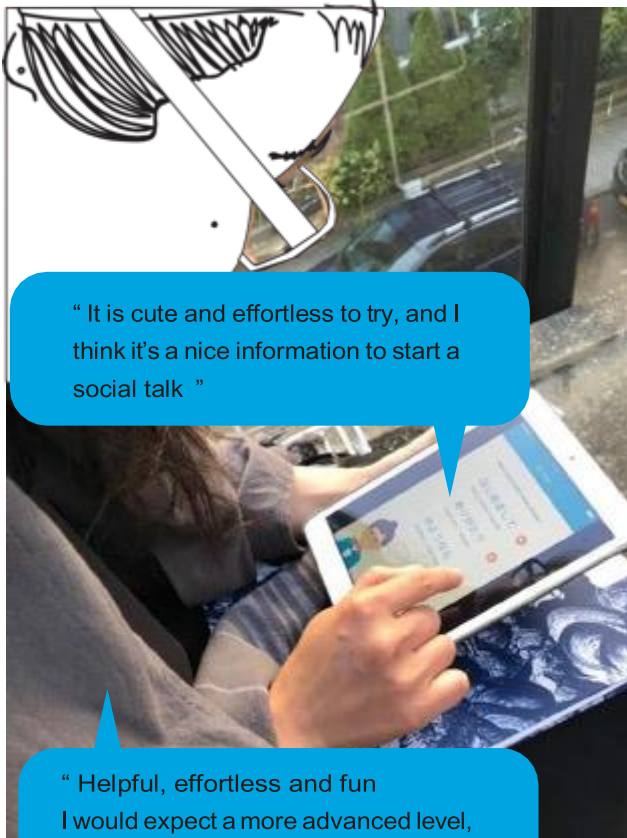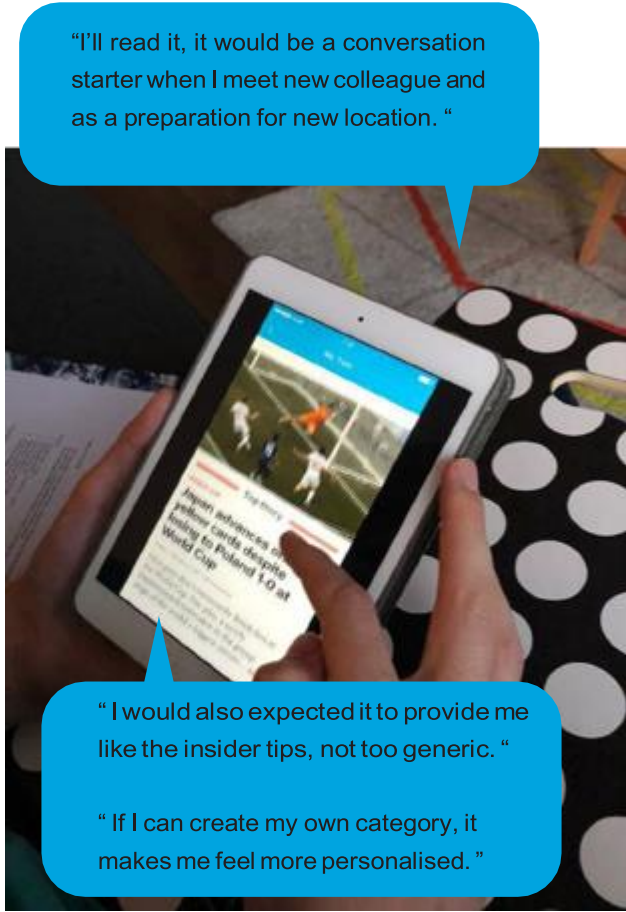" I would appreciate the standard calculation, (timeline) then I know what to add on. "

" This is too many text for me. "

" I would expect something more simple, like heading. "
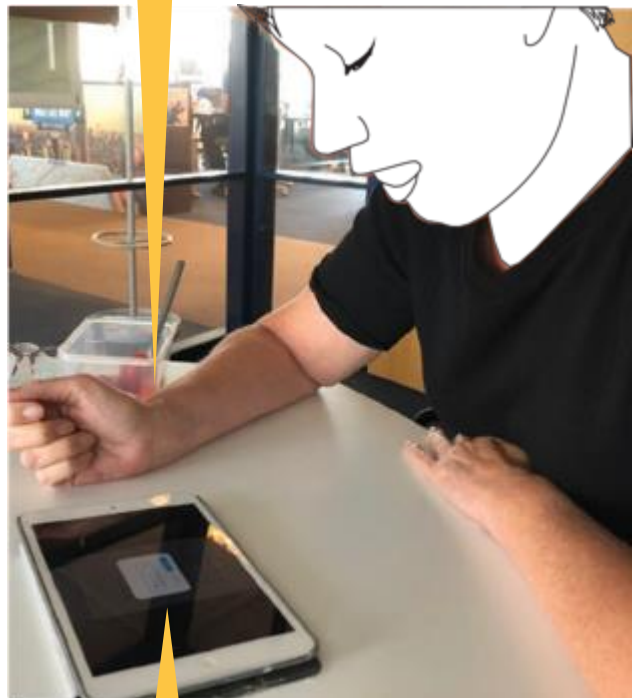
" This is helpful (reminder function), and maybe it can link to my alarm. "

" I would expect the security can have more information, but simple (not too many text) to inform me what I can or cannot bring. "

High conscientiousness

Assumption

The "Cultural tips "concept for high conscientious-ness business travelers was designed based on the assumptions :

1. People find the service helps them prepare more comprehensively.

2. People will be interested in reading the information related to their destination.

3. People think the service is helpful to stimulate a nice interaction when meeting new people.

4. People think "local phrase" information is relevant to the trip and useful.

5. People think "local phrase" is fun and effortless to try.

6. People think "local news information" is helpful to prepare ahead.

7. People think with the information of their destination enhance the feeling of doing things right.

8. People think the travel history page make them feel acknowledge and more connected to the brand.

" It's nice you get some information beforehand about the surroundings, and I never saw this kind of service before. "

" The service makes me feel more connected to the new location. "

"I'll read it, it would be a conversation starter when I meet new colleague and as a preparation for new location. "
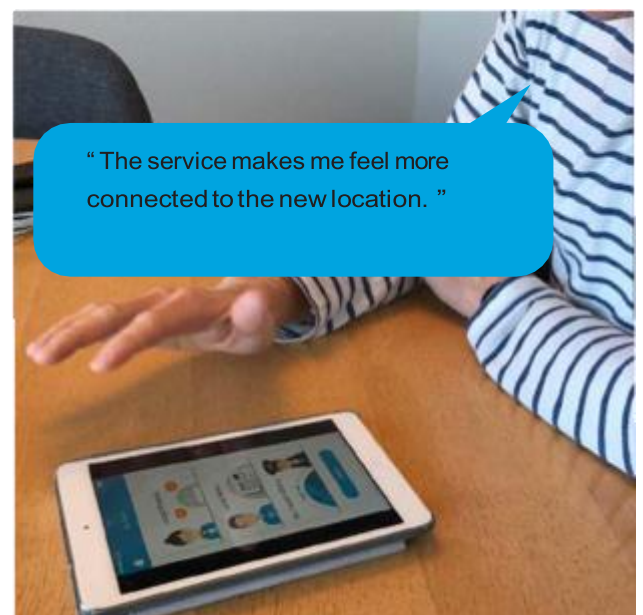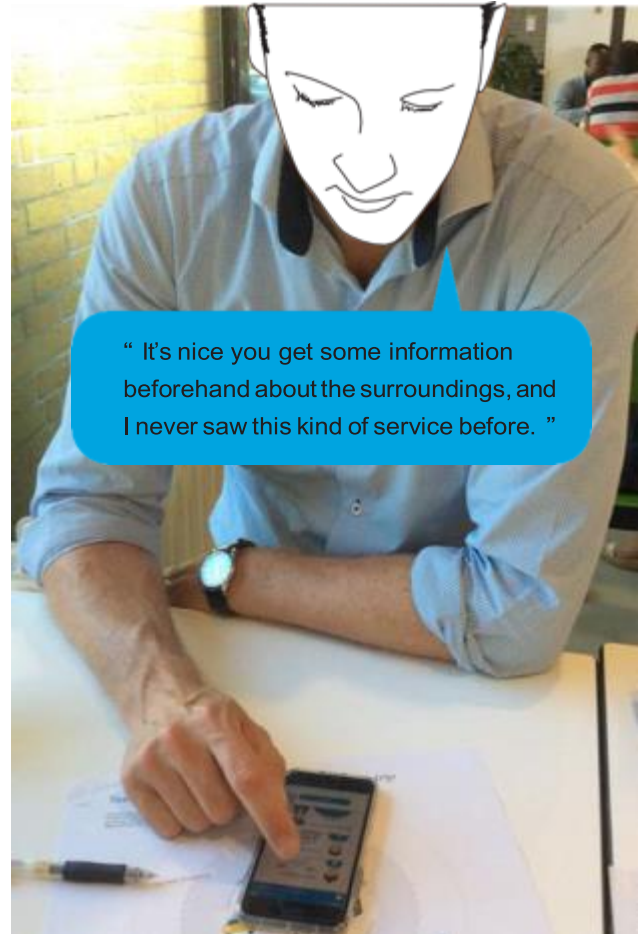
" It is cute and effortless to try, and I think it's a nice information to start a social talk "

" I would also expected it to provide me like the insider tips, not too generic. "

" If I can create my own category, it makes me feel more personalised. "

" Helpful, effortless and fun
I would expect a more advanced level, like other social business sentence. "
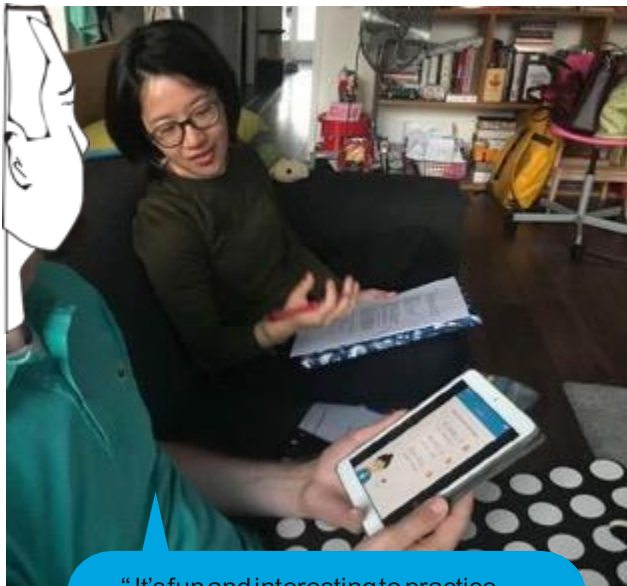
" It's fun and interesting to practice when you at home"
I would expect to have different level , and it will triggers me to come back to use it. "
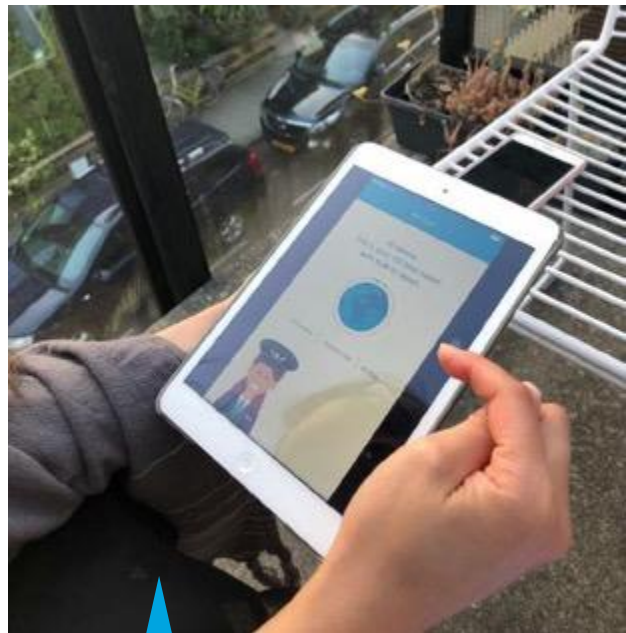
" It would be cool, if this page can document what I have been achieve from the insider tips. Then, I can check what I can do for next time."

Insights & design improvement

Low conscientiousness

Key insights from user testing of
" Nexter " concept

1. Dynamic information triggers the intention

The " small walking man" and "counting down time" gave people a sense of passage of time, hence catching their attention. Users mentioned that a different way of communicating the information changed the way they perceived time.

2. Prefer "simple heading" rather than sentences

Make the information simple and to the point. Users prefer simple text, such as heading to find the right information. Long sentence create hassles.

3. Timeline and facilitating them to the right programs reduce preparing hassles.

Users really appreciated timeline function, as they have to open the application anyway. However, the interaction of guiding users to click on the icon which link to other program need to be more clear.

Design improvement

- Landing page
- The "take away hassle button" is confused.

- Timeline
- Transport more information when clicking in.
- The information of security time should be more clear.

- Notification
- Setup their time personal alarm or give the right to airline company to inform customers.

High conscientiousness

Key insights from user testing of
" Cultural tips " concept

1. It is an ice breaker and helps travelers
   preparing social talk

The service helps users prepare some social talk.
They would like to have different level of the local
phrases which would trigger them to come back to
the service and learn more advanced level, such as
business sentence.

2. The " it's for you, only you know" feeling.

People would like to have the information which
being provided based on their personal preference
rather than generic information. This makes them
feel more personalized. Something like insider tips
or experts recommendation would trigger their
curiosity and encourage them to use the service.

Design improvement

• Local phrase
- Different levele and phrases trigger
  people to come back to use the service.

• Local news
- Nees different categories.
- Insider tips.
- Base on personal preference.

• Travel history
- Link to the local tips of what you've done.
- Make it more relevant to customers.

7.3 Final design

Services being provided differently based on different personality traits.
" Nexter " for low conscientiousness traveler ;
"Cultural tips" for high conscientiousness traveler.

Preparing the trip

Checking-in online

Low conscientiousness

"Nexter"

A service that helps you be on time for the flight. " Nexter " helps you prepare the commute wisely, plan schedule effortlessly, reduces your risk of missing the flight and provides you a hassle - free preparing trans- portation experience.
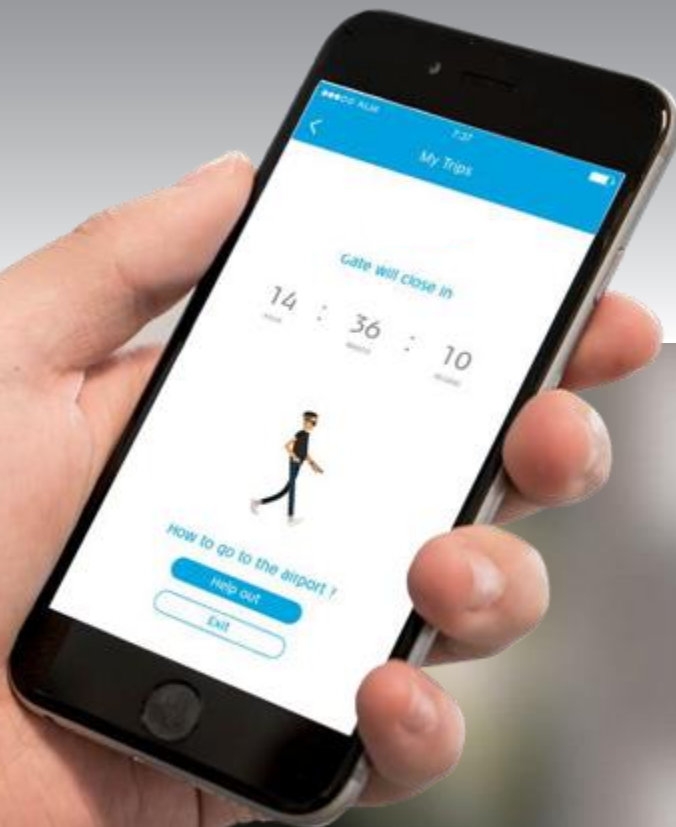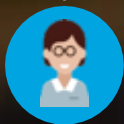
High conscientiousness

"Cultural tips"

A service that gives you a glimpse of destination, helps you plan ahead and reduces the hassle of preparing when going on a business trip to new destination. A small helper "Cultural tips" reduces your stressed mind and help you performing better when meeting new colleagues or clients to achieve the goal for your business trip. Whenever you are on business trip, "cultural tips" is here to help!

"Nexter" concept flow

Low conscientiousness

1.

Time information

After traveler checking-in online, the "Nexter" service will be provided through the airline mobile application to low conscientiousness travelers. Landing page shows "counting down" and "walking man" animation based on how much time left before gate close.

Time parameter shows the real time information till gate close.

Small walking man changes its status and shows how traveler should do to be on time for flight.
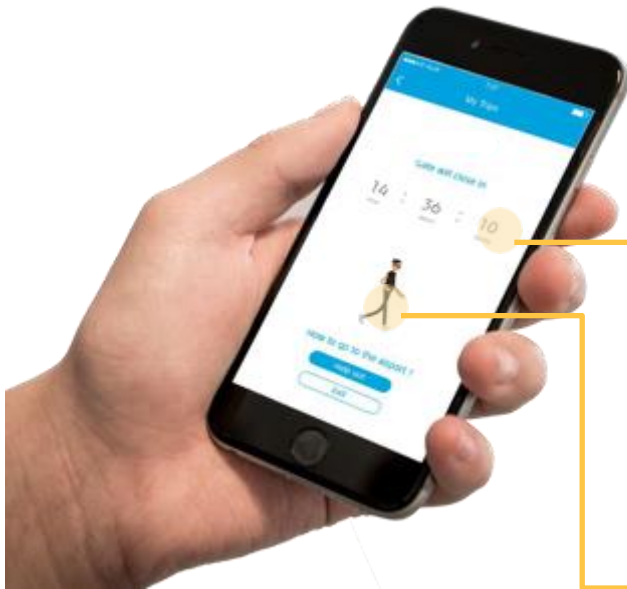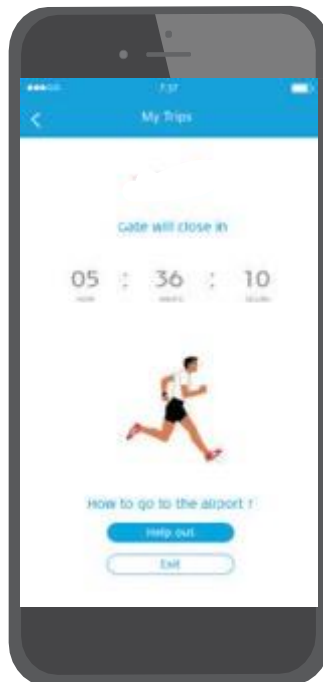
(Walking to the gate)   (Running to the gate)   (Skating to the gate)

2.

Transport timeline

When travelers click on the " help out " button, transport timeline will be shown.

Base on travelers' location, the system provides different transportation methods. The location can be set manually by users.

The timeline shows information from current location to airport and to boarding gate.
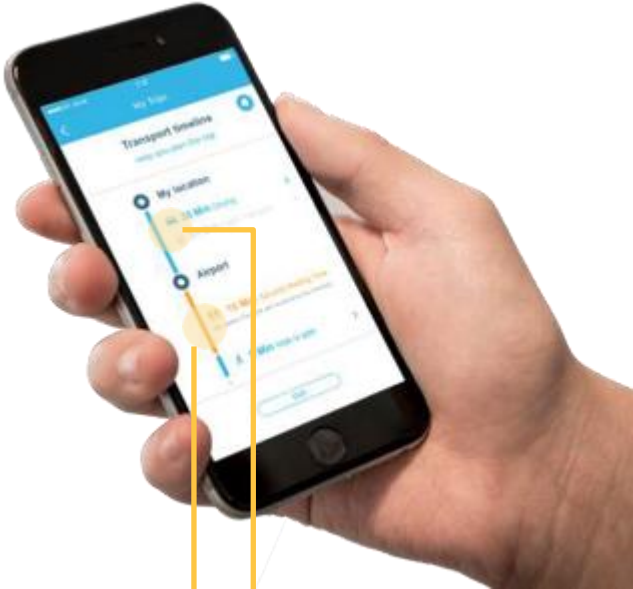
The timeline shows all the possible transport methods from their location to the airport.
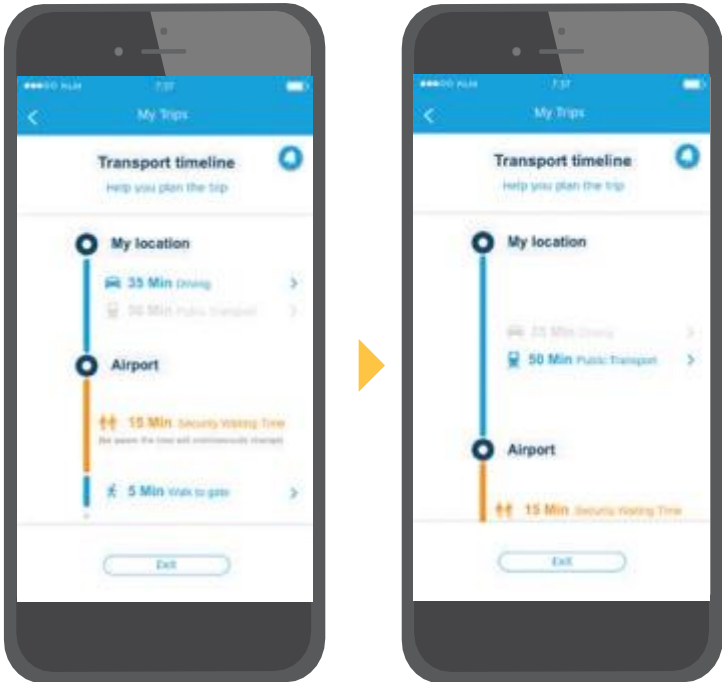
The time of security checking and walking to the gate are shown in the timeline.

(Choosing different transporting methods)

3.

Guide to different programs

By clicking different methods on the timeline, traveler will be guided to certain transport programs depending on their choice of methods. The information would help travelers plan their whole journey.
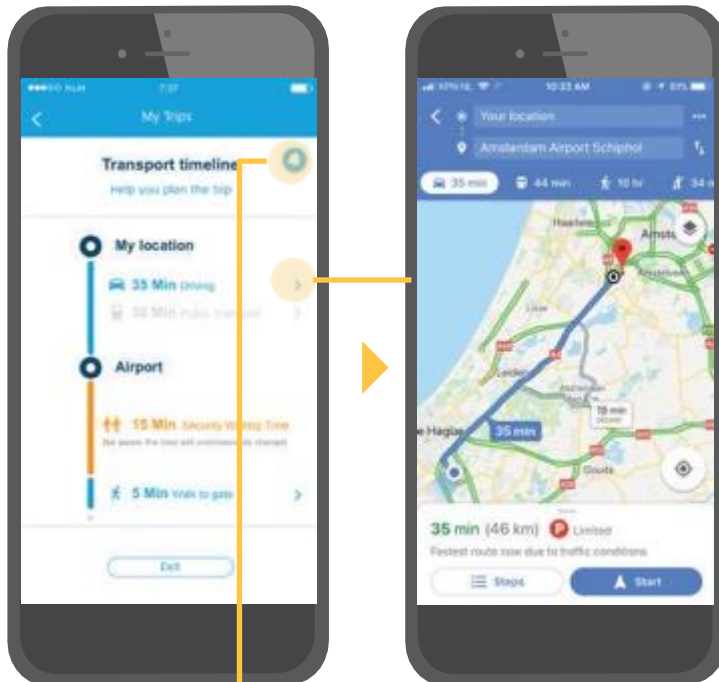
The transport timeline gives a comprehensive view for travelers when transporting from their location to the gate. The simple and to the point information helps travelers make better use of their time and reduce the hassle of preparing.
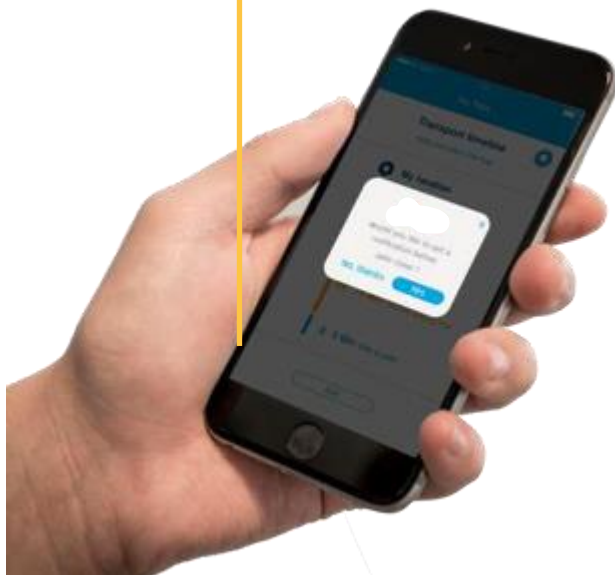
4.

Reminder system

Travelers can choose to give permission to airline company to send reminders based on travelers' location and time.

"Cultural tips" concept flow

High conscientiousness

1.

Cultural tips for

After traveler checking-in online, the " Cultural tips" service will be provided through the airline mobile application to high conscientiousness travelers.

The service of "Local phrases", "Local news / Insider tips" provided local information (destination) for travelers to read and learn.

"My travel journal" documents travelers' experience at the destination.

2.

Local phrases

On clicking the " local phrases " category, the service will show.

For first-time traveler, simple and basic local greeting language will be provided. Users can learn the basic greetings in the voice of a native speaker by clicking on the sound button.

The service will evolve based on how many times travelers have been to the destination. A more advanced content will be provided, such as learning sentences for business occasion.
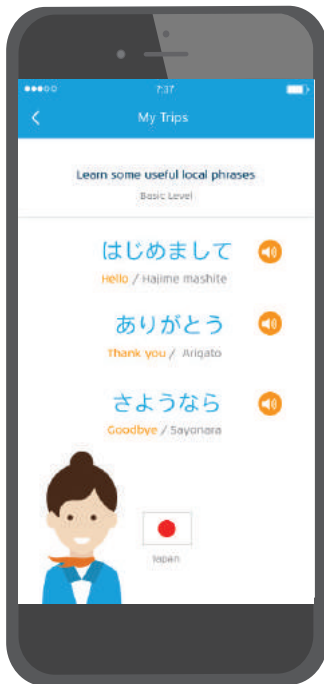
(First time use- basic level)   (Advanced level)

3.

Local news / Insider tips

On clicking the " local news / insider tips " category, the service will show.

The information help travelers to be more familiar with the destination and preparing for some social talk when they meet new colleagues / clients.
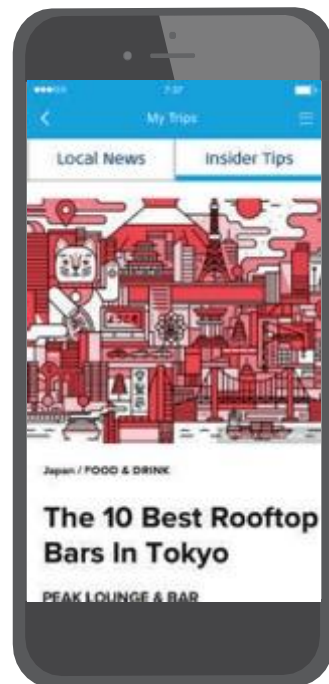
User can select or create different categories they are interested in. The information will be provided based on their preference to make it more personalised.
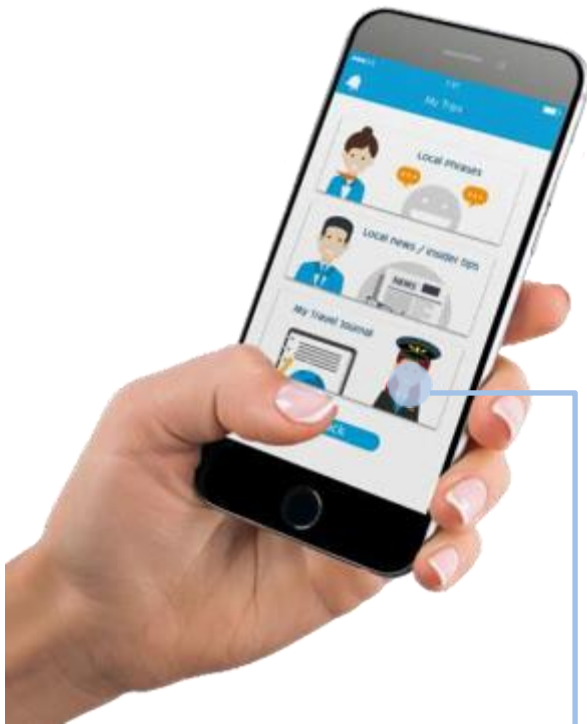

(Create different categories)

(Local news)

(Insider tips)

4.

My travel journal

On clicking the " My travel journal " category, the service will be shown.

My travel journal documents travelers' travel history of the destination. For example, how many times they have been to Tokyo on business trip, etc.

Travelers can save information they obtained from "Local phrases" or "Local news / Insider tips" to this page and easily access it in their next visit.

(First time ues) (10th time visiting the same dstination)

8

Evaluation

The concept of new services for high / low consci-entiousness will be evaluated from customers' perspective and company's perspective in this chapter. According to the evaluation result and recommendations will be presented.

8.1 Evaluation Setup

The two new service concepts proposed in chapter 7 (developed based on the needs and concerns-framework, as discussed in chapter 5) have been qualitatively evaluated. Evaluating the concept can be seen as a way to evaluate the framework. Feedbacks from customers' perspective and the company's perspective were both taken into account to derive the final conclusion.

Table. 8.1. User testing at lounge

The main research questions are as following:

From customers' perspective

(1) Do people with a particular personality (High / low conscientiousness) have the same preferences and needs towards the service provided to them?

(2) Do the services help reduce travelers' hassle during preparation and provide them new experiences?

- Low conscientiousness : Be conscious of time and reduce the risk of missing flight.
- High conscientiousness : Be prepared for new destination to help them achieve their business goal.

From company's perspective

(1) Is this an interesting approach for an airline company to create new services ?

(2) Is the outcome of this project valuable for airline company?

8.2 Customer's perspective

Thirteen business travelers in total were recruited for evaluating the concepts. The testing started with measurement of participants' personalities. The ten-questions measurement (Mengqi Yuan 2017) and TIPI scale scoring (Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. , 2003) were used in the beginning of the test to evaluate whether they are high or low conscientiousness travelers.

After that, "Nexter" concept prototype as well as "Cultural tips" concept prototype were provided to business travelers. The digital prototype showed the service and intended interaction that airline company wanted to provide to the customers. At the end, a scale questionnaire was given to evaluate users' experience and based on the questionnaire a follow - up interview was conducted to gain deeper insights. Results will be presented in the following sections.
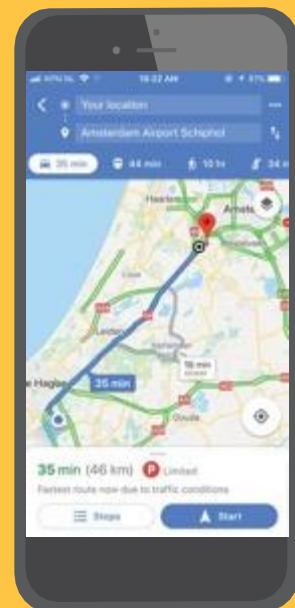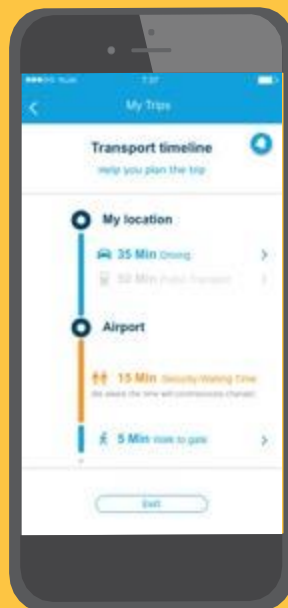
Results of " Nexter "

Low conscientiousness

["Nexter" service for low conscientiousness traveler]

Seven out of thirteen participants were found to be low conscientiousness travelers.

The result showed that **85% of the travelers** (6 out of 7 travelers) thought that the service **enhanced the awareness of time** and would like to use this service on their next trip.

70% of the travelers (5 out of 7) found the **transport timeline helpful** while preparing and planning their commute to the airport. Besides, **85% of the travelers (6 out of 7)** thought that the timeline that guided them to transportation program was **helpful and made the journey seamless.**

Finding:

Travelers appreciated airline company taking their whole journey into account and creating a smooth experience for them, especially when they were unfamiliar with the location.

According to the result, **57% of the travelers (4 out of 7)** thought "counting down" and "walking man" animation enhanced their awareness of time. Moreover, **70% of the travelers (5 out of 7)** were **triggered by the dynamic information** to try the preparing transport service.
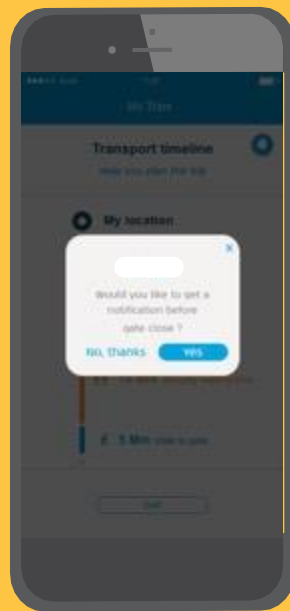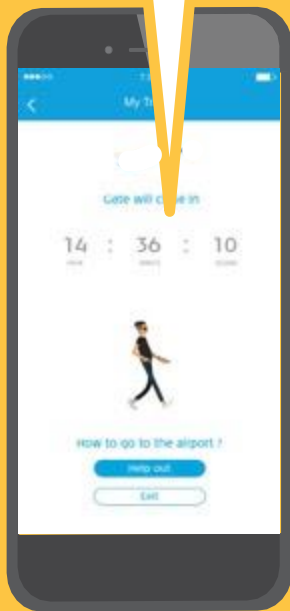
Low conscientiousness travelers appreciated the service as it simplified the steps and integrated information they needed. Such service helps low conscientiousness travelers prepare and reduce their hassles, as they are inclined to avoid putting too much effort into preparation. However, the accuracy and correctness of the information will influence traveler's experience and their trust of such service.

The result showed that **70% of the traveler (5 out of 7)** would like to receive reminder from airline company to help them be on time for the flight.
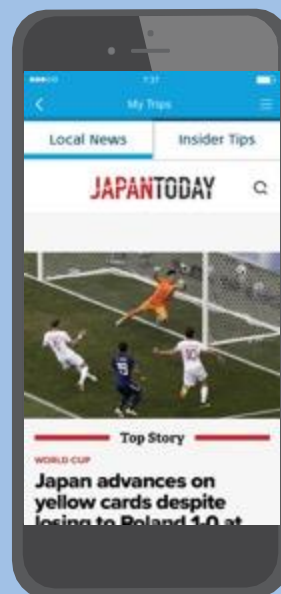
Results of " Cultural tips "

High conscientiousness

["Cultural tips" service for high conscientiousness traveler]

Six out of thirteen participants were found to be high conscientiousness travelers. The result was shown based on the feedback of these six participants.

According to the result, **83% of business travelers (5 out of 6)** affirmed that the "cultural tips" service helped them **prepare more comprehensively for the trip** and they would like to try this service for their next trip.

All the travelers (6 out of 6) found "local phrase" relevant to the **trip, useful, effort- less and fun to try.** Moreover, "Local news / Insider tips" helped them prepare ahead.

Finding:

Travelers appreciated the service that provided local information. It helped them to be more prepared for new destination. However, the content plays an important role in attracting travelers attention and building trust with the customers.

According to the result, the local information helped **66% of the travelers (4 out of 6)** interact when they meet new colleagues / clients.

The local information is not only useful tips but also icebreakers or conversation starter when meeting new people.

The "cultural tips" service provides a different experience that helps high conscientiousness travelers prepare ahead for their business trip. Providing relevant cultural information for their new destination through an effortless and interactive way helps them be ready to achieve their goal of the trip.

The result showed **50% of the travelers (3 out of 6 travelers)** found it interesting to see their past experience and achievements in the travel journal.
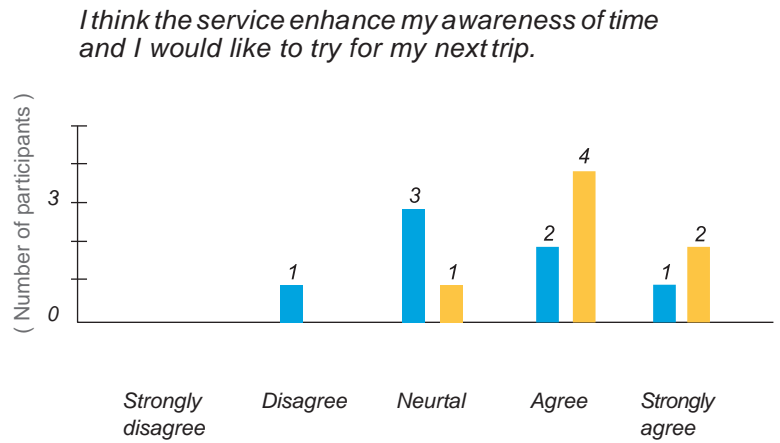
The preference of travel journal was neutral, as some travelers were more interested in reading relevant information for their next trip rather than seeing their travel history.
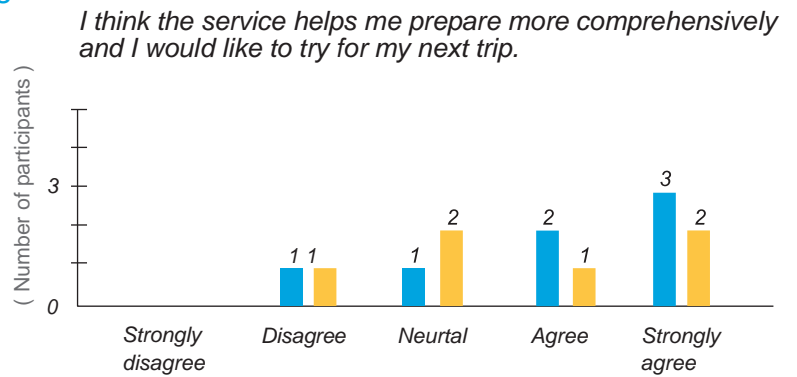
Results of both concepts

The result on the right showed that low conscientiousness group have similar preference towards "Nexter" ; high conscientiousness one have the same toward

"Cultural tips". However, there was no obvious preference pattern found in the group for whom the service was not intended.

Nexter

I think the service enhance my awareness of time and I would like to try for my next trip.

(Number of participants)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
High		1	3	2	1
Low			1	4	2

Cultural tips

I think the service helps me prepare more comprehensively and I would like to try for my next trip.

(Number of participants)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
High		1	1	2	3
Low		1	2	1	2

🟨 Low conscientiousness traveler   🟦 High conscientiousness traveler

8.3 Company's perspective

The concepts of two services provided to high and low conscientiousness travelers along with the evaluation results were communicated in the airline company to relevant stakeholders.

The feedback from company's relevant stakeholders:

" Interesting to see, I think we can just give it a try. Maybe it will help to create customer intimacy. "

- UX team lead of the airline company

" Nice to see the result. I think sometimes we can just creating ideas and test it directly to see how it goes. "

- Business analyst in digital team

" It is an interesting direction to explore. We received lots of questions from customers and asking how to go to the airport. "

- Customer experience team

" I think the research approach is really promising, and it is nice to see how users react to the service and having their feedback. If we want to implement the service, what do you think would be the next step ? "

- Strategist from customer experience team

Conclusion

In conclusion, the pattern of the preference for low conscientiousness travelers towards "Nexter" and high conscientiousness travelers towards "Cultural tips" services was inspected in group individually. The result showed that people with the same personality trait have the similar needs and concerns. Though 13 participants (6 low conscientiousness travelers, 7 high conscientiousness travelers) is not a big group, the qualitative feedback was acquired to infer the similarity in preferences in each trait. Therefore, personality traits can be used as a starting point to differentiate service so as to increase customer intimacy.

However, in order to make the service really personalised, a lot more travelers' personal behaviour data would need to be collected, such as their past experience of traveling, personal preference and preferred way of communication. Therefore, some further research need to be studied in order to make the service really personalised.

[Nexter] - for low conscientiousness travelers

To conclude, the service "Nexter" is **helpful** and **reduces the hassles** for low conscientiousness business travelers. The way of communicating information **increases travelers' awareness of time.** However, the style of illustration and how it influences people's perception of time needs to be further explored. The transport timeline function integrated all the information that helped travelers prepare transportation more effectively and efficiently. Nonetheless, the **accuracy of the information** influences how customers trust the service. The airline company can partner up with the experts in the transportation domains to provide more comprehensive services help people be on time for the flight. Providing a service based on travelers' location and time that not only helps them plan but also make action that bring them to the spot.

## [Cultural tips] - for high conscientiousness travelers

In conclusion, the service "cultural tips" opens high conscientiousness travelers to new experiences. Making the interaction **easy, simple and fun to do always encourages people to try.** The local information serves as a tool that **triggers different interactions when travelers meet new colleagues or clients.** It is a conversation starter as well as an icebreaker to help travelers create better interactions which also helps to develop a **long-term business relationship**. The service enables high conscientiousness travelers to be more familiar with the new destination and eases their intense minds. However, how unique and personalised the content is will influence how travelers trust the service.

8.4 Recommandation

## Communication style and how it influence travelers' perception of time

The result showed that the dynamic way of communicating information with low conscientiousness travelers is effective to increase their awareness of time. However, the preference of visual style and how it influences people's perception of time can be further explored. The user interface and different types of interaction of communicating the information about time, such as graphic style, colour, different font size, different animation.

Time perception will also be an interesting topic to study further: How travelers with different personality perceive time and what is the correlation between perception and interaction.
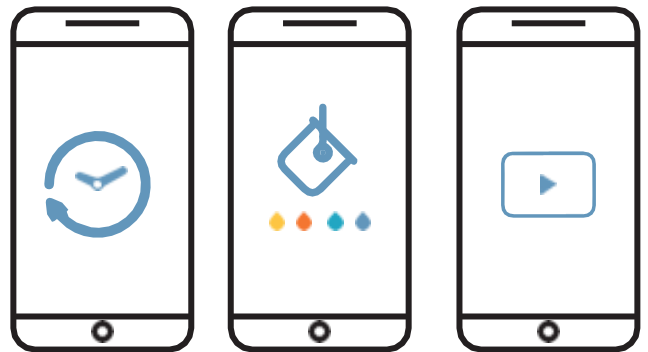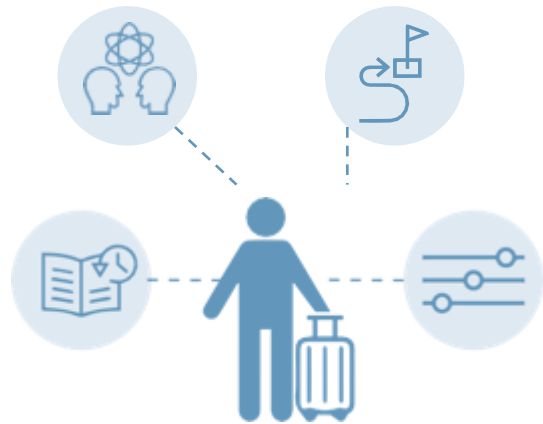

Expand the service to personal assistant

Based on traver's location and status providing different types of support. The concept " Nexter "service can be provided not only in preparation but also when travelers encountering urgent problems, such as public transport disruption which may interrupt them to be on time for the flight. Different types of support that customers may need can be further studied. The service can be provided based on their prefered way of transport. It has the potential to be a personal assistant and provide support during the journey and be the first one to help. Being a travel companion rather than a traffic tool that bring customers from A to B.
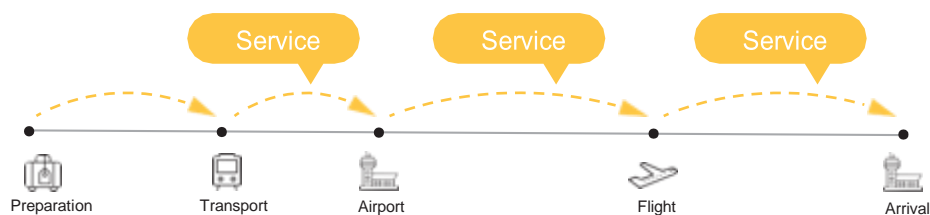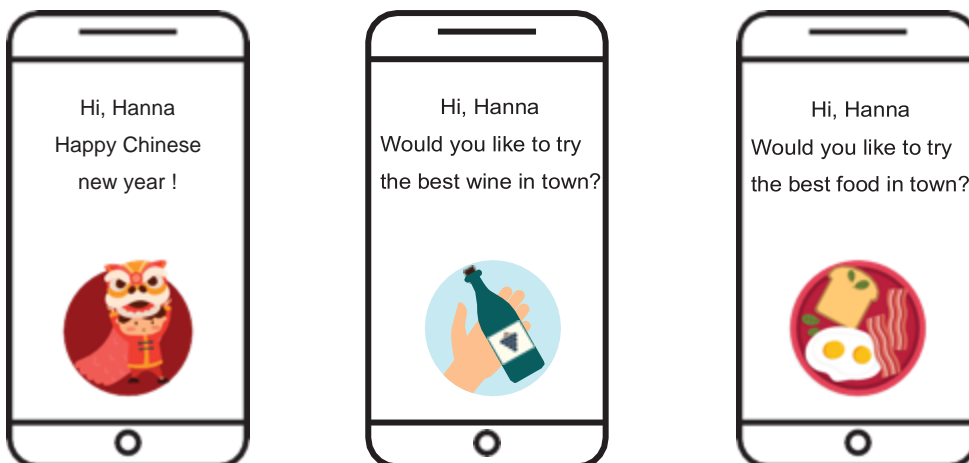
To get more personal behaviour data to make the service more personalised

Personality traits can be used as the starting point to create personalised service. However, to make the service more personalised, more personal behaviour data would be needed, such as their past traveling experience, personal preference, the purpose of the trip. With the combination of personal behaviour data and personality data a better personalised service can be created.

Expand the service to different personality trait

The cultural tips service has potential to expand to travelers who have high openness to experience personality trait. Providing information about different cultural experience. For example, create different cultural holiday theme, or different cultural food theme. The interface and the content can be more diverse based on travelers' preference.

Hi, Hanna
Happy Chinese
new year !

Hi, Hanna
Would you like to try
the best wine in town?

Hi, Hanna
Would you like to try
the best food in town?

Different service intervention in different personality traits

The research showed that travelers with different personality traits have different concerns and needs in different context. Therefore, different intervention services are needed to enhance customer intimacy. In this project, conscientiousness traits was chosen as a focus to create new services. However, there are many other opportunities during the journey that service can be created.

Openness to experience High

The services for openness to experience travelers can be created along the journey to bring them different experiences from the routine.
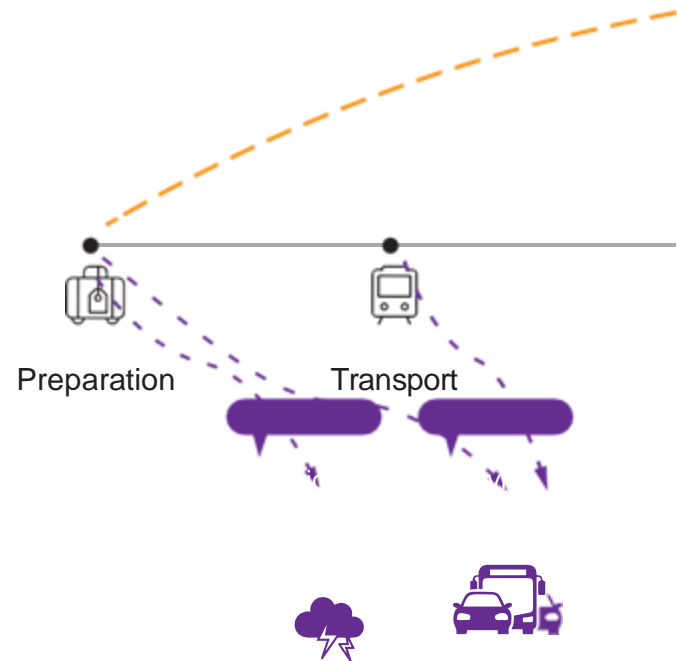
Neuroticisim High

People with high neuroticism trait are more emotionally unstable, their reaction are expected to be more severe when disruptions occur. Providing them support and communicate with them effectively when disruption happen will add value to both travelers and the company.

Preparation   Transport

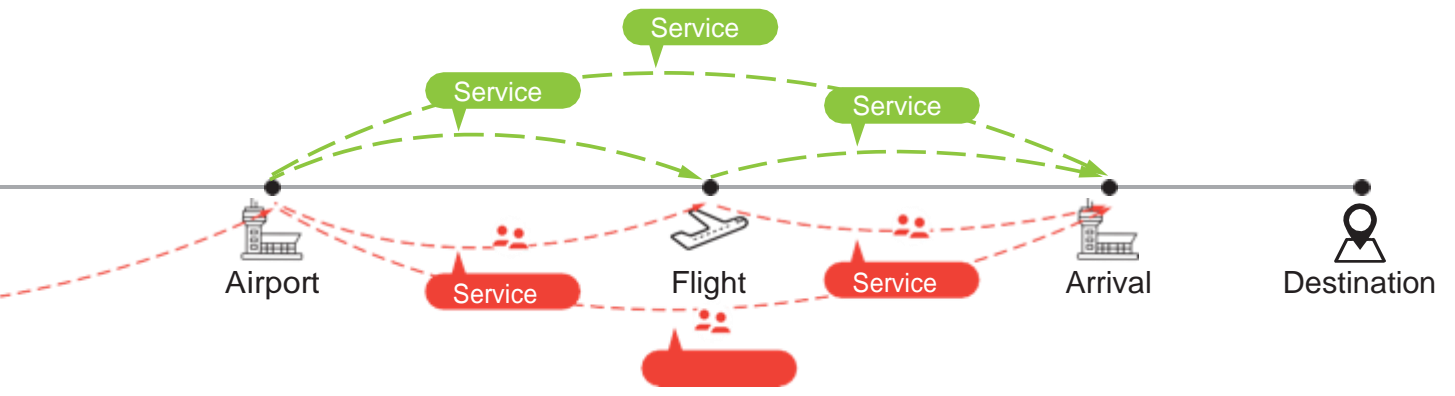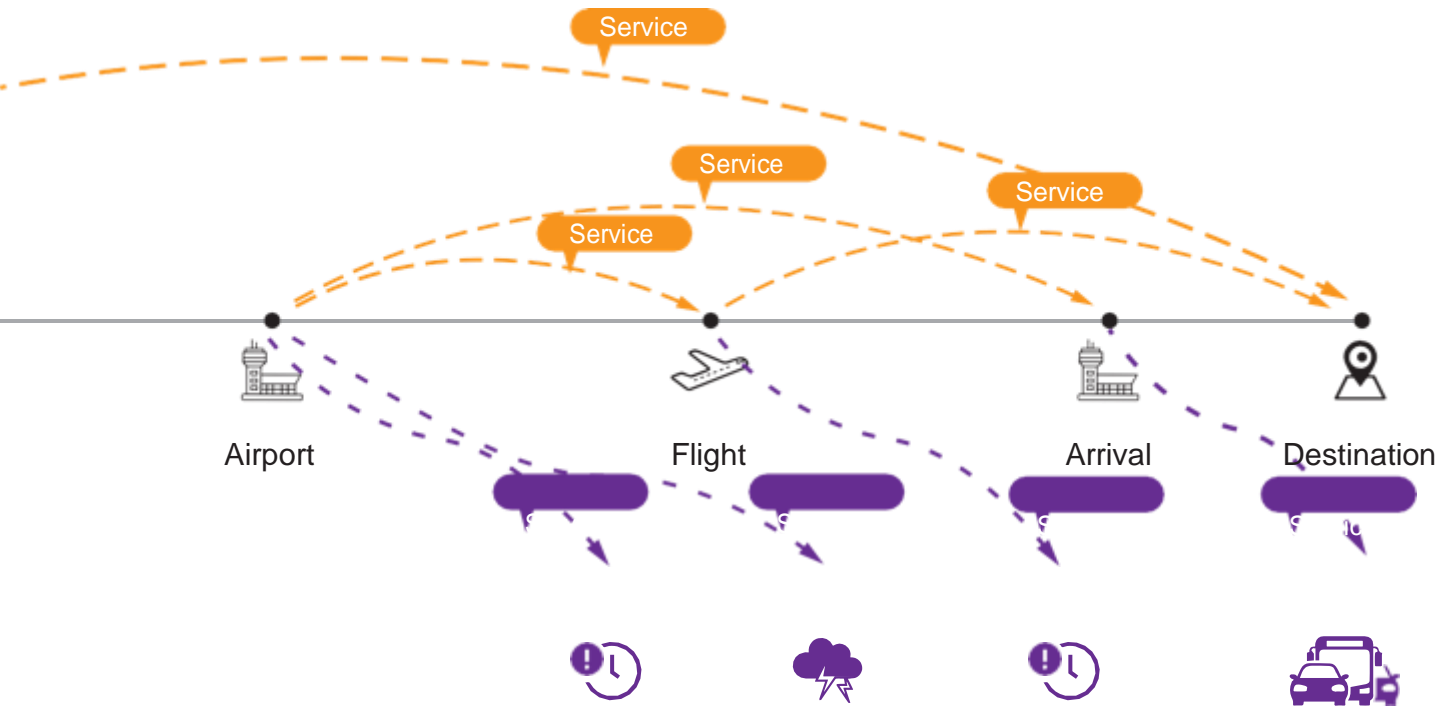**Agreeableness** High / Low   Personal value   Help others

People who are high agreeableness are more willing to help other travelers ; whereas, people who are low agreeableness focus more on their personal value. Such needs and concerns are more relevant in the context of waiting at the airport and in the flight, where travelers are more likely to interact with other travelers.

Preparation   Transport
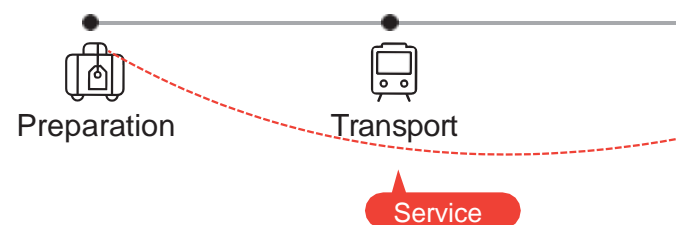
Service

Extraversion High

People who are high extraversion enjoy spending time with other people and would like to meet new people during their journey. The service can be provided in the context of waiting at the airport and in the flight where travelers are more likely to interact with other travelers.

Service

Service

Service

Service

Airport   Flight   Arrival   Destination

Service   Service   Service

Service

Service   Service

Service

Airport   Flight   Arrival   Destination

Personal reflection

This project was a great learning opportunity for me to explore and understand how digital experience can transform the services and influence aviation industry. The "Personalisation service" is a broad and popular topic. With the advanced technology, more and more companies are diving into the field of providing personalised service and trying to create different digital experiences that bring values for both customers and themselves.

The scope of the project was really broad in the beginning, and I tried to find focus through interviewing many relevant stakeholders in the company. Interacting with people not only enabled me to understand different aspects of the topic but also helped me understand the structure of the organisation. This is the benefit of doing thesis in the company, as you have chance to understand how project goes in the real world. Furthermore, the project itself was quite challenging, as there was no specific problem to solve. Therefore, I spent a lot of time framing a problem statement and exploring the possible opportunities, as I believe that in the toughest challenges lie the biggest opportunities. Besides, I really enjoyed and appreciated the feedback I got from relevant stakeholders, my supervisor team during discussions and from real users during the testing. It always opened me to fresh perspectives and made me aware of value I could bring to them. Introducing my ideas to random travelers in the lounge and asking their feedback has been an unforgettable and interesting experience, as you heard the most real and inspiring feedback that triggered you to go further. As I look back, I've talked to more than 40 business travelers in this project. I never thought I would be able to find as many many business travelers here. I have learned that as long as you know what you want to achieve and set the goal, you will always find the way out.

In this project, I regarded myself as a project manager, a researcher and a designer. At different phases of the project, the roles had to shift. However, I think the essence was to find the balance, be flexible and integrate all these roles throughout the project. This six-month journey contributed positively to not only the discipline-specific knowledge but also to my personality.

I was lucky to be able to work in the digital development team, as I was encouraged and motivated by the vibe of the team. People here were positive and supportive to work with, I appreciate their open-minded and enthusiastic attitude toward work. Having such positive working environment always helped me keep the motivation during this six-month journey.

Other than the project, I also learnt lot of practical skills that I can use in my career, such as time management and presentation skills. What I learn most from this project is how to achieve the goal within the certain amount of time. You have to be creative and be flexible to be able to reach the goal with the constraint of time. Besides, the internal presentation that I had every month helped me to sharpen my presentation skills. These are the lessons I did not expect in the beginning of the project. I think this project really gave me the chance to apply what I learned in school, take the initiative and bring value as a designer to the company.

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