KLM

PERSONALISED SERVICE RECOVERY
An Enhanced passenger experience during operational disruptions

APPENDICES

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Appendices
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Appendix A
Study: expert interviews

Dit onderzoek is uitgevoerd voor een afstudeerproject bij de Technische Universiteit Delft en KLM. Hierbij is onderzocht wat er gebeurd op de gate tijdens operationele disrupties, met name tijdens rode dagen. Aangezien KLC gate agents het directe contact hebben met de passagiers is het belangrijk om te weten hoe zij deze verstoringsdagen ervaren en hoe zij denken dat de passagier deze dagen ervaart. De resultaten van deze interviews zullen bijdragen aan het eindproduct. Het interview bestaat uit de volgende 3 topics:

Nu	*Wat gebeurt er op het moment dat er een vlucht gecancelt wordt? Is men tevreden met de huidige situatie?*
Verleden	*Wat is er verandert over de jaren op het moment dat er een disruptie plaatsvindt?*
Toekomst	*Hoe zal de toekomst van disruptie eruit gaan zien?*

Nu

Hoe reageert de passagier op verstoringsdagen?
Alle passagiers reageren verschillend op een verstoringsdag. Sommige passagiers zijn boos, anderen zijn teleurgesteld, sommige gaan zelfs huilen. Passagiers zijn in staat een disruptie te begrijpen, maar hiervoor moeten het vaak met eigen ogen zien. Sneeuw of mist op Schiphol Airport is duidelijk voor de passagier, maar wind bij London Heathrow is lastiger te bevatten. Passagiers trekken zich verstoorde situaties (vaak) niet persoonlijk aan, omdat zichtbaar veel mensen vast zitten op Schiphol Airport. Iedereen zit in dezelfde situatie. Ook weten ze dat KLM er niet veel aan kan doen op het moment zelf. De gate agents proberen de passagier zo goed mogelijk op de hoogte te brengen op verstoorde dagen, omdat dit de passagiers rust geeft.

Hoe voelt de Gate Agent zich tijdens verstoringsdagen?
Sommige gate agents vinden verstoringsdagen verschrikkelijk door de vele werkuren, de onzekerheid, het gebrek aan bevoegdheid om passagiers te helpen en de slechte bereikbaarheid van het ticket office. Anderen vinden het niet erg, het is een dag die totaal verschilt met het gebruikelijke ritme. Je hoeft niet op de automatische piloot te werken, maar je kunt uitzoeken wat mensen op dat moment echt willen. Je kunt echt een verschil maken als gate agent tijdens deze dagen. Een gate agent vind deze dagen zelfs leuk, omdat alles kan. Het belangrijkste is om de passagier van het vliegveld af te krijgen en de strenge regels worden daarbij iets versoepeld. Alle gate agents weten van te voren wanneer het onrustiger wordt op Schiphol. Ze worden van te voren geïnformeerd op de iPad, die de weersverwachting laat zien.

Verleden

Wat is er veranderd omtrent verstoringsdagen vergeleken met 5 jaar geleden?
De gate agents gebruiken tegenwoordig iPads tijdens hun werk, wat het mogelijk maakt om meer taken op te pakken dan vijf jaar geleden. Ze worden getraind als er nieuwe mogelijkheden beschikbaar zijn en het wordt dan ook verwacht dat zij deze extra taken uitvoeren. Helaas is er geen extra tijd vrij gekomen en krijgen ze weinig waardering voor het extra werk. De schaal waarin ze werken is gelijk gebleven. Het preventief annuleren van vluchten verlaagd de werkdruk aanzienlijk tijdens verstoringsdagen, wat als een positieve verandering wordt ervaren.

Is de passagier veranderd in deze tijd?
Het gebruik van mobiele apparaten heeft zowel het informeren van de gate agents als de passagiers verbeterd. Passagiers kunnen erg veel informatie opzoeken op het internet, waardoor zij soms eerder op de hoogte zijn van veranderingen dan de gate agent. Dit kan een reden zijn waarom de huidige passagier mondiger is dan vijf jaar geleden. Voor de gate agents maakt dit het erg lastig om autoriteit uit te blijven stralen. Daarnaast is de huidige passagier ook een stuk gehaaster dan vroeger. Nu moet alles zo snel mogelijk gaan terwijl zij vroeger rustig zouden gaan zitten.

Toekomst

Hoe zal de toekomst van disruptie eruit moeten gaan zien?
De gate agents hebben allemaal problemen aangestipt die zij tegenkomen tijdens verstoorde dagen. Voor veel van deze problemen hebben zij oplossingen of voorstellen geopperd die de ervaring voor zowel de gate agents als de passagiers verbeterd.

⚠ Problemen

- De passagier heeft de informatie (soms) eerder beschikbaar dan de gate agent.
- De gate agent mist bepaalde bevoegdheden in de iPad om zaken af te ronden.
- Te weinig beschikbare hotels/ accommodatie.
- Rijen bij de transfer- en service balies.
- Lange werkdagen met weinig pauze.
- Afhankelijkheid van andere afdelingen die slecht bereikbaar zijn zoals het ticket-office.
- Taalbarriere voor het helpen van passagiers die geen Nederlands of Engels kunnen.
- Geen beloftes kunnen doen aan de passagier.
- Te weinig waardering voor de vele verschillende taken die worden verricht.
- Moeilijkheden met het printen van vouchers en tickets.
- Onlogische en oncomfortabele omboekingen.

💡 Voorgestelde oplossingen

- Vergroten van de ticket-office.
- Het mogelijk maken om zelf de tickets aan te bieden, wat nu wordt gedaan door de ticket-office.
- Meer pro-actief cancellen van vluchten.
- Eerst de gate agents van informatie voorzien, daarna de passagiers informeren.
- Passagiers up-to-date houden door actief betrokken te blijven tijdens de reis.
- Positiviteit uitstralen door te benadrukken wat de voordelen voor de passagier zijn.
- Persoonlijk contact houden met de passagier ondanks de robotisering en self-service.
- Kant-en-klaar pakket aanbieden met alle informatie, tickets en vouchers.
- Live communicatie in de app.
- Grotere vliegtuigen inzetten.
- Alternatief vervoer stimuleren.

EXPERT INTERVIEWS – MANAGEMENT

Goal: The goal of these expert interviews is to discover the contextual factors that will enrich the Double Diamond approach. There is a lot of information available within the company KLM about the current operation and its pains and gains related to disruption. It is important to map this process and become aware of the problems the stakeholders notice and the available solutions they want to bring to the table. However, it is more important to find out why they think these are crucial factors within this topic and where it comes from. Besides that, they will have a future vision, both about the airline industry as a disruption.

This interview guide is formulated by means of Sanders' model, asking questions about their experience in the past first, before talking about dreams in the future. This will help them imagine their ideal future vision and explain them easily why they dream of such a future. (contextmapping, 2017)

INFORMATION
What: Semi-structured In-depth interviews
Duration: Max. 45 minutes

With whom:
1. Mike Huizinga - Product Owner Digital Disruption - Digital - 14/02/19 11:00 - 12:00 (pilot)
2. Mariken van Slobbe - Unit Manager Transfer & Disruption - Passage - 18/02/19 15:30 - 16:00
3. Christiaan van de Koppel - Product Strategy Manager Disruptions - CX - 19/02/19 16:00 - 17:00
4. Laurie Robben - Product Manager Optimizers - ODS - 22/02/19 10:00 - 11:00
5. Jini Sankasting - Manager Commercial Desk - OCC - NTB

Maybe:
1. Sander Stomph - Director of Operation Decision Support
2. Coen Swaanenburg - VP Operations Control
3. Boet Kreiken - EVP Customer Experience

INTERVIEW GUIDE | SEMI-STRUCTURED
Introduction
I am conducting an interview for my graduation project at KLM and the Delft University of Technology. This project is about offering the desired solution for a cancelled flight to KLM passengers. However, the airline industry is changing and I am curious about the stories of KLM employees about the coming trends and developments. Besides that, I want to know more about disruptions in general and the way the department copes with these disruptions. This interview is separated into three topics. Firstly, I want to talk about the current situation around disrupted/cancelled flights. Secondly, we will take a look where we are now and how KLM evolved over time. Lastly, we will talk about the future of flying and the things that might be possible to offer the passengers. To ensure confidentially I will let you check all the information you provide me before showing it to the public (KLM/ TUDelft). This interview will take about max. 45 min.

Checklist
1. May I record the audio of this interview?
2. For how long have you worked at KLM?
3. Can you briefly (3 sentences) explain what your function is within KLM?

Subtopic 1: Disruptive flights
1. When is the last time that you had to cope with a disruption? (how was that?)
2. Where in the customer journey can a disruption take place with a big impact? (what kind of disruption are these?)
3. Which of these disruptions is the most difficult for you to solve?
4. What caused these disruptions? (where is it coming from?)
5. How are you currently solving these disruptions? (Why do you do that?)
6. Are you satisfied with this solution? (why/why not?)

Subtopic 2: Changes in the airline industry
1. Do you see a change in the kind of disruptions over the years? (more or less extent?)
2. What has changed within the solution you offer nowadays compared with 3-5 years ago?
3. What problems did KLM encounter in the past?
4. What is an improvement/change you are the most proud of? (why?)

Subtopic 3: Future of flying
1. What are the changes you see happening in and outside the airline industry that you fear the most? (why?)
2. What are the changes you see happening in and outside the airline industry where you see the most opportunities for KLM? (why?)
3. What is your future vision concerning disruptions for KLM? (why?)
4. What would be the ultimate solution/achievement concerning disruptions for KLM? (why?)

Checklist for closure
Thank you very much for your input, is it possible to contact you in case I need some more information?
Do you have further questions or input regarding my research?

EXPERT INTERVIEWS – MANAGEMENT
Goal: The goal of these expert interviews is to discover the contextual factors that will enrich the Double Diamond approach. There is a lot of information available within the company KLM about the current operation and its pains and gains related to disruption. It is important to map this process and become aware of the problems the stakeholders notice and the available solutions they want to bring to the table. However, it is more important to find out why they think these are crucial factors within this topic and where it comes from.

The gate agents have direct contact with the passengers and know what makes a disruption such an undesired experience. That is the reason that I find it important to talk about the problems they are facing regarding the passengers.

After observing the gate agents of KLC, I have decided to change the original expert interview guide. Gate agents have more irregular breaks to get a coffee and chat a bit. That is the reason that I made the interview guide shorter. I also noticed that they are not as excited about KLM innovating new tools and trying to optimize their process. Many of them are already working quite long for the company and do not easily adapt the new tools. Only if it really benefits them, they are willing to use it. (e.g. using the new app to see your working schedule and the schedule of your favourite colleagues. #insight "I want to see if it will be a nice working day or a boring one".?
Minimum: 5 gate agents

Introduction

Voor mijn afstudeerproject binnen KLM aan de TU Delft hou ik momenteel interviews. Dit project gaat over het aanbieden van een gewilde oplossing aan KLM passagiers op het moment dat er een vlucht is gecanceld. Ik ben benieuwd naar de verhalen van KLM gate agents over de ontwikkelingen omtrent disrupties. Zo wil ik graag weten hoe jullie omgaan met disrupties, waar jullie tegenaan lopen en wat jullie zien gebeuren bij de passagiers. Dit interview is opgedeeld in 3 onderwerpen: het heden, het verleden en de toekomst. Eerst wil ik graag praten over de huidige situatie omtrent een gecancelde vlucht. Daarna wil ik graag een stapje terug doen in het verleden en kijken hoe KLM is veranderd door de jaren heen. Als laatste wil ik het hebben over de ideale oplossing voor disrupties in de toekomst. Dit interview zal als vertrouwelijk worden beschouwd en alle informatie die je verschaft zal met zorg behandeld worden. Ik zal niet om persoonlijke gegevens vragen om annonimiteit te behouden. Het interview zal max. 15 min. duren.

Checklist

1. Mag ik de audio opnemen van dit interview?
2. Hoe lang werkt u momenteel voor KLM?

Subtopic 1: Gecancelde vluchten

1. Wanneer heeft u voor het laatst een disruptie (PaxCon) meegemaakt tijdens uw werk meegemaakt? (hoe was dit?)
2. Welke disruptie oorzaak is het moeilijkst op te lossen voor jullie (waarom?)
3. Hoe handelen jullie momenteel op het moment dat deze disrupties plaatsvinden? (waarom doen jullie dat zo?)
4. Bent u tevreden met deze oplossing? (waarom wel/niet?)
5. Denkt u dat de passagier tevreden is met deze oplossing/werkwijze? (waarom wel/niet?)

Subtopic 2: Veranderingen in de luchtvaart industrie

1. Wat doen jullie nu anders dan 5 jaar geleden op het moment dat er een disruptie plaatsvind? (waarom? Wat vind u hiervan?)
2. Hoe reageert de passagier nu op disruptie ten opzichte van 5 jaar geleden?

**Subtopic 3: De toekomst van vliegen**

6. Wat zou u liever anders zien in de toekomst? (wat zou u veranderen aan het huidige oplossing? waarom?)
7. Bij deze vraag wil ik dat u uw fantasie gebruikt, wat zal de ultieme oplossing voor een gecancelde vlucht voor jullie passagiers?

Checklist for closure

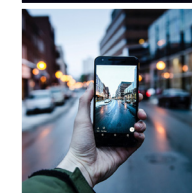1. Heel erg bedankt voor alle input. Heeft u nog vragen of opmerkingen omtrent dit onderzoek?

Appendix B

Context factors
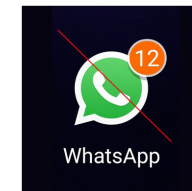
SILENCE = GOLD
People do not want that much screentime and notifications anymore. That is why they are shutting down their mobile devices to be less connected.

FAVOURING VISUAL COMMUNICATION
Young people are favouring more visual platforms nowadays. Instagram for example is hot, since images says more than words. KLM employees also wants to see their performance on visual dashboards.

ANGRY MOVEMENT
People are angry and showing this to the public. Examples of this angry movement are Tim Hofman with #BOOS and Rebecca Traister with #GoodandMad
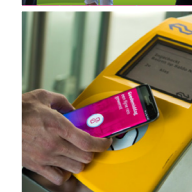
SEAMLESS TRANSIT
People want unified transit experiences. Many companies are focussing on these experiences nowadays with autonomous cars and shared bike use.

PRIVACY LAW
The General Data Protection Regulation (GDPR) makes sure to protect all individuals in the European Union by securing their personal data and privacy. KLM needs to

UNFAVOURABLE LOCATION SCHIPHOL
The positioning of Schiphol is in a hole, which results in having to cope with bad weather conditions.

VULNERABILITY IN SOCIAL MEDIA
KLM has to operate for hundreds of people, who are all invisibly connected to hundreds of more friends and followers. When something goes wrong it might be shared with many people.

TRANSPARANCY AS ADVANTAGE
With the rise of the block chain technology and the use of big data, transparancy will become a competitive advantage. Passengers will trust an airline in this way.

ROBO HELPERS
Robots are used in the operation to help passengers during their journey. These robots can for example speak different languages such as Japanese which makes it easier to communicate with foreigners.

BREXIT TRIGGERS INSTABILITY
It is feared that the Brexit will trigger instability in Europe. London is an important destination for KLM. The Brexit can have a major impact on the sales for this destination.

RUNNING EVERY 10 MIN
Trains will run every 10 minutes to all the major cities in the Netherlands soon. This frequency will result in not having the feeling of being disrupted anymore.

CHOICES ARE PERSONAL
It is not possible to generalise the target group of KLM. All the passengers have their own needs and the choices they make are personal.

DO NOT FORCE A CHOICE
Giving a choice without being able to change it feels forced. Passengers are not happy with forced choices and rather have the option to choose something themselves.

SUSTAINABLE ALTERNATIVES
There are many sustainable transportation alternatives and these are promoting themselves well. The high speed train to London and Paris for example is a fair alternative for business men.

CLIMATE CHANGE
The climate change has a major impact on the weather related disruptions. Nowadays the airports is coping with more and havier winds.

RISING SUSTAINABLE AWARENESS
People are more aware of the sustainable solutions and tend to make more conscious choices to become more sustainable.

AIRLINE INDUSTRY IS POLLUTING
The CO_2 emissions of aircrafts-in-flight are the most significant element of the aviation's total contribution to climate change

A COMPLEX ORGANISATION
KLM has a complex organisational structure. They work in silos, which results in a difficult manner of communication between the departments. ODS is weirdly placed in this structure.

KLM HERITAGE
KLM is the oldest airline in the world operating under its original name. It has a rich history, a vast amount of experience and a well established name.

KLM DEPENDS ON MANY OTHER COMPANIES
Multiple airlines are present at Schiphol and KLM is in collaboration with many of them. During a disruption KLM is trying to use all the available sources. They can not check-in for other airlines.

CULTURAL DIFFERENCES
People respond differently to disruptions, but there are similarities between cultures. Some act calm, while others are absent-minded or devastated.

NOTHING IS LIKE HOME
At home everybody feels the most comfortable and at ease. This is difficult to reproduce at another place.

MANY HANDS MAKE LIGHT WORK
Working together and increasing the crew will make it easier and faster to solve a disruption. KLM is showing its crew to different places where help is needed.

BLURRING BOUNDARY BETWEEN JOBS
KLM gate agents are doing more different tasks than 5 years ago. Especially during disruptive days, they have to be able to do lots of different tasks and help other employees.
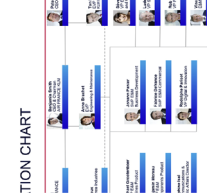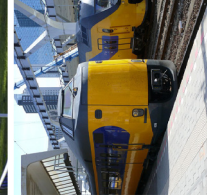
AN ACCELERATING WORLD
Everybody is moving faster and faster in this world. Time is more important then ever. Tools help us to move faster and we are making the transition to use all our time efficient.

POSITIONING KLM AIRFRANCE
The tumultuous positioning of KLM and AirFrance is often negative in the news and people get less trust in the two airlines.

KLM IS A CUSTOMER-CENTRIC AIRLINE
KLM's focus is on its customers. Their competitive advantage regarding to other airlines is the care for its passengers. This value is of huge importance when making difficult decisions.

AUTORITIES ARE OFTEN UNDERMINED
KLM ground crew is nowadays undermined by its passengers. People tend to know everything better and are more mature, which results in unrespectfull situations.

NOTHING IS AS IT SHOULD BE
A disruption creates chaos and nothing is as it should be. There is one new rule that whipes out all the other rules. The passenger needs to be gone as fast as possible and you can do whatever you want to this.

INCREASING VOLUME OF PASSENGERS
The volumes of passengers that is flying with KLM is growing. The tools that are used in the operation make it possible to fill the aircrafts to the max. and to create a tight schedule.

LESS GROUND STAFF DUE TO SELF-SERVICE
The self-service devices are increasing at the airport. People can check-in while being so through security by scanning their passport and soon they can rebook themselves via self-service desks. This will decrease the ground staff

GROWING DIGITAL TARGETGROUP
The target group with a mobile device is growing and soon (almost) everybody will travel with access to the most up-to-date information via the internet.

EXPANDING SCHIPHOL
There are plans of expanding Schiphol. Due to the continuous growth of passengers KLM is using the so-called wide body aircrafts which need a temporary stand. That is why a holding capacity is needed.

SCHIPHOL IS SMALL
Schiphol is a small hub compared to others, while super popular to fly to. When everything runs smoothly there is no problem. When a disruption occurs it can feel overcrowded and claustrofobic.

KLM IS COMPARABLE WITH THE NS
The operation of KLM and other airlines is comparable with the operation of other public transport modes such as the trains of the NS. They both have to deal with major safety regulations and weather circumstances.

GOOD COMMUNICATION IS KEY
The way you communicate to people has a major impact on the experience. You have to carefully decide what you are going to do it tell and how you are going to do it (digital platform/personally). Besides that it is important to think about your intonation.

THE IMPORTANT TRANSFER PASSENGER
70% of KLM's passengers is a transfer passenger and do not have a final destination. When a disruption occurs this is the group that is stuck at the airport and can not go home or stay at their destination.

TRUST WILL INCREASE LOYABILITY
Passengers want to have a person in front of them to ask their questions while having problems at the airport. Answers will give them trust in the airline and increase the loyability for KLM.
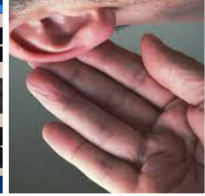
PEOPLE WANT TO BE HEARD
Passengers want to be listened when having a delay or a cancelled flight. That is why personal contact is an important aspect during disruptions. Even though you can not solve it, it can be very helpful to listen to your customers.

USEFULL TIME
People find their time very precious and want to spend it usefully. During travelling people tend to do other things while waiting. Listening to music, reading, working, watching video's etc.

SELFISH YOU
Many people can be quite selfish and find themselves more important than others. Passengers think their problems are the ones that need to solve first. While employees find their own work and department the most important.

SEEING IS BELIEVING
People only show empathy when they understand the situation. Often this is the case when they literally see that something is happening. Snow for example is a logical result for disruptions. Wind however, is unvisible and thus not credible.

YOU ARE NEVER FULLY SATISFIED
Whatever the solution that is given, people will never be 100% satisfied with the solution. They can always come up with new things that would have been better.

KNOWLEDGE CREATES PEACE OF MIND
Up-to-date information in unpleasant situations can help passengers to get peace of mind. In this way they are able to get an idea of the situation and to consider which steps to take.

PASSENGERS WANT TO BE IN CONTROL
People want to feel in control when something unexpected happens. Especially because flying is not an everyday activity and people often have important reasons to go by plane, they want to get grip on the situation.

UNCERTAINTY STIMULATES EMOTIONS
When a disruption happens, people show their feelings in a different ways. Some will become angry and shout to the personnel at Schiphol, others will start crying.

YOU LEARN FROM YOUR MISTAKES
This does not only counts for people, but also for technology. With machine learning you can teach systems to create an understanding of whats happening and give the best solution after some time.

COMMOTION CREATES HERD BEHAVIOUR
People seem to stop thinking when they are in a unexpected and unpleasant situation. Often they follow the crowd. During disruption this results in enormous queues at the transfer desks.

WHO YELLS THE LOUDEST IS RIGHT
People who raise their voice and try to prove that they are right often get more things done than people who await for their chance.

PEOPLE UNDERSTAND DISRUPTION
Often people can understand that a disruption is something that is unwanted for everyone, not only for the passenger. They can show an understanding. However, they still are unhappy with the situation.
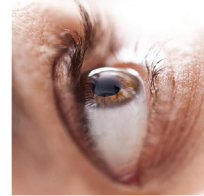
A TICKET MEANS GOING
People feel secure when something happens and they have something tangible in hands. A ticket for example means they have proof that they can fly. This makes people feel more secure.

STAFF IS IMPORTANT FOR THE PASSENGERS WELL BEING
The passengers of KLM like to have personal contact with a real person at the airport. They have trust in the crew and they have the feeling that they can really help them in cases of need.
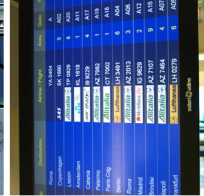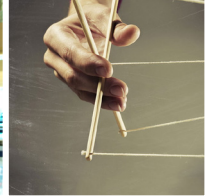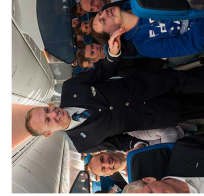
PEOPLE TEND TO LOVE CLOSURE
People want to close a case before moving to another one or passing it to someone else. This gives them peace of mind. They do not have to worry about this anymore.

Study Passengers

Statement cards

SPEED IMPROVES THE EXPERIENCE
People want to move on as fast as possible. Especially when something is not as planned, they want to move on and continue their journey, preferably as soon as possible.

SYMBIOSIS KLM AND SCHIPHOL
Schiphol and KLM are often mentioned in the same sentence, and a reinforcing effect occurs when the two collaborate. There is symbiosis especially in terms of quality.

TRAVELLING IS A STRESSFUL MATTER
Travelling by plane is for many passengers a stressful matter, because of the time and security checks which is unusual for many people.

INFORMATION BRINGS PEACE OF MIND
People want to get information when something unexpected happens. In this way they can decide for themselves what to do which can give them peace of mind.

WAITING MEANS MORE TRUSTWORTHY INFO
The longer you wait with deciding whether to cancel a flight or not, the more trustworthy your information is and the better you can make the ultimate choice.

NEW EXPERIENCES CREATE INSECURITY
People feel insecure when they do something they are not used to do. Flying is an example of an experience that is new or uncommon for many people.

OUTSIDERS ACCESS THE AIRLINE INDUSTRY
Other companies with no specific relation to the airline industry (e.g Google) will enter it anyway. This industry is rigid and their are many opportunities for them to take.

STAGNANCY IS AN ABATEMENT
KLM is dependent on its ticketsales since this is their biggest source of income. This is why it is so important for them to keep growing its volume.

THE MORE YOU FLY, THE MORE IMPORTANT YOU ARE
The more money you bring in, the more important you are for KLM. That is the reason that they try to make the frequent flyer feel important and offer them more than regular flyers.

COMMERCIAL INCENTIVE TRIGGERS
A commercial incentive is the right stimuli for getting fundings/money for projects or getting things done.

ADAPT TO A CHANGING ENVIRONMENT
KLM should adapt to the changing environment to survive in this industry. Especially now new and unexpected players are entering the market.

PASSENGERS ARE MORE INDEPENDENT
(Business) passengers are becoming more independent and mature since they have access to many sources that can help them and they know how to use them.

INCREASED TECHNICAL CALAMITIES
The volume of passengers and luggage is increasing and the time to process everything is becoming less. With the help of tooling this should work. However, the dependency on technologies is becoming more and more.

KLM IS BEHIND WITH DIGITALISATION
KLM employees have the feeling that KLM is not moving fast enough in this digital environment. Around them, digital experiences are popping up everywhere and KLM is not using its full potential.

PRO ACTIVE IN MAKING DECISIONS
KLM is becoming pro active in making decisions by for example cancelling flights when the expected runway capacity is less then usual. This increases the customer satisfaction on such days and can lower the costs.

DISRUPTION AFFECTS EVERYTHING
A disruption affects the whole complex operation and beyond. All the departments have to contribute to fix the disruption when it occurs. But also the passenger has to change his or her plans.

DEVELOPMENT COSTS TIME
To develop for example your tools costs lots of time and can not be done immediately.

DISRUPTIONS STAY FOREVER
A disruption will always exist, since companies will always increase their volumes till the max. Besides that time will become more valuable and people tend to feel disrupted faster.

MORE AND MORE INFORMATION SOURCES
Passengers can find their information all over the internet nowadays. This makes it difficult for the ground crew, since they often know earlier that something is happening then they do.
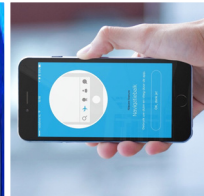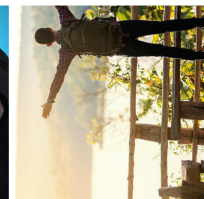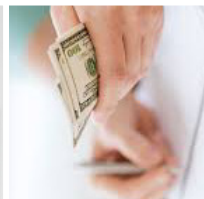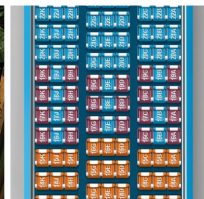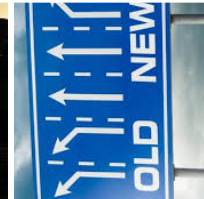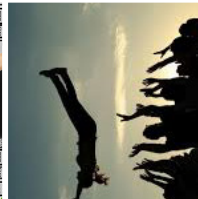
GROWING INTEGRALITY IN KLM
KLM is working to a more integral approach to make the operation more streamlined. It is important that all the touch points have the same up-to-date information in order to operate at its best.

LESS RUNWAY CAPACITY
The most common PaxCon situation is often told to be 'weather'. However, this is not the cause of the disruption, but it is the less runway capacity that is available. This can also result in a reduncancy of personel.

TECHNOLOGY WILL DECREASE WORKLOAD
New technologies such as automated tooling and robotics will decrease the workload that is nowadays applied to the ground crew of KLM. However, this can also result in a reduncancy of personel.

AUTOMIZATION BY TOOLING
KLM is using many different tooling to enhance the operation processes. This makes it better, faster and more consistent. Nowadays, they are also building their own tools.

TRANSITION TO BECOME DATA DRIVEN
KLM is making the transition to make fact-based decisions by the immense amount of valuable data they have instead of making intuitive decisions in their operation.

Appendix C

Study Passengers

The aim of this research is to find out what passengers desire when operational disruptions occur. Passengers have different mindsets while moving around with different mobility modes. (Fjord mobility mindsets, 2018). The accompanying needs, however, are not directly implementable while travelling by aeroplane. Besides that, they also differ when operational disruptions occur. With the use of adaptive storytelling, telling the participant a disrupted scenario which is adjusted to their own trip, it is likely that the mindsets will be enriched with new insights.

PLAN

This research took place at Schiphol Airport for two days, of which one day was at the international transfer desk of KLM and the other day was spent at different KLM departure gates. Before this research was executed, a pilot interview was held at the Industrial Design Engineering faculty with two students to improve the research. The interviews took between the 7 minutes and 15 minutes.

PARTICIPANT SELECTION

In total 17 passengers participated in this research, among which four couples travelling together. These passengers had nine different nationalities: American, Swedish, Danish, German, Israeli, British, Scottish, Turkish and Dutch. Both men (8) and women (9) joined this research. All the participants had a purpose for their trip; (short) business trip, (short) holiday, going home from a backpacking holiday and a family visit. The criteria for these passengers were that they had to fly with KLM and that they needed a short haul flight (<3 hours) or a long haul flight (>6 hours).

TOPICS

- **Mindset - choosing a statement card**
Which mindset fits the passenger the best?
- **Operational disruption - reading their personal disruption scenario**
What is their first response to the occurrence? What are the actions they are going to take? How do they wish to continue their journey? What are they willing to undertake themselves? What do they expect from KLM?
- **Offered solution - telling their given solution**
What is their first response to the offered solution? What would be a solution they are most happy with? If they could wish anything at that moment, what would it be?

INTERVIEW MATERIAL

[Statement cards + scenarios]

RESULTS

The following results are sorted based on the topics. The findings of this research have helped to enrich the mindsets which can be found in the report chapter 2.3. Some of the information found in the specific mindsets is not written down in this report.

MINDSET

The passengers were asked to choose a statement that was connected to a mindset that fit them the best. There were some popular and less popular mindsets that people chose impulsively. Seven people chose the Joy Maker mindset since they enjoyed travelling. While further questioning, the passengers seemed to not like a long flight that much, but they enjoyed the feeling of going towards their final destination

Five people chose the Comfort Seeker mindset for many different reasons. A man stated that he had long legs and therefore needed more leg space while flying. Another woman was aware of the difficulties during a long flight and wanted to make herself beforehand at ease.

"I think because it's such a long journey. I don't want to put myself under any undue pressure for anything. It's difficult to travel long journeys anyway." - British, family visit.

Two passengers chose the Planner mindset. Both of the passengers were more experienced passengers since they had to go on business trips very often. They try to plan everything in advance before they are going to the airport. To make sure they are on time at the airport without losing too much valuable time.

"I am now more on time than some years ago. In the past, I drove way too late towards the airport and missed my flight sometimes." - Dutch, business trip

One passenger chose the Penny Pusher mindset. She was a student, who carefully selected this flight. Even though it was not a direct flight and they had to wait at Schiphol for a while before heading home, it was the cheapest flight. She travelled with her boyfriend, but it was obviously her decision to buy this ticket.

"I chose this for this journey because we don't have a lot of money and it was cheaper to fly through Amsterdam and Paris than directly from Sweden." - Swedish, holiday

The Risk Evader mindset was chosen by one passenger, an older woman who was a bit insecure while travelling alone. The Humanitarian mindset was mentioned by one passenger, but he did not have any argument why he felt this mindset fitted him the best. During the rest of the interview, nothing else was mentioned that supported this mindset. Therefore this mindset is excluded from the final selection.

The passengers had difficulties with choosing the best mindset because they often had the feeling that multiple mindsets reflected their personality. Even the passengers that did not have difficulties, showed later on in the research a mix of different arguments.
"I suppose I should have opted for using my money wisely as well as being a comfort seeker because if I was that worried, I would probably have gone business, but it's too expensive." - British, family visit

OPERATIONAL DISRUPTION

All the results in this topic depending on the type of passenger who is in front of the interviewer. Most of the answers given are therefore implemented in the mindset personas. However, some overarching themes are discovered.

First response

Passengers react differently to the question of what their first response is when operational disruptions occur. Some are shocked and see it as a total disaster, being stuck with too many people at the airport, supplies that might run out etc. Some passengers would even cry because they are tired and sad about the situation. Others find it okay and believe that this is part of life, they just have to be patient. However, many passengers mention the point, not to become angry since it is nobody's fault.

"Patience! You can not change the situation, but you can change your own attitude." - German, Business trip

"When it comes to such things I tend not to become angry because what is the point. It is not KLM that makes the snow fall down" - American, Holiday

Taking action

Many passengers are searching for information about the disruption and the flight plan first. They want to know what to expect and when they can continue. To find this information, [10/13] passengers try to find a responsible person from the airline. Often they can find these people at the desk. Some would also go to a representative of Schiphol Airport because they believe that they can help them.

"Sometimes things change fast in a situation like that. I want to find a person with authority. Even though they do not have immediate information I can go back to that person" - American, business

"I feel it is safer to go to a person. Fewer things can go wrong. If it goes wrong at a machine you have to go to the desk anyway. So it will be faster to go there directly." - Denmark, visiting a friend

There are also people who would make sure they have their basic needs such as water, food and a place to sit and relax. Others might call family or friends to keep them up-to-date and tell them to change their plans. Often they have arranged transport when they arrive at their destination or at home.

Continue

Almost all the passengers mentioned that they want to continue by taking the first flight possible. Some even check the flight schedule of other airports and will try to get a ticket. For business passengers, the price does not play a role in this decision, for others they want to consider if the price is worth taking another flight. However, after some further questioning, it became clear that it can also be something else to make them feel at ease. Some feel that sleep is a good remedy to feel comfortable again, so they want to go to a hotel first before departing to their final destination.

"I would like to get a hotel room. If it is a long wait, I rather go sleep, wake up and take a flight the other day." - Swedish, holiday

Still, everyone believes that a flight is the most convenient and fastest way to get to their destination and it will become very difficult to take an alternative.

"I think I still want to fly back to Newcastle. I could not see myself going and looking for ferries and going across." - British, family visit

If the purpose of the trip is time-dependent, for example, a business meeting. Passengers want to cancel the flight to their final destination and just go home. If something like that happens, they just want their money back.

Expectations

Most passengers say they do not expect that much of KLM since it is not their fault. However, eventually, they are not responsible as well and expect that the extra costs would be paid by KLM. Besides that, they want KLM to give them a feeling they are taken care of. They want to feel that they get help in these situations and that KLM takes responsibility.

"That they tell me, you will not depart today, but tomorrow. We will arrange another flight for you. I expect the airport to take responsibility". - Turkish, holiday

A passenger mentioned the fact that KLM would probably have an insurance that will cover the costs for them. All the passengers expect in the end a new flight to continue their journey since that is their main concern.

"If the plane did not go, I would try to book another flight. If I had to stay overnight I would pursue the airline to pay for my hotel and get me transportation from the hotel and back. If I were here, I would not have any clue where to go so I want the airline to do that." - American, Business

Passengers are open to undertaking some action themselves by for example arranging their own hotel, their next flight or even plan some entertainment (dinner, football match). This depends on how much time they have.

"It depends on how much time I have. If I have six hours, I go out in Amsterdam. I might visit a coffee shop. But two-three hours does not work" - German, Business

However, not everybody planned to be in Amsterdam and have no clue where to go. These people are happy when KLM will tell them where to go.

OFFERED SOLUTION

Most passengers like it when KLM rebooked their flight for them, arranged a hotel for them and give them vouchers for food and drinks. Some passengers even think that this is more than they expected to get. They believe that it is about the feeling that they are being helped, that the airline has respect for their journey.

"Paid hotel room and flight the next day. That would be topnotch" - Swedish, holiday

"I have heard that some airlines take you to a hotel where you can stay for the night and that they arrange another flight for you the next morning. They show you that they care about your trip. They do not say, go home because we cannot continue your journey." - Turkish, holiday

Other passengers just want to have the option to choose themselves. With their mobile devices, they can find a good hotel and restaurant themselves on the internet. Especially, because they have hours left till someone can help them, they feel that it is more convenient to plan something themselves.

"I want a nice hotel that I can choose myself. A luxurious hotel. And I would choose a really nice restaurant to have dinner. I am sure they have that in Amsterdam. I will find this on the internet." - German, Business

"It is easier for us to find a place to stay if we can get the information through the app. Instead of sitting here and waiting for hours until somebody can help us find a place to stay. If there is an option to arrange something ourselves that would be great. The airline would not hear from us, except for the end where we can fill in our bank account in the system for a refund." - Israeli, holiday.

However, some passengers still feel uncomfortable and want someone available for information. They are afraid that they can, due to the circumstances, not leave the airport. Therefore, they would like to transport their mind to feel in control again. Others that feel insecure and uncomfortable want to have a simple, organized plan. Someone that can guide them, accommodate them near the airport and give them up-to-date information.

"I think I would like to be accommodated near the airport. Besides that it would be nice if I do not have to seek for the announcements, but if they seek for us and have it all organized." - Scottish, holiday.

"I was worried at what time my new flight was going to depart. And because we did not know, I did not have a very good night rest, because I was worried about that." - British, family visit.

CONCLUSION
MINDSET

Not all the mindsets were as popular as others. Most of the people felt that they were either a Joy Maker or a Comfort Seeker. However, this was peoples first impression and they had to choose impulsively. During the research, things have been said by multiple participants that enriched the mindset profiles that did not fit their original choice. That also shows that passengers do not fit perfectly into one specific mindset. They have a mindset profile that captures multiple mindsets. Besides that, they cannot decide perfectly for themselves which mindset fits them the best.

OPERATIONAL DISRUPTION

Passengers respond differently after hearing that their flight is cancelled due to unexpected situations. They can either be shocked, cry or be patient. Probably there will be even more reactions just after the disruption happened. The first thing almost every passenger is going to do is searching for a representative who can give them information. They believe it makes more sense to stand directly in the queue for the transfer desk than searching for a machine that can help them. There are a few passengers who are going to do it differently. Some might call stakeholders such as parents or a company to tell them the news. Others might claim a comfortable place first and arrange some drinks and food for themselves.

Everyone wants to get the first flight possible since that is their main problem; not being able to go to their final destination. However, after further questioning, it became clear that some passengers do not benefit from the first flight possible, because they have to be at their final destination on time. Others do care more about their personal wellbeing and would rather spend the night well in a hotel than wait a long time for a flight.

Even though the passengers know that it is not KLM's fault that the disruption happened, they have a certain expectation. All of the passengers expect that KLM will pay and arrange the new flight for them. Some even expect KLM to pay for the extra costs; for hotel accommodation, food and drinks and compensation. They want to have the feeling that KLM takes responsibility. That they will give them all the information and that they take care of their journey.

However, they are also open to arranging things themselves. Passengers would be okay with searching for a hotel and for some entertainment. Some passengers even mentioned that they can find their own ticket.

OFFERED SOLUTION

People tend to be happy with the offered solution; a new flight, accommodation when needed and some vouchers for food and drinks at Schiphol. They want to have the feeling that the airline respects their journey and does everything to make it as comfortable as possible. Some people, however, see more benefits in arranging everything themselves and claiming the costs afterwards. Other find this really scary and uncomfortable and want the airline to guide them through the system. The offered solution, therefore, is perfect, but the way it is communicated to the passengers should be adapted to each individual.

I travel because I enjoy it.	I need to plan my journey ahead.	Our future is important.
I need to be comfortable during my journey.	I need to spend my money wisely.	I rather avoid risks while travelling
I am a "Comfort Seeker"	I am a "Penny Pusher"	I am a "Risk Evader"
I am a "Joy Maker"	I am a "Planner"	I am a "Humanitarian"

................'s *short haul story* #

You are on your way to Schiphol to catch your flight to ....**[destination]** Last night you packed your suitcase and checked in via your mobile device to make sure you were ready to go. It is crowded at Schiphol Plaza. You get excited to go on your trip .... **[purpose]** and continue your way through the departure hall. When you enter Schiphol's security area there is a little queue, but it does not take that long before it is your turn to let your hand luggage be checked. While opening your trolley, the lights go out and the baggage belt stops working. For a few seconds, you and the people around you are scared of what happened, but soon only some lights go on again. Quickly afterwards somebody tells you that there is a power failure at Schiphol. Nobody knows exactly what to do at that moment. After 15 minutes you receive a text message from KLM on your mobile device that Schiphol is coping with a major power failure that can not be solved immediately. Unfortunately, they have to tell you that your flight is cancelled.

.................'s *medium haul story* #

You are at home grabbing the last items that you want to bring with you on your trip to .... **[destination].** After a quick check, you know that you have the most important items: your mobile phone, passport and credit card with you, and you are ready to go on ....**[purpose]**
A friend of yours told you to keep an eye on the communication channels of KLM since there were rumours on the news about an expected cabin-crew strike against the reduction of the number of crew members on some longer flights. Just before you want to leave, you check the KLM website and they indeed mention the problems that can occur on your day of departure. However, there is no specific news about your flight, so you decide to go to the airport because you really want to catch your flight. A minute later you receive a text message from KLM saying: *"Due to an expected employee strike, we, unfortunately, have to cancel your flight"*.

.................'s *long haul story* #

You are on your way to .... **[destination]** to ....**[purpose]**
Yesterday night you started your journey in .... **[departure]** After a long flight where you have tried to entertain yourself because you could not really sleep, you arrived here at Schiphol. You have a waiting time of a few hours, so you walk around a bit since you have sat in the plain for such a long time. Through the windows, you see that it has started snowing. When you landed the pilot already told his passengers that it would be cold today in Amsterdam, but you did not expect this. After your stroll through the airport shops, you walk back to your gate again to sit down and close your eyes for a moment. You are tired and want to be at your destination. Then you hear a woman through a microphone telling the passengers that due to bad weather the flights will be cancelled. There is unexpectedly much snow, that it will become too dangerous to continue with the operation. Soon after that, you see on the electric screen at your gate that your flight is indeed cancelled.

KLM's *solution*

You are rebooked on the same flight that will depart one day later. You can also rebook yourself in the app on another flight the next day but you have to pay the extra costs (if applicable). Cancellation is free of charge. To compensate you, KLM gives you a voucher (cash) of approx. €250,-.

KLM

KLM's *solution*

You are rebooked on the first available seat with another airline. This will be a downgrade (lower quality than KLM flight), but you can depart the same day, only 2 hours later. Cancellation is free of charge. In addition, you will receive free of charge meals and refreshments at Schiphol (€10,-).

KLM

KLM's *solution*

You are rebooked on the same flight that will depart one day later. You can also rebook yourself in the app on another flight the next day but you have to pay the extra costs (if applicable). Cancellation is free of charge. To compensate you, KLM gives you a voucher (cash) of approx. €250,-. In addition, you will receive free of charge meals and refreshments at Schiphol (€25,-) and hotel accommodation for your overnight stay (transport incl.).

KLM

Appendix D
Concept descriptions

JOURNEFY | DIY VERIFIED PLANNING

WHAT IS THIS CONCEPT?

This platform makes it easy for the stranded passengers to create their own plan during the time of delay. The platform will give desirable options to spend their time based on their personal profile. These options include activities, places, restaurants and hotels that can improve their experience during the delay. When the journey is created, KLM will give the extra service of validating the feasibility of the plan based on the time and the change in plans.

WHY DO WE NEED THIS?

This concept idea secures people to go outside the airport and spend their delayed time better. Passengers tend to insecure when they end up in unexpected situations. Besides that, every passenger has different needs during their delay. To give them control and peace of mind, they can create their own plan, while being checked by KLM if it's possible. This solution can suit every passenger that is able to leave the airport. However, the way to communicate and the amount of guidance needs to be adjusted to the person that is using the platform.

HOW DOES IT WORK?

The platform analyses the passenger's profile by using its personal flight data and history. With the help of third parties (e.g. Tripadvisor, Booking) they can provide accurate recommendations to the passenger. KLM will check the journey afterwards by checking the timespan (incl. Risk time) of the activities and the available time before the new flight.

TRAVEL POUCH | ALL YOUR NEW DATA TOGETHER

WHAT IS THIS CONCEPT?

This platform collects all your new data (e.g. flight tickets, hotel reservation etc.) when your flight is cancelled and pushes this to the passenger. It gives a clear insight into your new journey, by emphasizing on-time indication and the steps you as a passenger needs to take. Next to that, the passenger is able to upload their documentation as well such as receipts of their own expenses which can be declared afterwards.

WHY DO WE NEED THIS?

People do not know what to expect when something unexpected happens in an unknown country. This platform makes the delay more convenient, by showing the procedure and the compensation that the passenger should get. This transparency of information will answer the main questions of the passengers, which gives them peace of mind.

HOW DOES IT WORK?

This platform pushes a protocol to the passenger in a convenient way. This protocol includes information about the new trip which is gathered based on the previous trip of the passenger and explains the steps in a simple way. All the documentation about the new trip; check-in, boarding passes, hotel reservation can be linked to the passenger's original account. Next to that, it explains how to move around, for example, which taxi to take and what the average price should be.

KLM OFFER | NUDGING AVAILABLE OPTIONS

WHAT IS THIS CONCEPT?

This online platform creates one simple dialogue with the passenger by pushes available rebooking options based on their profile when disruptions occur. These options are all viable for KLM and will subtly palm the expectations of the passengers. The passengers can eventually choose whether they want the option or not.

WHY DO WE NEED THIS?

This is a quick way of giving a solution to the disrupted journey of the passenger. The disrupted passenger wants to have a suited solution, without waiting in line for hours. By managing the expectations, the passengers have the feeling that they get what they are entitled to.

HOW DOES IT WORK?

The platform pushes closed questions to the relative passenger based on the available rebooking options. These questions are sympathizing to the passenger, to stimulate them to choose specific options. To do this, the app needs to know the type of passenger by gathering relevant data (original flight, mindset). These options are all live, so they can disappear when not choosing fast enough.

DESTINATION SPACE | BRINGING YOUR FINAL DESTINATION

WHAT IS THIS CONCEPT?
This concept brings the final destination to the passengers during an unexpected disruption. In that way, the passenger will not lose any valuable time. By focussing on specific feelings and enabling people to do different tasks (e.g. feeling concentrated at a company meeting, feeling relaxed at the beach etc.) the purpose of the trip can be imitated.

WHY DO WE NEED THIS?
Passengers tend to be frustrated when they are not able to go to their final destination directly. They are stuck at an airport, where they get bored and uncomfortable. Sometimes they even miss important appointments due to the disruption. By creating a destination space, passengers can experience their final destination (or another one) during their stay at the airport.

HOW DOES IT WORK?
With the use of virtual, augmented or mixed reality, space can be created to adapt to the needs of the passenger. The most common scenarios need to be available for the passengers focussing on advanced image and sound. To elaborate on the different scenarios, the real space needs to be adapted as well by creating multiple zones with different furniture.

CONNEKT | CONNECT MATCHING JOURNEYS

WHAT IS THIS CONCEPT?
This platform adapts to the supply and demand for solutions for disrupted passengers. It connects similar journeys based on the initiative of a specific passenger. If a passenger has found a solution for its disrupted flight, he can show it to like-minded passengers to help each other out (e.g. drive with a personal car to another airport).

WHY DO WE NEED THIS?
All the passengers travel with a different mindset. Some of them are active and take initiative when something unexpected happens. Others are waiting for someone else to find a solution for them. When these passengers are able to reach out for each other, it will become a more pleasant experience and the crew will have more margin to solve other problems.

HOW DOES IT WORK?
This platform is based on supply and demand during an unexpected disruption. Passengers can either post their compelling stories about why they need the help of others or present possible solutions to reach their final destination. KLM needs to make presets of the most used solutions and requests to simplify the platform.

KLM PGA | YOUR PERSONAL GROUND ATTENDANT

WHAT IS THIS CONCEPT?

The digital PGA knows everything about your trip and will help you organise everything that needs to be done. This attendant knows who you are and what kind of help you need based on the different mindsets passengers travel with. Some passengers will be guided through the whole process, others will be quickly served. The PGA will try to make your delay as convenient as possible.

WHY DO WE NEED THIS?

Every passenger is different and needs a different approach to assistance. During disruptions, real ground attendants do not have the time to help everybody based on these needs. The digital PGA will help every passenger to feel in control of their journey by giving them the information they want to have and help to arrange their new journey.

HOW DOES IT WORK?

This digital platform needs to adapt to the individual's wishes. Therefore it is important to ask relevant questions to create a good passenger profile (mindset, occasion). After that, the PGA needs to provide the passenger of real-time information and generate solutions. The way it is presented to the passenger is dependent on its profile (e.g. A planner needs a formal and quick process while a comfort seeker needs guidance).

THE EXTRA MILE CLUB | LOYALTY PROGRAMME

WHAT IS THIS CONCEPT?

This loyalty programme shows the responsibility of the airline by giving the passenger something extra during a disruption. KLM is the most punctual airline in the world and being disrupted is a unicum. By touching upon the unlikeliness of the occurrence, they will increase the sympathy of the passenger.

WHY DO WE NEED THIS?

Passengers understand that the circumstances created by a disruption (e.g. snow, 3rd party strikes etc.) is beyond the control of the airline. However, it is not their fault either and they would like the airline to act responsibly. By providing the disrupted passengers with an exclusive membership, the passenger feels taken care of in a typical Dutch and funny way.

HOW DOES IT WORK?

This exclusive membership is providing aftercare when an operational disruption happened. During the disruption, they will get all the information needed to be part of the club (basic and up-to-date information about being disrupted) and afterwards they will get priority at their next journey.

Appendix E
SWOT

S — Strengths

Internal

- Great brand awareness in the Netherlands due to its old herritage, clear purpose communicated through the whole company and social media pressence.
- A huge amount of destinations worldwide with the use of their enormous and growing network.
- One of the most punctual airlines in the world.
- The frontrunner in sustainable development in the airline industy, partly due to efficient flight planning.
- Growing Net Promoter Score over the years .
- Operating with one of the most important hubs, CDG + AMS, in Europe.

W — Weaknesses

- Slow recovery from operational losses.
- Dependent on the success and quality of other parties e.g. Schiphol.
- Outdated gates for renewal fleet since the aircraft are larger.
- Intense competition in the airline industry with companies that position themselves similar to KLM.
- Brand confusion in the Air France KLM group between AF, KLM and its subsidiaries Transavia and Martinair.

Helpful / *Harmful*

Opportunities

External

- Expanding the network by creating partnerships with European train network which can be used during disrupted days.
- Opening Lelystad Airport for leisure travel to create more space for business travel at Schiphol Airport.
- Becoming the most sustainable airline in the future and using this as a competitive advantage.

O

Threats

T

- Ongoing growth of low-cost carriers due to growing middle class and increasing demand for air travel.
- Brexit unclarity might result in a restriction of services.
- Rising sustainable awareness and potential decline of air travel in the future.
- Increasing competition will raise operational costs, which results in lower profit margins.
- Labour disruptions such as stikes, caused by lowering the labour costs.
- European train network is offering fast train services targeting business passengers.
- Rising jet fuel price might impact KLM's profitability

Appendix F
Project brief

DESIGN FOR our future

TUDelft

IDE Master Graduation
Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

⚠ **USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT**
Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME
Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name	Bouwman
initials	S. given name Sanne
student number	4223179
street & no.	Rembrandtstraat 8
zipcode & city	2612 XM te Delft
country	The Netherlands
phone	+31640792596
email	sanne.bouwman@hotmail.com

Your master programme (only select the options that apply to you):

IDE master(s): ( ) IPD   ( ) Dfl   (✓) SPD

2nd non-IDE master: _____

individual programme: _____ - _____ (give date of approval)

honours programme: (Honours Programme Master)

specialisation / annotation: (Medisign)
(Tech. in Sustainable Design)
(Entrepeneurship)

**SUPERVISORY TEAM **
Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair	E.A. van den Hende	dept. / section:	MCB
** mentor	J.B. Klitsie	dept. / section:	MCB
2nd mentor	M. Oosten		
	organisation:	KLM	
	city: Schiphol	country:	The Netherlands

comments (optional)
Complementary knowledge required for this project.
E.A van den Hende: Consumer storytelling / radical innovation
J.B. Klitsie: People in transit / aviation

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

Second mentor only applies in case the assignment is hosted by an external organisation.

Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

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APPROVAL PROJECT BRIEF
To be filled in by the chair of the supervisory team.

chair   E.A. van den Hende _____   date 29 - 01 - 2019   signature _____

CHECK STUDY PROGRESS
To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC

Of which, taking the conditional requirements
into account, can be part of the exam programme _____ EC

List of electives obtained before the third
semester without approval of the BoE

(YES) all 1st year master courses passed

(NO) missing 1st year master courses are:

name _____   date ____ - ____ - ____   signature _____

FORMAL APPROVAL GRADUATION PROJECT
To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **.
Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of
  the student (taking into account, if described, the
  activities done next to the obligatory MSc specific
  courses)?
- Is the level of the project challenging enough for a
  MSc IDE graduating student?
- Is the project expected to be doable within 100
  working days/20 weeks ?
- Does the composition of the supervisory team
  comply with the regulations and fit the assignment ?

Content: (APPROVED) (NOT APPROVED)

Procedure: (APPROVED) (NOT APPROVED)

comments

name _____   date ____ - ____ - ____   signature _____

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Initials & Name S.   Bouwman _____   Student number 4223179 _____
Title of Project A desired experience for KLM passengers during undesired disruptions. _____

28

A desired experience for KLM passengers during undesired disruptions.   project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple.
Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date   29 - 01 - 2019   27 - 06 - 2019   end date

INTRODUCTION **
Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet
complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the
main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

As the airline industry is progressively optimizing, one area remains relatively unchartered: what happens to
passengers when disruptions occur? Unfortunately, operational disruptions are unavoidable and if not appropriately
managed, can have negative performance consequences for a firm (Hendricks & Singhal, 2005). Triggers which can
create these operational disruptions are associated with raw materials, people, technology or external events (Mizgier
et al, 2015). In the aviation industry, it is often caused by bad weather. These disruptions can cause large operational
losses with disastrous customer experience results. Currently, the passengers will be compensated; alternative empty
seats need to be pinpointed and arrangements have to be made. There is an instant mismatch between capacity and
demand. This process is currently suboptimal for both passenger and the airline.

Generally, operational managers solve these problems with intuitive knowledge. However, KLM currently makes the
transformationt towards a fact-based decision strategy by becoming data-driven. In 2017 KLM founded a new
department called Operation Decision Support (ODS) where they develop software-based tools that support
operational managers. ODS is a tech-driven department where they are able to figure out the optimal logistical
solution and determine the feasibility of the solutions regarding operational disruptions. However, it is only focussed
on innovation that the technology allows and not what the consumer wants. They are currently not able to find out
the current and future needs of the passengers. What is desirable for passengers whose flight is delayed or even
cancelled? And which offers are viable for KLM? Adding a design view to this department can be of huge value.

Studies (Bitner et al., 1990) showed that most customers can tolerate some service mistakes and mistakes alone do not
lead to dissatisfaction. Customers are likely to be satisfied and develop or reinforce trust for a company if the company
follows an initial service failure with effective recovery (Wen et al, 2013). However, this study raises questions about a.o
how the purpose of travelling (leisure/business), the cause of the flight delay (internal, external, controllable,
uncontrollable) and different norms and values (cultures) affects the customers' satisfaction.

References:
Hendricks, K. B., & Singhal, V. R. (2005). An empirical analysis of the effect of supply chain disruptions on long-run stock
price performance and equity risk of the firm. Production and Operations management, 14(1), 35-52.

Mizgier, K. J., Hora, M., Wagner, S. M., & Jüttner, M. P. (2015). Managing operational disruptions through capital
adequacy and process improvement. European Journal of Operational Research, 245(1), 320-332.

Wen, B., & Geng-qing Chi, C. (2013). Examine the cognitive and affective antecedents to service recovery satisfaction: A
field study of delayed airline passengers. International Journal of Contemporary Hospitality Management, 25(3),
306-327.

space available for images / figures on next page

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Initials & Name S.   Bouwman _____   Student number 4223179 _____
Title of Project A desired experience for KLM passengers during undesired disruptions. _____

Personalised service recovery: an enhanced passenger experience during operational disruptions   29

introduction (continued): space for images

TO PLACE YOUR IMAGE IN THIS AREA:
- **SAVE THIS DOCUMENT TO YOUR COMPUTER AND OPEN IT IN ADOBE READER**
- **CLICK AREA TO PLACE IMAGE / FIGURE**

PLEASE NOTE:
- **IMAGE WILL SCALE TO FIT AUTOMATICALLY**
- **NATIVE IMAGE RATIO IS 16:10**
- **IF YOU EXPERIENCE PROBLEMS IN UPLOADING, COVERT IMAGE TO PDF AND TRY AGAIN**

image / figure 1: _____

TO PLACE YOUR IMAGE IN THIS AREA:
- **SAVE THIS DOCUMENT TO YOUR COMPUTER AND OPEN IT IN ADOBE READER**
- **CLICK AREA TO PLACE IMAGE / FIGURE**

PLEASE NOTE:
- **IMAGE WILL SCALE TO FIT AUTOMATICALLY**
- **NATIVE IMAGE RATIO IS 16:10**
- **IF YOU EXPERIENCE PROBLEMS IN UPLOADING, COVERT IMAGE TO PDF AND TRY AGAIN**

image / figure 2: _____

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Initials & Name S.   Bouwman   Student number 4223179

Title of Project   A desired experience for KLM passengers during undesired disruptions.

PROBLEM DEFINITION *
Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

KLM sometimes has to cancel flights when an operational disruption occurs. Passengers will be re-booked on new routes, which is a costly affair for KLM with disastrous customer experience results.

KLM Operation Decision Support is currently working on models that offer the best logistical solution when operational disruptions occur. However, they have no experience with canvassing the current and future needs of their passengers and the viability of these needs. Therefore, the input of a designer is needed to create radical concepts. There is a specific need for an outside view. By looking at this problem through a human-centered angle, we expect an innovative concept and new business model to cope with disruption in the (near) future.

ASSIGNMENT *
State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, … . In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

Develop a strategy for how KLM can deal with the needs of their passengers when operational disruptions occur and create a product-service combination to show how this will work.

Defining a new strategy illustrated through product-service combination ideas, to optimize the customer experience when disruptions occur.

Several tools will be used to gain more knowledge about the aspects 'people', 'organization' and 'technology', with the primary focus on 'people' (the passengers travelling with KLM) and the 'organization' (Department ODS within KLM). The aspect 'technology' will be only discussed (not researched), since there is a lot of technological knowledge available within the department ODS. For testing the feasibility of my strategy I will use the operation research knowledge of ODS. The knowledge that I gain will be tested multiple times with the use of a minimum viable product (MVP) /storytelling.

The end product will exist off a final report, supporting the final strategy and a visual representation (movie/animation) to convince and align all the stakeholders (other departments) of this new strategy.

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Initials & Name S.   Bouwman   Student number 4223179

Title of Project   A desired experience for KLM passengers during undesired disruptions.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date   29 - 1 - 2019   27 - 6 - 2019   end date
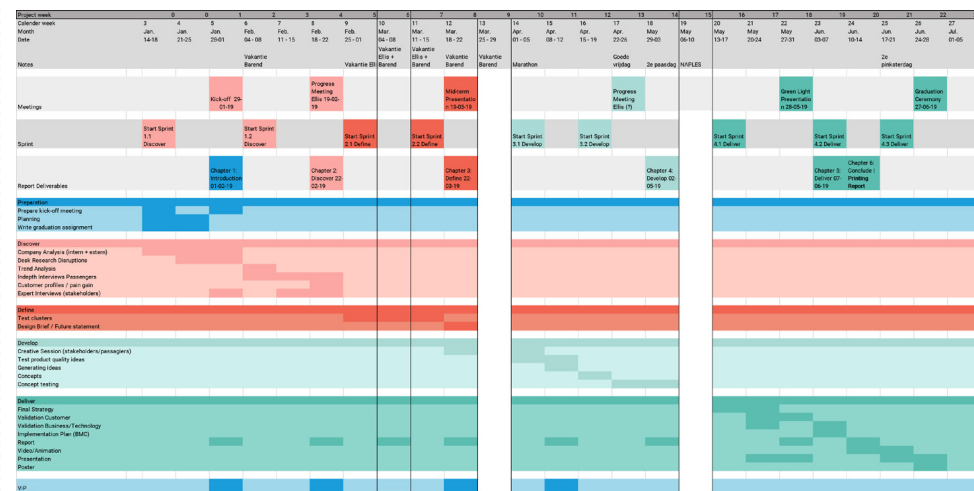
For this project, I will make use of the Double Diamond approach, covering the phases: Discover, Define, Develop and Deliver. During these phases, I will make use of an MVP/storytelling to test and validate my ideas, concepts and final strategy. This will enable me to gather feedback for improvements soon in the process. To unlock future possibilities, I will enrich this double diamond approach with elements of the design approach ViP.

The department ODS uses an agile way of working. By using sprints in their daily processes, they are able to create ideas quickly. This approach suits my graduation project really well and therefore I have made my own adjusted Scrum board. I will hold two sprints in every phase with a length of approximately 2-3 weeks to deliver on time.

The first two weeks are focussed on getting the know the company better. KLM has a big and complex structure. After the kick-off meeting, I will continue in the Discover-phase and get to know the customer (passenger) and the industry better by doing interviews and observations.

In the Define-phase, I will cluster the context factors/insights. During the mid-term presentation, I will communicate my findings and present my final future statement in a design brief.

After a brainstorm session and a creative session (with stakeholders) in the Develop phase, I will create three concepts that will be tested. The best concept will be optimized into a final strategy including an implementation plan. this will be validated by the customer and experts in the Deliver phase.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

After having completed my bachelor's degree at the faculty of Industrial Design Engineering and collaborating with students from other masters, I became aware of the value of Design. This project makes it possible for me to bridge the gap between technology and business with design in an established company. During this project, I will work with business managers, operational researchers and developers. As the only (strategic) designer at the department, I will get the opportunity and responsibility to improve their tools and experiences with "design".

In this project, they asked me to use an MVP (Minimum Viable Product) to quickly test ideas and validate the new strategy. This is new to me, but I believe that testing and validating is a very important part of delivering and convincing stakeholders about a new strategy. Besides that I will gather feedback soon in the process.

Also using elements of the ViP approach will be a challenge for me since I used it for the last time during PO3. However, I think that using parts of the approach can really add value to my project. Besides that, I appreciate the idea of being responsible for my own design strategy, since I have never been aware of that before.

During the elective space in my masters, I decided to learn more about creative facilitation. Unfortunately, I have only facilitated sessions with students of the faculty of Industrial Design Engineering. It will be really interesting for me to see how a session will be when non-designers (project managers, developers, analysts) are involved.

Finally, I want to finish my master's degree with a high grade while having fun. These years at this faculty were exciting, but also stressful sometimes. Now I want to prove myself that I can do good and enjoy the project at the same time.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

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Initials & Name   S.   Bouwman   Student number 4223179

Title of Project   A desired experience for KLM passengers during undesired disruptions.

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Initials & Name   S.   Bouwman   Student number 4223179

Title of Project   A desired experience for KLM passengers during undesired disruptions.

Passenger Validation

Validation test - KLM passengers

General information

What | Testing the satisfaction of KLM passengers when using the application. Validating the hypothesis based on the passenger.

When | Week / 3 June - 8 June

Where | Schiphol Airport behind the security (Lounge / Transfer desk)

With whom | >10 transfer passengers flying with KLM, experienced flying with a mobile device.

How | Semi-structured interview with questions focussed on the application principle.

What is needed?

- 2x iPad (with movie and images)
- 2x Mobile phone with voice recorder
- 2x Set Interview guide
- 2x Pen
- 1x Email address list

Goal

KLM needs to successfully recover the passenger experience during operational disruptions to improve the NPS score. Therefore, the passenger's perceived justice needs to be fulfilled, which is different for every passenger in every situation. A new application called 'Emma' might improve this experience for KLM passengers. This application is created based on a several assumptions, which need to be validated. The following semi-structured interview guide should enable the interviewer to answer the main question: How to create a desired experience for KLM passengers during undesired disruptions?

Next to that, the participants will provide feedback for further improvements.

Interview guide

Step 1: Introducing myself and the research to the passenger

Good morning, my name is Sanne Bouwman, a graduate student at KLM and the TU Delft and I am currently conducting interviews with KLM passengers. This research is about what to offer passengers when their flight is cancelled. I created a platform to create a better experience for passengers when it is overcrowded here at Schiphol due to many cancellations. This is called a mass disruption.

- *Do you mind answering a few questions? The interview will take about 10 minutes.*

Step 2: Setting the scene

First of all, I want to show you what it looks like when multiple flights are cancelled. It will become overcrowded here at Schiphol. KLM can nothing do about such disruptions, but they want to help their passengers in the best way possible.

[Show image crowded Schiphol]

Choose the best scenario (based on travelling alone or with others):

For this interview, I have created a fictitious family, so this is not real. This family exist of Sarah Parker, her husband Chris Parker and her daughter Elisa Parker (4 years old). This young family travels from Germany, Munich to Indonesia, Bali for a 3 week holiday. They have a transfer at Schiphol Airport, where they find out that they have a huge delay.

[Image family and characteristics]

For this interview, I have prepared a fictitious person. Chris Parker . This young business man needs to travel from New York City to London Heathrow for a conference the next morning. He has a transfer at Schiphol Airport, where he finds out that he has a huge delay.

[Image Chris and characteristics]

I am going to show you a short video of a new application that is being tested. Please imagine that this is about Chris Parker. Afterwards, I will ask you a few questions.

[Show movie]

Step 3: Questions about the video

- *Do you think Chris Parker is in control with this platform? Why (not)?*

- *Do you think this is a suitable solution for Chris Parker? Why (not)?*

- *Do you think Chris Parker needs a real KLM representative after using this platform? Why (not)?*

- *Do you think this is a fast experience for Chris Parker? Why (not)?*

- *Do you think this is a convenient experience for Chis Parker? Why (not)?*

- *Do you think Chris Parker has the feeling of being taken care of by KLM? Why (not)?*

- *Do you think Chris Parker has the feeling that KLM takes responsibility? Why (not)?*

Step 4: Closure

- *On a scale of zero to ten, how likely is it that Chris Parker will recommend flying with KLM to a friend or colleague?*

Thank you very much for your input!
Would you like to be informed about the results?

[Let them leave their email address!]

Appendix H
Evaluation Form

Journefy | Verified plan

(D) = ⊕
(F) = ⊕
(V) = ⊕
(O) = ⊕
_____
Totaal

Comment

Add

Travel Pouch | All your data together
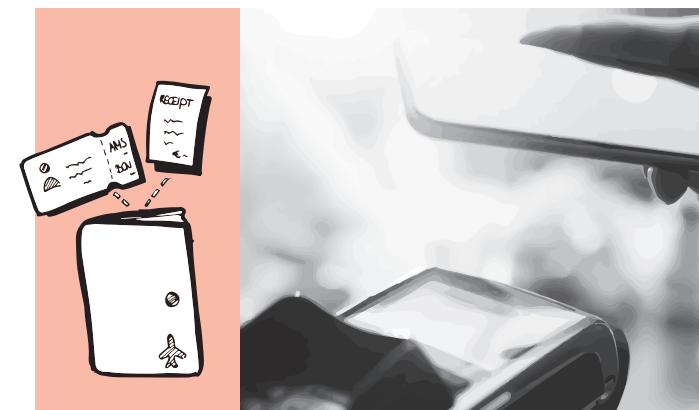
(D) = ⊕
(F) = ⊕
(V) = ⊕
(O) = ⊕
_____
Totaal

Comment

Add

KLM Offer | Nudging available options

(D) =

(F) =

(V) =

(O) =

_____

Totaal

Comment

Add

Destination Space | Bringing your destination

(D) =

(F) =

(V) =

(O) =

_____

Totaal

Comment

Add

Connekt | Connect matching journeys

(D) =

(F) =

(V) =

(O) =

_____

Totaal

Comment

Add

KLM PGA | Your Personal Ground Attendant

(D) =

(F) =

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_____

Totaal

Comment

Add

Appendix H

Personalised service recovery: an enhanced passenger experience during operational disruptions

The Extra Mile Club | Loyalty Program

(D) = ⊕

(F) = ⊕

(V) = ⊕

(O) = ⊕

_____

Totaal

Comment

Add

Ranking the concept ideas

1 ··········

2 ··········

3 ··········

Appendix I
Creative sessions

The sessions that have taken place to generate new ideas

CREATIVE SESSION 1, GROUP 1

GENERAL INFORMATION

Date: 21st of February
Time: 09:00 - 12:30
Place: Ede, Gelderland
Facilitator: Martha Kuijpers
Participants: 6

SESSION PROCESS

1. Introduction
2. Redefine the problem
   a. Persona & roleplay
   b. From insights to 'How to' statement
3. Ideation
   a. Brainwriting
4. Reverging
   a. Spontaneous clustering
5. Converging
   f. Creating concepts
   g. Presenting concept
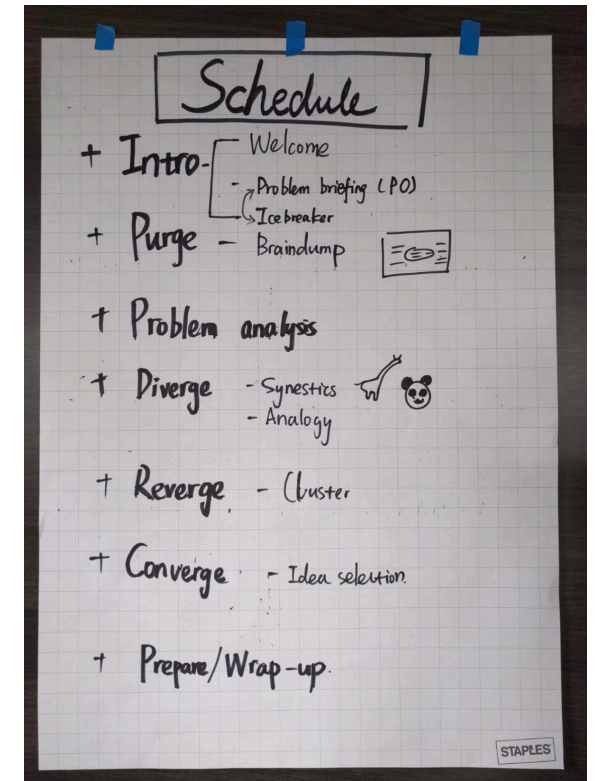
PROBLEM ANALYSIS

The initial problem, which I gave to the facilitators during our intake meeting was: *"How to create a desired experience after flight cancellation for transfer passengers"*. I focussed on the transfer passengers to scope the project a bit for the amount of time that was available during the session. Besides that, 70% of KLM's passengers are transferring passengers and did not plan to be stuck at Schiphol airport.

During this session, the group reformulated the problem statement as *"Design 'services' that make flight cancellation a positive experience"*. The did this by writing down 'How to' questions during my presentation and during a role play where two groups enacted like they were Joy Makers (travel mindset) in both a desired and undesired situation. The goal of these roleplays was to get into the mind of this persona. The new problem statement derived from the clusters. The first cluster was 'services' and the second cluster was 'positivity'.

To create out-of-the-box ideas, the group did a purge, a brainwriting exercise (with different stimuli: technology without limitations, random associations) and force fitting the associations back to the original problem statement. This part of the session was held in a different room to stimulate creativity. The clustering of the ideas was done with hits and dots focussing on creativity and fit with the persona. Via these techniques the following three concepts were created:

1. The lost and found treasure hunt

This concept incorporates a personal shopper helping you find something nice in the lost and found department (VIP room) when your flight is cancelled. To give you special treatment.

2. KLM creative cancellation solving

This concept helps people create the solution they want during a creative session. As an icebreaker, they can kick KLM mannequins to get rid of their first anger. Then they can let their frustration go and get their positive imagination flowing. Together with a group of like-minded passengers, they will create their desired solution with the help of a professional facilitator. In the end, KLM can make this all happen.

3. The extra mile club

"Congratulations, your flight is cancelled". When your flight is cancelled you can be excited and proud about it, as you become part of the 'extra mile club'. You receive a stamp in your passport and the next time you fly with KLM you will have priority boarding, you receive a KLM outfit and other exclusive experiences.

CONCLUSION

This session resulted in many different and out-of-the-box ideas. Although the ideas included some fun and unrealistic elements, it still had some inspiring elements that can definitely be used in a future concept. The core idea of these ideas was to enhance a positive experience, making disruption an exclusive experience and show that KLM is there to solve it for the passengers.
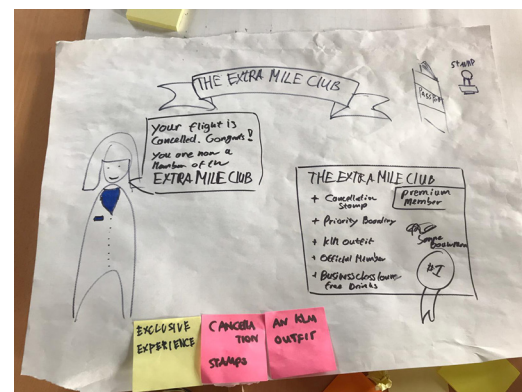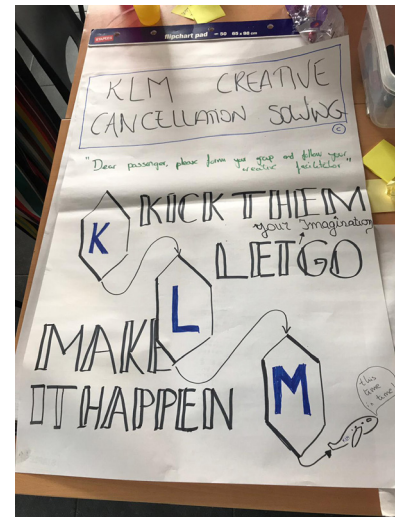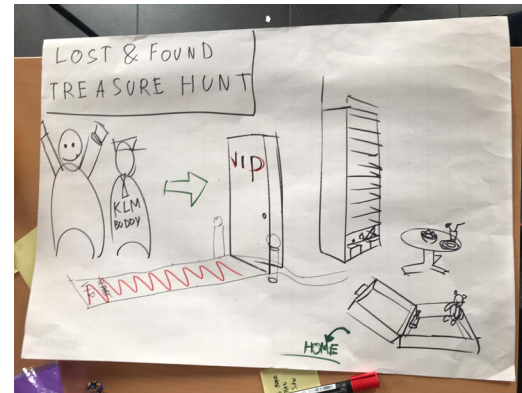
CREATIVE SESSION 1, GROUP 2

GENERAL INFORMATION
Date: 21st of February
Time: 09:00 - 12:30
Place: Ede, Gelderland
Facilitator: Xinyi
Participants: 6

SESSION PROCESS
1. Introduction
   a. Welcome
   b. Icebreaker
   c. Problem briefing
2. Purge
   a. Braindump
3. Problem analysis
4. Diverge
   a. Synetics
   b. Analogies
5. Reverge
   a. Cluster
6. Converge
   a. Idea selection
7. Prepare
   a. Final concept
   b. Presentation
   c. Wrap-up
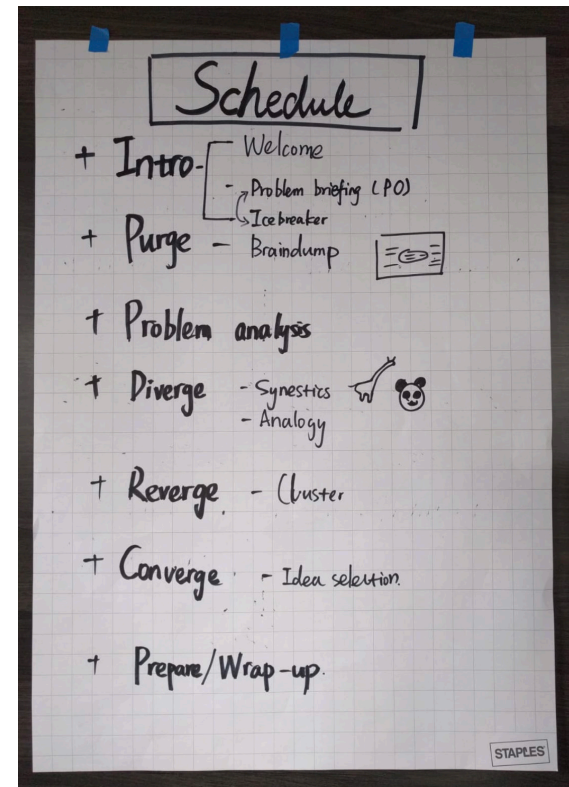
PROBLEM ANALYSIS
This group got the same initial problem as the previous group during the intake meeting: "How to create a desired experience after flight cancellation for transfer passengers". They, however, interpreted this problem in a different way after their analysis. This analysis mainly existed of a braindump, writing all the ideas that pop up in your mind while hearing the word 'disruption'. Next to that, they answered five different 'how to' questions in a short amount of time. The problem statement they eventually worked on was: "Make transfer passengers like KLM during and after a flight cancellation".

SESSION RESULTS
During this session, the facilitator used an interesting approach to ideate with the participants called 'synectics'. For this technique, both analogies and animal associations were used to stimulate the participants to think out-of-the-box. They all had to choose an animal and think of the needs that particular animal would have during a disruption. Afterwards, they could transform these ideas into possible solutions for real passengers. Something they discovered during this session was the need for valuable time. The following concept they designed with the group was focussed on a desired service to enable passengers to create valuable time:

1. Destination room
The Destination Room is a space that represents your own journey when you encounter a disruption. Passengers get a personal notification that they can experience the room that is tailored for them. Passengers who had planned to travel to a warm and tropical destination will be guided to a room with VR, hammocks, cocktails and a comfortable temperature. Passengers with an important meeting will be enabled to join their meeting in a conference room with a great WiFi connection.

CONCLUSION
This group highlighted some really clear and relevant needs that definitely need to be taken into account in a future concept. In the end, they focussed on one specific concept which was not desired, however, this concept was grounded in some strong findings. Their aim was to deliver something that makes the passenger like during and after disruptions. I do not necessarily see this in the concept they provided, but they gave me some useful insights.
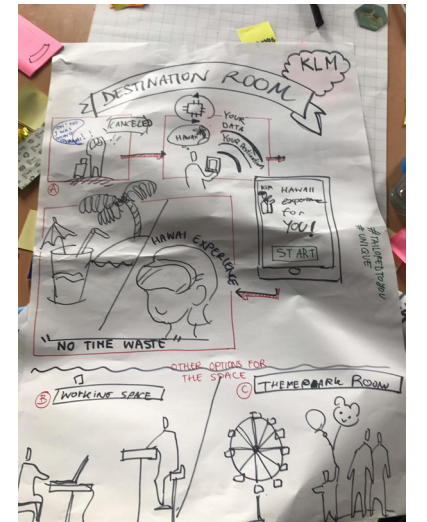
BRAINSTORM SESSION

GENERAL INFORMATION

Date: 12th of April
Time: 13:00 - 17:00
Place: Faculty of Industrial Design Engineering, TUDelft
Participants: 2

SESSION PROCESS

1. Introduction
2. Journey mapping
3. Problem framing
   a. Problem statement
   b. From 'How to' questions
4. Brainstorming
   a. First round: purge
   b. Second round: 'how to'
5. Converging
   f. Highlighting interesting ideas
   g. Creating concepts

PROBLEM ANALYSIS

The starting point for this session was to discover how KLM can offer every individual the ideal solution during a disruption. Together with someone who is involved in the project, we created the passenger's journey to discover the solution spaces in this journey. These solution spaces include the time of the delay, the alternative trip and the aftercare. For these spaces were 'how to' questions created to easily brainstorm about possible solutions.

SESSION RESULTS

This session was focussed on writing down all the concept ideas we had in our minds and enrich these ideas with new inspiration. The first round of creating 'how to' solutions existed mainly of ideas that were already mentioned during the project (purge). After the first round, we decided to do it again to elaborate on each other's ideas and to make more associations with was already there. By explaining some ideas with each other and forcing each other to make connections between different ideas, the following concepts were created:

1. Personal avatar

Your personal avatar offers you the help you need at the airport. It gives you information about what to do when disruptions occur, it shows you warnings and it generates your new data such as your rebooked tickets. The amount of help and guidance it offers depends on the passenger and its mindset.

2. Your KLM journey

The KLM journey gives a clear insight into your disrupted journey. You can fill in the rest of your journey from A to B by adding your hotel at your destination and the transportation mode you were planning to use. With this information, KLM will try to offer you other alternatives that can bring you from A to B.

3. MatchMaker

This platform connects different journeys with each other to make it easier to find a solution together. By connecting passengers, they can try to find alternatives that can bring them to their destination such as a shared car to another airport or to their final destination.

4. Timing

This tool shows the time it takes to undertake some activities during your delay. The passenger will see signs (digital, analogue) which show a broad range of activities (drinking coffee, having dinner in Amsterdam etc.) and the duration. This will show the passenger of the possibilities in the amount of time. This gives them peace of mind.

5. Option dashboard

This digital platform shows the possible solutions you can take when operational disruptions occur. Options might include taking the next flight available, an overnight stay etc. The value of each option needs to be clearly visible, so people do not have the feeling that some passengers get more than others.

6. Certainties

KLM will show the certainties a disrupted passenger is entitled to when operational disruptions occur. Passengers have often no clue what they can expect during these occasions and what they can expect from the airline. By visually showing the certainties and acting like it, the passengers will get more in control and secure about the situation. Besides that, KLM shows being responsible.

7. Storyteller

'The Storyteller' is a digital tool that has a dialogue with the passenger. This tool nudges the expectations of the disrupted passenger. This will enable KLM to offer viable solutions to the passenger. The passenger has the feeling that they really need this and will be happy.

CONCLUSION

This session enabled me to get all the ideas I already had in mind on paper and elaborate on them. That might be the reason that many ideas derived from this meeting, while it was not that different from other sessions. The ideas, however, still do not cover a specific solution space. The project, therefore, is not scoped based on that new information.

CREATIVE SESSION 2

GENERAL INFORMATION
Date: 19th of April
Time: 13:30 - 16:30
Place: At home
Participants: 5

SESSION PROCESS
1. Introduction
2. Problem framing
   a. Persona's
   b. 'How to' questions
3. Brainstorming
   a. First round: purge
   b. Second round: 'how to'
4. Converging
   a. Highlighting interesting ideas
   b. Combining solutions
5. Concept creation
   a. Filling in concept template

PROBLEM ANALYSIS
The focus for this session was to capture the importance of the expectations of all the individuals during an operational disruption. During the problem framing, the created personas were showed to dive into the mindsets of these different passengers. The participants could really identify themselves with the persona's and shared personal stories and problems they encountered during their journeys. This resulted in multiple 'how to' questions:

1. *How to fulfil the individual's expectations when disruptions occur?*
2. *How to categorize the different passengers?*
3. *How to reach the passenger?*
4. *How to satisfy passengers?*
5. *How to ensure the passenger about their journey?*

SESSION RESULTS
While creating the 'how to' questions, participants already generated small concept ideas. These were part of the purge and were parked at the parking lot (a square on a piece of paper). After that, the 'how to's' were answered by writing as many small ideas in 2 minutes per question. This technique resulted in some unexpected out-of-the-box ideas that could be combined with more logical ideas. These combinations resulted in the following concept ideas:

1. The Stickler Wins
This is a live app questionnaire which activates once a disruption takes place. Disrupted passengers get options (solutions) that might be something that they would like to get in random order. They can choose their preferred option. In this way, there is no need for a long waiting line in front of the desk. KLM can manage expectations by showing what passengers are entitled to.

2. The Survival Neckless
This is an analogue tool with all the information about the basic protocol when operational disruptions occur. In this way, the disrupted passenger always knows what to do, without being limited by WiFi zones and having a battery.

3. Moti
This app gives you the right steps to undertake when you are clueless at the airport. Many people do not know what to do when operational disruptions occur and they are in a different country. This app helps and motivates the passenger to take action themselves in simple steps. It explains for example how to get a cab to your appointed hotel, how much it should cost and a clear address to show to your taxi driver.

4. Feetback
This platform enables the disrupted passenger to create your own delayed journey, which will be checked by KLM to give the passenger peace of mind. KLM will show options that can be dragged into the journey, that will fit your personal profile. These options include activities, restaurants and hotels to create your desired journey.

CONCLUSION
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This session resulted in many ideas that keep specific characteristics of the persona's in mind or makes it able to personalize the solution based on these characteristics. That makes the ideas desirable for disrupted passengers. These concept ideas, however, do not show why this should be something KLM would invest in. There should be more elaboration on both the viability and the feasibility of these concepts.