KLM

A guide for sharing proactive and feed-forward information with airline passengers during a disruption.

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This has been quite an intense time and I'm glad to have reached the finish line. I wish you all a pleasant read with my thesis report.

Best,
Taresh

EXECUTIVE SUMMARY

The current airline industry is in a state of flux. With financial pressures due to rising fuel prices, new competitive environments being introduced with budget low cost carriers and the introduction and adaptation of new technologies, have all forced KLM to change its strategy in order to achieve a crucial market differentiation. This new direction proposes to change KLM's existing identity to that of being a customer centered one. Hence, the focus is on deep research on customer needs and expectations in order to deliver a personalised service or product with the intent to create a personal relationship with its customers.

KLM examined and identified certain gaps in their customer journey experience to focus on and improve. One of the key gaps identified is disruption handling. Disruptions occur often in the airline industry, and come across in all sizes and variations. A disruption is anything that alters the planning and proposed actions of the passengers, airlines or airports. These could be: Small delay, cancellation of a flight, or mass disruption due to bad weather, terror threat or event, etc. Most causes of disruptions; like weather conditions are an example of a recurring condition beyond KLM's control. Keeping customer intimacy in mind, disruptions are highly relatable to customer satisfaction (NPS) and are the cause for most complaints.

KLM projects almost 4.5 million passengers to be affected by disruptions in 2019 (KLM, 2019).
During a disruption, passengers experience increased stress and seek guidance and quick resolutions to their problems. One of the core customer needs gathered from research, is the receiving of proactive information in the event of a disruption. According to KLM's disruption communication mandate, customers should receive information that is consistent, relevant, contextual, personalised and transparent at the right time. KLM uses a number of communication channels to provide information such as push notifications and SMS's, e-mails, Facebook, Twitter, Whatsapp messaging, airport displays and many more. However, it is not clear yet if all these pieces of information are consistent, relevant, personalised or on time. In fact, one of the most common pain points for passengers is the lack of information received before, during and after a disruption.

Extensive research was done to understand these different disruption scenarios and to learn about passenger needs and expectations. Analysis of all the research shows that the airport and travel experience is actually quite stressful, even for passengers who fly frequently. The air travel system is a very complex system with multiple processes and services. In order to navigate all these complex processes, passengers

develop their own assumptions and strategies in order to deal with them smoothly. It is clear that passengers need understanding and guidance through this whole process so that they feel a bit more in control and reassured which might lead to an increase in satisfaction and maybe a higher NPS score.

A disruption is a sudden event and that passengers do not have control over it. Thus the only way they will feel some sense of control is if they have information about it, information that is transparent and information that will help them take their next steps. Regardless of the cause of the disruption, passengers are usually quick to blame the airlines for the negative situation. Therefore, effective communication might help in reducing that perception and might generate a positive sentiment about the airline. The nature of the information and the mode of communication also has a big part to play in a person's perception of the service or the event. This research has shown that passengers want to feel valued and want to be heard. They also want relevant information at the right time and instant solutions to their problems.

As per the KLM compass and their new emphasis on customer intimacy, KLM wants to show passengers that they care about them, that passengers feel recognised, comfortable and touched. However, these particular aspects of

customer intimacy do not translate to the information that the passenger is being sent. Therefore, the tone of voice, the nature of the information (helpful, not helpful, feed forward) also makes a big difference in how passengers perceive KLM as a brand. Therefore, based on learnings from the research conducted, it can be surmised that passengers perceive and judge the value of the information on four dimensions - The content of the information, timeliness of the information, the proactiveness or reactiveness by which the information was sent and through which channel it was sent through. It is abundantly clear that information forms a fundamental part of the overall experience and perception. Any inconsistency or mismatch between these four dimensions can cause passengers to feel increased levels of stress, anxiety and in some cases even anger and frustration.

From the research, it is clear that the content of the information is the most important dimension that directly impacts the passengers perception of their journey and also that of KLM. A piece of information can be sent proactively by KLM which reaches the passenger exactly when they need it, through their preferred channel, but if the information is not helpful or contains superfluous information that the passenger does not need, it is considered as impersonal and irrelevant. Hence, a new structure called the Asix structure for

information content was designed which acts as a guide to unify all the information content sent by KLM across all channels and touchpoints. The structure gives guidelines for how information can be structured in a way that it's more meaningful, sincere and impactful to the passenger. The Asix structure consists of six A's namely - Acknowledge, Advise, Assure, Assist, Act and Assess.

KLM
asix

● **Acknowledge:**
Greeting. Acknowledge and announce the problem / adverse / disrupted situation, engage and get the passenger's attention

● **Advise:**
Advise the passenger on what to do next, where, when and how, share why if relevant

● **Assure:**
Assure the passenger by offering options/ showing the action taken / to be taken to mitigate the situation

● **Assist:**
Assist the passenger by guiding them + providing timely updates on the developing situation and circumstances

● **Act:**
The actions the passengers have to take in order to help KLM deliver the desired result and experience

● **Assess:**
Acknowledge the impact of the disruption on the passenger's plans and commitments, and collect feedback on KLM's attempt to help the passenger through the experience.

This structure was utilised to redesign the information sent through SMS and email which are the two channels with which KLM can reach the maximum number of people. These were then translated into information flows for four scenarios - non disrupted journey, delay journey, cancellation journey and missed connection journey. These pieces of information and messages were tested for a delay scenario and showed a positive shift in terms of perception by the passengers.

Multiple user tests were conducted and they showed that messages and pieces of information created on the basis of the Asix structure are effective and are considered much more helpful as compared to the original messages sent by KLM. From the responses by the participants, it was also determined that the information presented was clear, transparent and relevant thereby satisfying the core requirements by the passengers. The personalised nature of the messages made them feel more recognised, acknowledged, confident and reassured which also increased the trustworthiness of the information. Almost all the participants agreed that all the information presented was relevant to them.

According to KLM's desired customer experience embodied by their compass, KLM wants to care for passengers by making them feel recognised, touched

and comfortable in addition to being easy to deal with. All of these aspects were reported by the participants after receiving the newly designed messages. They especially appreciated the tone of voice and the acknowledgement by KLM about the impact of the delay on their journey. Along with the tone of voice, being presented with their options and especially the immediate compensation in the form of a food and beverage voucher was also greatly appreciated and considered as KLM trying to make an effort to make them feel better.

However, when it comes to changing perception about the disruption, most participants felt that these messages would not actually help that much in changing their perception about the event. A disruption is a real event which impacts the passengers and forces them to make changes in their plans. The pain and anguish felt during a disruption cannot be taken away just by sending these new messages, unless KLM comes up with a way to instantly transport their passengers to their destination. But what the messages did help in was changing the perception about KLM. Passengers felt that the new messages were more personalised, heartfelt, sincere and more human which definitely showed that KLM cares for them. It is this change in perception about KLM that is showcased here with the messages designed on the basis of the Asix structure. That is a good positive step towards positively changing

the perception of the passengers during a disruption.

ACKNOWLEDGE

ADVISE

ASSURE

ASSIST

asix

KLM Royal Dutch Airlines

FLIGHT NUMBER:
KL1147

BOOKING CODE/PNR
JGYZ3V

Your flight to Oslo today has been delayed by *3 hours* and will now depart at 5:30PM

Amsterdam (AMS)   Oslo (OSL)
~~2:30 PM~~   ~~4:15 PM~~
5:30 PM   7:15 PM
New Time   New Time

Dear Ms. Smith
We are very sorry, but due to the severe weather in Oslo, your flight KL1147 has been delayed. This means that you will arrive in Oslo later than planned. We realise that this is inconvenient and are doing our best to make your flight depart as soon as possible.

As a start we would like to offer you **a drink and a meal** since your delay is longer than 3 hours.

Your food and beverage voucher can be printed at a blue KLM self-service kiosk located in Departure hall 1 (before security) or, T2, T4 and T6 after passport control.

Sincerely,
Mark Bakker
KLM Customer Care

Your Preferences

Boarding Pass
Your boarding pass remains valid. If you have not checked in, you can do so from the following link -

Check-In >

Seat 12A
Premium Economy
Your paid for seat no. 12A will be ready for you when you reach the aircraft.

Change Seats >

Special Vegan Meal
Your preference for a Vegan meal has been noted and will be served to you in-flight.

Change Meal >

Checked-in Luggage
We will make sure that your checked in bags arrive with you at your destination.

What should I do now?
You can go to your departure gate. You can view your latest flight details in the KLM app or on KLM.com. And of course the moment we have news about your trip, we will immediately let you know.

Can I cancel my flight and get a refund?
Yes, we will refund the costs in various cases. To find out more, please go to KLM.com or contact us.

Read more about this >

Have more questions?

Contact us via social media

Ask your question 24/7 via one of our social networks. We will do our very best to respond as soon as we can.

Or call us:
+47 22 643 752

Available from 07:00 - 22:30

KLM's easy travel app

The fastest way to check and change your flight
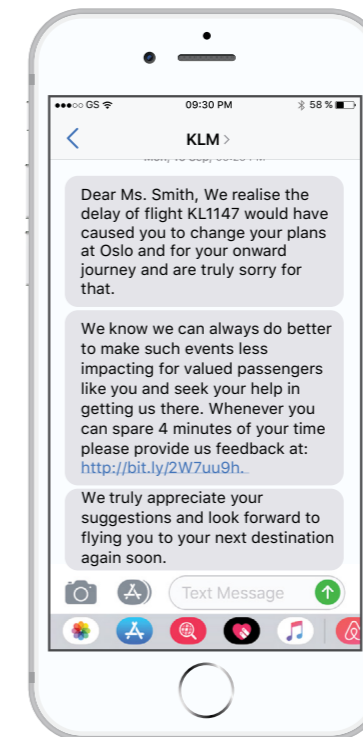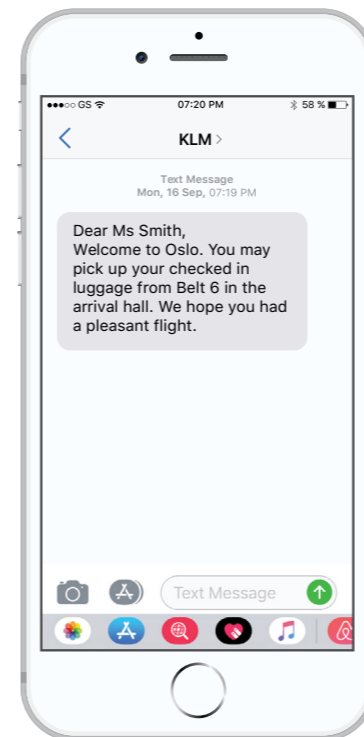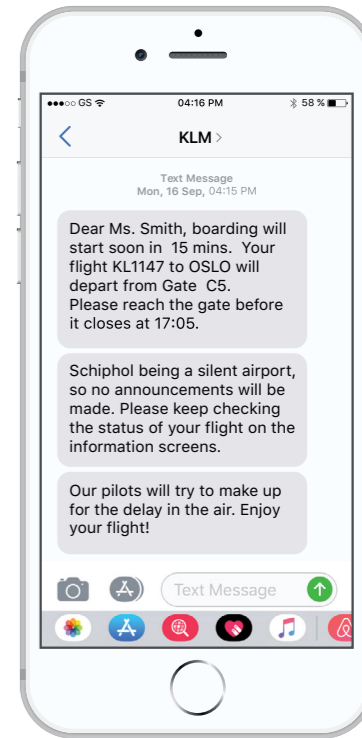
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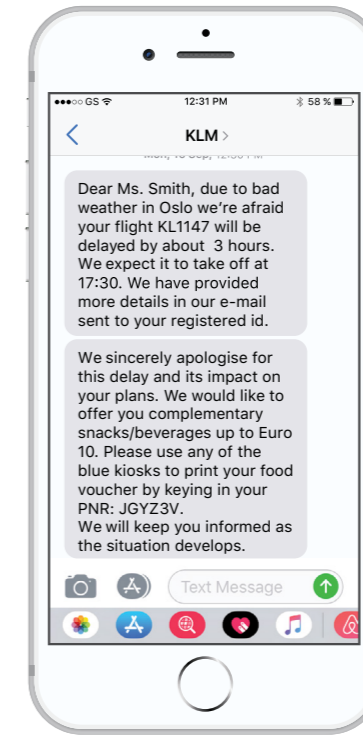

KLM

Text Message
Mon, 16 Sep, 10:59 PM

Dear Ms. Smith, Please reach check-in desk 1A in Departure Hall 1 at Schiphol before 13:30 to catch your flight KL1147 to Oslo.

The desk will open at 11:30, so you may reach there earlier. The estimated wait time for security check at this time is 10-12 minutes.

Schiphol offers free WiFi for all your on-line needs.

KLM

Dear Ms. Smith, due to bad weather in Oslo we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. We have provided more details in our e-mail sent to your registered id.

We sincerely apologise for this delay and its impact on your plans. We would like to offer you complementary snacks/beverages up to Euro 10. Please use any of the blue kiosks to print your food voucher by keying in your PNR: JGYZ3V.
We will keep you informed as the situation develops.

KLM

Text Message
Mon, 16 Sep, 04:15 PM

Dear Ms. Smith, boarding will start soon in 15 mins. Your flight KL1147 to OSLO will depart from Gate C5. Please reach the gate before it closes at 17:05.

Schiphol being a silent airport, so no announcements will be made. Please keep checking the status of your flight on the information screens.

Our pilots will try to make up for the delay in the air. Enjoy your flight!

KLM

Text Message
Mon, 16 Sep, 07:19 PM

Dear Ms Smith,
Welcome to Oslo. You may pick up your checked in luggage from Belt 6 in the arrival hall. We hope you had a pleasant flight.

KLM

Dear Ms. Smith, We realise the delay of flight KL1147 would have caused you to change your plans at Oslo and for your onward journey and are truly sorry for that.

We know we can always do better to make such events less impacting for valued passengers like you and seek your help in getting us there. Whenever you can spare 4 minutes of your time please provide us feedback at: http://bit.ly/2W7uu9h.

We truly appreciate your suggestions and look forward to flying you to your next destination again soon.

asix

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01.
INTRODUCTION

The first chapter provides an introduction to the thesis to show the relevance of this graduation project. Firstly, the company KLM Royal Dutch Airlines will be introduced. Following that, the problem tackled by this project will be defined and expanded upon. Finally, the research approach used in this project will be explained.

1.1 ABOUT KLM

KLM Royal Dutch Airlines is the flag carrier airline of the Netherlands. This year, 2019, KLM celebrates its 100th birthday, which makes it the oldest airline that still operates under its original name. The core of the KLM group is KLM and its subsidiary KLM Cityhopper. The KLM group also includes the owned subsidiaries Martinair and Transavia. In 2017, the KLM group transported 32,9 million passengers from their hub Schiphol to 87 European and 76 intercontinental destinations generating over €10 billion revenues and employing 32.000 staff from its Amsterdam basis. Every day almost a 100,00 passengers fly with KLM.

Pieter Elbers, Managing Director and CFO Erik Swelheim and Managing Director and COO Rene de Groot. This organization has a complex structure covering the following main departments: Customer Experience, Transformation, Cargo, Engineering Maintenance, In-flight Services, Flight Operations, Information Services, Human Resources & Industrial Relations and Corporate Center (Figure 1.1.1). The thesis project was initiated in collaboration with the Customer experience department (CX) and the excellence centre (COX).

1.1.1 Organisational Structure
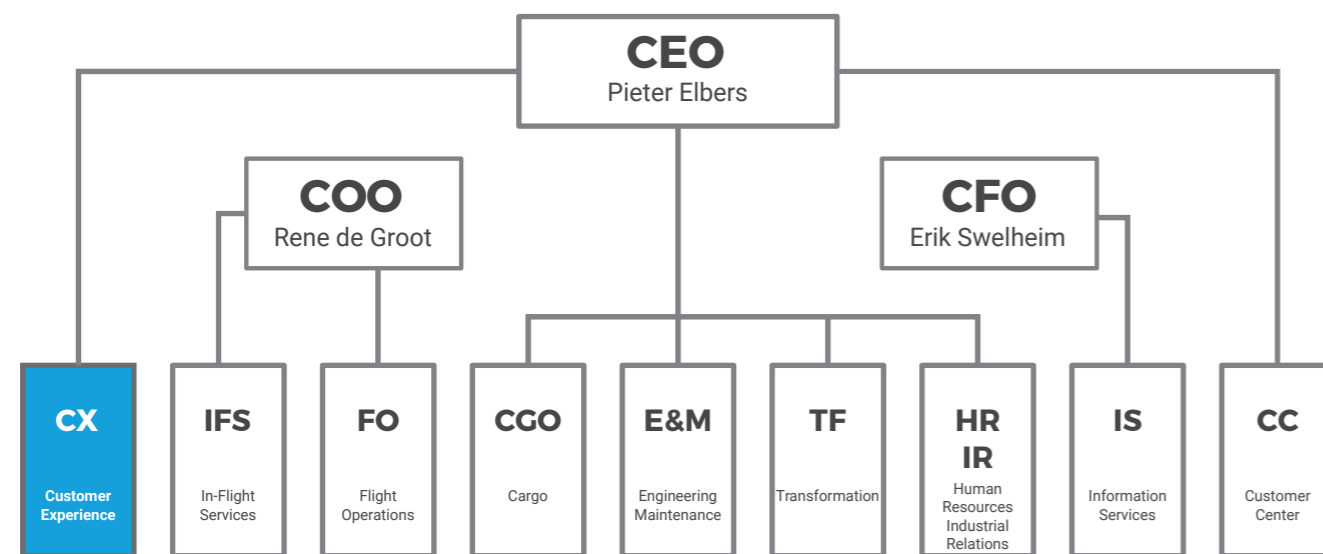KLM's organization is under the management of the President and CEO

Figure 1.1.1 KLM Organisational Structure

1.2 KLM'S IDENTITY AND PURPOSE

The current airline industry is in a state of flux. With financial pressures due to rising fuel prices, new competitive environments being introduced with budget low cost carriers and the introduction and adaptation of new technologies, have all forced KLM to change its strategy in order to achieve a crucial market differentiation.

1.2.1 The New Strategy
The change in strategy is based on framework developed by Michael Treacy and Fred Wiersema (1992). In their research, they state that companies that have become leaders in their industries have done so by narrowing their business focus, not broadening it. With that intent, these companies have focused on delivering superior customer experience on the basis of three value disciplines: Operational excellence, product leadership or customer intimacy. They have become leaders of one discipline while maintaining industry standards on the other two (Treacy & Wiersema (1992). Using this framework, KLM has determined their most relevant discipline will be that of customer intimacy (Figure 1.2.1).

1.2.2 Customer Intimacy
This new direction proposes to change KLM's existing identity to that of being a customer centered one. Hence, the focus is on deep research on customer needs

and expectations in order to deliver a personalized service or product with the intent to create a personal relationship with its customers.

Figure 1.2.1 KLM in the Value Discipline model

1.2.3 KLM Compass
KLM has created their own vision called the KLM compass which defines who they are as a company, what they stand for and what they strive for (Figure 1.2.3). In a line, KLM's mission is to 'Move your World' by creating memorable experiences. This is in line with their new focus on customer intimacy. The goal is to create an exceptional relationship with the customer so that they choose to fly KLM as their preferred carrier.

KLM Compass

Moving Your World
By Creating Memorable Experiences

WHY
Our purpose

WHO
Our identity

We are aviation pioneers, Dutch at heart.

AMBITION
Our goal

To become the most customer-centric, innovative and efficient European Network carrier.

WHAT
Our offering

We bring our customers the world, taking them anywhere, anytime.

HOW
KLM spirit

We dare to reach out, initiate and explore new horizons. We are KLM for you!

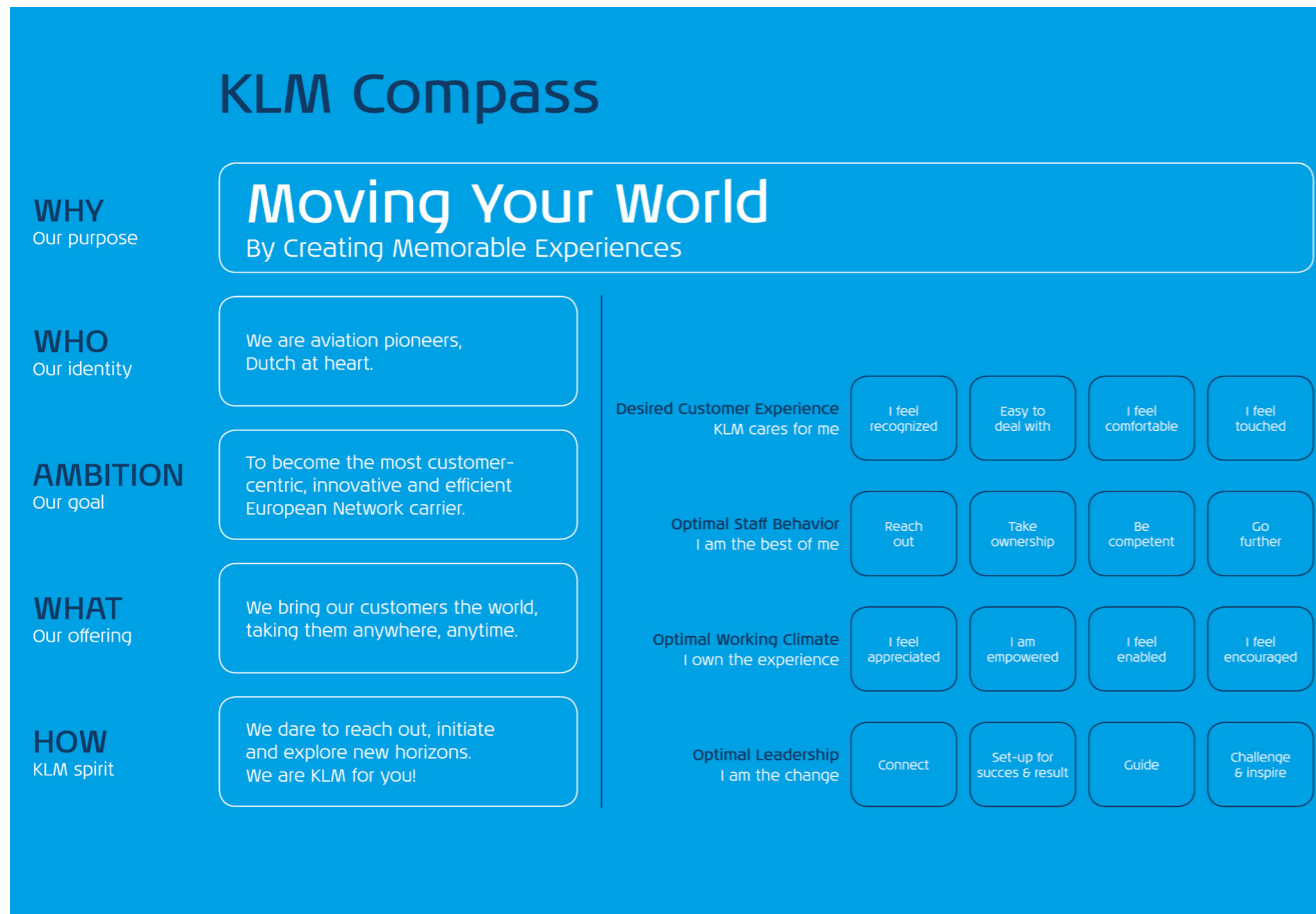|	I feel recognized	Easy to deal with	I feel comfortable	I feel touched
Desired Customer Experience — KLM cares for me				
Optimal Staff Behavior — I am the best of me	Reach out	Take ownership	Be competent	Go further
Optimal Working Climate — I own the experience	I feel appreciated	I am empowered	I feel enabled	I feel encouraged
Optimal Leadership — I am the change	Connect	Set-up for succes & result	Guide	Challenge & inspire

Figure 1.2.3 The KLM Compass

Air travel has become quite common now and is likened to a means to get from point A to point B. However, traveling by air is still a unique way to travel and for some who experience it for the first time, quite special. KLM recognises this feeling and wants to demonstrate this to customers by providing them with memorable experiences.

In order for them to achieve these memorable and unforgettable experiences, they invest in innovations which increase customer intimacy all the while showcasing the Dutch renown for reliability, security and innovation.

Their ambition is to become Europe's most customer centric, innovative and efficient network carrier by offering memorable experiences by leveraging new market opportunities and technological developments. The service or product on offer is the connectivity and ease offered by 'bringing their customers the world, taking them

anywhere, anytime' with the KLM spirit of being daring, innovative and explorative.

KLM's vision is to excel in customer intimacy. In essence, customers should feel like 'KLM cares for me, by making me feel touched and recognised as an individual. Also, that KLM is easy to deal with in any situation.'

1.3 PROJECT APPROACH

This project uses the Double Diamond design framework (Design Council UK, 2005) while incorporating elements of Design Driven Innovation framework for meaning change and vision creation (Norman & Verganti, 2016). This combination leads to an adjusted double diamond which is explained in the next section.

1.3.1 Adjusted Double Diamond

I. The initiate phase kicked off at the start of the project. It consisted of expert interview sessions (Kumar, 2012) to understand the problem area, scope of the project and to define some of the preliminary research questions.

II. The discover phase which consisted of extensive research undertaken to understand the context. The various research activities undertaken are mentioned below:
5 Informal interviews
2500 passenger feedback verbatim
50 Facebook, Twitter post and Data Mining
4 In person observations
8 Literature studies
D-Team Volunteer

III. The define phase in which all the insights from the research activities were gathered and analysed. In this phase highly detailed micro-action journey maps were created to accurately map the passenger experience through their whole disruption journey.

IV. An envisioning exercise was undertaken to create experience visions both for current and future passenger interactions with KLM during a disruption.

V. The develop phase. In this phase several rounds of design iterations were performed which included self design exercises, brainstorming sessions as well as expert meetings. These iterations resulted in the proposed concept.

VI. The deliver phase. In this phase several paper and digital prototypes were created and tested with actual passengers. In addition, these prototypes with anonymous users using an online survey format. After this the conclusion and recommendations were formulated.

VII. Finally, the information guide was formulated which included a detailed guide to send the right information at the right time in the correct channel to the passenger to assist them during a disruption in order to change their perception.

The theoretical background and reasoning for using the Double Diamond framework along with the Design Driven Innovation is explained in the next section.

INITIATE — Expert Interviews

DISCOVER — **5** Informal Interviews / **2500** Passenger comments / **50** Social Media Posts / **8** Literature Studies / **4** In person observations / **D**-Team Volunteer

DEFINE — **4** Journey Maps / Current Meaning Exploration / Design Requirements

VISION — Current Experience Vision / Current Meaning / Future Experience Vision / Future Meaning

DEVELOP — Design Approach / Information Content Mapping / Channel Analysis / Information Typology

DELIVER — Concept Testing / Results / Conclusions / Recommendations

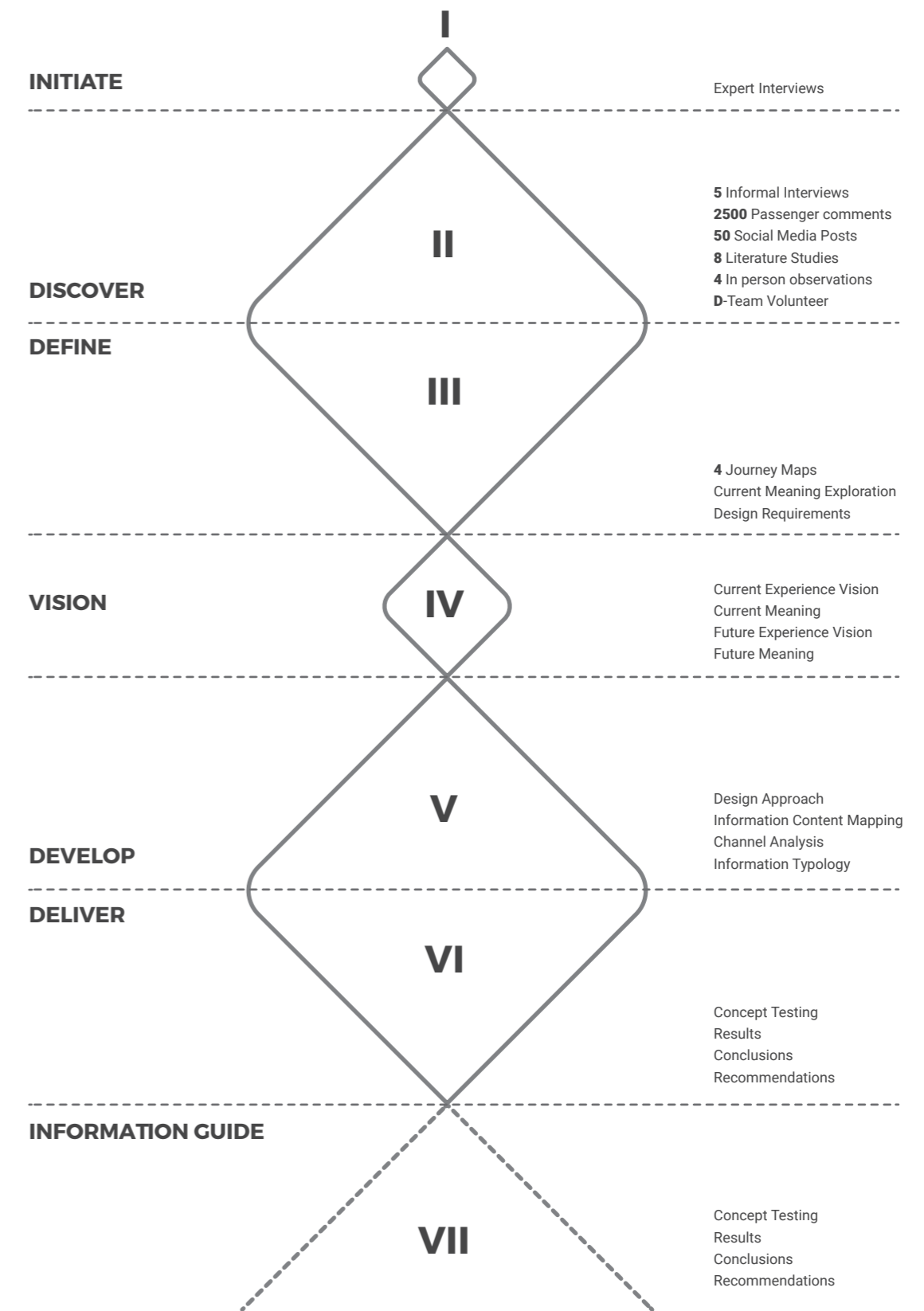INFORMATION GUIDE — Concept Testing / Results / Conclusions / Recommendations

Figure 1.3.1 The Adjusted Double Diamond Framework

As mentioned earlier, this project uses the Double Diamond design framework (Design Council UK, 2005) while incorporating elements of Design Driven Innovation framework for meaning change and vision creation (Norman & Verganti, 2016).
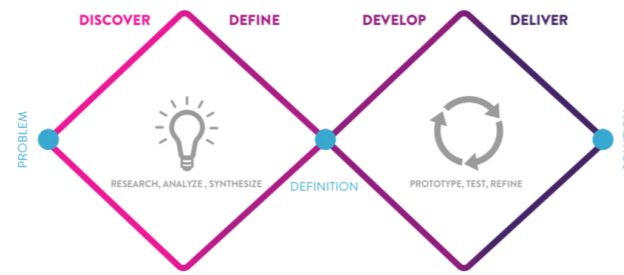
1.3.1 Theoretical Background

This project uses the Double Diamond design framework to understand the context, define the problem, develop solutions and to test them. This framework mainly follows the Human Centered Design approach (HCD) wherein an iterative cycle of research, ideation, prototyping and testing is conducted. Developed by the British Design Council in 2005 (Design Council UK, 2005), the Double Diamond design framework is by far the best known and most commonly used design frameworks for designers around the world. The main feature of the Double Diamond is its emphasis on the "divergent" and "convergent thinking" as illustrated in figure 1.3.1. While, the framework is very linear, this is often not how designers work. During the course of the project, this aspect of a non linear approach was quite evident with dynamic nature of the process. Over the years, human centered design has become the method of choice for a lot of designers. However, according to Don Norman and Roberto Verganti, this approach mostly leads to incremental improvements to existing products or problems (Norman & Verganti, 2014).

Figure 1.3.1 The Double Diamond Framework

Towards the later stage of the project, it was necessary to understand the current meaning of disruption communication and to create a new vision with a new meaning. This is where Design Driven Innovation comes in. Design Driven Innovation is an innovation strategy introduced by Roberto Verganti in 2009. In this strategy, Verganti states that there are four innovation strategies defined by radical change in either technology or in meaning (Figure 1.3.1.1).

1.3.2 Radical Innovation

Radical innovation transforms the product experience into something that previously did not exist and offers new affordances of use either through technology change or meaning change (Verganti, 2016). Radical innovation, according to Verganti, does not start with the traditional research of users needs or problems, but instead, it comes about when an individual has a vision and acts on realising that vision. This strategy emphasizes on the designer to step out and focus more on the meaning
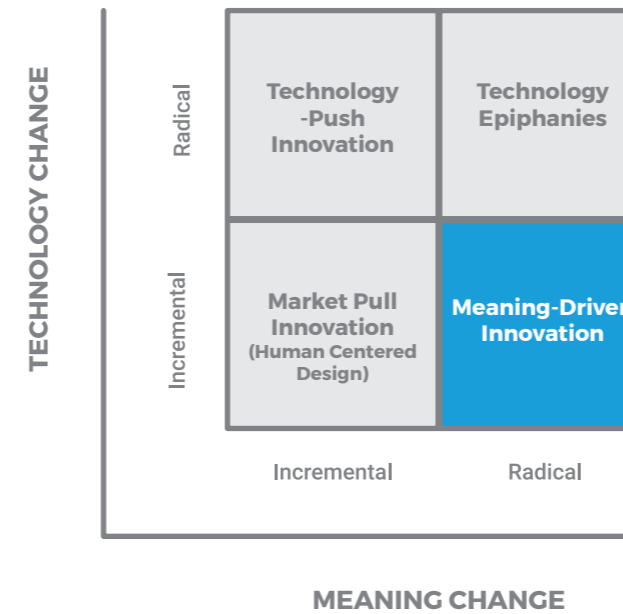

Figure 1.3.1.1 The two innovation dimensions and four related innovation types. Source: Norman & Verganti, 2014

of their vision than with user needs. To evolve and refine their vision, Verganti has developed the Inside-out process of innovation of meaning (Verganti, 2016). The process consists of exposing the vision to a number of people and through a constant dialogue of criticism and reflection, define the meaning and refine the vision to create a product which embodies the new meaning that others can appreciate (Figure 1.3.2). This process, therefore starts with the individual. The individual creates a vision or new interpretation of a product or service which then goes through a phase of critical reflection to advocate it's value on how it can change the experience for others in a meaningful way. It is this aspect of the Design Driven Innovation strategy, that was incorporated in the

Double Diamond approach for this project, thereby making it an adjusted Double Diamond Framework.

Vision Creation

A key condition for this process is that the individual should already have the vision ready for exposure and that may not be the case all the time. Given the complexity of the airline disruption communication system, it was difficult to have a radical vision with a new meaning for disruption communication at the outset. According to Baha and others, to make a truly meaningful change, research needs to be done on long term thinking and history (Baha et al; 2012). These are important to understand existing meanings, what meanings to re-introduce or dispose as
well as how to create new meanings by either adding on to or combining with existing meanings. Thus, extensive research was done to first understand the whole system and the disruption experience to arrive at the current meaning of disruption communication
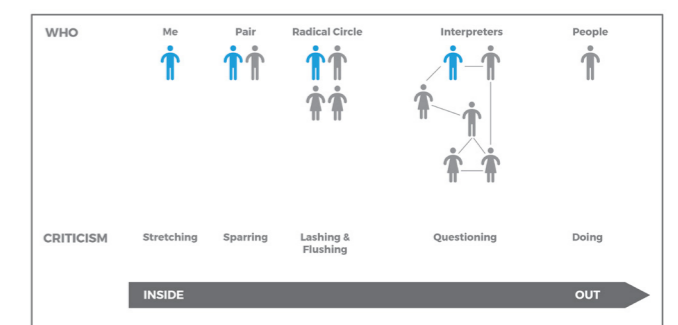

Figure 1.3.2 The inside-out process of innovation of meaning. Source: Verganti, 2016

before which a new vision with a new meaning could be formulated. This may not be the case always, but this project shows that in cases of extremely complex systems and services, it might be necessary to do some research in order to come up with a meaningful vision for radical change.

Adoption of radical Innovations
In order to identify an innovation as radical, Dahlin and Beherens (2005), have proposed three criteria - The innovation must be novel, it must be unique, and it must be adopted. While the first two criteria actually illustrate radicalness, criteria three focuses more on success and acceptance. In cases of radical innovation, people and corporations may be confronted with a significant change either in technology or meaning which might cause a significant meaning gap between the previous paradigm and the new one introduced by the radical change (Baha et al; 2012). This affects the possibility of successful adoption and acceptance by both people and corporations. Baha et al. (2012) believe that in order for a radical innovation to be accepted, a balance needs to be created between existing and new meanings. New meanings can be introduced in two ways (1) introducing a new meaning with existing meanings; and (2) introducing a new meaning combining existing or lost meanings. This was the approach used in this project as well where new meanings for information

communication were introduced with existing ones at KLM. This was done so that people/corporations (KLM) can recognize, understand and adopt the new meaning of information communication much more easily. As observed during the course of this project, it is difficult to completely radically transform the extremely complex information communication systems at KLM. Therefore, the new meaning was combined with existing meaning of information communication in order to make it easier for people to accept the change as well as making it easier for KLM to adopt the change.

Innovation of products within services
As mentioned before, the information and communication systems at KLM are an extremely complex system. Therefore, it is difficult to radically transform the entire system. However, a more practical approach might be to innovate the meaning of a part of the service instead of redesigning the whole system. A similar sentiment is shared by Baha et al; (2014) in their meta studies conducted in exploring how meaning of an existing product or service can be innovated by introducing innovative add on services. Called Servitization (Morelli 2003), the study shows promising results in how the meaning of an existing product or service can be innovated by the addition of one or more products designed around existing products instead of significantly redesigning the whole product or system.

This project adds to their research by demonstrating how innovating the information content can help improve the perception of the passengers instead of radically redesigning the whole information communication system.

1.3.3 Academic Contribution
This project adds on existing research being done on Radical Innovation and Design Driven Service innovation. Through this project we can see that in order to follow Verganti's inside out process for meaning innovation (Verganti, 2016), extensive research is required to understand existing meanings of products or services in order to create a vision with a new meaning. In addition, We have also showed that it is not necessary to completely redesign a whole complex system in order to achieve a radical new meaning. It is possible to bring about a meaning change by innovating a part of the system or product which adds on to the existing system. By introducing new meanings with existing meanings or by combining new meanings with existing or lost meanings, makes it easier for people and corporations to accept and adopt this new changed service or product.

1.4 OPPORTUNITIES FOR INTERVENTION

As mentioned previously, new innovations and increased competition have compelled KLM to shift its strategy to that of being more customer centric (Para 1.2.1). The new strategy places more focus on a user centered mindset in developing new products and services. Customer needs are closely researched and new product offerings are designed or optimised based on those needs with the goal of being the most customer centric airlines in the world.

In order to do that, KLM uses the Net Promoter Scores Index to measure passenger satisfaction and gauge customer sentiment. KLM's goal is to raise their overall NPS score from 44 (2019) to 50 by 2020. In order to achieve this goal, KLM examined and identified certain gaps in their customer journey experience to focus on and improve. One of the key gaps identified is disruption handling.

Disruptions occur often in the airline industry, and come across in all sizes and variations. A disruption is anything that alters the planning and proposed actions of the passengers, airlines or airports. These could be: Small delay, cancellation of a flight, or mass disruption due to bad weather, terror threat or event, etc. Most causes of disruptions; like weather conditions are an example of a recurring condition beyond KLM's control. Keeping customer intimacy in mind, disruptions are highly relatable to customer

satisfaction (NPS) and are the cause for most complaints.

A lot of research conducted by KLM have shown that the passenger disruption experience influences the NPS index dramatically. Thus it is vital that this aspect of disruption handling be improved on. It can be stated that good disruption handling and service recovery are very important in achieving KLM's goal of becoming the most 'the most customer-centric, innovative and efficient European network carrier'.

In any travel journey, every interaction between a passenger and an airline impacts their perception, this in turn, impacts behavior. The impact and perception of the passenger is most business critical for KLM. Airline and airport staff contribute to this perception through their own behavior and interaction, so there is a cause-effect relationship. The disruption experience itself is quite subjective and depends on a variety of factors. For some passengers, a disruption can have minimal impact on their journey, while for others, it can completely derail their travel plans. Similarly, KLM staff also experience disruptions subjectively. An operational disruption may not always translate into a perceived disruption by the passengers.

1.4.1 Disruption Communication
According to KLM's customer insights team, 40% of KLM's passengers

Figure 1.4.1 Passengers seeking information during a disruption at Schiphol.

experience some kind of disruption.

During a disruption, passengers experience increased stress and seek guidance and quick resolutions to their problems. One of the core customer need gathered from research, is the receiving of proactive information in the event of a disruption. According to KLM's disruption communication mandate, customers should receive information that is consistent, relevant, contextual, personalised and transparent at the right time. KLM uses a number of communication channels to provide information such as push notifications and SMS's, e-mails, Facebook, Twitter, Whatsapp messaging, airport displays and many more. However, it is not clear yet if all these pieces of information are

consistent, relevant, personalised or on time. In fact, one of the most common pain points for passengers is the lack of information received before, during and after a disruption (Figure 1.4.1).

However, due to lack of research and empirical data, it is hard to say how and what type of information will be needed in order for KLM to achieve their vision for customer intimacy: "KLM Cares for me by making me feel touched and recognised as an individual and I can feel that KLM is easy to deal with whenever a disruption occurs" (see Figure 1.2.3). This is where the thesis project is aimed at.

Research shows that with good disruption handling and service

recovery, passengers might have a more memorable travel experience. This is explained in more detail in chapter 2

Acknowledging the importance of disruption handling, KLM gives a lot of importance on improving this aspect of the customer journey. KLM's own customer insights team has done extensive research and have shown the impact that effective communication has on passenger satisfaction. Consequently, it can be said that a good disruption handling depends very much on the communication between the company and the passenger.

Over the years, KLM has investigated new processes and methods in order to improve the customer journey and make it more pleasant for passengers traveling with KLM. The needs of the passengers are constantly evolving. KLM wants to match that evolution by improving their processes and in some cases even introduce new services. The rise of new digital technologies, social media and smartphones have led to passengers preferring instant results, increased personalisation and customer support, self service and self management during their travel journey. In addition to the more conventional information channels, KLM sees huge potential in reaching the customers through these new digital touchpoints. Thy are working towards achieving that goal by introducing customer support and information

sharing on social media channels such as WhatsApp, Facebook Messenger and Twitter. Additionally, the KLM app has also been designed to provide more functionality, information and customer support.

With all these information channels in place, one would expect the travel journey to go much smoother, but real world experience has shown that there is still a lack of consistency in the type of information and how the information is shared with the passenger.

During the course of their journey, a huge amount of information is available to the passenger, however, it's not always targeted to fit the passenger's need at the time and may not complement their traveling experience. The nature of information provided is not personalised nor is it contextually relevant and neither is it consistent across all the other touchpoints. Often cases, different information or messages are presented in different ways depending on the devices being used or the channels that the passenger is using. An example of this condition is visible at Amsterdam Schiphol Airport, where different signage (physical & digital) show different types of information which might be relevant to passengers. However, it is dependent on the passenger to actively look up, scan these touchpoints and discover the information that is relevant to them at that moment, which does not complement their experience.

This situation is further exacerbated in the event of a disruption. It is here that passengers need extremely relevant and contextual information which is also consistent across all touchpoints (physical as well as digital). Hence, it is clear that a design solution is required to distribute relevant and consistent information to the customers. In other words, how can KLM deliver the right content to the right passenger at the right place at the right time through the right channel.

Along with disruptions that are caused due to operational reasons such as technical problems, weather, KLM has started to observe another phenomenon taking place; That of Perceived Disruptions. Passengers perceive a service failure or delay and report it as a disruption even if there is actually no disruption. As the knowledge of perceived disruptions is relatively new, not a lot of research has been done to identify the causes of these failures. This aspect of Perceived Failures has also been included in the research scope of this project. Meta analysis of passenger feedback collected by KLM has led to the identification of several potential areas which can impact passenger experience and thus, make them perceive a service failure even when there is none. These areas were carefully analysed and are described in more detail in chapter 2.

It is clear that information communication plays a vital role in

the passenger experience and their perception. It is all the more important to emphasize the importance of delivering the right kind of information to the right passenger at the right place at the right time through the right channel.

It is also important to note that a huge number of passengers travel every year with KLM and each type of passenger has their own needs and expectations. A 'One size fits all' approach will not work in the contexts mentioned in the project. Hence it is important to also know, who are the passengers that KLM wants to focus on for this design intervention. This is explained in more detail in section 1.5 where we look at KLM's focus.

1.5 KLM'S FOCUS

1.5.1 Passenger Typologies

Every year, millions of passengers fly with KLM. In order to identify and understand the different types of passengers that use KLM services, extensive customer profiles and personas were created.

Given the immense diversity in the types of travelers, it can be difficult to group them into specific defined segments. For example, a businessman traveling for work can be a frequent flyer with a need for efficiency and punctuality. But the same businessman traveling with his family for a vacation will have very different set of needs. It is therefore evident that travelers cannot be simply classified into set profiles. Therefore, a new approach was introduced where new passenger typologies were created (KLM Customer Insights, 2016).

This new approach was created with the goal of adding further contextual knowledge to their existing typologies and to enrich their passenger personas. Extensive research was done by the customer insights team in order to arrive at these new passenger typologies (Figure 1.4.1).

Using this approach, called Demand Spaces, KLM identified Thirteen different segments covering all the passengers that KLM caters to. Currently a lot of work is being done to improve the passenger experience for higher tier passengers ie.- Business class passengers, Platinum and Gold Card frequent fliers. However, the same is not being done for passengers belonging to the lower tiers such as Economy passengers who only fly occasionally. It was then decided that the focus of this project will be these passengers. To further define the passenger profile, KLM has decided to focus on passengers belonging to 'A good start' segment. The reason for selecting these segment is that it constitutes a big share of the passengers who travel by KLM. In addition, KLM believes that an intervention in this segment can also be translated to other segments as defined by the Demand Spaces.

1.5.2 The Focus

The focus of KLM and also this project is thus on functional minded and cautious travelers who travel for both leisure and business. They mostly fly economy and take occasional trips. In general, passengers belonging to this segment want a pleasant start to their journey. They want their journey to be as smooth as possible. These types of passengers and their needs are described in more detail in chapter 3.

	Europeans Long Haul	Europeans Long Haul	Europeans Short + Medium Haul	Europeans Short + Medium Haul	Europeans Long Haul	Europeans Long Haul	Europeans
Busy Ambitious Travellers (19% of persons)	Entertain Me 8% Flights 11% Revenue		A Good Start 14% Flights 5% Revenue		Give Me Recognition 9% Flights | 15% Revenue		
Functional Minded Travellers (19% of persons)					Recharge in the Skies 6% Flights | 8% Revenue		
Travel Lovers (15% of persons)	Treat Myself 3% Flights 4% Revenue	Personalised Moments 4% Flights 6% Revenue	Reliance on Staff 4% Flights 2% Revenue	Let Me Work 11% Flights 12% Revenue			
Premium Brand/Service Seekers (15% of persons)						Luxury Now 7% Flights | 12% Revenue	
Cautious Insecure Travellers (16% of persons)	Reassure Me 12% Flights | 7% Revenue			Make Sure it Works 5% Flights | 4% Revenue			
Online Price Hunters (17% of persons)	Best Deal for Basics 12% Flights | 9% Revenue			Efficiency for a Good Price 5% Flights | 5% Revenue			

Figure 1.4.1 Passenger Typologies created by KLM called 'Demand Spaces'

1.6 DESIGN BRIEF

To explore interaction attributes that most influence passenger perception of an airline (KLM in this case) when experiencing a disruption.

Research Question 1
What are the different elements that influence a passengers perception of their journey and KLM?

Research Question 2
What impact do these elements have on the passengers perception?

Research question 3
How does KLM respond to passengers in the event of a disruption?

Research Question 4
What are the different strategies and processes in place to help and guide passengers during a disruption?

As we can see, the airline travel experience is a multi sensorial experience made up of tangible and intangible sevices (Bitner, 1992). Passengers experience these services through various factors such as the airport infrastructure (signage, seating, washroom facilities, recreational facilities, shopping facilities), the staff interactions (both airport and airline staff) and the information that is supplied to them. All of these factors have an effect on the passengers experience and their perception.

From amongst these factors, the airport infrastructure is mostly out of KLM's direct influence and takes the most amount of effort to change. Even in terms of staff, some may be long time KLM employees with strong loyalty to the company, while most others might be 3rd party sub contractors working partially for KLM. They may not show the same sense of loyalty to KLM as compared to the long term employees and therefore might exhibit a different interaction experience with passengers. Considering that employee training needs multiple approvals not just from the company but also from various unions, it is safe to say that re-training employees also takes much longer and is highly dependent on the individual and their circumstances. The last factor is the information supplied to various different channels both at the airport and to the individual through either SMS, Email, Social Media or the App. It is this particular factor that KLM has the most influence over and is easy to change (as compared to the other two factors). Moreover, effective information communication has the most potential to changing passengers perception about KLM and their travel experience. It is for this reason that this project will focus more on information as a factor for influencing passenger perception. The following chapters delve into the context, the role and the effect of information on passengers in much greater detail.
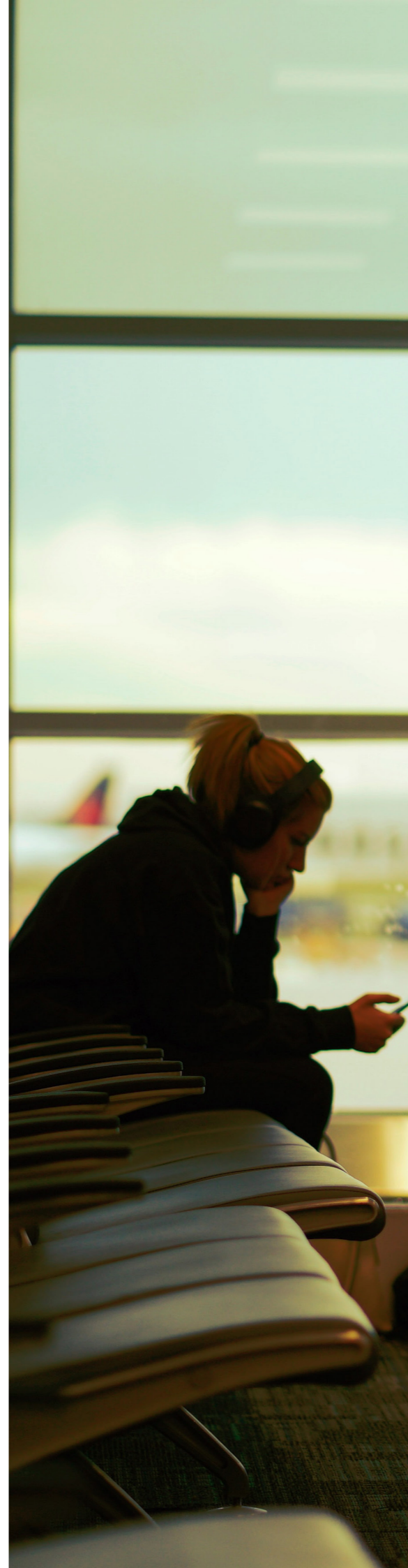
02.
CONTEXT

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The second chapter explores the context of the thesis in great detail. What do passengers expect? What are disruptions? What types of disruptions are there? How does KLM handle disruptions? and what is their strategy to provide assistance and information during a disruption? These are some of the questions that will be answered in this chapter.

2.1 Disruptions definition
2.2 Types of disruptions
2.3 Disruption Scenarios
2.4 Current Disruption Handling
2.5 Disruption Communication
2.6 Insights and Conclusions

2.1 DISRUPTIONS DEFINITION

As mentioned earlier , disruptions occur often in the airline industry, and come across in all sizes and variations (Para 1.4). A commonly accepted definition of a disruption is - *'Anything that alters the planning and proposed actions of the passengers, airlines or airports'.* However, this definition is more from an operational point of view with a focus on time as a variable. This definition does not take into account, the passengers experience and perception of the disruption. Therefore, this definition can be ascribed to more of an operational disruption. Disruptions often are unexpected and are unpleasant for passengers.

Regardless of an operational disruption, passengers come with certain expectations about their travel experience. When their actual experience does not match their expectations, it creates a gap and that is perceived as another type of disruption - a service failure (Mueller et al., 1991). It is the cumulative experience of an operational disruption along with perceived service failures that passengers use to measure their overall travel experience and satisfaction. Therefore, a disruption can be classified into two broad categories - A real disruption (operational) and a perceived disruption (perceived service failures). Recently, KLM has undertaken extensive research and analysed data which suggests that almost 40% of the passengers experience a perceived disruption.

2.1.1 Disruptions Definition

Real Disruptions (Operational Disruptions)
Disruptions when there are flight delays, cancellations, aircraft changes, flights re-routing. These can be caused due to weather, natural disasters, technical faults, civil unrests.

Perceived Disruptions
Disruptions that occur when a key passenger expectation is not met, like the check-in process, aircraft boarding experience, in-flight experience (e.g. entertainment system not working, seat not reclining, dirty toilet, musty cabin, insufficient food, specific requests or needs not catered to, especially for differently abled, children, elders, impolite or impatient crew, and others.

The relationship between a passenger's expectation and their actual service experience plays a vital role in the perception of the experience as well as their trust in the company (Kau and Lou, 2006). This is explained further in section 2.4.

Based on previous research done by KLM, passenger expectations in both real and perceived disruptions are shown in tables 2.1.1. These are illustrative passenger expectations to show what the passenger expects at each phase of their journey.

Real Disruptions - Indicative Passenger Expectations

Passenger expectations	Nature of the interaction	Stage in the passenger journey / touch-points when disruption happens				
		Stages up to, and including check-in	Pre-boarding	Post-boarding / in-Flight	On Landing	Before connecting flight
Airport experience (information quality and content)	Individual proactive, as well as reactive	Know exactly what has happened, status of my flight in real-time and correct, likely impact on my journey	Know exactly where I need to be, by when, how to get there, and why	What to expect on landing, where to go, who to contact, by when	What are the options, what action has been taken, what to expect, by when and where	What action has been taken, what to expect, options offered, compensation and rights, process to claim
Staff interactions (behaviour and knowledge expected)	Primarily proactive general and individual	Cordial, formal, stick-to-the facts	Fully informed and up-to-date	Cordial, formal, stick-to-the facts	Patient, fully informed about options and next steps	Patient, fully informed about options and next steps
Call-center interactions (interaction experience)	Primarily reactive, individual	Convenient, simple to contact, no wait or delay, well informed and up-to-date, should know me	Convenient, simple to contact, no wait or delay, well informed and up-to-date, should know me	N/A	Convenient, simple to contact, no wait or delay, well informed and up-to-date, should know and remember me	Convenient, simple to contact, no wait or delay, well informed and up-to-date, should know and remember me

Table 2.1.1.1 - Information expectation from the airline at each stage, through 3 dominant channels – the airport communication infrastructure, staff interactions, and call-center interactions

Perceived Disruptions - Indicative Passenger Expectations

Passenger expectations	Stage in the passenger journey / touch-points when disruption happens				
	Stages up to, and including check-in	Pre-boarding	Post-boarding / in-Flight	On Landing	Before connecting flight
Pre-flight					
Check-in process	Information on which counter I should be at, signage to find it. Quick, efficient; complete the whole process at one counter, in one queue, at one go	N/A	N/A	N/A	N/A
Boarding process	N/A	No gate change, quick document checks, boarding sequence clear and fair, orderly boarding in declared sequence	N/A	N/A	N/A
In-flight					
Seats	N/A	N/A	Seat of my choice, ergonomic and comfortable, no malfunction	N/A	N/A
IFE	N/A	N/A	IFE and head-sets working, channels as advertised, no ads or interruptions, maximum on-time	N/A	N/A
Overhead Luggage holds	N/A	N/A	Adequate for all carry-on bags, close to seat or visible	N/A	N/A
Toilets	N/A	N/A	Sufficient, clean and fresh smelling, well stocked	N/A	N/A

Table 2.1.1.2 - Indicative passenger expectations of the whole experience; disruption is perceived when one or more of these expectations are not met. Contd. on next page.

Passenger expectations	Stage in the passenger journey / touch-points when disruption happens				
	Stages up to, and including check-in	Pre-boarding	Post-boarding / in-Flight	On Landing	Before connecting flight
In-flight					
Cabin	N/A	N/A	Fresh smelling, clean and brightly illuminated	N/A	N/A
Crew	N/A	N/A	Pleasant and approachable, know my language, treat me with respect, cater to specific, reasonable demands, know my choices in advance	N/A	N/A
Catering	N/A	N/A	As per my choice, adequate quantity, served aesthetically, clean, fresh	N/A	N/A
Post-flight					
De-boarding	N/A	N/A	N/A	Orderly and quick; where to go next, baggage belt information	N/A
Terminal experience	N/A	N/A	N/A	Where to go next, location of wash-rooms and baggage belts	N/A
Baggage collection	N/A	N/A	N/A	No inordinate delay, undamaged, unopened baggage, no baggage loss	N/A
Transfer to local transport	N/A	N/A	N/A	Baggage trolley available, clear signage to direct towards exits, public transport, waiting areas, meeting points, cab services, money exchange, police, and telephones	N/A

Table 2.1.1.2 - Indicative passenger expectations of the whole experience; disruption is perceived when one or more of these expectations are not met. Contd. on next page.

Perceived Disruptions - Indicative Passenger Expectations

Passenger expectations	Stage in the passenger journey / touch-points when disruption happens				
	Stages up to, and including check-in	Pre-boarding	Post-boarding / in-Flight	On Landing	Before connecting flight
Transfer flight					
Fly-out time	N/A	N/A	N/A	N/A	Convenient, as per declared schedule, no delay; aircraft type unchanged
Reach the gate	N/A	N/A	N/A	N/A	No gate change, boarding process visually clear
Gate checks	N/A	N/A	N/A	N/A	Prompt document checks
Checked-in luggage	N/A	N/A	N/A	N/A	Handled with respect and care, clearly identified and tagged
Cabin bags	N/A	N/A	N/A	N/A	Adequate space in overhead luggage hold, near to or visible from the seat
Seat preference	N/A	N/A	N/A	N/A	Seat of my choice, ergonomic and comfortable, no malfunction
Meal preference	N/A	N/A	N/A	N/A	As per my choice, adequate quantity, served aesthetically, clean, fresh
Cabin	N/A	N/A	N/A	N/A	Fresh smelling, clean and brightly illuminated

Table 2.1.1.2 - Indicative passenger expectations of the whole experience; disruption is perceived when one or more of these expectations are not met. Contd. on next page.

Passenger expectations	Stage in the passenger journey / touch-points when disruption happens				
	Stages up to, and including check-in	Pre-boarding	Post-boarding / in-Flight	On Landing	Before connecting flight
Transfer flight					
Entertainment preference	N/A	N/A	N/A	N/A	IFE and head-sets working, channels as advertised, no ads or interruptions, maximum on-time, choices as per my preference
Toilets	N/A	N/A	N/A	N/A	Sufficient, clean and fresh smelling, well stocked
Crew	N/A	N/A	N/A	N/A	Pleasant and approachable, know my language, treat me with respect, cater to specific, reasonable demands, know my choices in advance

Table 2.1.1.2 - Indicative passenger expectations of the whole experience; disruption is perceived when one or more of these expectations are not met.

2.2 TYPES OF DISRUPTIONS

KLM currently recognises eleven types of disruptions which include both real as well as perceived disruptions -

Delay: It will take longer for the aeroplane to take off. Often the passenger needs to wait before boarding. Even a minute of delay can create a feeling of disruption.

Cancellation: The aeroplane will not take off, and passengers are expected to rebook their Flight.

Denied boarding: Some passengers will be denied boarding because the aircraft is overbooked.

Downgrade: Passengers will get a downgrade in the aeroplane. An example of a downgrade at KLM is going from Business class to Economy class.

Seat allocation: The passenger has to change seats. This change can have an impact on people traveling with others.

Checked-in luggage: A problem occurred with the passenger's checked in luggage. It might not be onboard or lost at an airport.

Cabin luggage: A problem occurred with the passenger's cabin luggage. They might have to check it in due to lack of space.

Seat: A problem with the appointed seat.

Catering: The catering is not what the passenger asked for. An example can be the question of getting a special (vegetarian) meal.

In-flight entertainment: Their entertainment is not working properly during the flight.

Other (Perceived service failures): Any other problem that is disrupting the smooth travel experience.

Disruptions by their nature are very unpleasant experiences. There are days when a disruptions affects only a small number of people. For example, when just one flight gets delayed or canceled. However, there might be very rare days when more than half of the flights need to be canceled. Such days are called as Mass Disruption days (also known as Red Days). On such days, passengers experience both real and perceived disruptions. One example of a Mass Disruption day was on July 24th and 25th, 2019 at Schiphol, when the system that provides fuel to the aircraft malfunctioned, effectively grounding all flights and redirecting incoming flights. This led to thousands of passengers stranded at Schiphol and KLM receiving the lowest NPS score this year.

Mass Disruption days are rare but can occur due to other tertiary reasons as well. For example - problems with public

and/or personal transport which can make passengers late; Natural disasters or civil unrest such as demonstrations, protests, riots, terrorism threats. As passenger safety is paramount, these types of threats can halt and greatly affect airport and airline operations.

According to KLM, weather is the most common reason for a Mass Disruption. Bad weather conditions can greatly affect the functioning of the runways and this translates into a disruption. In cases like these, the runways are usually closed down or operate at half capacity which leads to a lot of passengers stranded at the airport for great lengths of time.

KLM projects almost **4.5 million passengers** to be affected by disruptions in 2019 (KLM, 2019). This is done by analysing the NPS data and real time situation monitoring. In the next section we look at the various reasons for some of these disruptions that are communicated by KLM to passengers.

2.2.1 Reasons for Disruptions
From the research conducted both prior and during this project, it is clear that passengers want to know the reason for the disruption in a clear and transparent way. Most disruptions cause delays to passengers leading them to change their planning in certain cases. There are different types of reasons for a delay - delays on a passenger level which are delays that are focused on individual

Figure 2.2 Illustrative examples of some types of real and perceived disruptions - A mass disruption experience. Very long queues and mismatching information on devices

passengers. The other form of delays are those that concern a whole flight. For the purposes of this project we will be focusing on the latter type of delay reasons - Flight level.

Currently there are three types of reasons that are given for a flight level delay:

Operational Reason (crew rotation etc.)
Technical reason (system failures, technical issue)
Other (weather, diversion, airport closure, terrorist threats)

In cases of delays, these are the three types of reasons that KLM communicates to passengers. As is pretty evident, these reasons are not that clear and are a bit ambiguous at best. These reasons do not provide the reassurance to passengers who are seeking more transparent and relatable reasons for their delay. In case a flight is canceled, sometimes these reasons are not mentioned which can add to a passengers stress and anxiety.

The good news is that KLM has recognised this need for transparent and honest information. In fact, there is already a proposal being developed to add 14 more different types of delay reasons to increase transparency:

Old Disruptions Reasons:
Technical
Operational
Weather

New Disruptions Reasons:
Passenger did not board
Moving baggage to the hold
Boarding of the last passengers
Delay in baggage sorting area
Special assistance
Delayed loading of the aircraft
Delayed cabin crew boarding
Unfavourable weather conditions
Restrictions from Air Traffic Control (2x)
No gate available
Delayed passengers or cargo
Delayed incoming aircraft
Delayed cabin crew

The push towards greater accountability is a welcome move by KLM to be more transparent to passengers however, the implementation of reasons will still take some time as both Air France and KLM need to be in agreement. Once that happens, passengers can look forward to hearing about their delays or cancellations in more detail.

2.3 DISRUPTION SCENARIOS

As previously stated, disruptions occur often. Mass Disruption days, while rare, still do occur every once in a while. A mass disruption event leads to a domino effect which affects operations and people all over the world (Gershkof, 2016). In the previous section, we looked at the different types of disruptions and the reasons for those disruptions (as identified by KLM). Regardless of the reason or type of disruption, passengers are always affected and their experience can be represented in the form of three scenarios - A delayed flight, A canceled flight, and a delayed flight that results in a missed connection. These three scenarios are illustrated in the next section.


Scenario 1 - A Delayed Flight

This is the most common type of disruption that occurs. The causes for delays can vary but as mentioned in para 2.2.1, the reasons for a delay can range from unfavourable weather conditions to waiting for last passengers to board or even delayed cabin crew. In this scenario, depending on the severity of the delay reason, a delay can last from a few minutes to hours on end. Either way, this is an unpleasant experience for all passengers involved. Usually these flights are direct short haul / medium haul flights with passengers either going to their final destination or returning home.

Delays are often considered as more annoying because they are not fixed. Delays can get prolonged or in some cases even canceled after a long period of time. The uncertainty involved with delays is what makes passengers feel so stressed.

Scenario 2 - A Canceled Flight

A canceled flight occurs when the conditions are not favorable at all for flying. Similar to delays, if the reason for the disruption is of high severity, then flights can get canceled. Flights can also get canceled due to events out of the airline's or airports control such as extreme weather conditions, natural disasters, or even in cases of events which threaten passenger safety (Mass Disruption Days). Usually these flights are direct short haul / medium haul flights with passengers either going to their final destination or returning home.
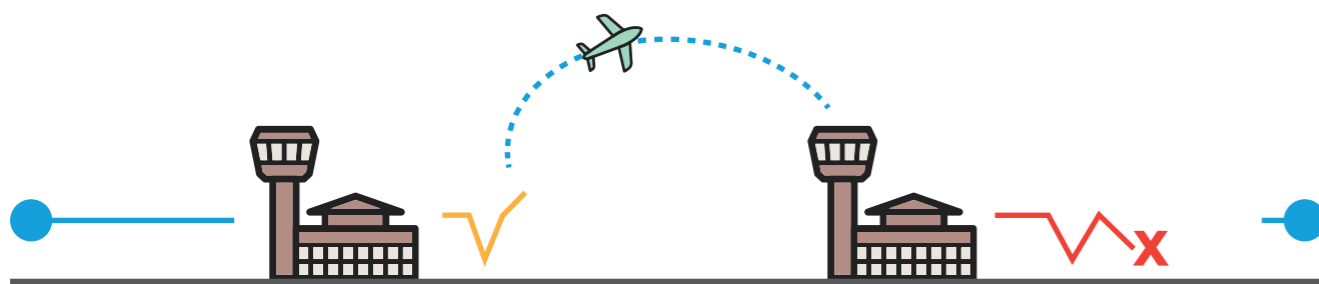
Scenario 3 - A Missed Connection

These are usually long haul flights with a connecting flight in the middle. A disruption with the first flight can adversely affect the probability of passengers making it to their connecting flight. The margin of error is so thin with flight schedules that even a small delay can have a masive impact on the passenger's connecting journey.

2.4 CURRENT DISRUPTION HANDLING

At present, in case of a disrupted flight, KLM has a set of established procedures to inform and help passengers. The entire service recovery process is built around informing, repairing the relationship and compensation. KLM uses a number of touchpoints and communication channels to inform passengers about their flight status and what they might be entitled to in case of compensation. These channels and touchpoints can include, SMS or push notifications, airport displays or signage and even KLM staff members. The informing phase is then succeeded by other processes such as rebooking (in case of canceled flights) and will be done with the means available (automatic or manual rebooking).
In addition to this, a small bonus is offered in the form of a food and beverage voucher which can be availed at establishments in the airport. Finally, compensation is offered which allows the disrupted passenger to request a refund or claim damages.

2.4.1 KLM Disruption Handling
Disruptions are typically classified into two main categories - minor disruptions and major disruptions (also called mass disruption days or Red days). Mass disruption days are the days when multiple number of flights get either delayed or canceled. The disruption handling process usually kicks in if a flight has been delayed for more than an hour. In cases of flights being only slightly delayed, for instance half an hour, then passengers are only informed through an announcement at the airport.

In cases of a disruption that is longer and more serious, the OCC (Operations Control Centre) (figure 2.4.1.1) will be the first ones to be notified. They will then inform and coordinate with the HCC (Hub Control Centre). Based on the information and the nature of the situation, the commercial desk will decide on the next steps as they are responsible for customer experience. A push notification is then sent out to inform about the situation (eg- a flight being canceled) and the DPM (Duty Passenger Manager) is alerted. The DPM then coordinates with various shift leaders who are responsible for the ground agents handling the disruption. In cases where possible, passengers will be automatically rebooked on the next available flight (OPR Tool) while others will have to make their way to the services and transfers desk in order to get their rebooking done by an agent.

Delay at the Airport
In case the passenger reaches the airport and then, is confronted by a disruption, they will first be notified by a push notification or SMS, followed by an announcement by one of the gate agents (figure 2.4.1.2). While, this strategy covers most of the circumstances, there are still instances when passengers have not read their messages or heard the announcements. In those cases, they

Figure 2.4.1.1 KLM Operations Control Center. Source: KLM

are then purely dependent on the flight status display screens or interacting with an agent in person. While, an in person interaction with an agent or staff member might seem like a good idea, often times passengers are left even more confused or irritable because the agent may not be allowed or have the relevant information that they might be seeking. Also, only a select few agents who have gone through the requisite training and have the skills, are empowered to rebook a passenger or provide them with compensation vouchers and guide them. The other

agents on the ground can only inform passengers about the situation in a

Figure 2.4.1.2 Passenger getting a delayed flight notification on their phone. Source: KLM

generic way and refer them to a services and transfers desk where their queries will be taken up in more detail.

Delay during Transfers
In cases of delays happening during transfers, where a passenger has missed their flight due to a previous delay or disruption, the OCC and the Commercial desk will try and rebook those passengers automatically using the OPR tool. In case they are unable to do the rebooking automatically, they will then guide passengers to the self service kiosks at the services and transfers desks (figure 2.4.1.3). It is here that passengers can get their food/ beverage or hotel vouchers and get their rebooking done manually. This is an effective way to reduce long queues. Sometimes, big groups of people travel together. When these big groups of people get disrupted, they are gathered together by an agent and led to another room where they are collectively rebooked.

2.4.2 Issues with Disruption Handling
Looking at the current scenario of disruption handling at the airport, the passenger feels like he / she receives very little to no information, has to wait in a long queue at the services and transfers desk and in general, that there are too many steps in the process to effectively navigate a disrupted scenario. In some cases passengers are offered food/ beverage /hotel vouchers wherever
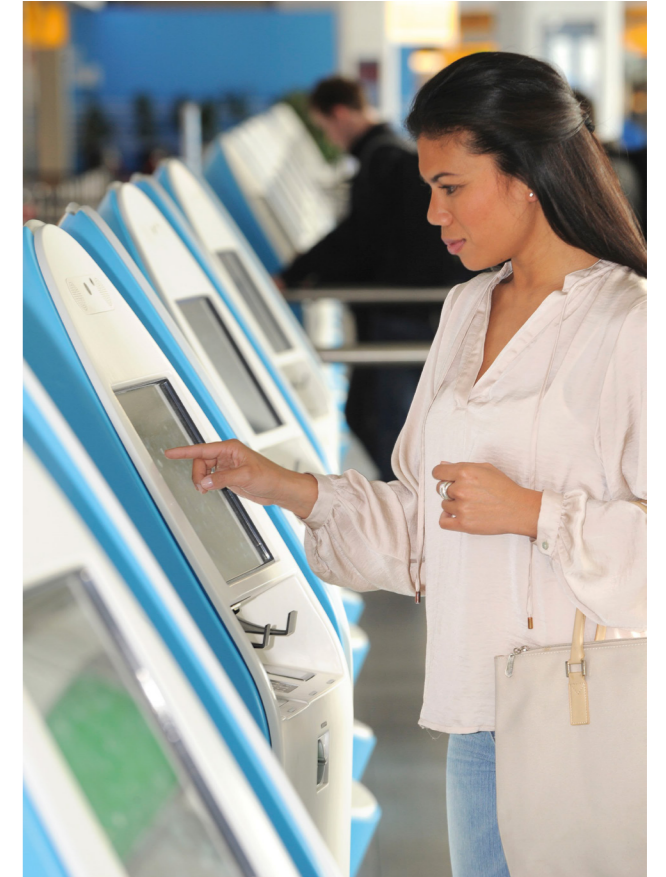
Figure 2.4.1.3 Passenger using the self service kiosks to get boarding pass & food vouchers after rebooking. Source: KLM

applicable based on the new European regulations. These vouchers are typically based on the distance that the passenger has to travel along with the duration of the delay.

When it comes to rebooking, only qualified, certified agents (at the services and transfers desk) and those stationed at the call center (IGT) in the back office are able to rebook passengers manually. In cases of mass disruption days, this process of rebooking can take a long time and usually ends up with long ambiguous waiting times for passengers. Having identified this issue, KLM has also initiated SSCOP which is a tool that helps passengers rebook themselves. This tool is also scheduled to be implemented in the Appy2Help app which is often used by passenger services staff to rebook passengers. Another initiative that is being developed at KLM is customer 360, which allows ground services to get a complete view of a passengers profile. Though this might be easier said than done, since data privacy laws (GDPR) are quite strict here in Europe and the only information that KLM has access to is the Passenger's PNR number, previous trip history and flight details. The goal is to implement this information across all the new I-Pads which have been distributed to the crew and staff.

As part of the rebooking process, sometimes passengers need to be accommodated in hotels. Information

about hotel availability and capacity are updated everyday. The selection of hotels is done on a zone or circle basis. First class, business, gold and platinum member flyers are accommodated in hotels in the immediate vicinity of the airport and therefore fall in circle 1. The other passengers are then accommodated in circles 2 and 3 which are further away from the airport and lie closer to the city.

In cases of disruption during transfers, a CFM/TFM (customer/transfer flow management) tool is used to check if a passenger will be able to make it to his/her connecting flight or not. The CFM tool uses a colour coded scheme similar to that of a traffic light, to determine the probability of the passenger making it to their flight. This information is then relayed to the gate agent who can then decide if they can keep the gate open for a bit longer or not. As mentioned before, in cases of missed connections, the OCC and the commercial desk will try to rebook the passengers automatically using the OPR tool. In case they are not able to do so, a meet & connect agent will be deployed (if available) to guide or escort the passengers to their next flight or guide them to a services and transfers desk where they can be rebooked. Unfortunately, in practice, passengers do not get their desired information in order to make it to their connection in time.

These established procedures essentially

remain the same during a mass disruption or red day, except increasing in intensity and scale. In the event of a mass disruption, the DPM can request for more people on the ground and in that case, the passenger services will scale up and make sure that there are more people available to aid and guide passengers. In particularly bad mass disruption days like the one that occurred on 24th and 25th July of this year, office staff from KLM HQ also volunteered to help out as part of the D-Team. The OCC meanwhile, will work on fixing the flight schedule, reorganising flights to handle the disruption. Passengers will be booked in hotels if they are forced to stay overnight and for passengers who are not able to be rebooked into a hotel or those that do not have a visitors visa to leave the airport, field beds will be deployed in extreme situations so that they can sleep at the airport. All of these efforts by KLM are part of their disruption handling and service recovery process. The next section delves a little deeper into service failures and service recovery.

2.4.3 Service Recovery
According to Mueller, a service failure means that the expected service or product could not be delivered due to some lapses in the service delivery process (Mueller et al., 1991). During a service failure, customers can experience a range of negative reactions such as dissatisfaction and anger, feeling abandoned, increased intent to complain
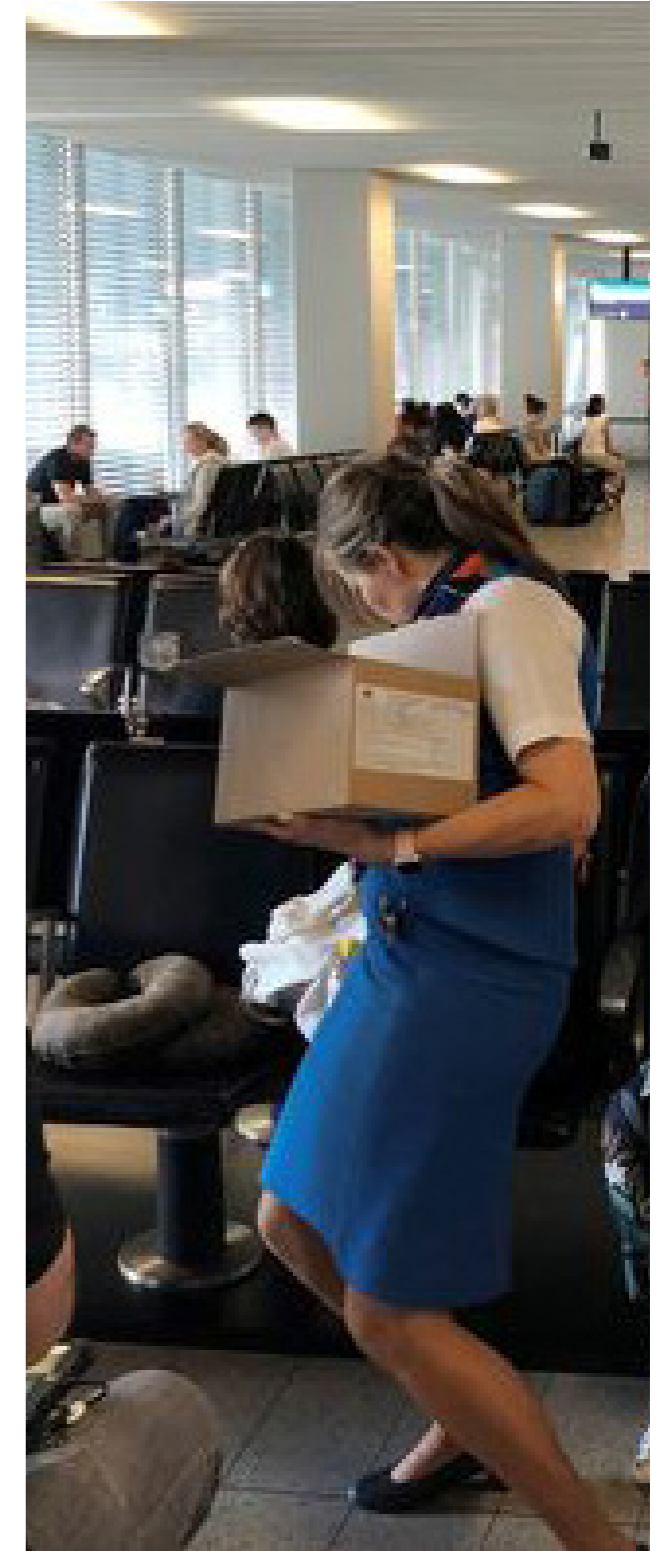

Figure 2.4.2 KLM staff handing out water bottles during mass disruption at Schiphol on July 25th, 2019

and make themselves heard, withdrawal of loyalty, spreading negative word-of-mouth and finally giving up on repurchase behaviour. A service failure can happen for a variety of reasons which can range from failures due to a flight delay or cancellation, failure to respond to customers needs and requests, long waiting time to simply being unsatisfied when the delivered service does not conform to expectations. It can be noted that Any flight delay or a delay in service provided, which increases the amount of wait time, can negatively affect the customers in various ways. According to Taylor, passengers feel increased anger, uncertainty and disappointment with the service provided during a flight delay or cancellation (Taylor, 1994; Wong, K. L., & Liu, Y. C. (2011).

Recovering customers during any sort of service failures is a key need for airlines as these lost customers can result in significant financial and reputational loss. Therefore a service recovery's purpose is to repair or reduce the damage in the relationship between a customer and company brought about by the disruption or service failure. According to kau and Loh (2006), customers appraise the success or failure of a service recovery based on perceived justice. This perceived justice is comprised of three types of justice: Distributive justice, procedural justice and interactional justice (Tax, S. S., & Brown, S. W. (1998)).

Distributive justice
Relates to a customers expectations and perception regarding how a company should respond in the event of a service failure or in the case of customer complaints. In the airline industry, for example, meal and travel vouchers, free upgrades, free hotel stays and other forms of compensation are associated with distributive justice.

Procedural justice
Relates to the perception of fairness of the various processes set by the company to deal with a service failure. A good example of this type of justice is illustrated by the process one has to go through to recover his/her lost baggage. Some companies are quick to compensate passengers with just a single claims form while others might request a very lengthy and arduous process to get the same type of compensation.

Interactional justice
focuses on employees or managers of a company interact with customers during a service failure (Tax, S. S., & Brown, S. W. (1998)). Research shows that this form of justice relates to the communication between employees and customers and how the message is delivered. For example, if the staff were courteous, polite, empathetic and willing to provide an explanation to the passengers during a disruption event, customers perceive a higher level of interactional justice. Incidentally, interactional justice is also
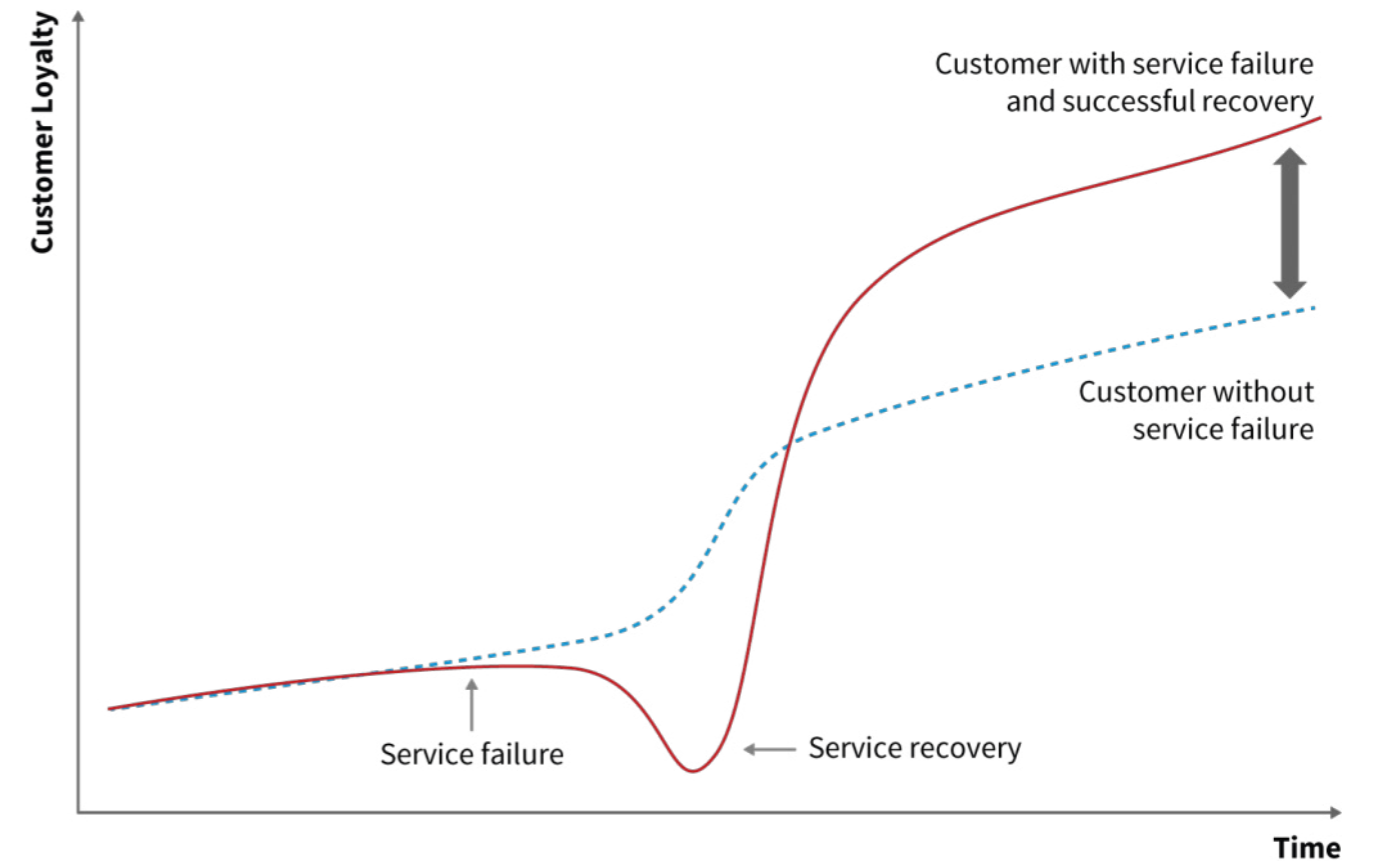

Figure 2.4.3 The Service Recovery Paradox

linked with positive or negative word of mouth.

It is evident now that each passenger creates an overall judgement experience based on the combination of their experiences with the people (interactional justice), the service or product (distributive justice) and the process (procedural justice).

A successful service recovery leads to increased customer satisfaction. In their research, Kau and Loh (2006), successfully show how a successful service recovery leads to increased levels of trust with the company, a positive word of mouth sentiment and higher customer loyalty. On the other hand, an unsuccessful service recovery effort leads to even greater dissatisfaction, anger, distrust and negative word of mouth.

Some theories suggest that a good service recovery effort can exceed the satisfaction of a disrupted customer as compared to a customer who has not experienced a disruption (Krishna et al., 2014). This would mean, that if done right, a disruption can actually be used to increase satisfaction in customers. This theory is called the service recovery paradox and is illustrated in figure 2.4.3.

2.5 DISRUPTION COMMUNICATION

The disruption communication to passengers is handled by the disruptions department at KLM. In this department, they use CRMPush which is an application which receives operational information (e.g. timings) and distributes it to several front end touchpoints. The CRMpush development team is responsible for the emails and SMS that are sent out and for receiving the right information from the operation systems as well as forwarding that to the front end (touchpoints). Through CRMPush, Emails, SMS (text) Whatsapp, Twitter, FB Messenger and push messages to the KLM mobile app are the communication channels used to inform passengers about their disruption. The core purpose of this information is to inform the passenger and mostly to update on their travel and to take away incomprehension about the situation. In case of cancellation KLM encourages self-service options for the passengers in order to be more in control of their situation. CRMPush emphasizes five communication pillars (also mentioned in chapter 1 section 1.4). These pillars are -

Consistency
- Use single source of truth on all channels (B2C & B2E) – Flight Status API
- Align disruption information on all touchpoints

Personalization
- Recognize our passengers at anytime anywhere

- Send only relevant information

Contextualization
- Use the context and internal information to adjust messages
- E.g. AMS vs outstation or 2nd delay occurs

Transparency
- Create clear and honest information for staff and passenger
- Humanize the Reason of Delay

Flexibility
- Being able to act/change quickly in the internal environment
- Easy tooling / A-B testing

In its current form, the disruptions department utilising the CRMPush application can inform passengers via multiple channels.

Around 50% of all communication is sent out via email; around 30% by SMS and the rest by social/app.

2.6 INSIGHTS AND CONCLUSIONS

Real and Perceived Disruptions
There are two types of disruptions - Real and perceived disruptions. Real disruptions are operational disruptions that can be caused by weather, natural disasters, technical faults. Perceived disruptions are more on an individual level and occur when a key passenger expectation is not met. A passenger may experience a perceived disruption even in cases when there is no actual disruption. It is the overall experience (both real and perceived disruptions), that forms the opinion in the passengers mind about their journey, as well as about KLM. This project will focus on both real and perceived disruptions as part of the context.

Disruption Types
There are many different types of disruptions occurring sometimes from an individual level to an operational level. Some of these disruptions have a big effect on customer satisfaction and NPS such as flight cancellations especially during days of Mass Disruptions (Red Days), where multiple flights get canceled at the same time, affecting thousands of people. In other cases, a single flight may get delayed or canceled affecting only a small number of passengers. The project will focus on the second type of disruption while giving recommendations for what to do during a Mass Disruption day.

Disruption Scenarios
There are three disruption scenarios described in this chapter which cover both direct as well as transfer flights. This project will focus on a delay or a cancellation scenario while giving recommendations for the third scenario (missed connections).

Disruption Handling
KLM has made great strides in improving their disruption handling. From trying to introduce more transparent and honest reasons for a delay to leveraging social media for sending updates and information. While some processes have evolved, other processes are still in the process of change, leading to a mismatch in experience. In the event of a cancellation or missed connection, some passengers may be automatically rebooked while others will have to go to the Services and Transfers Desk, stand in queue and wait their turn, which only makes the experience worse. On Mass Disruption days, immense queues can be seen in front of these desks. In other instances, Passengers might need to be booked a hotel for an overnight stay, but if the hotels are already full, then booking a hotel is not possible. There are multiple dimensions to the current disruption handling process with a lot of scope for improvements and design interventions.

Disruption Communication

Disruption communication in its current form involves informing passengers about their situation and journey status and to remove any doubts that they might have. This information is based on the four pillars of communication namely - contextual, personalised, consistent, transparent and flexible. However, there are instances where the information received is not relevant or not personalised or even consistent. A passenger may receive a piece of information or a message on their phone but if the same message / information is not reflected in the other information touchpoints (displays, kiosks etc.), then the passengers feel that the information is inconsistent and this reduces the trustworthiness of the information. This aspect is explained in much more detail in chapter 4. This project will take all these five pillars into consideration for the design intervention.

03.
PASSENGER
NEEDS

This chapter contains extensive research to identify the passenger needs and their experience in much greater detail. In this chapter, the different methods of research undertaken are described along with the results and insights. This chapter aims to answer some of the questions such as what do passengers actually experience when they are confronted with a disruption? What are the existing processes in place to handle disrupted passengers? How do passengers interact and communicate with KLM? What happens during a Mass Disruption event? And finally, the core passengers needs are defined.

3.1 THE PASSENGER

The passengers that will be the focus for this project was touched upon briefly in chapter 1, para 1.5.2. In this section, the passenger profiles and their needs will be described in more detail.

3.1 The target group
As mentioned earlier, The focus of KLM and also this project is thus on functional minded and cautious travelers who travel for both leisure and business. They mostly fly economy and take occasional trips. In general, these passengers want a pleasant start to their journey. They want their journey to be as smooth as possible. Based on the customer typologies that KLM has created, these passengers belong to the 'Good Start' segment. This group of passengers exhibit the following characteristics:

The person
- Fly both for business and leisure
- Fly occasionally to frequently
- Short, medium and long haul flights (depending on the occasion and purpose of the trip)
- Well educated
- Between the ages of 25-50 years old

The Trip
- Trips for leisure are usually done with partners or friends
- The trips are planned much in advance with some research
- Usually fly economy without any additional services
- Spend time at the airport before departure exploring it, eating or reading.
- Many check-in online, but some still prefer to check-in at the airport counter.

The Needs
- Prefer their flights to be punctual and on time
- Expect good information support
- Expect staff to be helpful, responsive and competent
- Seek transparency
- Expect to be updated as soon as something changes
- prefer things to be properly organised and go smoothly
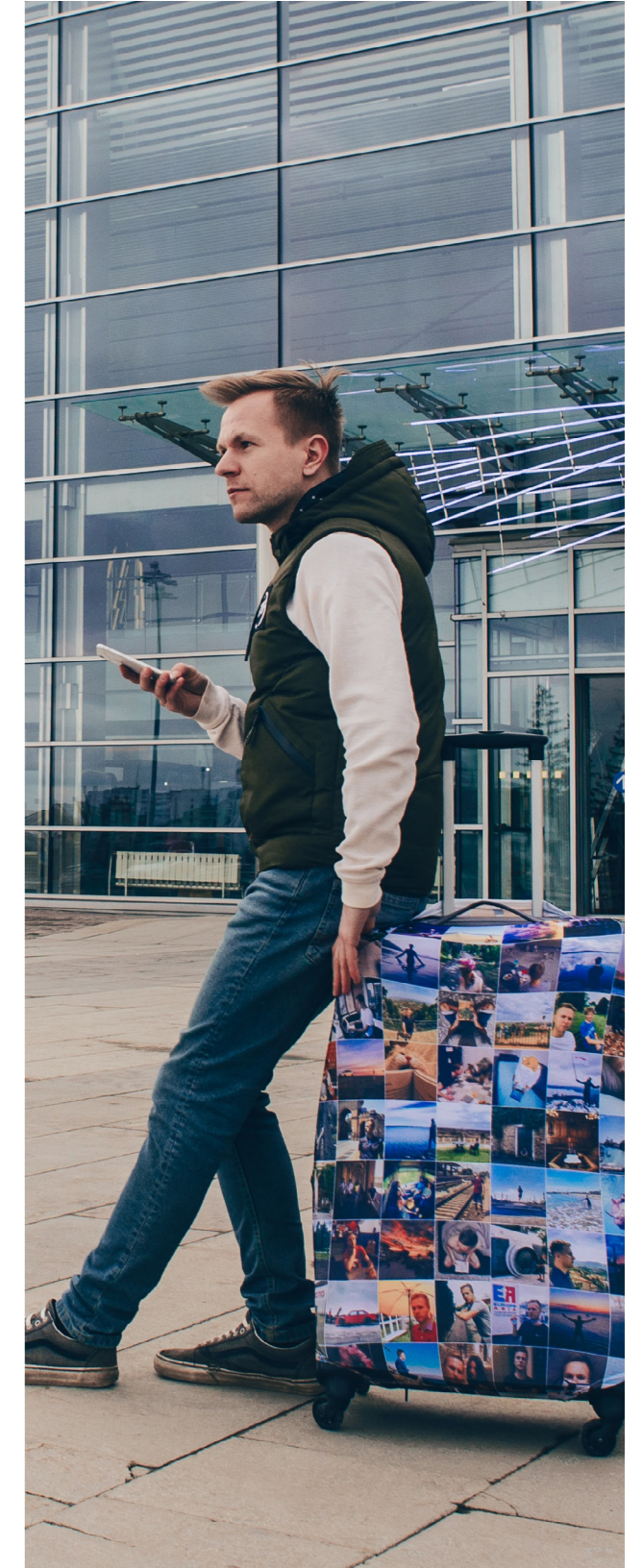
3.2 PASSENGER EXPERIENCE RESEARCH

In order to create an impactful outcome, the needs and experience of the target passenger groups need to be discovered and validated. A multi pronged research approach was undertaken to gather all the required data. The research was conducted in phases and multiple different sources were used to gather a more holistic and complete understanding of the context. Research sources varied from personal interviews, KLM's E- Score verbatim analysis, Social media data mining, in person observations as well as literature studies. The various methods used during the research or sensing phase are described in the following section.

3.2.1 Expert interviews (3 days)

At the start of the project, expert interviews (Kumar, 2012) were conducted with the product strategy manager of disruption communication in the CRM department (Customer Relations Management) and with the director of the Center of Excellence at KLM. The interviews were conducted at KLM headquarters in Amstelveen. The purpose of the interviews was to get an experts opinion and interpretation of the problem context and to understand the current processes and strategies deployed by KLM in the real and perceived disruption context. Findings from those interviews are listed in table 3.2.1

Expert	Location	Comments
Product Strategy Manager for Disruption Communication (CRM Push Disruption)	KLM HQ Amstelveen	Disruptions impact the NPS directly. Every one minute of delay costs KLM one NPS point which is a lot. The more problems or disruptions that a pasenger perceives, the worse is the NPS.
Director of Excellence Team	KLM HQ Amstelveen	40% of the passengers experience or report a perceived service failure or a perceived disruption even in cases when operationally speaking, everything is working fine and the flight is on time. This needs to be investigated further. 30% of actual delays are beyond the airlines control while 70% of the delays fall under the EU laws

Table 3.2.1 - Expert interviews comments

3.2.2 Informal Interviews (1 week)

In order to familiarise ourselves with the situation, informal interviews (Kumar, 2012) with individuals were conducted with the sole aim to understand first hand accounts of passengers disruption journeys and their experience during the same. The interviews were conducted in an informal setting and participants were asked to recount any recent disrupted journey that they had gone through. The results of this qualitative exercise led to a first draft of insights.

The setting
Since the target group of passengers were passengers who fly occasionally and for leisure, five participants were chosen within the age group of 25 - 45 years. The interviews were conducted with these five participants in an informal setting at the Industrial Design faculty of TU Delft. An initial introduction to the project was given along with explanation of the interview process. A verbal confirmation to record the participants responses was taken before the start of the interview.

The materials of the interviews were:
* A recording device (smartphone)
* Pen and paper

The interview process was as follows:
* Approach a person that seems to belong to the target group
* Introduce the researcher and the research project
* Ask how frequently the passenger is flying
* Ask the participant to remember any prior incident that they can recollect of a disruption (canceled or delayed flight)
* Ask the participant to narrate his or her story in as much detail as possible
* Ask the participant to describe what could be done better.
* Ask the participant to describe the ideal situation for a disruption handling.
* Thank the participant and ask him/her if he/she has something to add.

The participants responses were recorded and transcribed in an excel sheet. These were then analysed and categorised on the basis of interesting patterns and insights. These insights are detailed in table 3.2.2

No. of participants	Location	Interview Results
5	IDE faculty, TU Delft	• They want to be acknowledged and respected as a paying customer. • They want their schedule and time to be respected. • They want to be reassured that they will make their flight (in cases of delays or missed connections). • They want transparent, real, up to date and truthful information. • They want accurate information in order to plan their next steps. • They want to receive information either before a potential delay or immediately when a delay or cancellation happens. • They want relevant and feed forward information which will help them plan their next steps. • They want to be feel like KLM is on their side doing whatever they can to help them. • They want to be heard and feel like their suggestions or input is being taken into consideration for their solutions. • They want to know alternate options immediately. • They do not want to prolong this experience and would like to get through this as smoothly as possible. • They want to be compensated according to the nature and length of the delay.
		Insights
		Most participants stressed on a few key requirements when it comes to information that they need during a disruption: • The nature of the disruption (is it serious enough that the flight will take more than an hour to fly or be canceled?) • The reason of the disruption (transparent reason for disruption) • What steps is KLM taking in order to solve the issue? • What do I (the customer) have to do in order to expedite the process? • Will I get compensated and if yes, how?

Table 3.2.2 - Informal Interview Results and Insights

3.2.3 E-Score Analysis (3 weeks)

Following the informal interview session, a follow up research was done by looking at KLM's E-Score responses. Access was given to KLM's E-Score database which is KLM's own measure of passenger experience in the form of anonymous surveys e-mailed to passengers after their journey. The E-Score data for the month of March, 2019 was analysed and led to some interesting directions. A section of the E-Score Survey is reserved for Verbatim where passengers can type their comments. It was here, in the Verbatim analysis where a lot of insights were gathered and some of the insights from the interviews were validated. A section of the e-score survey template is shown in figure 3.2.3.

Figure 3.2.3 - A section of the E-Score Feedback form sent to passengers after their trip

The E-Score feedback for the month of March 2019 contained 2500 passenger responses and feedback comments. These comments from the verbatims section were separated into Positive, neutral and negative comments and coded with keywords categories based on the comment content and passenger satisfaction. Each individual comment was analysed in detail to get a contextual understanding of what the passenger was talking about.

Negative/Neutral E-Score comments

Analysis of the negative & neutral verbatim revealed that most passengers difficulties peaked in the airport environment during a disruption. In all, eight moments or journey instances were identified which have the potential for passengers to experience heightened negative emotions. These eight instances are illustrated below:

Journey Instances	Passenger Quotes
Short Connection times make people more stressed and raise anxiety and uncertainty.	*"I was looking forward to flying but don't understand the following: why do you let people book connection flights with less than 1 hour, as in nowadays, this scenario is very stressful and rather not realistic: - there are constant flight delays on the airports, baggage transition done in a messed up way. For the price and time spent on these journeys, nothing convinces me to undertake such user experience again."*
Having the right information in the right format at the right time to make the journey less stressful.	*" CLEAR, comprehensible directions SHOULD have been given to ALL passengers transferring from one flight to the other. And, we should have been given additional time to find the other terminal AND gate. No such information was written on the ticket/boarding pass. The time AND distance between the landing terminal and transfer terminal was insufficient. Albeit we asked different airport officials (in uniform), all of them indicated the same thing, it was a LONG way from one terminal to the other."*

Table 3.2.3 - Journey moments based on analysis of Negative and Neutral passenger comments; Source: KLM E-score. Contd. on next page

Journey Instances	Passenger Quotes
Automation works.......... (Sometimes)	*"When I was delayed I missed my connecting flight to Houston. I was told to find out about my rebooked flight via the self service terminals or airport personnel. There were no available airport personnel and I was totally unsure how to use the terminals."*
Minimal Steps to solve a problem is better	*"I was directed (unclear directions) to another KLM desk to rebook my flights and had to navigate through the airport with the hope that someone would be where I needed them (and the fear that if I got lost I wouldn't have any help to get me back on course). After re-booking the flights I'm then told I have to go to yet a third KLM location to get a hotel organised (yet again, unclear directions, and this time even scarier if I made a mistake as I had to go through arrivals, security and immigration before I could get there). At this 3rd location, they couldn't book me a hotel and just gave me an A4 printed sheet with lots of instructions (not easy to comprehend late at night)."*
Human presence (Staff) is needed......... even in the face of growing automation.	*"Very professional, courthouse and friendly staff. They made me feel welcome and were pleased to make my flight an enjoyable experience. The aircraft was very clean."*
Unexpected Extra Expenditure feels worse without valid reasons or without the possibility of refunds.	*"We had to pay for the bus that we were told to take, which we were not informed of (the bus driver was confused about what to do when we showed the KLM voucher).* *There were other travelers boarding this same bus who were also not informed that they had to pay for the bus. We still don't know where to get compensation for the bus transportation we had to pay for."*
People expect to get what they paid for....... (regardless of changes / circumstances)	*" Four of us traveling together paid over $837.28 additional fees for the more legroom seats. At booking we chose the seats we wanted. Sometime later the type of airplane was changed and we were reseated into four regular seats in the middle with no leg room. We were not informed and only figured it out when we got on the airplane and we were not in extra legroom seats. I want a refund."*

Table 3.2.3 - Journey moments based on analysis of Negative and Neutral passenger comments; Source: KLM E-score. Contd. on next page

Journey Instances	Passenger Quotes
Time, that can be spent in a useful way, is wasted by standing in long queues.	*"The queue was very long and cause further delay for those with appointment to meet up the next day. Limited space with so many passengers, I had to call my wife in UK to rebook my flight as I was at the back of the line and would probably not have made my meeting albeit all my schedules were destroyed..."*

Table 3.2.3 - Journey moments based on analysis of Negative and Neutral passenger comments; Source: KLM E-score.

The most striking and frequent issue was the stress that passengers felt due to lack of useful and feed forward information. Staff interaction was another key determinant in a passengers disruption experience with some passengers indicating that good and helpful staff interaction definitely helped them navigate the disruption experience in a positive way. These insights in a way also validated the findings from the informal interview session conducted earlier.

Positive E-Score Comments

On the other hand, analysis of the positive verbatims showed that despite having an overall positive experience, passengers still experienced or perceived a disruption or a service failure. Following the same process as the negative comments, these verbatim were coded with keyword categories based on comment content and passenger satisfaction.

Analysis of these comments showed that more than half of these perceived failures were related to the in-flight experience with issues such as catering, seats, In flight entertainment systems, cabin temperature and cleanliness, information & communication. It is also interesting to note that most passengers reported extremely high levels of satisfaction with their interaction with the cabin crew and in-flight staff. This qualitative data set was a valuable source of insight because it showed that even without real disruptions, there are still elements that exist which can negatively impact passengers perceptions and make them perceive a service failure (see appendix A).

3.2.4 Social Media Analysis (1 week)

In-Addition to E-Score data-verbatim analysis, another exercise was initiated to analyse social media communication channels employed by KLM to inform and connect with passengers, notably Facebook and Twitter. 50 Facebook and Twitter posts by passengers spanning 6 months were observed, noted and categorised. An example of the social media communication is illustrated in figure 3.2.4. These comments were collected from KLM's official Facebook and Twitter pages. The comments were scanned and categorised on the basis of the passenger issue being addressed and the response by KLM. These can also be seen more in detail in appendix B.
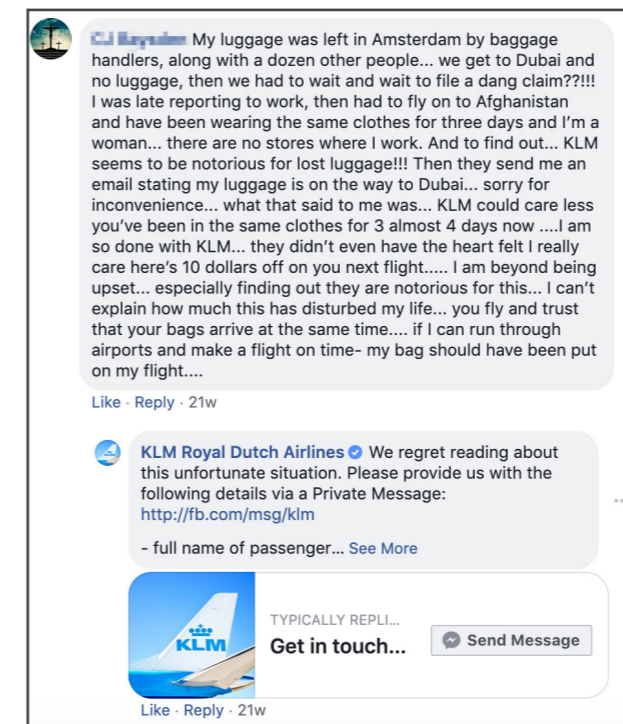

Figure 3.2.4 - An example of a facebook post interaction between a passenger and KLM
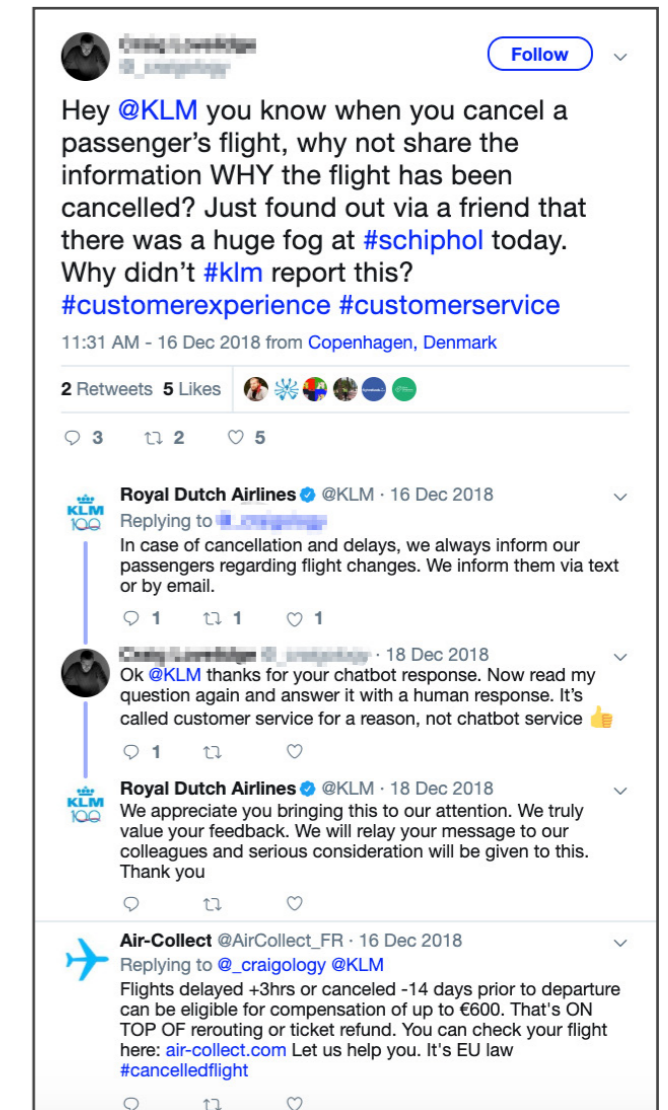

Figure 3.2.4 - An example of a twitter post interaction between a passenger and KLM

Analysis of these social media comments revealed that passengers want real, up-to-date and transparent information regarding all their queries and complaints. Interactions over social media channels are seen as being a bit impersonal as most responses by KLM feel automated. Passengers want to feel as though they are connecting with a real person rather than interacting with a software bot. In most cases, while passengers expect reassurance, recognition and empathy, they are instead left with the feeling of being left in the dark. These social media interactions again highlight the frustration and stress that passengers feel due to lack of useful information along with reduced or limited interaction with staff members.

Insights from Social Media Analysis
- Passengers want clarity for all process and feed forward information. (mostly for refunds policy for unexpected extra expenditure)
- Almost 70% of the posts were about delayed baggage and follow ups.
- Passengers want real, up-to-date and transparent information.
- Passengers want to feel as if they are connecting with a real person rather than a software bot with automated responses.
- Passengers want to be recognized and empathized with.
- They expect accountability and responsibility from KLM.
- Following up with customer care always is not pleasant and most passengers would rather not prolong their communication as that prolongs their negative look back experience as well.
- Most passengers expect KLM to be more proactive and follow up with them, rather than the other way around.

3.2.5 In person observations (1 day)
In person observations (Kumar, 2012) were conducted at four locations at Schiphol Airport of the Services and transfers desk. The observations were conducted around midday and lasted for approximately three hours. Though there were no disruptions, these observations on a regular day revealed much. The use of technology to make processes faster and reduce wait times is an admirable pursuit, and KLM has deployed a number of self service kiosks to accomplish exactly that. However, we observed that passengers first instinct is to go to a human being first. Despite having self service kiosks for passengers to quickly print their boarding passes, many passengers were seen as approaching an agent first. In cases like these, the user interface of the kiosks also plays a vital role in the passenger experience. In times of distress, passengers do not want to spend time on processes or technology that adds a cognitive strain. Instead they would rather go to an agent and have their problem solved. The observations and insights are mentioned in table 3.2.5.

Services & Transfers Desk	Location	Observations	Insights
	Departure hall 1 (Schiphol)	• Almost all passengers came up to the agent at the entrance and talked with her about their problems or requirements. • The agent was quite proactive in walking up to passengers and asking them about their requirements. • Was very polite and courteous. • She would then proceed to operate the kiosk and get the passengers in queue. • Also had an I-Pad which she used.	• The human presence (staff) is definitely needed. • People look around and actively search for agents just get confirmation and reassurance from them. • They seem to trust actual people more than just the machines.
	T2 (Schiphol near lounge 1)	• Almost all passengers came up to the agents at the entrance and talked with them about their problems or requirements. • The agents hovered around the kiosks and waited for passengers to approach them. • Getting the kiosk to work was quite a task. • Agents had I-Pads with them and were using those whenever passengers would come to them with a request.	• Trying work the kiosk, getting and error and finally getting a printed sheet which tells you to call an agent only annoys people more and prolongs the process. • In times of distress, people do not want to spend time on process or technology which adds a cognitive strain on them. Instead, they would rather prefer to go directly to an agent and try and have their problems solved.
	T4 (Schiphol D-Pier)	• Passengers came up to the agents at the entrance and talked with them about their problems or requirements. • The agents hovered around the kiosks and waited for passengers to approach them. • Getting the kiosk to work was quite a task. • Agents had I-Pads with them and were using those whenever passengers would come to them with a request.	

Table 3.2.5 - In person observations of KLM Services and Transfers desks at Schiphol (Departure hall 1, T2, T4,T6 after security)

Services & Transfers Desk	Location	Observations	Insights
	T6 (Schiphol Holland Boulevard)	• Agents were quite busy as more passengers were coming up to them. • Observed one elderly passenger who was having quite a lot of problem with the kiosk. • Adjacent passenger also tried to help him but it did not work. • Eventually got the 'take this to an agent' sheet, got annoyed and requested the agent to come over and help him. • Agent had a look and proceeded to put him in the queue to talk to another agent at the desk. • If agents look free, then people directly go to them instead of trying out the self service kiosks. But if the agents look busy, then passengers go and try the kiosk (for about 20-30 sec). If there is even a single error, they give up, get annoyed and call for the agent. • This incident highlights the importance of having a clear, simple and easy to use UI which not only assists you but also gives you options for what to do next, in case there was an error. In this case, clearly, the machine did not function as expected and only added to the passenger's frustration.	• The human presence (staff) is definitely needed. • People look around and actively search for agents just get confirmation and reassurance from them. • They seem to trust actual people more than just the machines. • Trying work the kiosk, getting and error and finally getting a printed sheet which tells you to call an agent only annoys people more and prolongs the process. • In times of distress, people do not want to spend time on process or technology which adds a cognitive strain on them. Instead, they would rather prefer to go directly to an agent and try and have their problems solved.

Table 3.2.5 - In person observations of KLM Services and Transfers desks at Schiphol (Departure hall 1, T2, T4,T6 after security)

3.2.6 Schiphol Mass Disruption Day Volunteer (July 24-25,2019)

On July 24th and 25th, an electrical fault at the refueling facility at Schiphol caused a huge disruption with multiple flights being canceled, leaving thousands of passengers stranded. The fault meant that only planes that had enough fuel on board were able to take off from the airport. As well as the various grounded planes, passengers on recently landed planes were unable to immediately disembark because there was no gate available. Many passengers cited instances of complete chaos and lack of information by the airport authorities and the airlines. All this chaos and lack of information meant that passengers had to stand in huge queues for more than 5-6 hours, just to get some information and or to book a hotel. Many did not find a place to stay for the night as most hotel at and around Schiphol were already full, leading to more frustration and anger. The chaos was further exacerbated when passengers who were supposed to fly out the next day also arrived. This meant that passengers whose flights were scheduled to fly out on the 25th were now stuck in the same queues as the passengers whose flights had been canceled on July 24th (Figures 3.2.6).

Figure 3.2.6 - Headline about Schiphol Disruption on July 24 & 25, 2019. Source: BBC
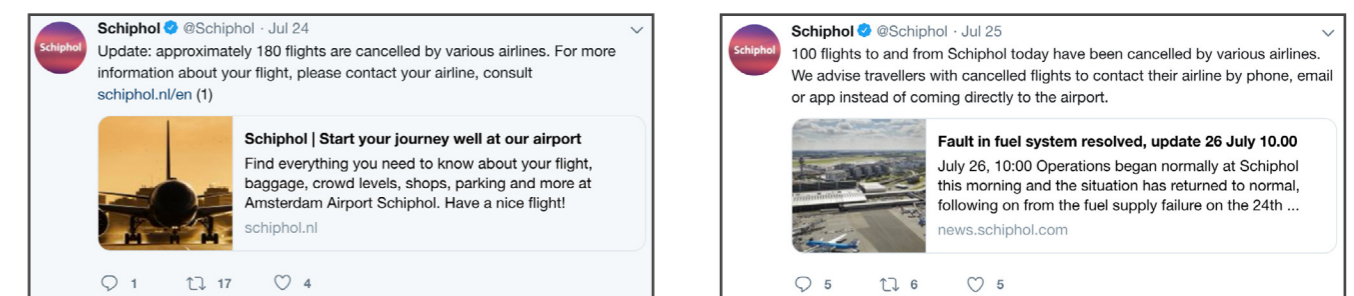

Figure 3.2.6 - Tweets by Schiphol about the disruption on July 24 & 25, 2019. Source: Twitter

As part of KLM established SOP, a disruption team (D-Team) (Figure 3.2.6.1) is dispatched, consisting of volunteers from various different departments of KLM, to come and help out during the disruption. As volunteers we were expected to aid passengers in rebooking and getting their boarding passes, provide them with bottles of water and snacks and help in queue management. Being part of the D-Team, gave me a unique opportunity to not only observe, but also actively interact with passengers while helping them out and seeing the processes designed to work especially in a disruption scenario.

As we were focusing on KLM customers, we were stationed in Departure hall 1 at Schiphol. From our interactions with the disrupted passengers, we observed the following:

- There were huge queues stretching from one terminal to the other.

- Most passengers did not have the KLM app and were trying to get information through other people and other channels.

- Most passengers had printed tickets and other identifying documentation.

- Even with more volunteers and staff, it was still difficult to manage the passengers

- Some passengers were not able to find accommodation and ended up spending the night at the airport.

- Passengers with special needs, with children, elderly and pregnant women were the most stressed out in this situation and were seeking quick solutions to their situation along with personalised attention by the staff.

- Almost all passengers wanted a member of the staff or volunteers to be with them and guide them through the chaos.

- They wanted transparent information and feed forward information with steps and suggestions as to what to do next.

- There were only a few mobile kiosks with agents authorised to rebook passengers on the go. This meant huge queues in front of those stations and increased stress on

the single agent manning the kiosk.
- The KLM services and transfers desk was overwhelmed and could not manage the sheer number of passengers waiting in queue. To help out, volunteers were dispatched to approach passengers stuck in the queue and forward their details to the back office, where they could be rebooked.

Figure 3.2.6.1 - The D-Team Volunteers at the end of the day on July 25, 2019 after the disruption ended

3.3 KEY LEARNINGS

Analysis of all this research shows that the airport and travel experience is actually quite stressful, even for passengers who fly frequently. The air travel system is a very complex system with multiple processes and services. In order to navigate all these complex processes, passengers develop their own assumptions and strategies in order to deal with them smoothly. It is clear that passengers need understanding and guidance through this whole process so that they feel a bit more in control and reassured which might lead to an increase in satisfaction and maybe a higher NPS score.

A disruption is a sudden event and that passengers do not have control over it (Chapter 2). Thus the only way they will feel some sense of control is if they have information about it, information that is transparent and information that will help them take their next steps. During a mass disruption such as the one that occurred in July, people's more baser instincts are triggered and they do not want to do anything that will add more stress or do any task that adds more cognitive load. In that situation, it is important to get relevant and contextual information which is useful for the passenger at that moment.

Passengers showed a remarkable level of understanding and patience when they were told about the nature of the disruption but also about the steps being taken to mitigate the disruption. Regardless of the cause of the disruption, passengers are usually quick to blame the airlines for the negative situation. Therefore, effective communication might help in reducing that perception and might generate a positive sentiment about the airline.

The nature of the information and the mode of communication also has a big part to play in a person's perception of the service or the event. This research has shown that passengers want to feel valued and want to be heard. They also want relevant information at the right time and instant solutions to their problems. To cater to these needs KLM has defined their communication strategy with five strategic pillars. These pillars are - Consistency, personalisation, contextualisation, transparency and flexibility. While these pillars satisfy most of the demands by the passenger, there is scope to expand these pillars to include Pre-emptive and Proactive as well. Pre-emptive information is information that is anticipated and feed forward in nature, thereby helping the passenger take his/her next steps. Proactive information is information that is proactively supplied to the passenger without them ever having to ask for it.

Thus, the passengers need relevant, consistent, contextual, personalised, pre-emptive and proactive information throughout their journey (Figures 3.3.1).

3.4 CONCLUSIONS

- The airport and flight travel experience can be stressful.

- A disruption is a sudden event which can trigger negative reactions in passengers. In these events, passengers do not want to spend time trying to figure out processes. They just want quick solutions.

- The target group is educated but they do not fly frequently. They have some knowledge about the processes involved, but they still need more information to feel reassured.

- They seek the reason behind the disruption and want transparent, honest information.

- Learning about a disruption is never a good thing, but the sooner the passengers are made aware of the situation, the better equipped they are to handle it and decide their next steps.

- Passengers expect KLM to provide information proactively.
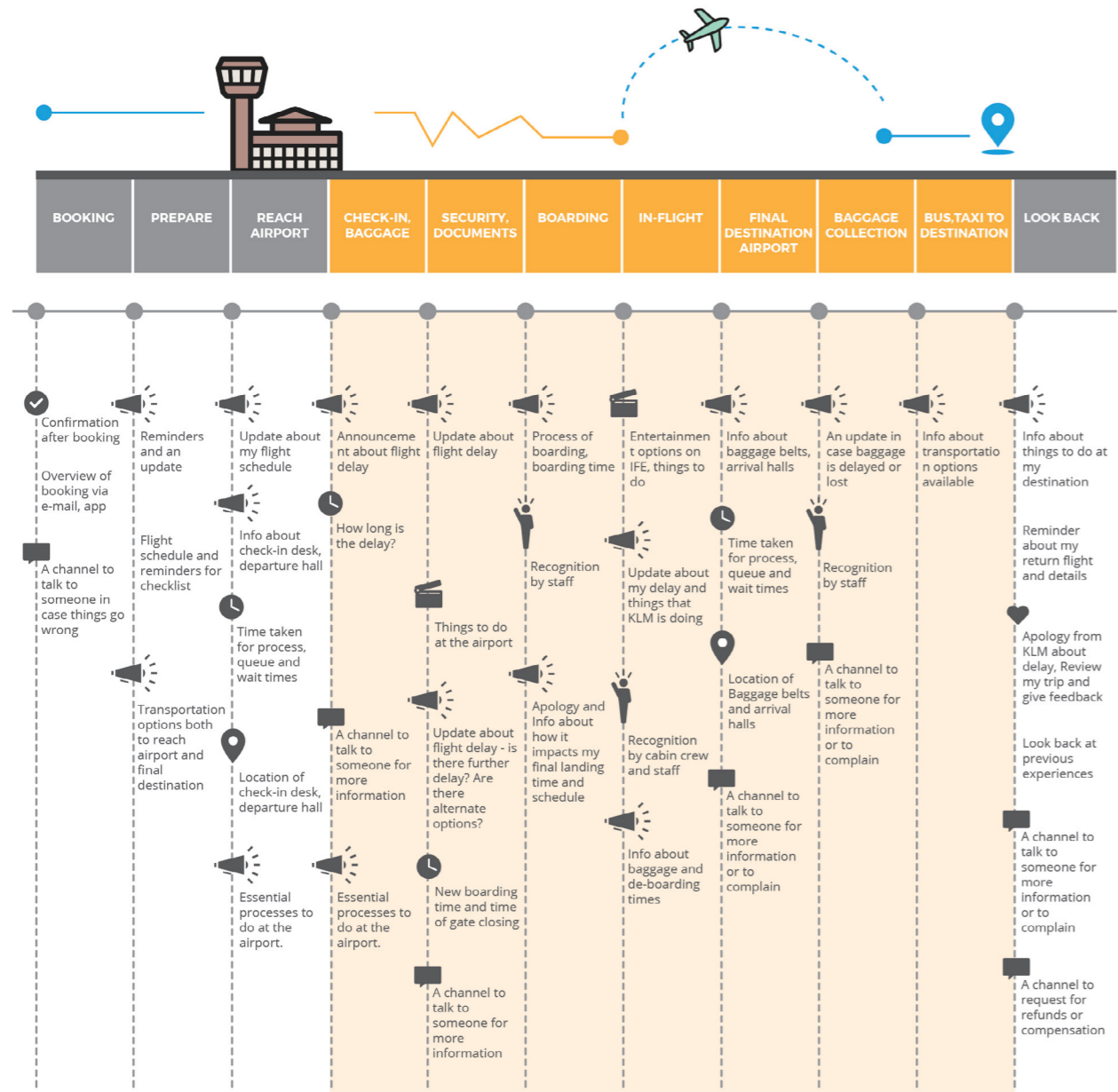
Delayed Flight - Passenger Needs

BOOKING | **PREPARE** | **REACH AIRPORT** | **CHECK-IN, BAGGAGE** | **SECURITY, DOCUMENTS** | **BOARDING** | **IN-FLIGHT** | **FINAL DESTINATION AIRPORT** | **BAGGAGE COLLECTION** | **BUS,TAXI TO DESTINATION** | **LOOK BACK**

- Confirmation after booking
- Overview of booking via e-mail, app
- A channel to talk to someone in case things go wrong

- Reminders and an update
- Flight schedule and reminders for checklist
- Transportation options both to reach airport and final destination
- Location of check-in desk, departure hall

- Update about my flight schedule
- Info about check-in desk, departure hall
- Time taken for process, queue and wait times
- Essential processes to do at the airport.

- Announcement about flight delay
- How long is the delay?
- A channel to talk to someone for more information
- Essential processes to do at the airport.

- Update about flight delay
- Things to do at the airport
- Update about flight delay - is there further delay? Are there alternate options?
- New boarding time and time of gate closing
- A channel to talk to someone for more information

- Process of boarding, boarding time
- Recognition by staff
- Apology and Info about how it impacts my final landing time and schedule
- Info about baggage and de-boarding times

- Entertainment options on IFE, things to do
- Update about my delay and things that KLM is doing
- Recognition by cabin crew and staff

- Info about baggage belts, arrival halls
- Time taken for process, queue and wait times
- Location of Baggage belts and arrival halls
- A channel to talk to someone for more information or to complain

- An update in case baggage is delayed or lost
- Recognition by staff
- A channel to talk to someone for more information or to complain

- Info about transportation options available

- Info about things to do at my destination
- Reminder about my return flight and details
- Apology from KLM about delay, Review my trip and give feedback
- Look back at previous experiences
- A channel to talk to someone for more information or to complain
- A channel to request for refunds or compensation

Figure 3.3.1 - Scenario 1 - Passenger information needs during a delay scenario

Canceled Flight - Passenger Needs

BOOKING | **PREPARE** | **REACH AIRPORT** | **CHECK-IN, BAGGAGE** | **SECURITY, DOCUMENTS** | **BOARDING** | **IN-FLIGHT** | **FINAL DESTINATION AIRPORT** | **BAGGAGE COLLECTION** | **BUS,TAXI TO DESTINATION** | **LOOK BACK**

- Confirmation after booking
- Overview of booking via e-mail, app
- A channel to talk to someone in case things go wrong

- Reminders and an update
- Flight schedule and reminders for checklist
- Transportation options both to reach airport and final destination
- Location of check-in desk, departure hall

- Info about check-in, departure hall
- Time taken for process, queue and wait times
- Essential processes to do at the airport.

- Announcement about flight cancellation
- Update about flight cancellation - why is the flight canceled What is KLM doing about it?
- Am I being rebooked automatically or do I have to do it myself? Will it cost me extra money? Will I reach on the same day?
- A channel to talk to someone for more information
- Update about flight cancellation - Alternate flight options? Refunds/compensation?
- New flight details, new boarding time and time of gate closing
- Recognition by staff

- Update about flight cancellation - why is the flight canceled What is KLM doing about it?
- Am I being rebooked automatically or do I have to do it myself? Will it cost me extra money? Will I reach on the same day?
- Recognition by staff
- Info about how it impacts my final landing time and schedule
- A channel to talk to someone for more information

- Process of boarding, boarding time, Apology for cancellation
- Recognition by cabin crew and staff
- Info about baggage and de-boarding times

- Entertainment options on IFE, things to do
- Update about the impact of cancellation

- Info about baggage belts, arrival halls
- Time taken for process, queue and wait times
- Location of Baggage belts and arrival halls
- A channel to talk to someone for more information or to complain

- An update in case baggage is delayed or lost
- Recognition by staff
- A channel to talk to someone for more information or to complain

- Info about transportation options available

- Info about things to do at my destination
- Reminder about my return flight and details
- Apology from KLM about cancellation, Review my trip and give feedback
- Look back at previous experiences
- A channel to talk to someone for more information or to complain
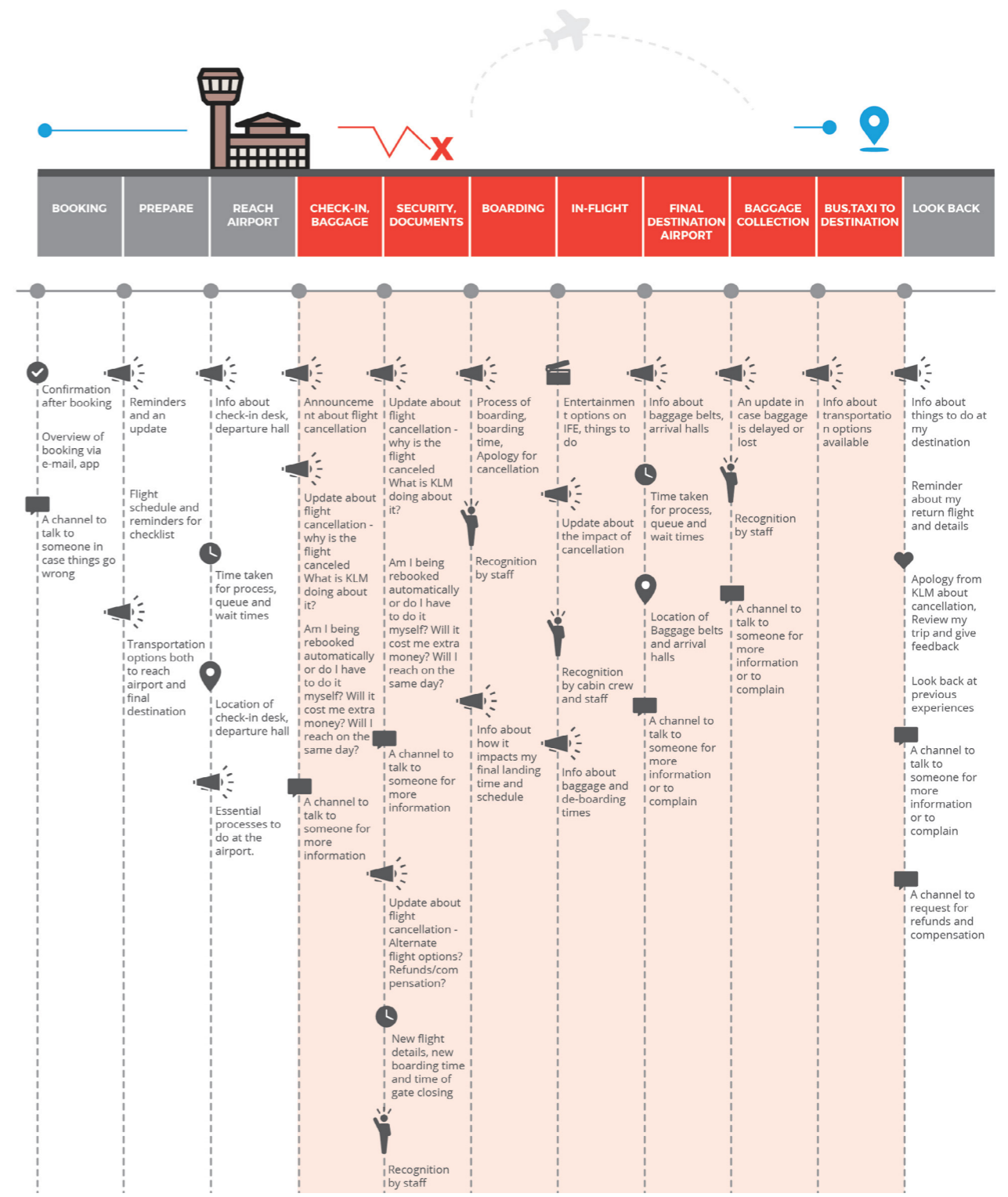- A channel to request for refunds and compensation

Figure 3.3.1 - Scenario 2 - Passenger information needs during a cancellation scenario
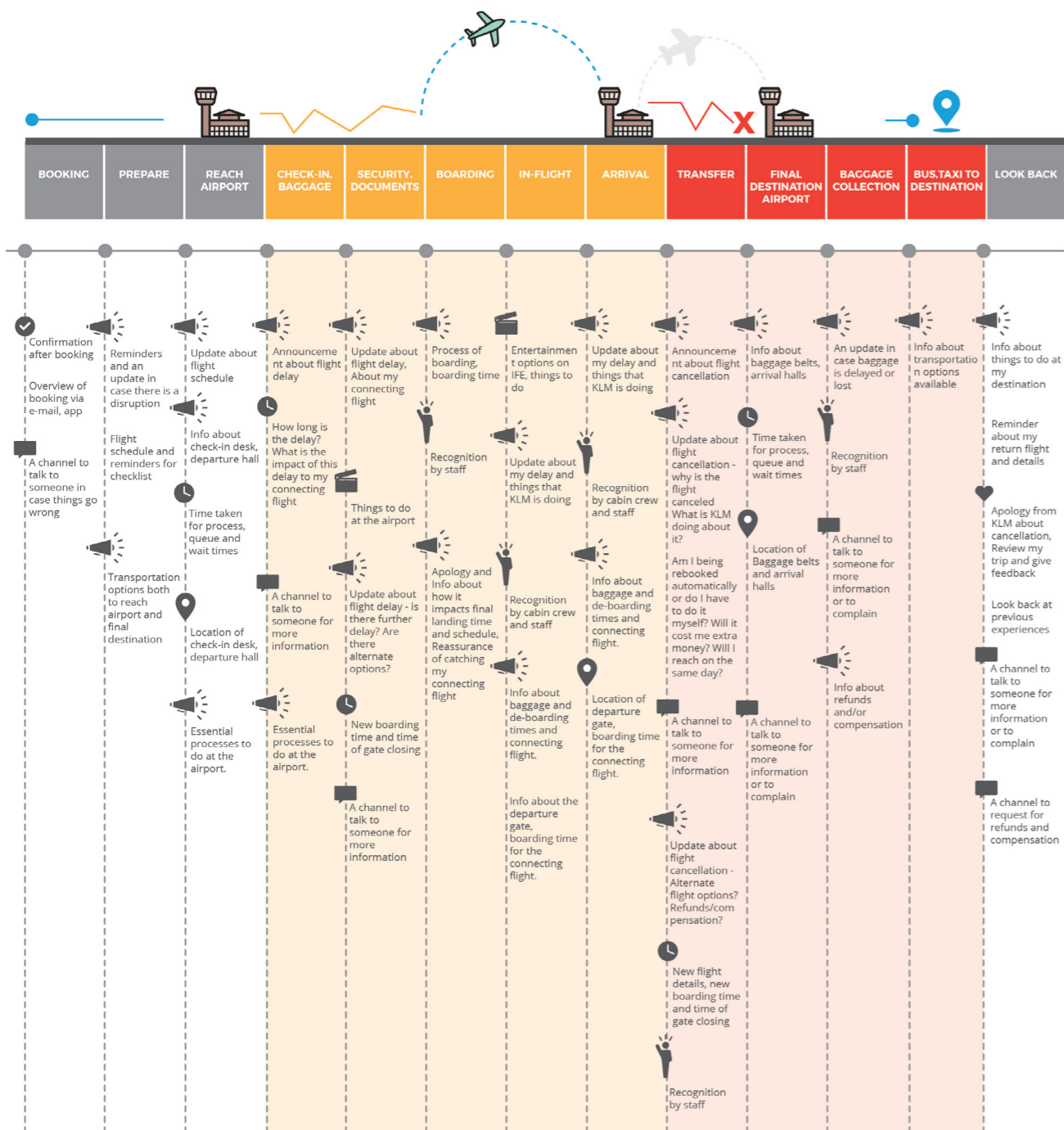
Missed Connection - Passenger Needs

Stage labels: BOOKING | PREPARE | REACH AIRPORT | CHECK-IN, BAGGAGE | SECURITY, DOCUMENTS | BOARDING | IN-FLIGHT | ARRIVAL | TRANSFER | FINAL DESTINATION AIRPORT | BAGGAGE COLLECTION | BUS,TAXI TO DESTINATION | LOOK BACK

Confirmation after booking

Overview of booking via e-mail, app

A channel to talk to someone in case things go wrong

Reminders and an update in case there is a disruption

Flight schedule and reminders for checklist

Transportation options both to reach airport and final destination

Update about flight schedule

Info about check-in desk, departure hall

Time taken for process, queue and wait times

Location of check-in desk, departure hall

Essential processes to do at the airport.

Announcement about flight delay

How long is the delay? What is the impact of this delay to my connecting flight

A channel to talk to someone for more information

Essential processes to do at the airport.

Update about flight delay, About my connecting flight

Recognition by staff

Things to do at the airport

Update about flight delay - is there further delay? Are there alternate options?

New boarding time and time of gate closing

A channel to talk to someone for more information

Process of boarding, boarding time

Recognition by staff

Apology and Info about how it impacts final landing time and schedule. Reassurance of catching my connecting flight

Info about baggage and de-boarding times and connecting flight.

Info about the departure gate, boarding time for the connecting flight.

Entertainment options on IFE, things to do

Update about my delay and things that KLM is doing

Recognition by cabin crew and staff

Update about my delay and things that KLM is doing

Recognition by cabin crew and staff

Update about my delay and things that KLM is doing

Recognition by cabin crew and staff

Info about baggage and de-boarding times and connecting flight.

Location of departure gate, boarding time for the connecting flight.

Announcement about flight cancellation

Update about flight cancellation - why is the flight canceled What is KLM doing about it? Am I being rebooked automatically or do I have to do it myself? Will it cost me extra money? Will I reach on the same day?

A channel to talk to someone for more information

Update about flight cancellation - Alternate flight options? Refunds/compensation?

New flight details, new boarding time and time of gate closing

Recognition by staff

Info about baggage belts, arrival halls

Time taken for process, queue and wait times

Location of Baggage belts and arrival halls

A channel to talk to someone for more information or to complain

An update in case baggage is delayed or lost

Recognition by staff

A channel to talk to someone for more information or to complain

Info about refunds and/or compensation

Info about transportation options available

Info about things to do at my destination

Reminder about my return flight and details

Apology from KLM about cancellation, Review my trip and give feedback

Look back at previous experiences

A channel to talk to someone for more information or to complain

A channel to request for refunds and compensation

Figure 3.3.1 - Scenario 3 - Passenger information needs during a missed connection scenario

No Disruption - Passenger Needs

Stage labels: BOOKING | PREPARE | REACH AIRPORT | CHECK-IN, BAGGAGE | SECURITY, DOCUMENTS | BOARDING | IN-FLIGHT | ARRIVAL | TRANSFER | FINAL DESTINATION AIRPORT | BAGGAGE COLLECTION | BUS,TAXI TO DESTINATION | LOOK BACK

Confirmation after booking

Overview of booking via e-mail, app

A channel to talk to someone in case things go wrong

Reminders and an update in case there is a disruption

Flight schedule and reminders for checklist

Transportation options both to reach airport and final destination

An update in case there is a disruption

Options in case there is a disruption

An update in case there is a disruption

Info about check-in desk, departure hall

Time taken for process, queue and wait times

Location of check-in desk, departure hall

Essential processes to do at the airport.

An update in case there is a disruption

Time taken for process, queue and wait times

Location of departure gate

Boarding time and time of gate closing

Things to do at the airport

Process of boarding, boarding time

Entertainment options on IFE, things to do

Recognition by cabin crew and staff

An update in case there is a disruption

Update about my connecting flight - departure time, gate number

Recognition by cabin crew and staff

An update in case there is a disruption

Info about baggage and de-boarding times

Info about departure gate and departure time

Time taken for process, queue and wait times

Location of departure gates

A channel to talk to someone in case things go wrong

An update in case there is a disruption

Recognition by staff

Time taken for process, queue and wait times

Location of Baggage belts and arrival halls

A channel to talk to someone in case things go wrong

An update in case baggage is delayed or lost

Info about delayed or lost baggage

Recognition by staff

A channel to talk to someone in case things go wrong

Info about transportation options available

Info about things to do at my destination

Reminder about my return flight and details

Review my trip and give feedback

Look back at previous experiences

Figure 3.3.1 - Scenario 4 - Passenger information needs during a regular no disruption scenario

04.
INFORMATION COMMUNICATION

This chapter contains extensive research to understand the different types of information that passengers receive by KLM as well as an indepth analysis of the different information touchpoints. This chapter builds on learnings from previous chapters to answer questions such as what are the different information touchpoints that passengers interact with? What are the types of information KLM shares with passengers? And how do passengers measure the quality of the information received? The latter part of this chapter explores ways by which bad news can be delivered to passengers to minimise the stress, anxiety and anger felt during a disrupted scenario.

4.1 INFORMATION TOUCHPOINTS

The learnings from chapters 2 and 3 show the importance of relevant, contextual and proactive communication in how passengers experience a real and perceived disruption. It is therefore important to understand the different types of information that KLM provides to passengers and through what channels and touchpoints. These are described in more detail in the next section.

4.1.1 Information Touchpoints
Research was conducted to identify the various different information touchpoints that the passengers interact with throughout their journey. These include - smartphones, kiosks, personel (KLM staff/agents, airport staff), Flight Information screens, airport signage, printed documents (boarding pass, passports, identification papers), In flight entertainment screens and cabin crew. Each touchpoint was explored to see what kind of information is communicated. These are listed in table 4.1.1.

While each of these information touchpoints have their merits and demerits, it was observed that most of these touchpoints required the passenger to physically go to the touchpoint and find the information relevant to them and their situation except the smartphones and printed documents. These two touch points were the only ones that travelled with the passengers all through their journey. Of these, the printed

document only provided very limited information which is static. This leaves the smartphones with the most capability to automatically update and refresh the information.

Preferred Information Touchpoint
Thus, passengers prefer the smartphone as their preferred information touchpoint. This is supported by research done by Berendien Lubbe and Liebie Louw (Lubbe & Louw (2010). In their research, they investigate the preference and readiness for passengers to interact with airlines via mobile devices (smartphones). Given the rise of smartphone usage amongst people, the biggest advantage of communication through smartphones is the fact that it offers a direct line of communication between KLM and passengers at any place at any time (figure 4.1.1). Their research proves that given a choice between the various different information touchpoints available, passengers prefer to communicate and receive information through their smartphones. Thus, the design solution will focus on the communication received via smartphones for this project.

Information Touchpoint	Name & Location	Strengths	Weakness
	Smartphone On person/Individual	• Most versatile medium to communicate and receive information and updates • Direct line of communication with KLM • Can store all important / required documents for the journey in one place • Always with the person so the information can be retrieved at any place and at any time. • Gives alerts and reminders.	• battery constraints • Some types of information requires an internet connection. • SIM card may not work especially in cases of international travel
	Kiosks Schiphol (Departure Hall 1, T2, T4, T6)	• Located before and after security. • Allow for quick self service actions such as printing vouchers, boarding pass. • Are useful to use in cases of long queues and waiting • Only touchpoint which allows passengers to print their documents.	• Not mobile. Located at fixed positions at the airport. • Passenger has to physically go these kiosks to perform specific tasks. • Kiosks provide limited functionality and information. • Do not provide functionality to communicate with someone from KLM. • Prone to errors which leads to increased stress and frustration.
	KLM / Airport Personnel Schiphol	• Are stationed all over the airport. • Easy to approach and ask questions relevant to ones situation • The uniform makes them seem more trustworthy and official. • Information and suggestions from them is perceived as reliable. • Can listen and show empathy and understanding. • Can suggest alternatives and take action in specific situations. • Show care by the human touch	• Have limited capacity to balance needs of their job and the needs of the passengers. • may not always be empowered to take certain actions. • Behaviour and capacity to empathize is driven by their own circumsatnces and how their day is going. • May not have all the answers always. • Passengers have to physically approach them and ask their questions.

Table 4.1.1 - Information touchpoints and their strengths, weaknesses. Contd. on next page.

Information Touchpoint	Name & Location	Strengths	Weakness
	Flight Information Screens Schiphol Airport	• Located at various areas of the airport. • Show relevant flight information like flight number, check-in desk no., departure hall no. • Easy to spot because usually there are multiple screens together.	• Displays all information regardless of relevance to passenger. • Passenger needs to spend time, scan and find the information relevant to them. • Passenger has to physically go to these screens. • Does not give alerts or reminders.
	Printed Documentation On person / Individual	• Trustworthy and official form of communication. • Is available on the person at all times • Useful for claims	• Is static and cannot automatically update. • Can be lost or misplaced • In acse of any updates, new documentation has to be printed.
	Announcements Airport / Cabin	• Are done periodically and in cases of alerting passengers. • Is a reminder • Passengers do not need to read a screen to understand the announcement, but can just hear it and make decisions. • In a silent airport, announcements grab attention.	• Are generic most of the time, unless in cases of reminding specific passengers. • Are easily ignored by most people.
	In-Flight Entertainment Aeroplane	• Are available in the aircraft. • Provide a big variety for entertainment during flight. • Can display information regarding transfers. • Important to show safety videos and give explanations. • Easy to access as each passenger has their own IFE.	• Have limited capacity to show information. • Information shown is mostly about the flight but now what the passenger has to do next. • Information is only updated once the cabin staff get informed or updated

Table 4.1.1 - Information touchpoints and their strengths, weaknesses.
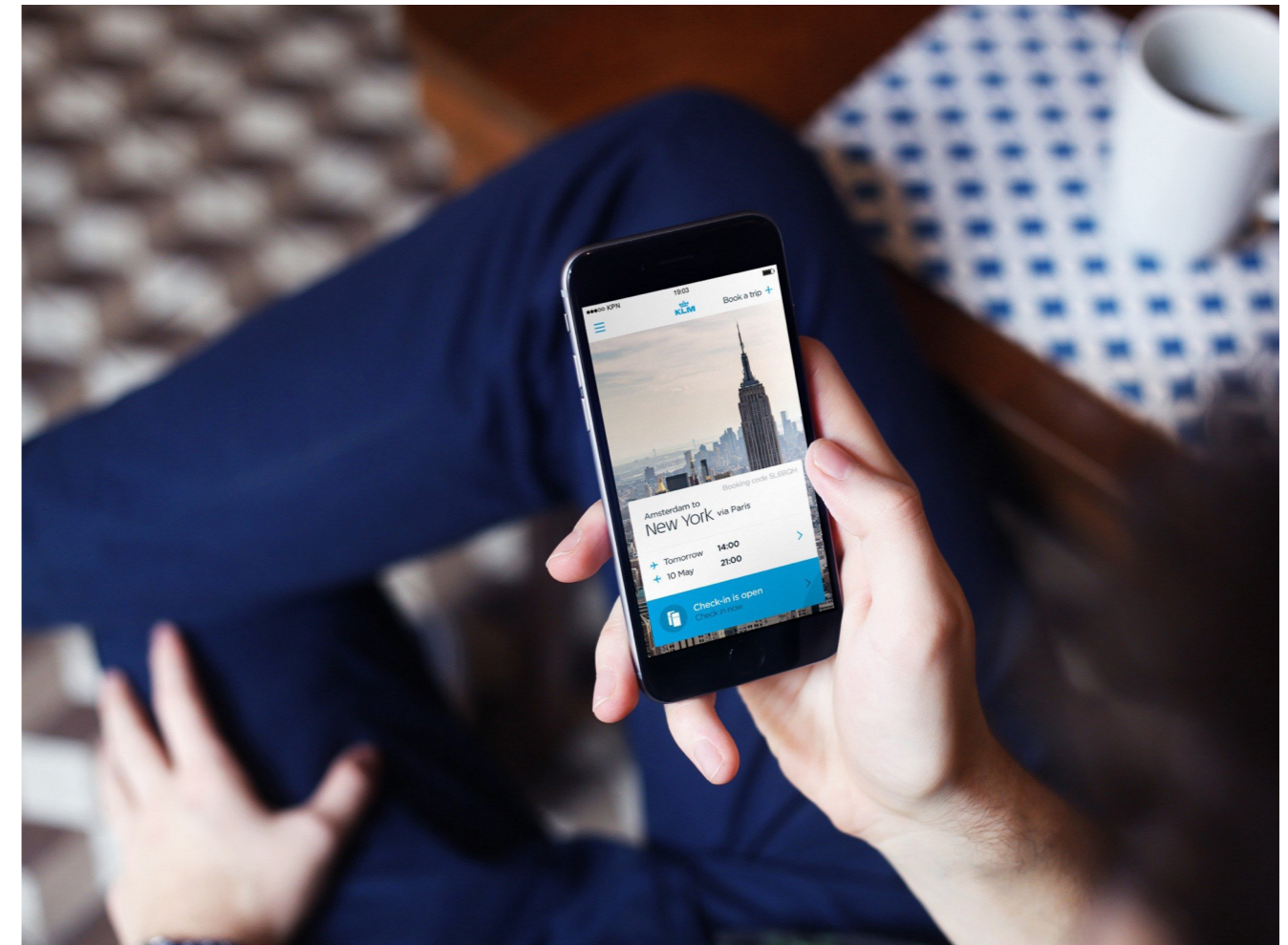
Figure 4.1.1 - Smartphone as the preferred information touchpoint. Also supported by research done by Lubbe & Louw (2010)

The smartphone affords many advantages as compared to most of the other information touchpoints discussed in table 4.1.1. Passengers can install the official KLM app which offers the most relevant functionality in terms of providing information while also giving the digital boarding pass as well as digital food and beverage vouchers. Apart from this passengers can also get in touch with KLM through their Social media channels.

These channels are useful to connect with KLM but also have enhanced fuctionality such as WhatsApp and facebook Messenger. These channels can also display the digital boarding pass. Passengers can also receive SMS and Emails which they can access right there on their smartphone. Thus, it's clear why people prefer the smartphone. In the next section we will look at the different types of information that is sent by KLM.

4.2 TYPES OF INFORMATION

Figure 4.2 - Different types of information supplied by KLM in a regular non-disrupted journey.

Regular Journey Information Supplied

In a normal journey, KLM shares five different types of information sets through their channels - Mandatory Airline Processes, Practical Information, Inspirations (promotional campaigns, offers, special deals), Products and services (paid upgrades, special meals) and customer support (Figure 4.2) (KLM, 2019). These information sets are important from a business standpoint but it is not necessary that all these information sets are sent all the time throughout the passengers journey. From the passengers point of view, some of

this information is superfluous and is not required at all times.

4.2.1 Disruption Information supplied

In cases of a disrupted journey (delay, cancellation or missed connection), the passenger does not need inspiration or products and services. Instead, in that situation, the most important information sets are Mandatory Airline Processes, Practical Information and the ability to contact someone from KLM (Customer Support) (Figure 4.2.1). In this type of situation, the passenger is only looking at what the situation is, what they have to do and what KLM is doing to resolve the situation. Thus, from the figure we can see how the dynamics of the type of information supplied changes as the situation and passenger needs change.

KLM has initiated processes to identify, classify and create a framework or guidelines for what sort of information should be provided at what time to the passenger which it is calling Digital Orchestration (KLM, 2019). Based on their initiative and the findings from the passenger research conducted, it can be seen that passengers just need those three types of information in the event of a disrupted journey.

Mandatory Airline Processes: Important from the airline's perspective to ensure reliable service delivery; often considered bothersome from the passenger's perspective

Products & Services: Greatly diminished significance. Distraction and intrusion during a disruption

Customer Support: Constant feeling of being taken care of, the responsible partner in the journey. Reactive and responsive, addressing ad-hoc needs for guidance and hand-holding, an always-available companion.

Practical Information: Critical information to address questions, doubts, fears, anxieties, worries in the passenger's mind – addressed proactively (for the group) and reactively (specific to individuals)

Figure 4.2.1 - Different types of information needed by passenger in the case of a disrupted journey. Example shown is a delay journey.

4.3 CAMPAIGNS & CHANNELS

While undertaking a journey the passenger is exposed to multiple types of content by KLM which have different purposes. KLM uses four main channels to send messages and inform people namely, SMS, Email, Mobile (KLM App) and Social media (WhatsApp, Facebook Messenger and Twitter). A detailed description of campaigns can be found in appendix C. Currently, KLM has multiple campaigns and offers that they wish to inform the passenger about. They use multiple information touchpoints along the customer journey to reach out to their customers over different channels. However, the content of these messages is often, not personalised nor relevant to the context of the passenger. Messages and notifications are generic in nature and are sent en masse to passengers. The aspect of contextual and personalised content should be at the forefront of the offered content and be proactive as well. People don't want to spend time scanning a lot of information to figure out if that information is relevant to them or not. Figure 4.3 shows a distribution of the different kinds of information and content supplied to the passengers throughout their journey.

4.3.1 Dimensions of Information Perception

KLM prioritises certain types of messages and notifications through certain channels. However, depending on the situation of the passenger, they may or may not be able to access this

information when they need it, leading to increased levels of anxiety and stress. What is also clear is that the content of the message, the tone of voice and helpfulness of the information greatly differs from channel to channel. There might be times, when the passenger expects a certain piece of information that they really need but it is not supplied to them. This also makes the passengers anxious and start to doubt if KLM has their best interests in mind or not.

As per the KLM compass and their new emphasis on customer intimacy, KLM wants to show passengers that they care about them, that passengers feel recognised, comfortable and touched. However, these particular aspects of customer intimacy do not translate to the information that the passenger is being sent. Therefore, the tone of voice, the nature of the information (helpful, not helpful, feed forward) also makes a big difference in how passengers perceive KLM as a brand. Therefore, based on learnings from the research conducted, it can be surmised that passengers perceive and judge the value of the information on four dimensions - The content of the information, timeliness of the information, the proactiveness or reactiveness by which the information was sent and through which channel it was sent through. These are explained in the next section.
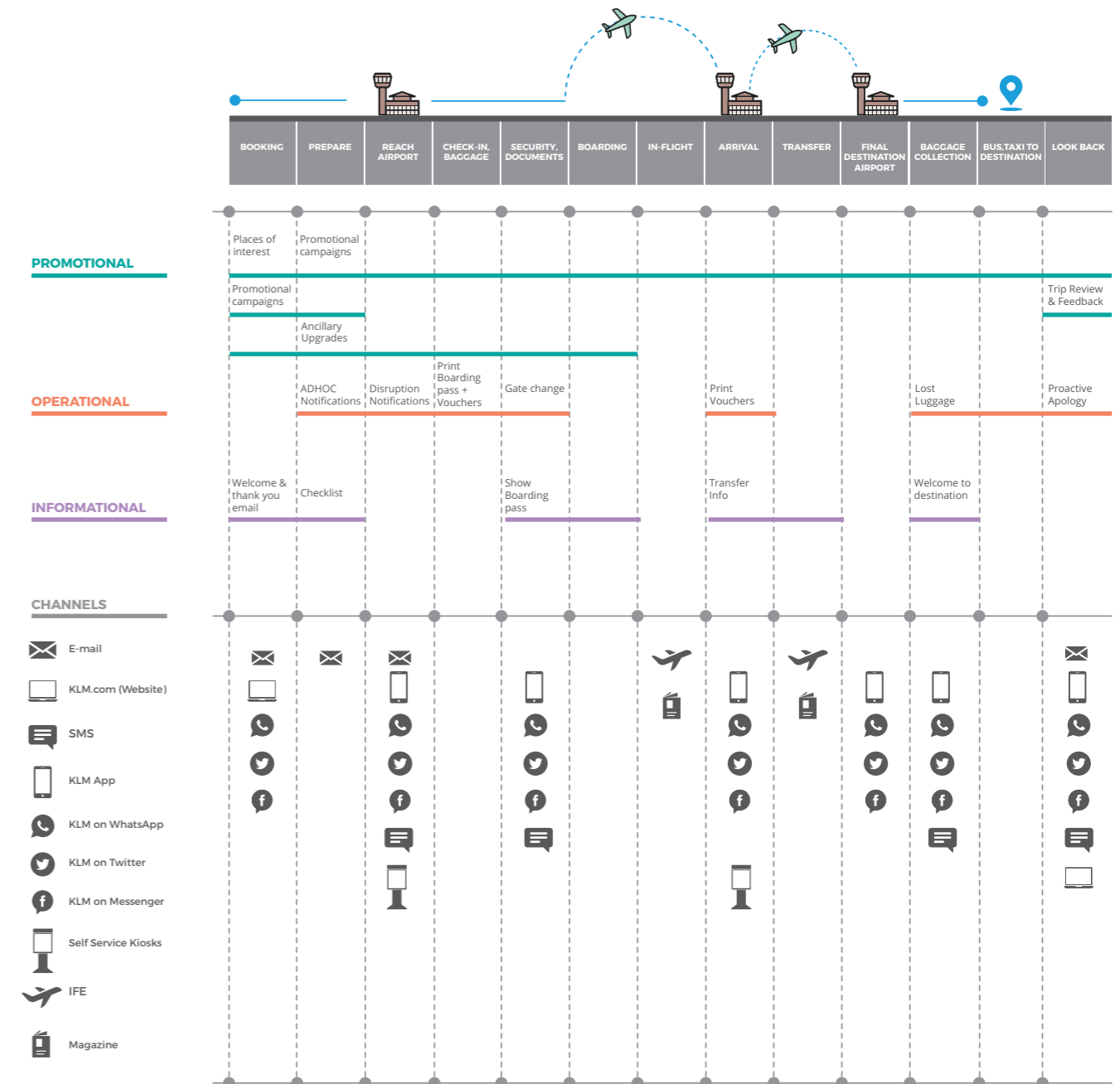
Figure 4.3 - Distribution of information content supplied by KLM along a passengers journey

Information content

The content of the information is one of the primary determinants by which passengers perceive KLM and their journey. In an ideal scenario, the information sent to the passenger should be personal (addressed to the passenger), inform them of the situation and what KLM is doing, inform them about what actions they need to take next and assure them that all their preferences are being honoured and that they will be constantly informed as the situation develops. This particular content is not specific to only disruption scenarios but also non disrupted regular journeys where passengers expect similar types of information content. Figure 4.3.1.1 shows an example of an SMS message sent by KLM.

Information content plays a vital role in reassuring passengers that their journey will go as planned and that their preferences will be honored. Examples of preferences could include a special meal (vegan, gluten free) or a paid upgrade to an extra legroom seat. There can be situations in which these preferences cannot be honoured because of a last minute aircraft change, or a problem with catering. In such situations, passengers expect to be notified as soon as possible so that they are not confronted with the situation later on, leading to a very negative perception about KLM. Unfortunately, most of the time that is the case, because KLM currently does

Figure 4.3.1.1 - Example of text message (SMS) sent by KLM informing passenger about disruptions.

not send out information like this to passengers.

Another aspect of information content is how it is addressed to the passenger. A generic message starting with 'Dear Passenger' or no greeting can be
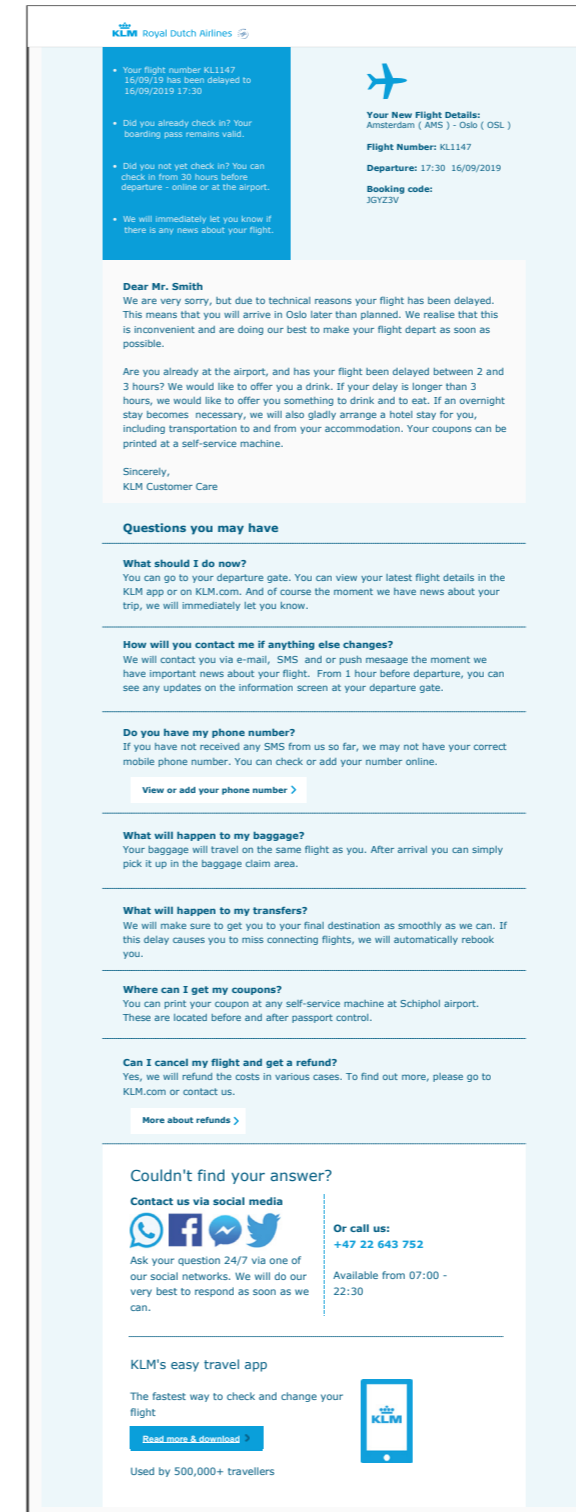
Figure 4.3.1.1 - Example of E-Mail sent by KLM informing passenger about their delayed flight.

interpreted as impersonal and is usually seen as an automated message. The tone of voice, the nature of the information also plays a big role.

As we can see from the examples of the SMS and E-mail sent by KLM, the content of the information greatly differs. The E-mail is very long and does provide an explanation about the situation. This is appreciated by the passengers, however, they also want to know how this situation affects them individually and what their options are or even if their preferences are honoured or not. The answers to some of these questions can be found in the 'Questions you may have' section of the e-mail, but again, this is a generic list of answers which does not match with the passengers information requirement. Furthermore, having to scan and read such a long e-mail might be too cumbersome for passengers and they might end up ignoring it after a point of time.

In the case of the text message (SMS), KLM informs the passengers about the situation but has not provided a reason for the change. In fact, there is no acknowledgment or greeting (who is the message addressed to). Nor have they given any information about preferences or indicated that the passenger will receive an e-mail with more details and options. It is these kinds of gaps in the information content which makes passengers anxious and seek other forms of information and reassurance.

Timeliness of the information

The time of receiving a piece of information is also a very important dimension for passengers. In a disrupted scenario, in case of a delay or cancellation, passengers want to be informed as soon as possible expect to be updated constantly about their situation. The sooner or more proactively the information comes to the passenger, the better prepared they are and therefore, better equipped to make decisions and handle the situation. The timeliness of the message also plays a big role even in non disrupted regular journeys where passengers expect timely updates such as check-in desk information, queue and wait times at security or check-in, departure gate and boarding time and more. KLM does send out some of this information but the timing of sending this information is not consistent across the various different communication channels or touchpoints. Table 4.3.1.2 shows some examples of the kind of information is sent at what time and through what channel.

Proactiveness / Reactiveness of Information

Depending on the situation, passengers expect a certain level of proactivity from KLM. Relevant information based on the phase of the journey that the passenger is in, is expected. This applies both to disrupted and non disrupted journeys. In the case of a disrupted journey, passengers expect very high levels of proactivity from KLM in terms of informing them about the situation, what their options are, what actions they need to take and to reassure them. In case the passengers have initiated a conversation with KLM through either a phone call, or social media, they expect very prompt responses. If they do not receive a prompt response or if the information received is not relevant to their situation, this leads to increased levels of anger and frustration. Even in the cases of a non disrupted journey, passengers expect timely updates with relevant information that will help them navigate their situation better. KLM has established time codes for when to send certain types of information, but these do not always work and more work might be required to improve them (Table 4.3.1.2).

The Information channel

As mentioned earlier, KLM uses four main channels to send messages and inform people namely, SMS, Email, Mobile (KLM App) and Social media (WhatsApp, Facebook Messenger and Twitter). At the time of booking their tickets, passengers are required to enter their email address and phone no. so that KLM can contact them via SMS and Email. In addition, passengers can choose to be informed via social media (WhatsApp, Facebook messenger and Twitter) as well. They can even download the KLM app. Depending on what details the passenger enters and what channel they select, KLM then

Information Group	Information Type	Email ✉	SMS 💬	Mobile App 📱	Social Media	Content	Time of sending
Operational Notifications	Flight Delay	✔	✔	✔	✔	Notify about flight delay before departure	from -14 days to day of departure
	Flight Cancellation	✔	✔	✔	✔	Notify about flight cancellation	from -14 days to day of departure
	Gate Change	✘	✔	✔	✔	Notify about gate change	at 120 mins for LH; 90 mins for SH-MH
	Final Call	✘	✔	✔	✔	Notify passengers who are late for boarding	At airport Time (?)
	Ineligible to board	✘	✔	✘	✘	Notify passengers for whom KLM misses mandatory data	At airport Time (?)
Rebooking Notifications	OPR rebooking (Automatic)	✔	✔	✔	✔	Notify passengers about their rebooking solution done through OPR	From days 364 before to 2 days after scheduled flight
AD-HOC Notifications	OCC AD-HOC notifications	✔	✔	✔	✘	Notify passengers in cases of major crises like strikes, natural disasters	10 days before to 10 days after
Collective Apology	Proactive Apology	✔	✘	✘	✘	E-mail campaign with or without comp.	After arrival

Table 4.3.1.2 - Examples of information types and information content sent through which channel at what time by KLM.
Source: KLM

sends out information accordingly. However, this research has shown that each channel has certain strengths and limitations in terms of what content can be sent and what technical requirements are needed to access that information content (Wi-Fi, SIM). Based on these channel strengths and limitations, there is a variation in the content shared with the passengers and this creates an inconsistency in the overall information experience. There might be instances where a passenger gets an SMS update or a push notification, but the same change or update is not reflected in the app and this again is frustrating for the passenger. Efforts are being done by KLM to unify these channels, but currently, there are no information guidelines to do exactly that.

Conclusions

It is abundantly clear that information forms a fundamental part of the overall experience and perception. However, a lot of that perception depends on what does the message say (content), when did the message arrive (timeliness), did the message come proactively (proactive/reactive) and through which channel did the message get received. Figure 4.3.1.3 shows these four dimensions framework of information perception. Any inconsistency or mismatch between these four dimensions can cause passengers to feel increased levels of stress, anxiety and in some cases even anger and frustration.

For example, a delay SMS informs the passenger about the departure time change, but does not indicate how long the delay is or what the passenger has to do next along with being impersonal. In contrast, a delay email will go into great detail about the nature of the delay and is addressed directly to the passenger. The email also contains a lot of FAQ's which cover most of the questions that the passenger might have in that situation, but it means that the passenger has to scan through the whole email and then determine for themselves if there is any information present which is helpful for them.

In a similar way, passengers can be informed via WhatsApp, Facebook Messenger and Twitter. These channels are slightly better in the sense that passengers can initiate a conversation immediately with KLM in case of any queries or need of help. However, on careful analysis of the content offered by these Social Media Channels also shows a difference in the content offered, the tone of voice and the helpfulness of the information offered. It is a similar situation with the mobile KLM app as well. While it is the most convenient, it can also have problems of its own.

It can therefore be concluded that the information shared with the passengers is not consistent through all the aforementioned channels and neither do they sound the same or convey the same feeling to the passenger (figure 4.3.1.4).

4 Dimensions Framework of Information Perception

Information Content
The absolute content, the way it is structured, the message or notification is designed, tone-of voice and the emotion it generates.

Proactivity / Reactivity in response
Whether the information is delivered proactively (without the passenger asking for it) or reactively (in response to a specific query or request from the passenger).

Information Timeliness
The time it takes for information to reach the passenger. Information when needed to be informed, reassured, generating confidence to take the next step.

Information channel
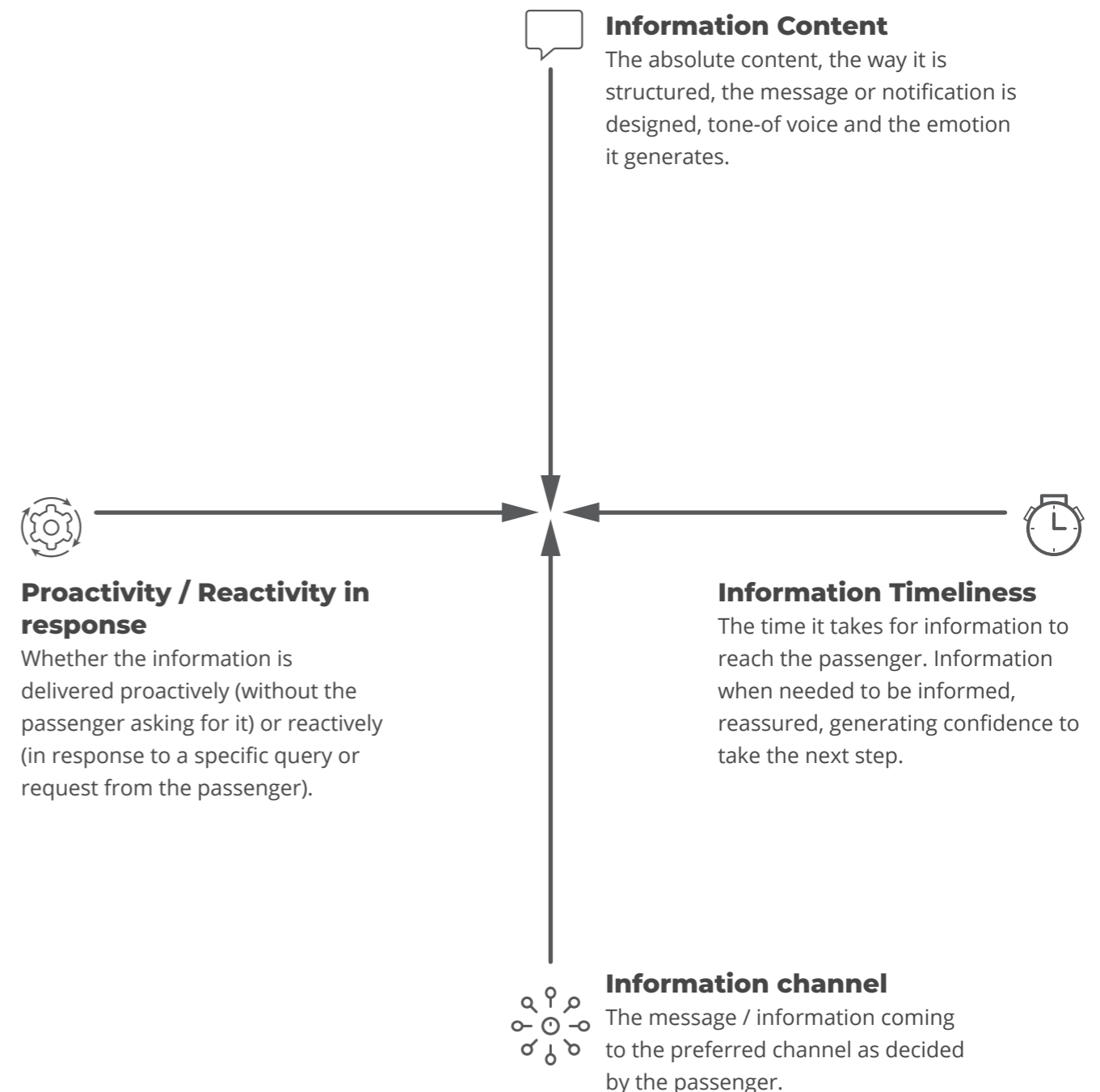The message / information coming to the preferred channel as decided by the passenger.

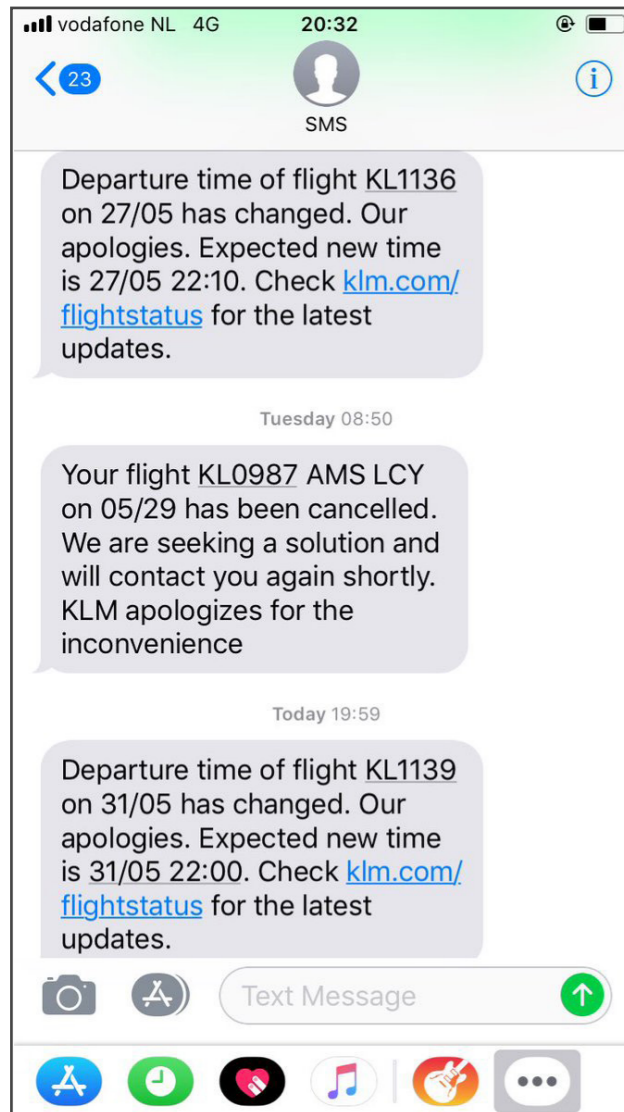Figure 4.3.1.3 - The four dimensions framework of information perception by passengers

Figure 4.3.1.4 - Example of text message (SMS) sent by KLM informing passenger about disruptions.

As mentioned earlier, the content of the messages and the tone of voice also differs from channel to channel. Shown here are four examples of communication - SMS, Email, WhatsApp, and facebook Messenger, all informing the passenger about a delayed or cancelled flight.
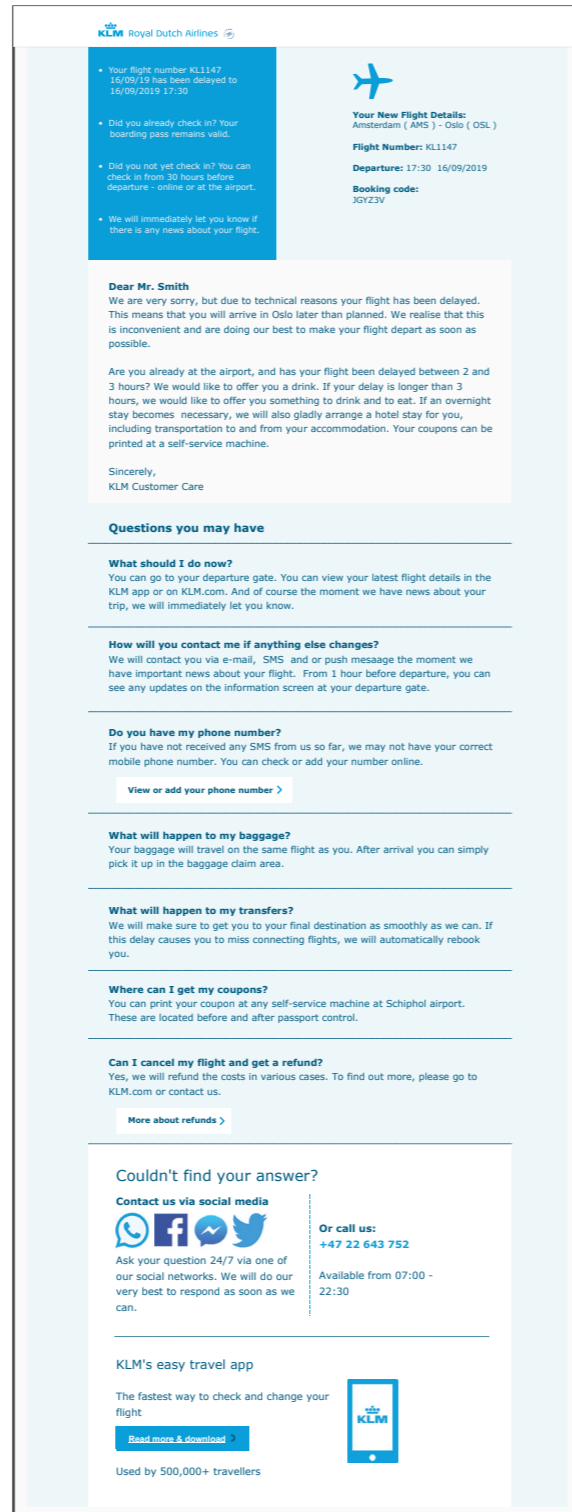

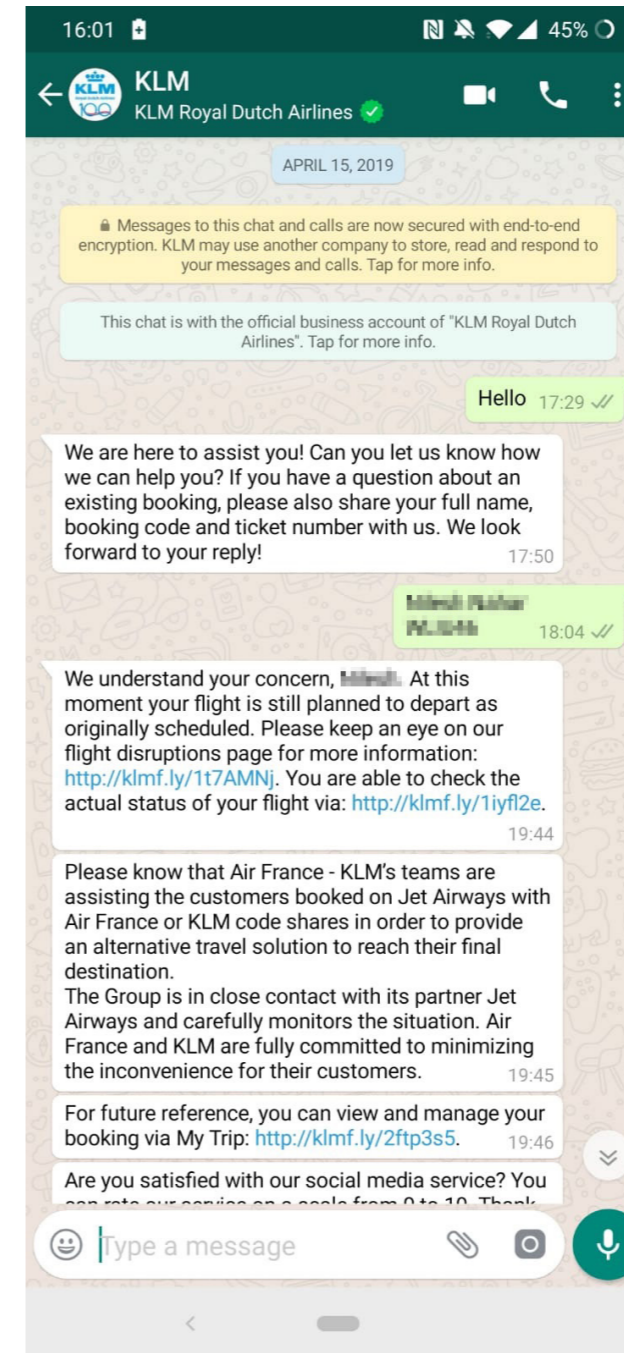Figure 4.3.1.4 - Example of E-Mail sent by KLM informing passenger about their delayed flight.

Figure 4.3.1.4 - Example of a WhatsApp exchange between passenger and KLM
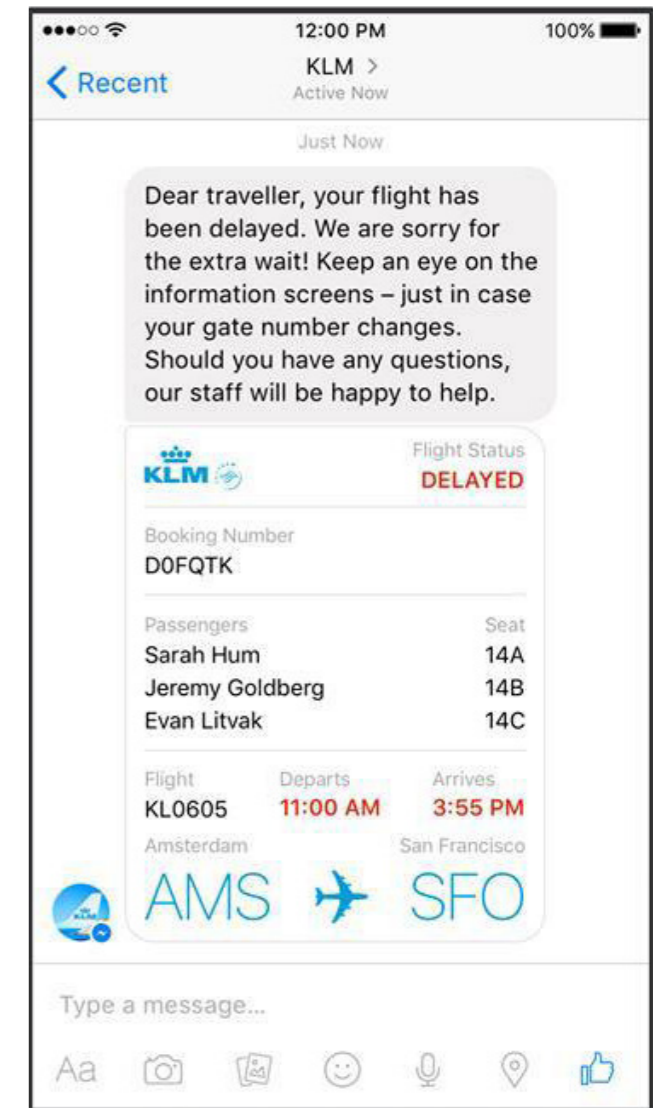
Figure 4.3.1.4 - Example of a Facebook Messenger message from KLM

These examples highlight the inconsistent nature of the communication provided from KLM. This also presents an opportunity to make a design intervention here. This is discussed in more detail in chapter 5.

4.4 DELIVERING BAD NEWS

Passengers do not like it when they have to change their plans suddenly due to a real disruption or if they have to adjust in cases of their expectations not being met such as not getting the meal they specified or the seat that they paid for (Perceived Disruptions). In both these cases, it is increasingly clear that the passenger is informed. Delivering a message that informs a passenger that they have to change their plans or adjust to a situation is called as delivering bad news (figure 4.4). There are different ways by which bad news can be delivered to passengers however, based on sessions conducted with top CEO's, Erica Andersen, came up with the following six insights (Andersen, 2013) -

Speak up. Deliver the message as soon as possible. **(Proactive)**

Be accurate. Don't beat around the bush. Simple, transparent, true, Balanced. **(Acknowledge Situation)**

Take responsibility. Don't play the blame game. **(Accountability)**

Listen. Try to understand why people are angry. **(Empathize)**

Say what you'll do next. Show that you are working on resolving the situation. **(Solution/options)**

Do what you say - Don't just say what you will do, but actually do it and show it

Figure 4.4 - Example of KLM check-in staff informing a passenger about an issue

with actions. **(Action and Assure)**

Based on these guidelines, further literature and desk research was done to get more evidence for these guidelines and to better understand the definition of bad news. Robert J. Bies, a professor of management at Georgetown University's McDonough School of Business spent 20 years researching the meaning of bad news and how it can be delivered within organisations (Bies, R. J. (2013). In his research, he builds upon research done by other researchers about the definition of bad news. According to Bies, bad news can be defined as -

"*information that results in a perceived loss by the receiver, and it creates cognitive, emotional, or behavioral deficits in the receiver after receiving the news*".

Figure 4.4 - Examples of passengers receiving good/bad information through eith one-to-one staff interaction or via other information channels such as E-mail or SMS.

A more relevant version of this definition can be that bad news is any information that adversely alters their expectations for the future (Back et al;2005). In his research he also acknowledges the fact that the perception of bad news depends on a variety of factors. Bad news is determined subjectively by each individual and can be perceived differently by different people. In addition bad news perception is shaped by various contextual and environmental factors (Bies, R.J.,(2013). Upon researching all these aspects for about 20 years, he has come up with a list of ten guidelines of delivering bad news, which he calls the ten commandments of delivering bad news (Bies, 2012). These ten commandments mentioned below can also be translated to the type of messages and information that KLM shares with passengers in the event of a disruption. These ten commandments

are mentioned below in decreasing order-

10. The Tenth Commandment: Thou shalt never surprise.
Disruptions happen often in the airline industry and most of the time, they come as a surprise to passengers leading to sudden increase in stress and anxiety. Passengers want to know the reason for the disruption and would like to know the probability of the disruption being extended longer. This aspect is validated by the findings of the research conducted as well. Therefore, it is necessary to keep them informed so that they are not suddenly surprised if the situation changes.

09. The Ninth Commandment: Thou shalt never delay.
It is vital that the passengers are informed as soon as possible in order to give them time to process the situation

and adjust as they see fit. In a disrupted scenario, the moment KLM gets to know about a disruption or potential disruption, they should inform the passengers.

08. The Eighth Commandment: Thou shalt never hide the facts.
Passengers want real, up-todate, honest and transparent information. Most passengers are quite understanding but their understanding will quickly turn to distrust if the information does not show the reason for the disruption, or if there is a mismatch between what they see and hear and the information they receive by KLM.

07. The Seventh Commandment: Thou shalt always put it in writing.
This commandment is applicable to some extent. Research conducted shows that passengers perceive information on mediums like paper and Email as more official. This is the reason why most passengers prefer to print out their boarding pass or look to their email for more information.

06. The Sixth Commandment: Thou shalt always justify.
Always justify the bad news. In this context. The reason for the disruption should be told to the passengers upfront and further explanation delivered if required.

05. The Fifth Commandment: Thou

shalt always look for the silver lining.
Getting bad news is always an unpleasant experience. But this unpleasantness can be mediated if KLM also provides some bit of positive news or a silver lining which can lessen the impact of the bad news.

04. The Fourth Commandment: Thou shalt always bring solutions.
Passengers always want to know what their options are in case they are stuck in a disrupted journey. They also want to know what KLM is doing in order to rescue them from that situation.

03. The Third Commandment: Thou shalt always remember your multiple audiences.
No two people are alike. Each individual has their personalities, needs and expectations and their own cultural identity. It is important to keep those differences in mind.

02. The Second Commandment: Thou shalt always follow up and follow through.
Timely updates about the situation, proactive assistance and guidance is required until the situation is resolved. It is imperative to show that KLM is doing everything possible to resolve the situation. Once the situation is resolved, it is equally important to let everyone know and in cases provide some positive news as well.

01. The First Commandment: Thou shalt always treat people with respect and dignity.
Everyone expects to be treated with respect and dignity. KLM's own compass holds those values when they say that they care for passengers. These values should follow through in their information as well because in the end, they are communicating to human beings.

Careful analysis of these ten commandments has led to the conclusion that while all ten are important to deliver bad news in a more humane and caring way, some of the commandments take precedence over the other when it comes to KLM's communication to passengers, namely commandments no. 10,9,8,4,3,2,1. These specific commandments as well as the six guidelines set by Erica Andersen will be used in the solutioning process to come up with a way to inform passengers and to show that KLM cares for them.

4.5 CONCLUSIONS

Preferred Information Touchpoint
Passengers prefer their smartphone as their primary information touchpoint to communicate and receive information. The biggest advantage that the smartphone has is that it is always with the passenger so they can access the information at any time and place. The smartphone also has the capability to receive and display information dynamically which is the second advantage of using this touchpoint. Finally, a smartphone gives the user the ability to talk to someone from KLM and also has the ability to remind or alert them in case the situation changes.

Information Types
From the research, it is clear that in cases of disrupted journeys, passengers do not want superfluous information like offers or special deals. What they require is extremly targeted, relevant information which is provided proactively by KLM.

Campaigns and Channels
KLM has a number of information campaigns that they would like to inform the passenger about. However, certain campaigns are useful only in certain situations. The campaigns need to be closly matched with the type of information requirements by the passengers based on their specific circumstances and then pushed forward.

Perception of Information
Research conducted in the project

shows that passengers perceive and judge the value of the information on four dimensions - The content of the information, The timeliness of receiving the information, The proactiveness or Reactiveness of the message and through which channel it was received. These four dimensions have been used to create a preliminary framework of information perception shown in figure 4.3.1.3. In the following chapters, this framework is taken ahead and proposed to be used as a measuring tool which can be used by KLM to evaluate their existing communication systems.

Delivering Bad News
Delivering bad news is never easy. But based on certain guidelines and frameworks suggested by Erica Andersen and Robert J Bies, it is possible to do exactly that while showing the passengers that KLM cares. By being Proactive in informing passengers, taking accountability and responsibility, understanding their specific situation, empathizing with them, suggesting solutions and actually delivering on them, it is possible to show that KLM truly cares for the passenger and has their best interests at heart.

All of these insights are used to define the project and come up with the design opportunities. These are detailed in the next chapter.

05.
DESIGN
OPPORTUNITIES

In this chapter, all the learnings from the previous chapters are used to define the design opportunities for the proposed intervention. This chapter forms the synthesis section of the design project which showcases different methods used to create storyboards, journey maps and experience visions to define both current and future interactions with information communication. Towards the end of the chapter, a final list of design requirements and experience principles will be mentioned which will be used for the final design intervention.

5.1 Journey maps, Verbatim
5.2 Current Experience Vision
5.3 Future Experience Vision
5.4 Experience Principles & Design Requirements

5.1 JOURNEY MAPS

Learnings from the previous chapters highlight the passengers needs in terms of their situation as well as their information needs at each stage of their journey. They also emphasize the importance of delivering good/bad news as quickly as possible in a relevant, transparent way through the smartphone to passengers. Having established these parameters, the next step was to understand how passengers perceive the current form of communication from KLM. Multiple methods were employed to understand and represent this experience in the form of Micro-Action Journey maps (Richardson, A. (2010), verbatim analysis (KLM E-Score, 2019) and finally a vision creation which encapsulates the whole experience (Verganti, 2016). These methods are explained in more detail in the following sections.

Journey Maps Creation
A journey map is a diagram that illustrates the steps a customer goes through while engaging with a company, service, product, online experience, retail experience or any other combination (Richardson, A. (2010). Leveraging learnings and insights from passenger needs research (Chapter 3) and further analysis of specific comments regarding information experience from the E-Score database, a detailed journey map was created. The focus of the journey map was to map out a disrupted journey

but through the process of creating the journey map, it became clear that in order to accurately represent all that a passenger goes through in their journey, it was important to map out the journey from the beginning (from booking a ticket) to all the way to the end of their journey (landing at their final journey). The scenario chosen was that of a disrupted journey where the passenger's first flight is delayed and this causes her to miss her connecting flight.

Journey maps Process
The process of journey mapping started off with creating a persona (Pruitt, J., & Grudin, J. (2003). The persona created was that of a female passenger belonging to the 'Good Start' demand space specified by KLM and the focus of this project. Next, every stage of the journey was first mapped out in Excel and then illustrated as a storyboard to better explain the scenario. Next, her emotions, actions and interaction with different touch points was mapped out. All of this was printed on A3 sheets and together reached a size of almost 11 meters in length. It was highly detailed and showed all the micro actions and interactions the passenger took during her journey. The purpose of creating this storyboard and journey map was to get a holistic view of what a passenger goes through during a disrupted journey and to identify moments where an intervention might help. Sections of the journey map and persona are explained in figure 5.1 and 5.1.1.
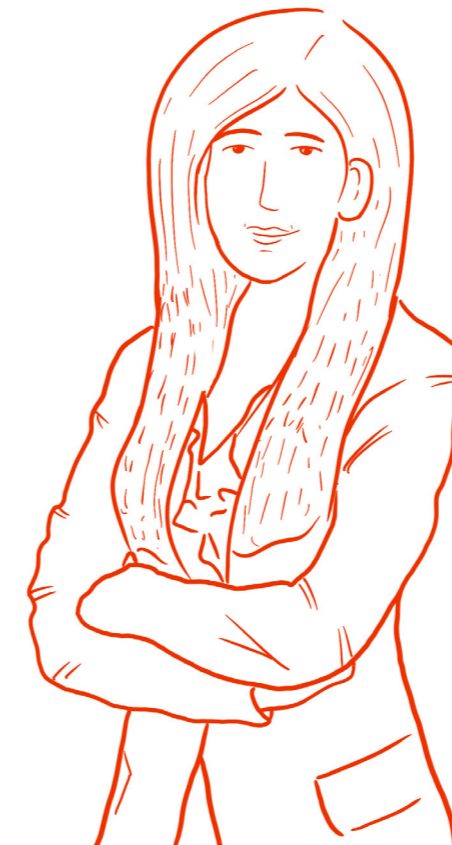
Hi, I'm Sara

"I'm 28 years old, a working professional and I travel occasionally, mostly for leisure."

"It's been a while since I've spent time with my boyfriend, so I've taken a couple of weeks off next month to go and meet him."

"I just hope that nothing goes wrong during my trip because I cannot afford to take more days off or spend extra money."

"I like to make sure that I have everything ready so that my travel is as smooth as possible. "
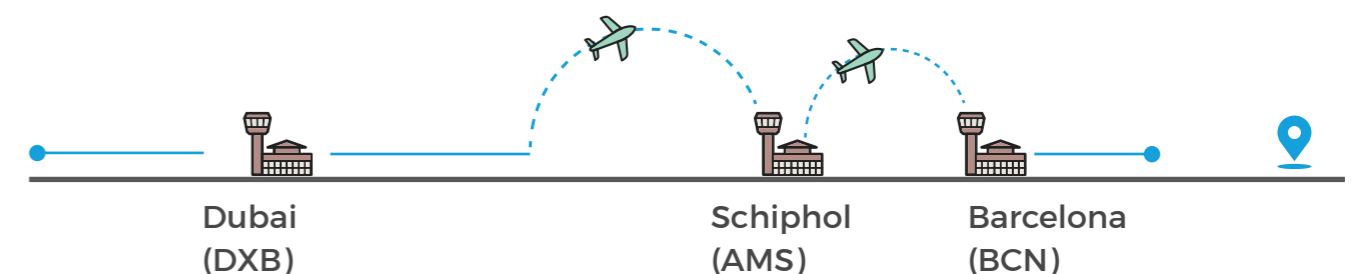

Figure 5.1 - Persona of the passenger Sara who is travelling from Dubai to Barcelona with a transfer at Amsterdam Schiphol to meet her boyfriend.

Figure 5.1.1 - Some frames of the journey storyboard created to illustrate Sara's journey
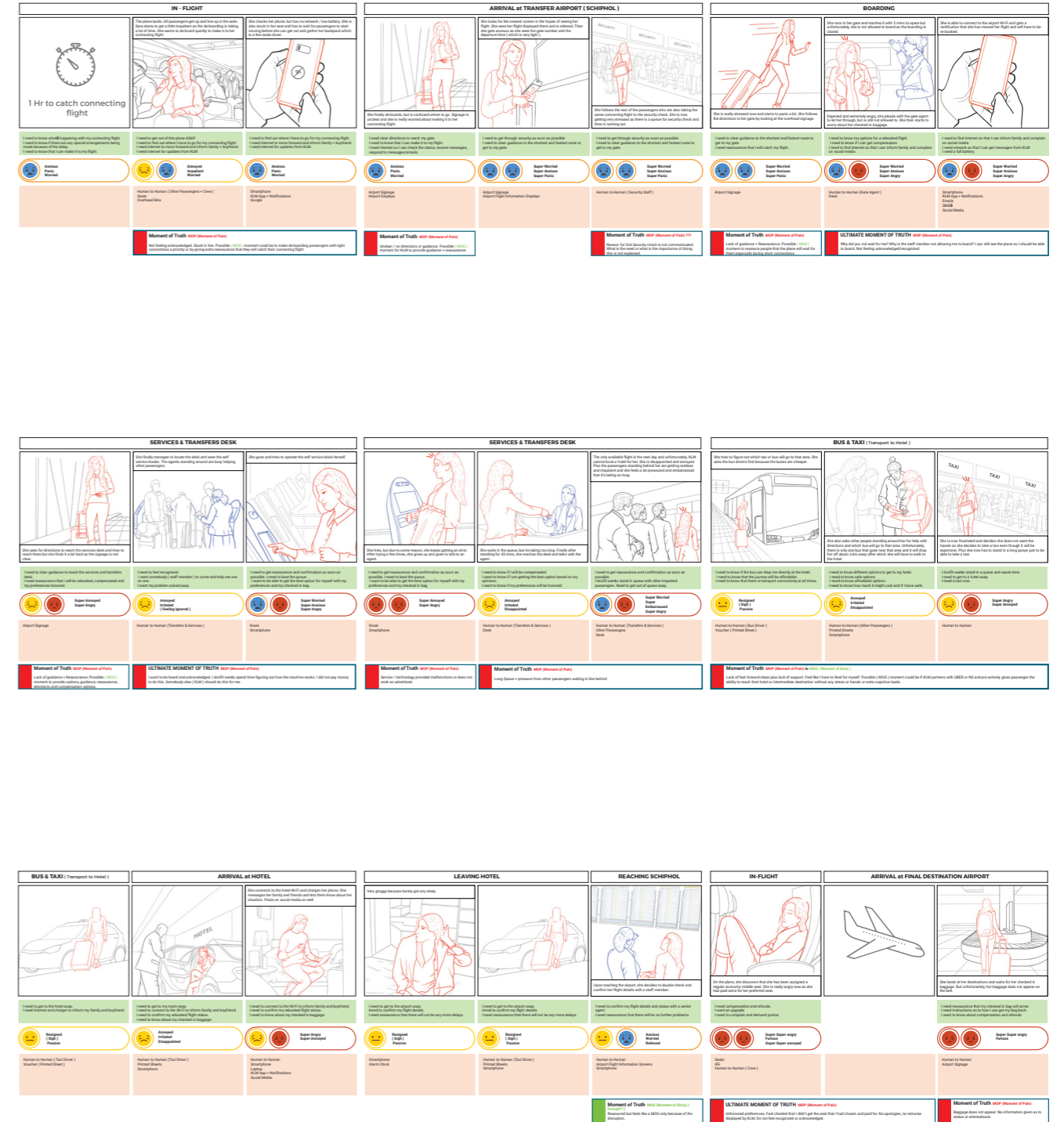

Figure 5.1.1 - Some frames of the journey maps with integrated storyboards, emotion and actions mapping and moments of truths

Journey map learning

As the journey map was made using learnings from the passenger needs research and the analysis of KLM's E-Score database, the journey map created was quite extensive. Analysis of the journey map showed multiple moments in the journey where critical information was needed by the passenger and was either not supplied in time or the passenger had to search for it on her own. It also highlighted instances where her expectations were not met either with information or her preferences. Some of these are highlighted in figure 5.1.1. Critically, this journey map also showed some instances of perceived disruptions such as the time when Sara does not have space to keep her bag in the overhead bins over her seat and instead has to put it a few rows down. Another instance of a perceived disruption shown here is when her meal is served slightly late due to the timings being changed because of the delay.

The overall conclusions from this exercise was that the airline travel experience is a multi sensorial and multi process and services servicescape (Bitner, 1992). Any mismatch between the expectations of the passengers and their actual experience will seriously impact their perceptions about the service as well as the airlines (Fodness, D., & Murray, B. (2007). It was also clear how big a role, proactive and accurate information delivery plays in the whole journey.

Having established the importance of information delivery throughout the journey, the next step was to get a real world understanding of how passengers perceive or experience the information currently shared with them by KLM. In order to do that, a google forms questionnaire was created with samples of text messages sent by KLM to inform passengers and questions were asked based on each message. The scenario chosen was a delay scenario (as mentioned in chapter 2).

Questionnaire

The online questionnaire was designed to understand how passengers perceive the current information from KLM. The questionnaire was designed in the following manner-

First, a scenario was introduced to explain the situation.

Then, based on a particular stage of the journey, a sample of text message was introduced.

Questions were then asked about each message. The questions were designed to measure the passengers perception of the information on two dimensions - rational (Is the information clear and helpful enough for them to take their next steps and emotions (How do they feel when they read the message). To qualitatively measure how participants
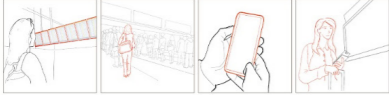
feel after reading the message, a graphical cartoon based self reporting tool developed by Pieter M.A Desmet and Gaël Laurans was used. This tool called PrEmo, is a set of items that represent particular feelings, and participants can select one or more item(s) to describe their current state or indicate how well each item matches their current experience (Laurans, G. and Desmet, P.M.A. (2017). Of the 14 items, 7 were used for the purposes of this test. A sample of the questionnaire is shown in figure 5.2.
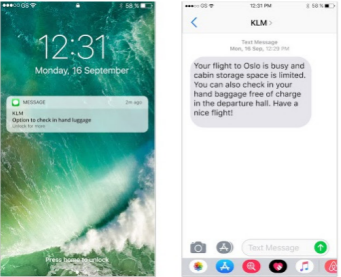
Learnings from Questionnaire

In all 14 participants responded to the questionnaire and detailed what they thought or felt after reading the sample text messages. Some of these responses are illustrated in figure x. Overall, almost all participants thought that the messages were inadequate and had just enough information to help them take their next steps. They did however feel that more information should be provided, especially the reason for their delay and whether the delay would be further extended or not. In terms of how they felt, reading those messages, almost all passengers reported high feelings of anger, stress and not sure of what to do next. However, their feelings of anger and stress diminished a little, once they got the message about their departure gate. Almost all passengers showed increased levels of feeling reassured because this message meant that their delay was over

Figure 5.2 - A section of the questionnaire asking participants feedback on current messages content

and they will get to fly soon.

Overall conclusions

It is clear from this exercise, that the information that the passenger needs may not be supplied or is available at other places and the passenger is expected to gather all the pieces of information and piece it all together. The pieces of information may not come at the time that the passengers need and this leads to that feeling of being lost and not knowing what to do next. Getting these types of messages does help the passengers in this situation, but they expect more information from KLM, especially a transparent and honest reason for the delay. As one passenger remarked - "A little information is good, more is better". These findings and remarks were then taken forward to create a vision to represent the current information experience. This is shown in the next section.

The Current Experience vision

The results of the online questionnaire revealed much and the feedback helped create a vision to represent the current information experience. The current information experience feels like the frustration felt when you have spent hours on trying to complete a complicated jigsaw puzzle, only to find that the last few pieces were missing. This is represented in figure 5.2.1

Current Experience with information communication with KLM feels like -

"The frustration and anger felt when you have spent hours trying to complete a complicated Jigsaw puzzle, only to find the last few pieces missing."

5.3 FUTURE EXPERIENCE VISION

Just as a vision was created to represent the current experience of information communication from KLM, a similar exercise was done to create a vision for the future experience. In order to make this future vision, the learning from the journey maps was used along with inputs from the customer experience team and the disruptions team, as to a desired experience that KLM wishes to happen. These inputs were then collected and evaluated on the KLM Compass values. In the end, it was clear that KLM wants to show passengers that they care about them and that they truly want to make flying a memorable experience for them. Thus, using these inputs, a new future vision was created which represented all those values. The new experience with information and communication should feel like always having a warm, fuzzy, faithful companion with you as you travel on a long desolate road (Figure 5.3).

The qualities showcased by this experience vision are those of a companion (KLM) being faithful, reliable, comforting, and reassuring while showing unconditional love and companionship. These qualities are also embodied in the KLM compass and therefore, serve as good drivers for the new envisioned experience with information communication. Passengers should feel valued and cared for with the information that they receive from KLM. The information should be transparent and honest, thereby, showing unconditional companionship and faithfulness. The content of the information should be personal and relevant to the context of the passengers. Seeing as how having a furry companion makes people feel more comforted and confident, the information content should also inspire similar feelings of confidence and comfort to passengers. Finally, these companions are faithful and stay by their owners side. In a similar way, the information should always be there with the passengers at all points of their journey when they need it.

Future Experience with information communication from KLM should feel like -

"Having a warm, fuzzy and faithful companion with you as you travel on a long desolate road."

Experience Qualities:

Unconditional
Loyal
Comforting
Reassuring
Reliable

5.4 DESIGN REQUIREMENTS

Chapters 2 and 3 dealt with understanding the context and the passenger needs, while chapter 4 dealt with the various different types of information that KLM shares with the passengers and should share with passengers in case the situation changes to that of a disrupted journey. In addition, it was also established that the passengers evaluate or perceive the value of the information received on four dimensions - Information content, information timeliness, proactivity/ reactivity in response and the preferred information channel. Taking the learnings from those chapters as well as learnings from the journey maps and visions, it is now clear that the content of the information is the most important dimension that directly impacts the passengers perception of their journey and also that of KLM. A piece of information can be sent proactively by KLM which reaches the passenger exactly when they need it, through their preferred channel, but if the information is not helpful or contains superfluous information that the passenger does not need, it is considered as impersonal and irrelevant.

Analysis of KLM's existing communication content has also shown that there is no consistency and universal template for all the information that they send. The content of the information varies greatly from campaign to campaign in terms of

what content is shared, the tone of voice and the amount of helpfulness they want to convey in the message. Of course, limitations of technology do play a role in this content variation as it is not possible to send the same amount of content via SMS as compared to that of an e-mail or WhatsApp/FB Messenger. In a similar way, whether a channel needs an internet connection or not also plays an important role.

Further, most departments in KLM such as the Mobile team which oversees the KLM app, the disruption team, The social media team, the customer care team, marketing team all work in Silos with each team or department having their own parameters for information content. This is one of the main reasons why there seems to be inconsistency in the types of information content shared with passengers. That being said, efforts are being taken by KLM to connect all these different departments to come together and create a unified template which can be applicable to all departments. It is here that this project will have the biggest impact as currently there does not exist any guidelines or templates for information content across channels, across departments. Therefore, the goal of this project will be to create a framework or a structure for information content which can be universally applied to all communication channels, with the express hope of making the passenger feel cared for and reassured every step

of the way on their journey. In order to do this, first a set of experience principles and design requirements need to be defined. These are detailed in the next section.

5.4.1 Information Experience Principles

A. Information Content
The absolute content, the way it is structured, the message or notification is designed, tone-of voice and the emotion it generates.

B. Information Timeliness
The time it takes for information to reach the passenger. Information when needed to be informed, reassured, generating confidence to take the next step.

C. Proactive / Reactive Response
Whether the information is delivered proactively (without the passenger asking for it) or reactively (in response to a specific query or request from the passenger.
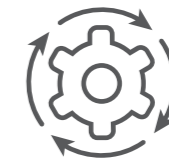
D. Information Channel
The message / information coming to the preferred channel as decided by the passenger.

5.4.2 Information Design Principles

A. Information Consistency
The information is aligned and consistent through all the channels and touchpoints, especially in cases of a disruption.

B. Personalised Information
The information is targeted specifically to each individual passenger keeping in mind their situation and stage of the journey.

C. Contextual Information
There should be no superfluous information. Only relevant and required information from the passenger should be transmitted.

D. Transparent Information
Clear, honest and transparent reasons and explanations should be given in the event of a disruption. Being transparent about what is happening and what will happen (KLM processes), increases the feeling of trust and being taken care of by KLM.

E. Feed forward Information
Information should guide passengers to their next steps and show them their options wherever possible.

5.4.3 Final Design Requirements

To evolve a communication structuring, design and dissemination framework which effectively and consistently delivers the most relevant informational content as expected and desired by passengers under conditions of flight disruption and otherwise.

The effectiveness of such an information framework will be measured by the consistency of the experience delivered to passengers through multiple channels under varying conditions of disruption, both real and perceived, as well as under normal circumstances.

The goal is for this superior information experience to positively impact the passengers' perception of the airline as genuinely caring.

06.
DESIGN
EMBODIEMENT

This chapter is focused on the generation of the proposed information structure framework based on the experience and design requirements detailed in the previous chapter. In this chapter, the idea generation process will be detailed and the final proposed framework will be introduced along with examples of it's use in the various different channels in various different scenarios.

6.1 DESIGN GOAL

To design a guide for sharing proactive and feed forward information with airline passengers during a disruption.

The previous chapters demonstrated the importance of proactive and feed forward information along with the relevant theoretical background and live research conducted during this project. In addition, the limitations and inconsistencies in terms of the information shared with passengers has also been established. Therefore, it is clear that a structure or framework needs to be designed to unify the information content and provide a more coherent and consistent information communication experience to passengers. The next section explains how all the knowledge gathered in the course of this project will be used to design this framework.

6.1.1 Use of knowledge gathered

Core passenger needs from KLM-
- KLM needs to keep sending timely updates.
- KLM should be honest and transparent throughout their journey.
- KLM should always inform the passengers of the next steps that they have to take.
- KLM should always inform the passengers of their options at each stage
- KLM should always compensate the

passenger for unforeseen expenses and if they specifically request for it (provided they are eligible for it).
- KLM should always provide ability to contact someone or have face to face conversations with staff.
- KLM should show that they care for the passenger and have their best interests at heart.

Leveraging the smartphone as a preferred information touchpoint.
Research has shown that the most preferred touchpoint by passengers is their own smartphones because of its ability to dynamically change and display information but also because it is the one touchpoint that is always available with them in person (Lubbe & Louw (2010). Messages and information sent on this touchpoint can be considered more personal and trustworthy.

Receiving only relevant and contextual information.
Information supplied to passengers should not be superfluous with irrelevant elements such as suggesting special offers in the event of a disruption. Instead, the information should only focus on the immediate needs of the passenger at that moment and be

supplied accordingly.

Information should be personalised and transparent.
The information should acknowledge the individual passenger as well as acknowledge the situation they are in. In addition, honest, transparent reasons and explanations should be given for a given delay or cancellation situation.

Information should be feed forward.
The information should always guide the passengers to their next steps and also show them their options wherever possible.

Delivering bad news.
Delivering bad news is not easy. However, studies have shown that the most promising approach to delivering bad news is to proactively inform everyone as soon as possible, to be transparent and honest, to take responsibility for the situation, to understand and empathize with the individual passenger and to suggest and take concrete action (Andersen, 2013).

Tone of voice
Finally, the tone of voice of the messages, the content should feel human and not

like an automated message generated by a chatbot. It should sound friendly yet calming and reassuring to passengers. It should display all the experience qualities as derived from the KLM compass as well as the future experience vision exhibited in the previous chapter - unconditional care, loyal, reassuring, comforting and reliable. In essence, it should make the passengers feel recognised and cared for by KLM.

Thus, with all these factors, a half day brainstorming and idea generation session was conducted at KLM headquarters. This is detailed in the next section.

6.2 IDEA GENERATION

A brainstorming session was conducted at KLM headquarters which consisted of seven participants. All participants were service designers working in different departments at KLM. The workshop started with a brief introduction about the topic followed by a brief walkthrough of a delay journey with the help of the storyboards and journey maps created. Following this, three 'How Might We's' (HMW) were introduced, each with their own interaction vision. The three how might we's were -

01. How might we show care for passengers through information and communication during a disrupted journey?
The interaction vision for this HMW is shown in figure 6.1.1. The interaction should feel like *Your partner preparing and serving you breakfast in bed, after a tough day at work the night before.* The reason why this vision was used was because this vision shows care, empathy, intimacy, proactiveness and in a way, a reversal of roles.

Figure 6.1.1 - Interaction vision representing what showing care can mean for KLM.

02. How might we delight passengers using information and communication all through their disrupted journey?
The interaction vision for this HMW is shown in figure 6.1.2. The interaction should feel like *The joy of discovering a load of money while cleaning the couch.* The reason why this vision was used was because it shows the joy of an unexpected surprise.

Figure 6.1.2 - Interaction vision representing what delighting passengers can feel like for KLM.

03. How might we reassure passengers using information and communication all through their disrupted journey?
The interaction vision for this HMW is shown in figure 6.1.3. The interaction should be like *A parent standing behind as their child learns how to ride a bike.* The reason for using this vision is because it shows the reassurance, trust and protection that the child feels knowing their parent is right behind them and that no matter what happens, they will always be there to take care of them.

Figure 6.1.3 - Interaction vision representing what reassuring passengers can feel like for KLM.

Based on these three HMW's , a total of almost 30 unique ideas were generated. Towards the end of the workshop, each participant was asked to rank three concepts each which they felt would have the most impact, but also be most feasible and viable from KLM's point of view. The results from the workshop highlighted the need to acknowledge the person and the situation, to advise them on what to do next, to help them by guiding them, and to show them that KLM cares for them. These results were then taken ahead and refined through multiple iterations to finally become the groundwork for the Asix structure for information content which will be introduced in the next section.

6.3 THE CONCEPT

structure | KLM

The results of the workshop gave suggestions for how information can be structured in a way that it's more meaningful and impactful to the passenger. Care was also taken to incorporate all the knowledge gathered so far in the project as specified in the previous section. Thus, the Asix structure for information content was created. The Asix structure consists of six A's namely - Acknowledge, Advise, Assure, Assist, Act and Assess (Figure 6.3). These elements are explained in greater detail below.

Acknowledge - Greet the passenger. Acknowledge and inform the passenger about the problem/adverse/disrupted situation. Engage and get their attention.

Advise - Advise the passenger on what to do next. When, where and how. If required, share why as well.

Assure - Assure the passenger by showing options, actions to be taken or are being taken by KLM to mitigate the situation.

Assist - Assist the passenger by guiding them and providing them with timely updates on the developing situation and circumstances.

Act - Specify the actions that the passengers have to take in order for KLM to deliver the desired result and experience.

Assess - Acknowledge the impact of the disruption on the passengers plans and commitments and collect feedback on KLM's attempts to help the passenger through the experience. Close the feedback loop.

Acknowledge:
Greeting. Acknowledge and announce the problem / adverse / disrupted situation, engage and get the passenger's attention

Advise:
Advise the passenger on what to do next, where, when and how, share why if relevant

Assure:
Assure the passenger by offering options/ showing the action taken / to be taken to mitigate the situation

Assist:
Assist the passenger by guiding them + providing timely updates on the developing situation and circumstances

Act:
The actions the passengers have to take in order to help KLM deliver the desired result and experience

Assess:
Acknowledge the impact of the disruption on the passenger's plans and commitments, and collect feedback on KLM's attempt to help the passenger through the experience.

It is interesting to note that not all six elements are required to be present in all messages at all times. Depending on the situation of the passenger and their stage of the journey, only some of the elements of this structure are required. Figure 6.3.1 shows a comparison of an existing message sent by KLM and the new proposed one with the asix structure along with the inputs from the knowledge gathered. Figure 6.3.2 shows a cross section of the message with the various elements highlighted.

Original Message

Text Message
Mon, 16 Sep, 12:51 PM

Departure time of flight KL1147 on 16/09 has changed. Our apologies. Expected new time is 16/09 17:30. Check klm.com/flightstatus for the latest updates.

asix

Dear Ms. Smith, due to bad weather in Oslo we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. We have provided more details in our e-mail sent to your registered id.

We sincerely apologise for this delay and its impact on your plans. We would like to offer you complementary snacks/beverages up to Euro 10. Please use any of the blue kiosks to print your food voucher by keying in your PNR: JGYZ3V.
We will keep you informed as the situation develops.

Figure 6.3.1 - The original delay message currently sent by KLM.

Figure 6.3.1 - A delay message composed on the basis of the new proposed Asix structure.

ACKNOWLEDGE

Dear Ms. Smith, due to bad weather in Oslo we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. We have provided more details in our e-mail sent to your registered id.

ASSURE

We sincerely apologise for this delay and its impact on your plans. We would like to offer you complementary snacks/beverages up to Euro 10. Please use any of the blue kiosks to print your food voucher by keying in your PNR: JGYZ3V.

ADVISE

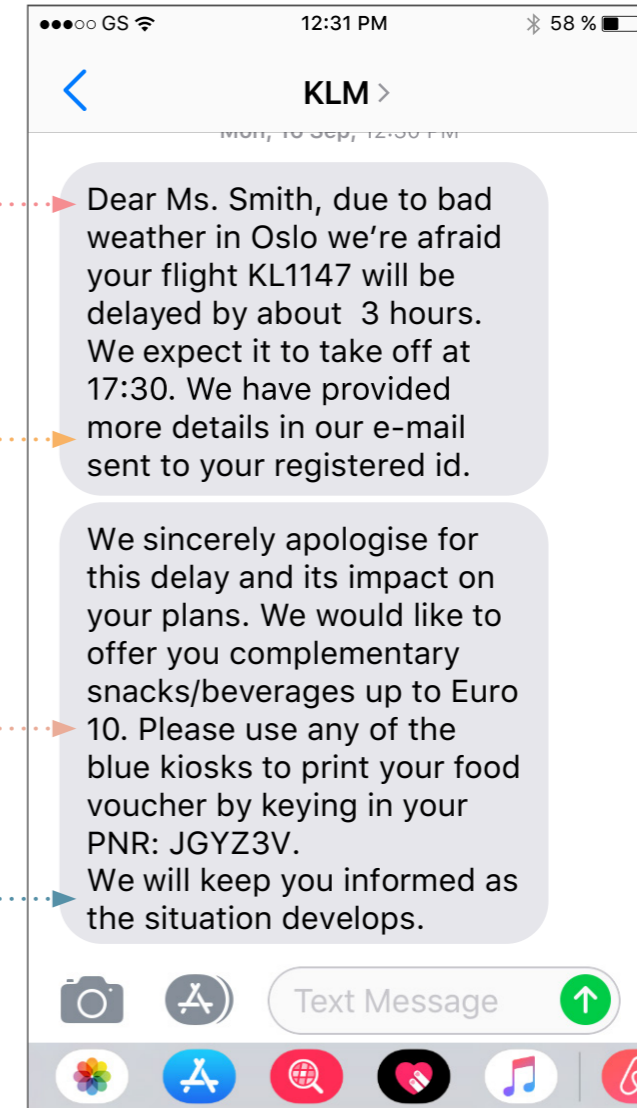We will keep you informed as the situation develops.

ASSIST

Figure 6.3.2 - A crossection of the message composed based on the Asix structure.

Knowledge Used

Passenger is recognised and information is transparent, contextual and relevant.

Information is actionable and the passenger is given suggestions for what to do next.

The impact of the disruption on the passengers plans is acknowledged.

Along with delivering bad news, genuine effort is taken by providing the passenger with some form of compensation.

Tone of voice is friendly, calm and reassuring - more human.

Reassurance is provided in the form of acknowledging the situation and commitment to providing more information in a timely manner as the situation develops.

The message comes directly to the passenger on their phone and is addressed to them.

In a similar fashion, the e-mails that KLM sends were also analysed and redesigned based on the Asix structure. Figure 6.3.3 shows the comparison between the original emails sent by KLM and the new redesigned e-mails based on the Asix structure. Examples of how the Asix structure is utilised in actual communication is illustrated in the following sections. Samples of existing SMS and Emails have been taken and redesigned based on the Asix structure and shown their application in four different scenarios.

Original E-mail

Knowledge Used

Passenger is recognised and information is transparent, contextual and relevant.

Information is actionable and the passenger is given suggestions for what to do next.

The impact of the disruption on the passengers plans is acknowledged.

Special care is given to acknowledge the passengers preferences and to reassure them that they will be taken care of.

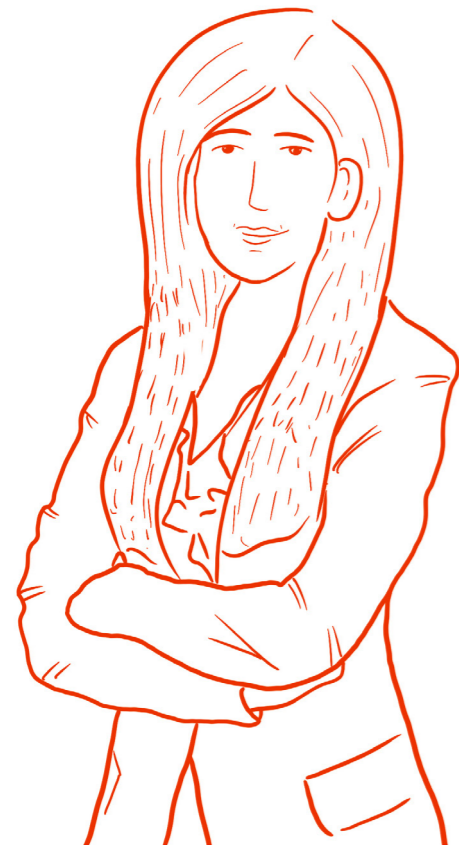Along with delivering bad news, genuine effort is taken by providing the passenger with some form of compensation.

Tone of voice is friendly, calm and reassuring - more human.

Reassurance is provided in the form of acknowledging the situation and commitment to providing more information in a timely manner as the situation develops.

The message comes directly to the passenger on their phone and is addressed to them.
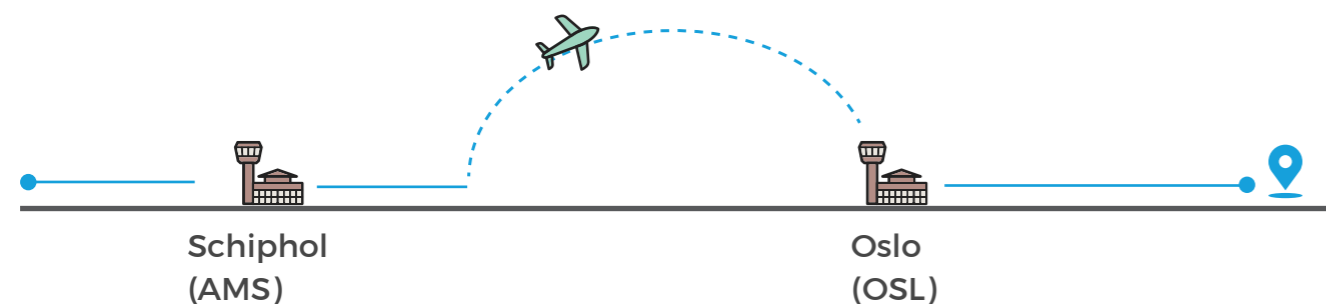
6.4 NO DISRUPTION SCENARIO

Hi, I'm Sara

"I'm 28 years old, a working professional and I travel occasionally, mostly for leisure."

"It's been a while since I've spent time with my boyfriend, so I've taken a couple of weeks off next month to go and meet him."
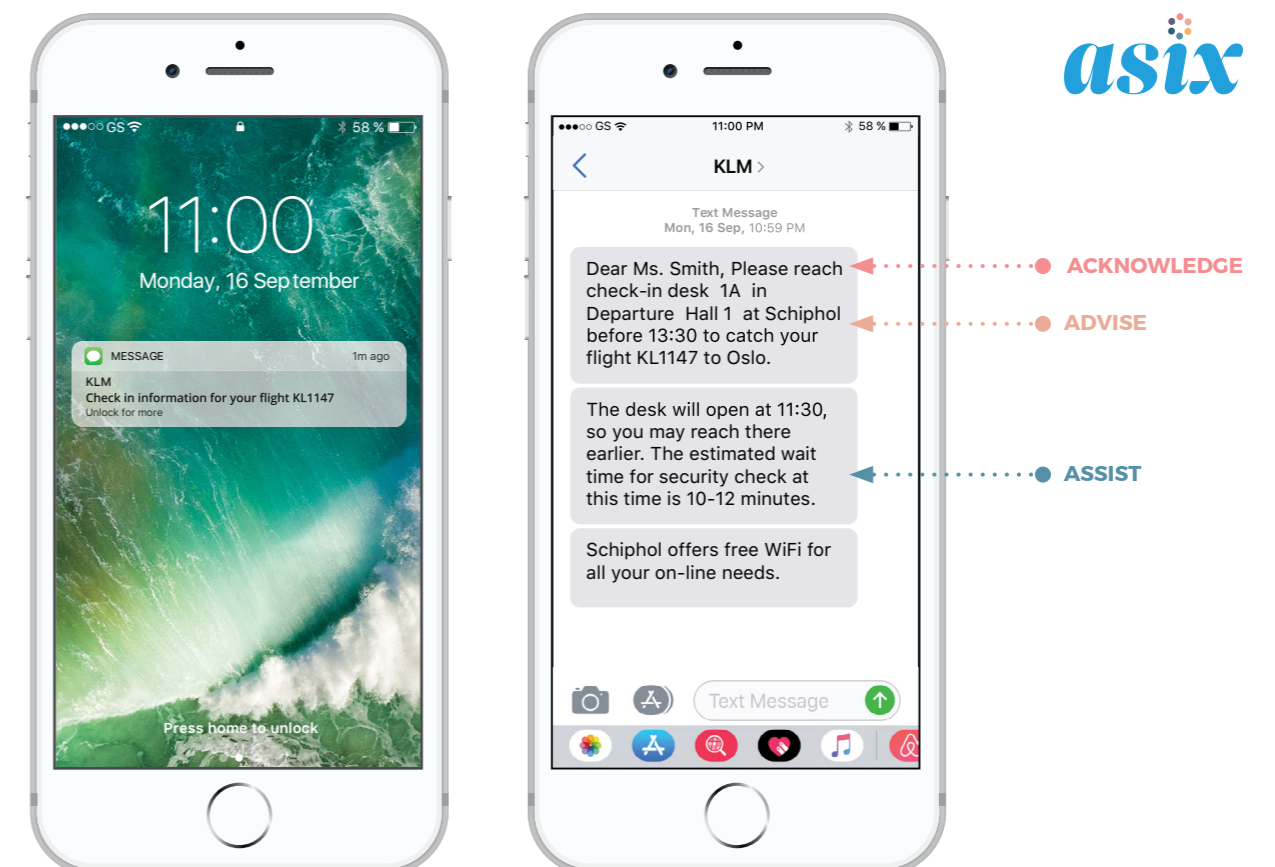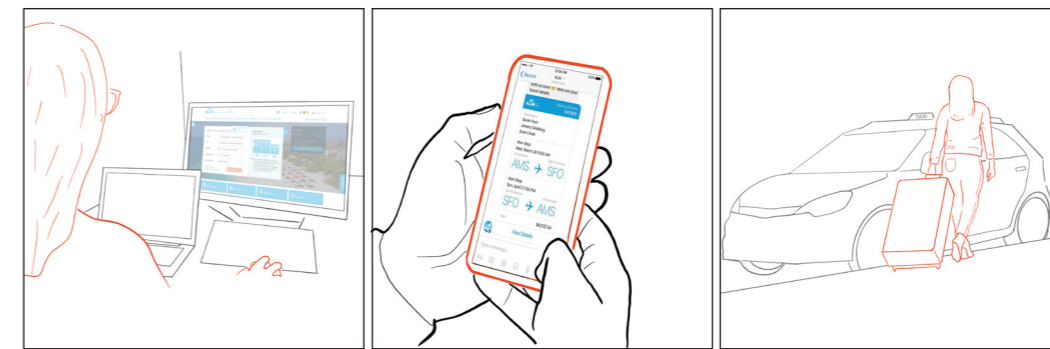
"I just hope that nothing goes wrong during my trip because I cannot afford to take more days off or spend extra money."

"I like to make sure that I have everything ready so that my travel is as smooth as possible. "

Schiphol (AMS)

Oslo (OSL)

Day of travel: Reaching Schiphol

Sara's flight to Oslo departs at 2:30 PM. Before leaving, she checks her phone to see if there are any new messages from KLM. Anticipating long lines at check-in and bag drop, she decides to leave a little early. She books a taxi to reach Schiphol. On the way to the airport, she receives a message from KLM giving her information regarding check-in for her flight.

asix

11:00
Monday, 16 September

MESSAGE   1m ago
KLM
Check in information for your flight KL1147
Unlock for more

Press home to unlock

KLM

Text Message
Mon, 16 Sep, 10:59 PM

Dear Ms. Smith, Please reach check-in desk 1A in Departure Hall 1 at Schiphol before 13:30 to catch your flight KL1147 to Oslo.   ← **ACKNOWLEDGE**
      ← **ADVISE**

The desk will open at 11:30, so you may reach there earlier. The estimated wait time for security check at this time is 10-12 minutes.   ← **ASSIST**

Schiphol offers free WiFi for all your on-line needs.

Text Message

Day of travel: Check-in and Security check

Sara's happy she received her check-in information beforhand. Now she doesn't have to waste time looking at the flight information screens. She proceeds to check-in, drops off her bag and proceeds to security check. She already knows how long security check might take and is pretty calm. After security she has some time to relax so she decides to have some coffee at a cafe. Approximately, 1hr before her flight departs, she receives another message from KLM.

13:16
Monday, 16 September

MESSAGE   1m ago
KLM
Boarding starts in 15 mins from Gate C5
Unlock for more

Press home to unlock

01:16 PM   58 %

KLM

Text Message
Mon, 16 Sep, 01:15 PM

Dear Ms. Smith, boarding will start soon in 15 mins. Your flight KL1147 to OSLO will depart from Gate C5. Please reach the gate before it closes at 17:05.   → **ACKNOWLEDGE**
                                                                        → **ADVISE**

Schiphol being a silent airport, so no announcements will be made. Please keep checking the status of your flight on the information screens.   → **ASSIST**

Our flight crew is eager to make your flight as comfortable as possible. Enjoy your flight!

Text Message

asix

Day of travel: Take off and Landing at Oslo

Sara is quite happy with the message as it gives her enough time to finish her coffee and make her way to her gate for boarding. The flight departs on time. Soon, her flight lands in Oslo. A few minutes after disembarking the plane, she receives a message from KLM informing her about the belt number where her checked-in bag will appear. Though they made a similar announcement in the flight, she is still glad to get this message.

16:16
Monday, 16 September

MESSAGE   1m ago
KLM
Welcome to Oslo, bags will arrive at Belt 6
Unlock for more

Press home to unlock

04:16 PM   58 %

KLM

Text Message
Mon, 16 Sep, 04:15 PM

Dear Ms Smith,
Welcome to Oslo. You may pick up your checked in luggage from Belt 6 in the arrival hall. We hope you had a pleasant flight.   → **ACKNOWLEDGE**
                                                                        → **ADVISE**

Text Message

asix

6.5 DELAY SCENARIO

Schiphol
(AMS)

Oslo
(OSL)

Day of travel: Reaching Schiphol

Sara's flight to Oslo departs at 2:30 PM. Before leaving, she checks her phone to see if there are any new messages from KLM. Anticipating long lines at check-in and bag drop, she decides to leave a little early. She books a taxi to reach Schiphol. On the way to the airport, she receives a message from KLM giving her information regarding check-in for her flight.
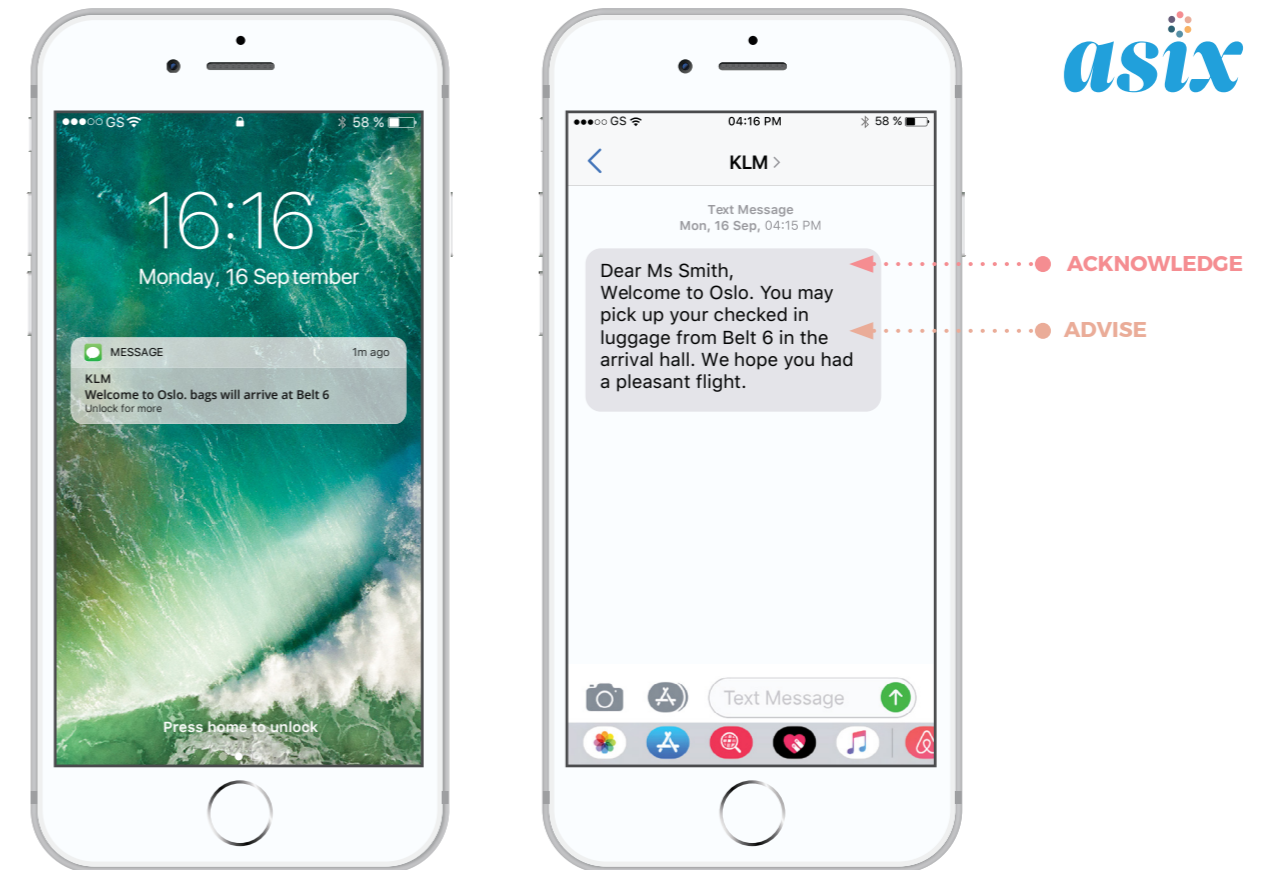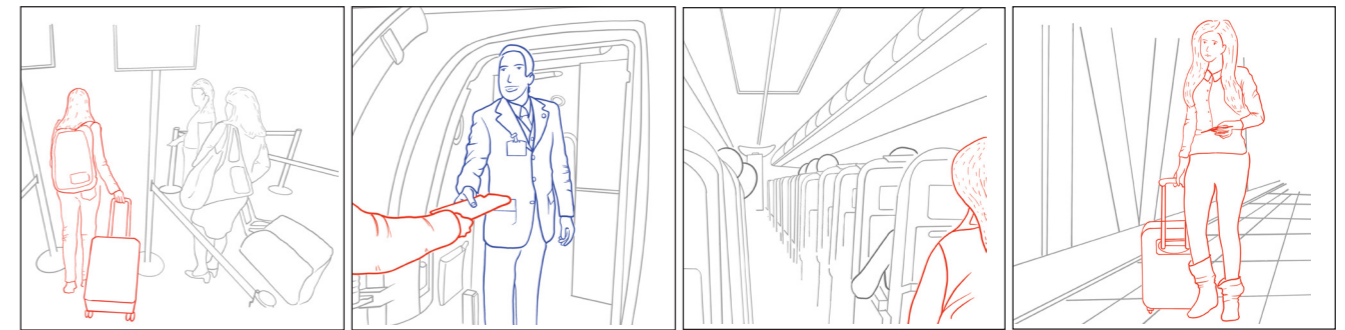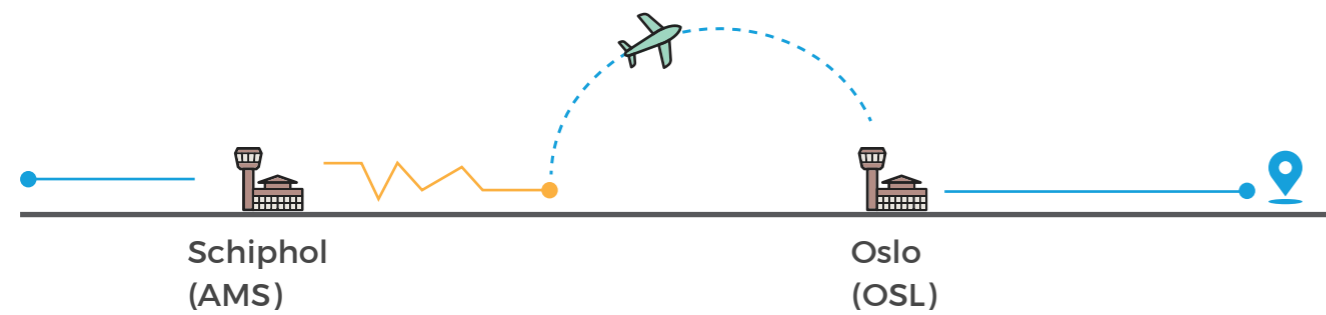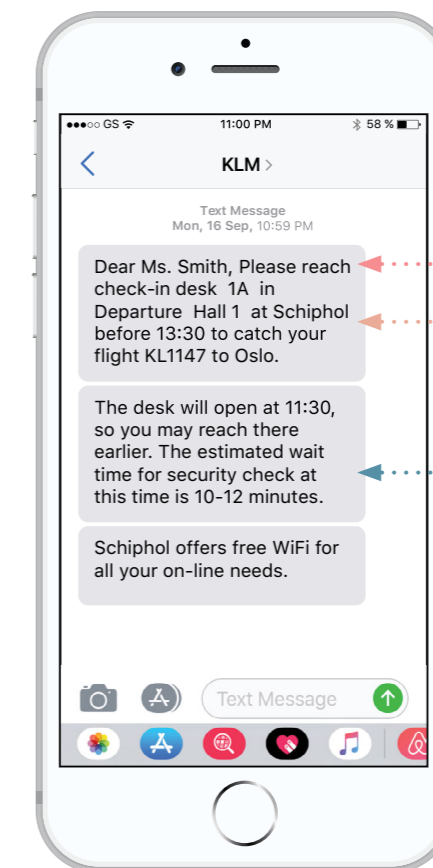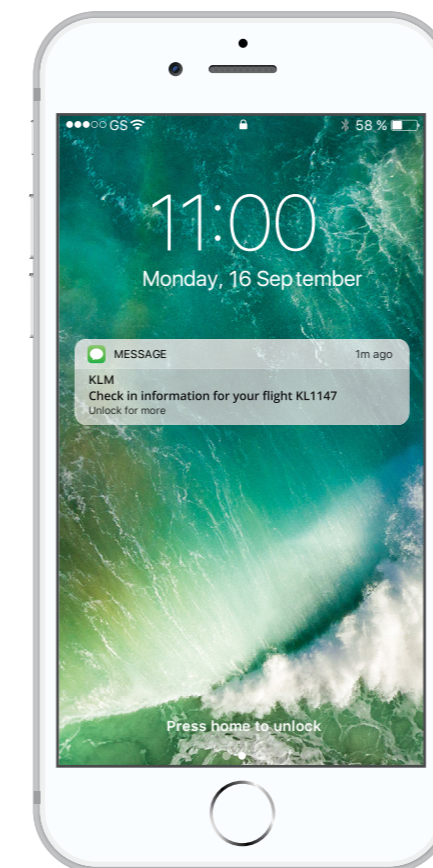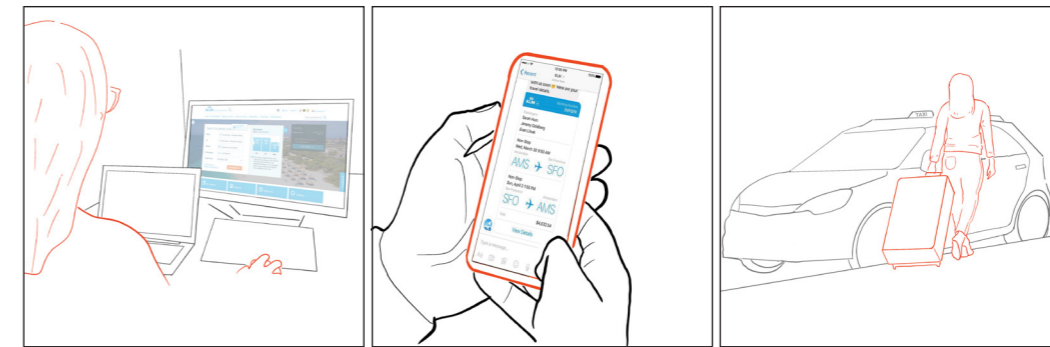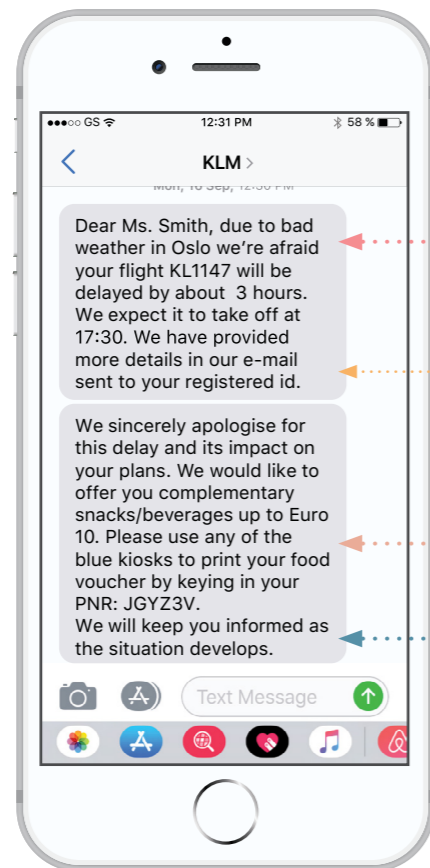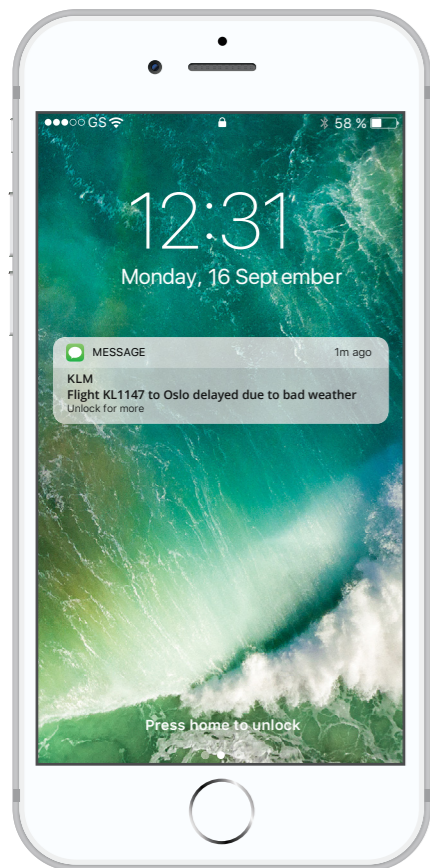

ACKNOWLEDGE

ADVISE

ASSIST

Day of travel: Check-in, Delay notification

Sara's happy she received her check-in information beforehand. Now she doesn't have to waste time looking at the flight information screens. She proceeds to check-in, drops off her bag and proceeds to security check. She already knows how long security check might take and is pretty calm. Just after security check, she receives a message informing her that her flight to Oslo is delayed due to weather.

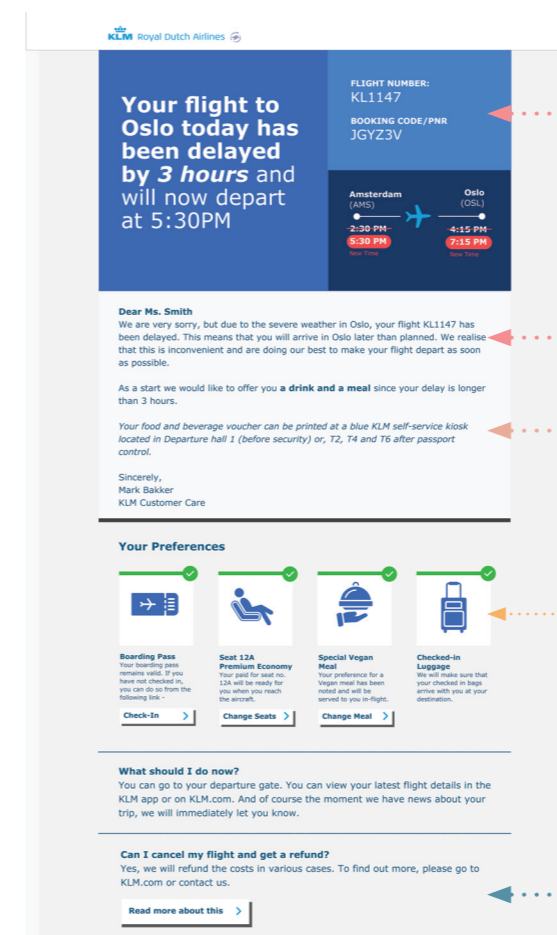Dear Ms. Smith, due to bad weather in Oslo we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. We have provided more details in our e-mail sent to your registered id. — **ACKNOWLEDGE**

— **ASSURE**

We sincerely apologise for this delay and its impact on your plans. We would like to offer you complementary snacks/beverages up to Euro 10. Please use any of the blue kiosks to print your food voucher by keying in your PNR: JGYZ3V. — **ADVISE**

We will keep you informed as the situation develops. — **ASSIST**

Day of travel: Food voucher, Delay notification

Sara is not happy about the delay because it means she will have to change her plans in Oslo. She is glad though that KLM is making an effort to make her feel better and is offering a food and beverage voucher upfront. In addition, she checks her email and it mentions her preferences as well. She is still angry about the delay, but she is glad that KLM remembers her preferences and is making an effort to make sure that she gets them in-flight.

Your flight to Oslo today has been delayed by 3 hours and will now depart at 5:30PM

FLIGHT NUMBER: KL1147
BOOKING CODE/PNR: JGYZ3V

Amsterdam (AMS) — Oslo (OSL1)
2:30 PM / 5:30 PM — 4:15 PM / 7:15 PM
— **ACKNOWLEDGE**

Dear Ms. Smith
We are very sorry, but due to the severe weather in Oslo, your flight KL1147 has been delayed. This means that you will arrive in Oslo later than planned. We realise that this is inconvenient and are doing our best to make your flight depart as soon as possible.

As a start we would like to offer you a **drink and a meal** since your delay is longer than 3 hours.

Your food and beverage voucher can be printed at a blue KLM self-service kiosk located in Departure hall 1 (before security) or, T2, T4 and T6 after passport control.
— **ACKNOWLEDGE**
— **ADVISE**

Sincerely,
Mark Bakker
KLM Customer Care

Your Preferences

Boarding Pass / Seat 12A Premium Economy / Special Vegan Meal / Checked-in Luggage
— **ASSURE**

What should I do now?
You can go to your departure gate. You can view your latest flight details in the KLM app or on KLM.com. And of course the moment we have news about your trip, we will immediately let you know.

Can I cancel my flight and get a refund?
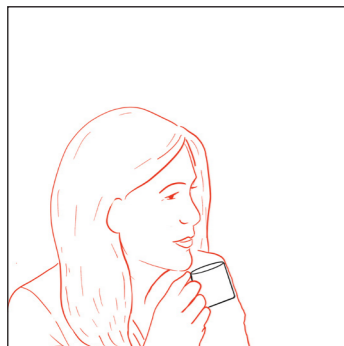Yes, we will refund the costs in various cases. To find out more, please go to KLM.com or contact us.
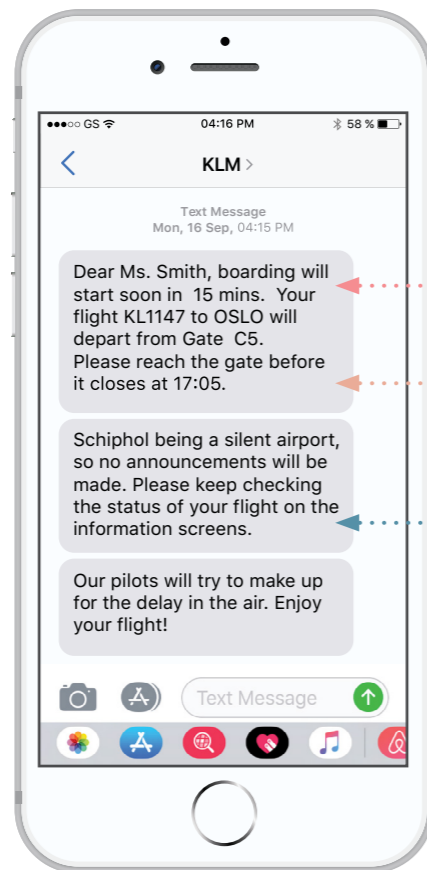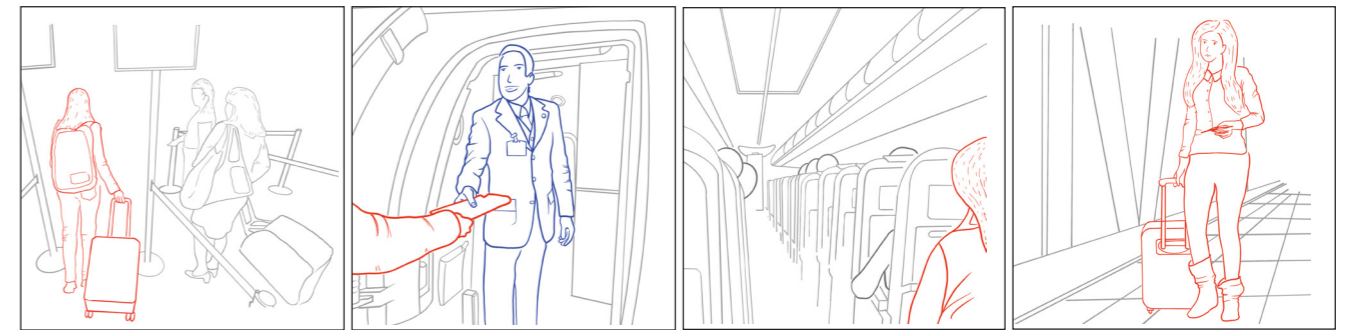— **ASSIST**

Day of travel: Check-in and Security check

Seeing as her flight is now delayed by 3 hrs, Sara decides to spend time at the airport. It does not make sense for her to go back home. Later, approximately, 1hr before her flight departs, she receives another message from KLM giving her an update about her boarding time and get. She is very happy to receive this message because it is proof that her flight will now take off and not be further delayed.

16:16
Monday, 16 September

MESSAGE   1m ago
KLM
Boarding starts in 15 mins from Gate C5
Unlock for more

Press home to unlock

04:16 PM
KLM ›

Text Message
Mon, 16 Sep, 04:15 PM

Dear Ms. Smith, boarding will start soon in 15 mins. Your flight KL1147 to OSLO will depart from Gate C5. Please reach the gate before it closes at 17:05.   ····· **ACKNOWLEDGE**

···· **ADVISE**

Schiphol being a silent airport, so no announcements will be made. Please keep checking the status of your flight on the information screens.   ···· **ASSIST**

Our pilots will try to make up for the delay in the air. Enjoy your flight!

Text Message

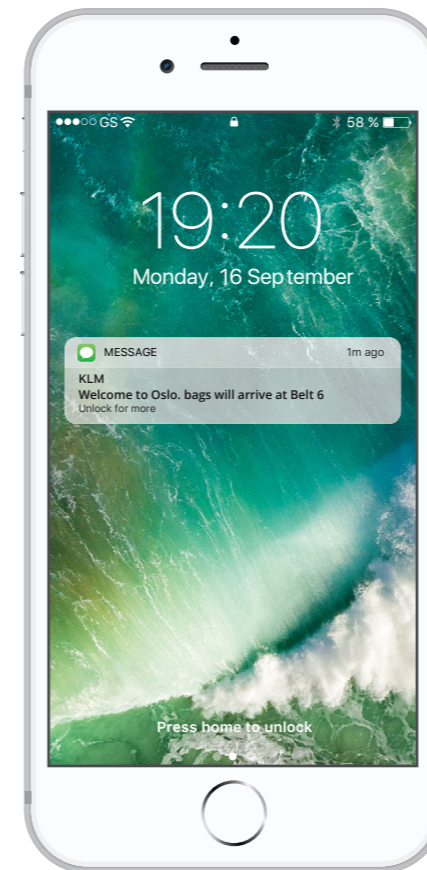*asix*

Day of travel: Take off and Landing at Oslo

Sara is relived that she can now finally depart. She is able to board and her flight soon departs at the designated time. Soon, her flight lands in Oslo. A few minutes after disembarking the plane, she receives a message from KLM informing her about the belt number where her checked-in bag will appear. Though they made a similar announcement in the flight, she is still glad to get this message.
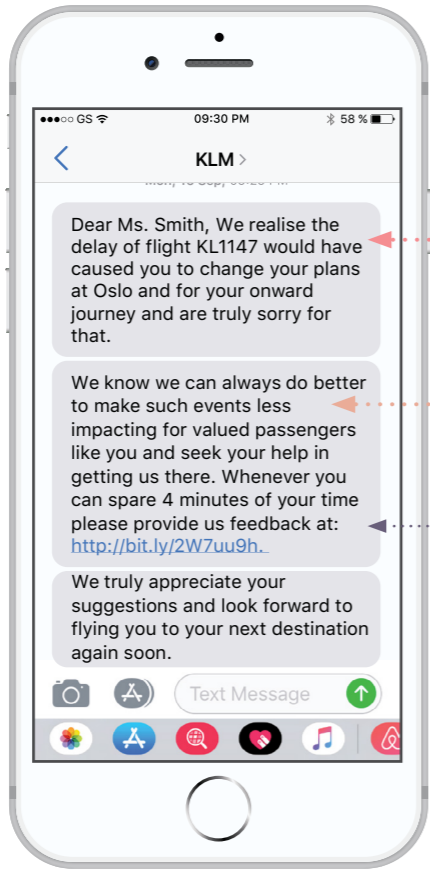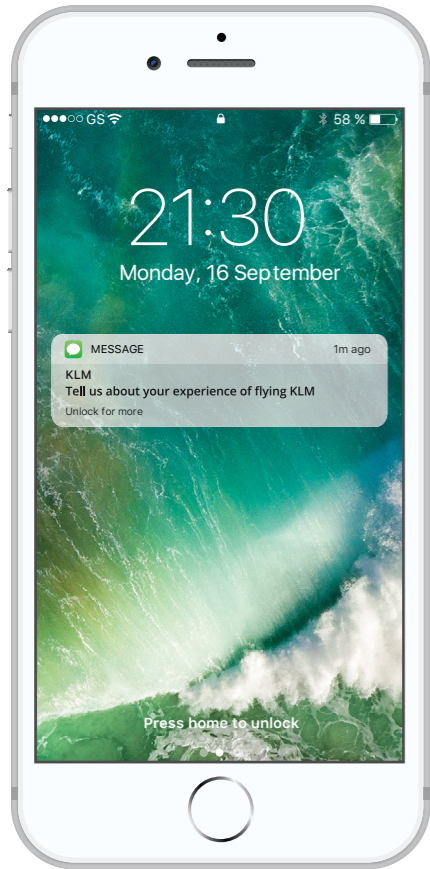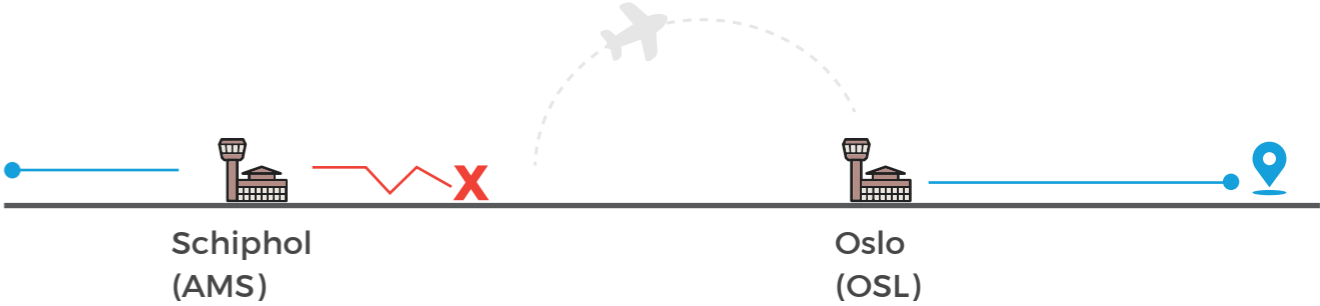

19:20
Monday, 16 September

MESSAGE   1m ago
KLM
Welcome to Oslo. bags will arrive at Belt 6
Unlock for more

Press home to unlock

07:20 PM
KLM ›

Text Message
Mon, 16 Sep, 07:19 PM

Dear Ms Smith, Welcome to Oslo. You may pick up your checked in luggage from Belt 6 in the arrival hall. We hope you had a pleasant flight.   ····· **ACKNOWLEDGE**

···· **ADVISE**

Text Message

asix

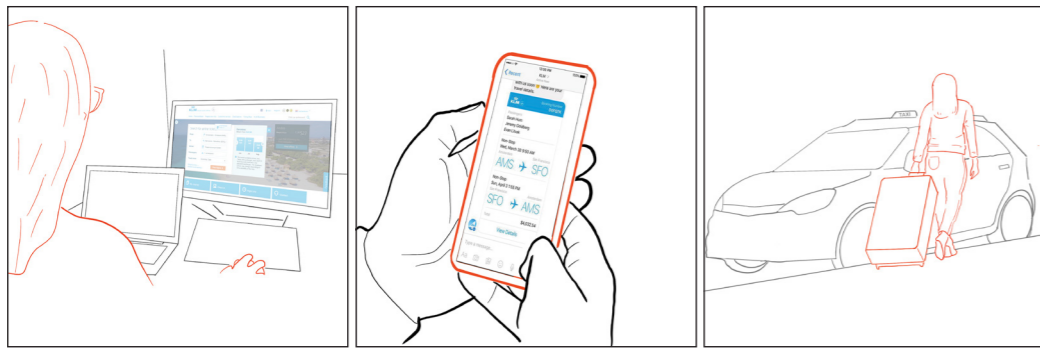**Day of travel: Meeting Boyfriend and look back**

She is really happy to reach Oslo. She meets her boyfriend and they go on home. A few hours later, she gets a final message from KLM acknowledging her delay and asking for her feedback because they want to improve their experience. KLM assures her that her feedback will be valued and that they want to do better in the future.
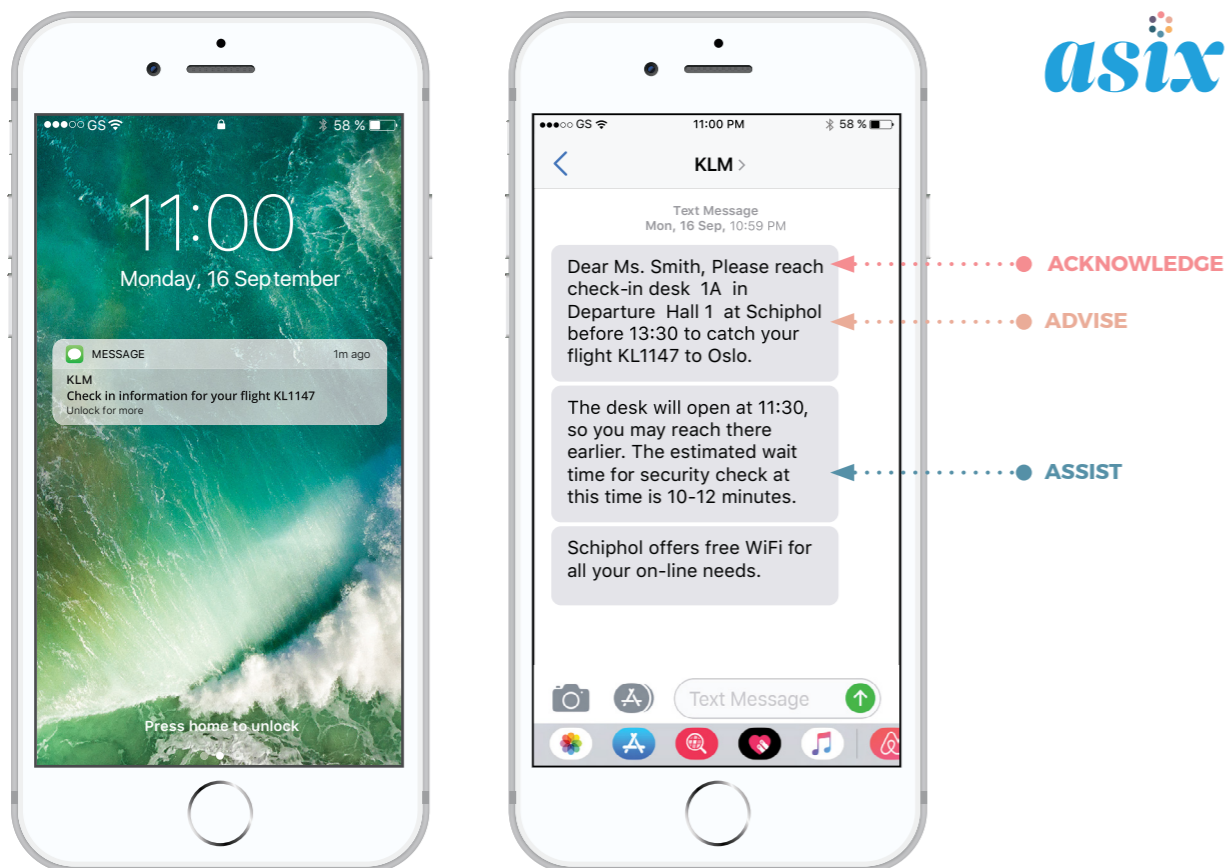

asix

21:30
Monday, 16 September

MESSAGE   1m ago
KLM
Tell us about your experience of flying KLM
Unlock for more

Press home to unlock

09:30 PM   58%

< KLM >

Dear Ms. Smith, We realise the delay of flight KL1147 would have caused you to change your plans at Oslo and for your onward journey and are truly sorry for that. ← **ACKNOWLEDGE**

We know we can always do better to make such events less impacting for valued passengers like you and seek your help in getting us there. Whenever you can spare 4 minutes of your time please provide us feedback at: http://bit.ly/2W7uu9h. ← **ADVISE**

← **ASSESS**

We truly appreciate your suggestions and look forward to flying you to your next destination again soon.

Text Message

Schiphol
(AMS)   Oslo
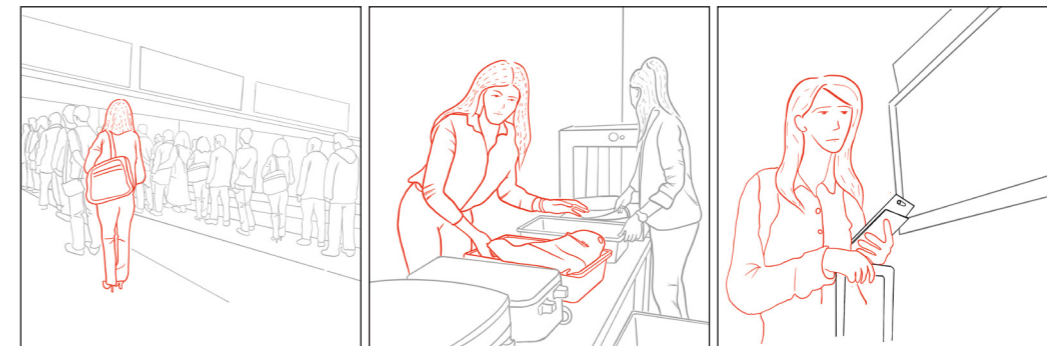   (OSL)

Day of travel: Reaching Schiphol

Sara's flight to Oslo departs at 2:30 PM. Before leaving, she checks her phone to see if there are any new messages from KLM. Anticipating long lines at check-in and bag drop, she decides to leave a little early. She books a taxi to reach Schiphol. On the way to the airport, she receives a message from KLM giving her information regarding check-in for her flight.

Day of travel: Check-in, Cancellation notification

Sara's happy she received her check-in information beforehand. Now she doesn't have to waste time looking at the flight information screens. She proceeds to check-in, drops off her bag and proceeds to security check. She already knows how long security check might take and is pretty calm. Just after security check, she receives a message informing her that her flight to Oslo is cancelled due to bad weather.

asix

11:00
Monday, 16 September

MESSAGE   1m ago
KLM
Check in information for your flight KL1147
Unlock for more

Press home to unlock

11:00 PM   ⚡ 58 %
< KLM >

Text Message
Mon, 16 Sep, 10:59 PM

Dear Ms. Smith, Please reach check-in desk 1A in Departure Hall 1 at Schiphol before 13:30 to catch your flight KL1147 to Oslo.   ·········· ● ACKNOWLEDGE
                                    ·········· ● ADVISE

The desk will open at 11:30, so you may reach there earlier. The estimated wait time for security check at this time is 10-12 minutes.   ·········· ● ASSIST

Schiphol offers free WiFi for all your on-line needs.

Text Message

asix

12:31
Monday, 16 September

MESSAGE   1m ago
KLM
Flight KL1147 has been cancelled due to bad weather
Unlock for more

Press home to unlock

12:31 PM   ⚡ 58 %
< KLM >

Text Message
Mon, 16 Sep, 12:30 PM

Dear Ms. Smith, Your flight KL1147 from AMS to OSL on 16/09 has been canceled due to bad weather. We are working on a solution to get you to your destination as soon as possible and will contact you again shortly. We sincerely apologise for this delay and its impact on your plans.   ·········· ● ACKNOWLEDGE
                                    ·········· ● ASSURE

We have provided more details in our e-mail sent to your registered id.   ·········· ● ASSIST

Text Message

Day of travel: Cancellation Details E-mail

Sara's really angry about her flight being cancelled. She immediately wants to know why it has been cancelled and what is KLM doing to resolve the situation. Since the message tells her that KLM has sent more details in the e-mail, she decides to check it. The e-mail informs her that her flight has been cancelled and that KLM is looking to rebook her on another alternate flight. They have also made sure to include her preferences.

Day of travel: Rebooking details

Sara is still angry and wants immediate solutions. For now she decides to wait for KLM to rebook her. She does not want to spend more money or effort in trying to find an alternate flight to Oslo. She will wait and see what KLM comes up with and then decide what to do next. A while later, she gets a message and an email from KLM informing her that she has been rebooked on another flight.
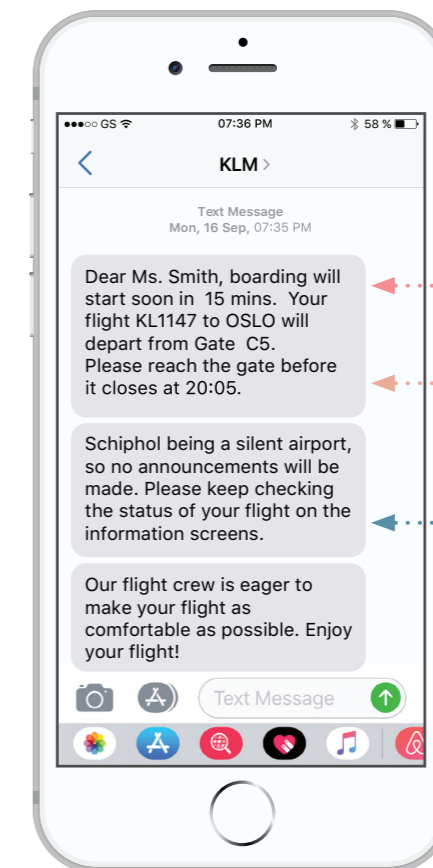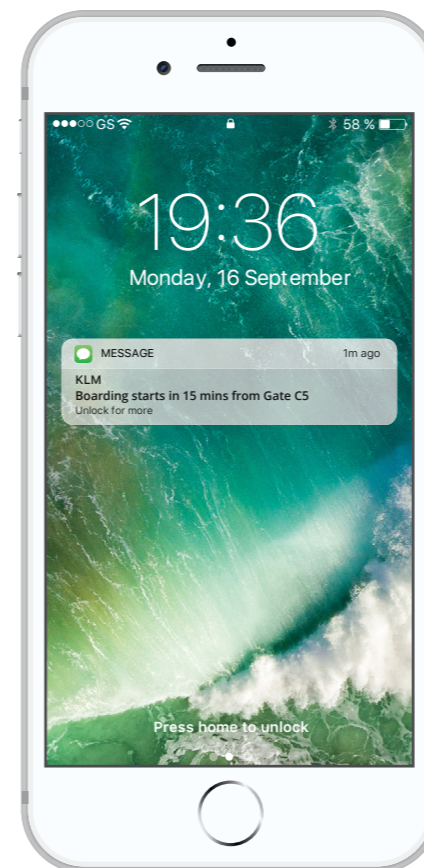
ACKNOWLEDGE

ACKNOWLEDGE

ADVISE

ASSURE

ASSIST

Day of travel: Boarding

Sara is still angry. For now she decides to avail the food and beverage voucher. She goes to one of the kiosks and manages to print out her voucher. The e-mail told her that KLM has rebooked her on another flight. Unfortunately, the new flight is going to depart a few hours later, so she decides to use the voucher and get herself a snack and some coffee. Sometime later, she gets a message from KLM informing her of her boarding gate and time for her new flight.
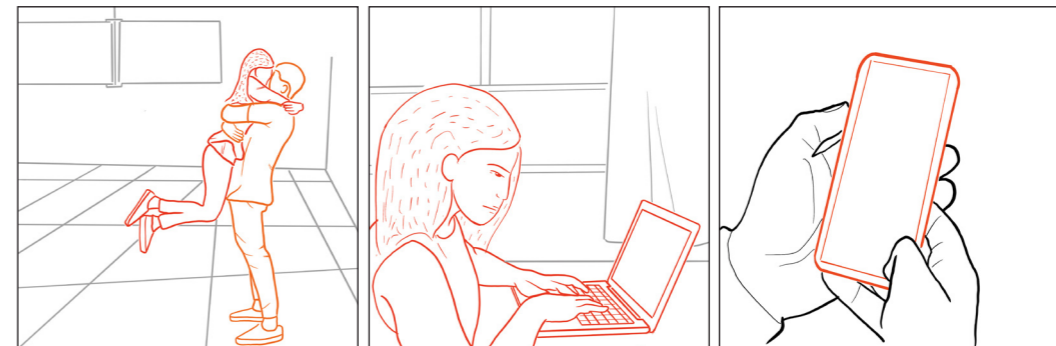

ACKNOWLEDGE

ADVISE

ASSIST

Day of travel: Take off and Landing at Oslo

Sara is relived that she can now finally depart. She is able to board and her flight soon departs at the designated time. Soon, her flight lands in Oslo. A few minutes after disembarking the plane, she receives a message from KLM informing her about the belt number where her checked-in bag will appear. Though they made a similar announcement in the flight, she is still glad to get this message.

22:36
Monday, 16 September

MESSAGE   1m ago
KLM
Welcome to Oslo. bags will arrive at Belt6
Unlock for more

Press home to unlock

10:26 PM

< KLM >

Text Message
Mon, 16 Sep, 10:25 PM

Dear Ms Smith,
Welcome to Oslo. You may
pick up your checked in
luggage from Belt 6 in the
arrival hall. We hope you had
a pleasant flight.

Text Message

● ● ● ● ● **ACKNOWLEDGE**
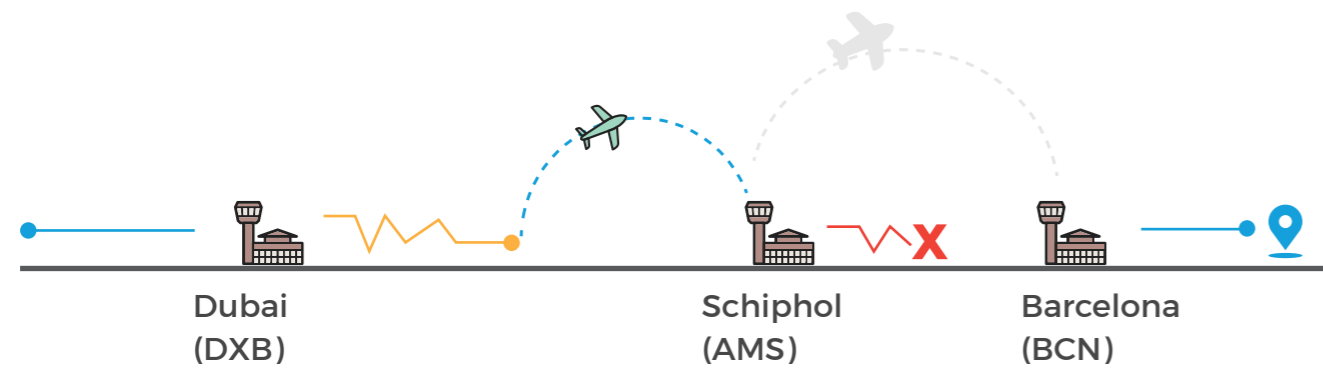
● ● ● ● ● **ADVISE**

asix

Day of travel: Meeting Boyfriend and look back

She is really happy to reach Oslo. She meets her boyfriend and they go on home. The next day, she gets a final message from KLM acknowledging her delay and asking for her feedback because they want to improve their experience. KLM assures her that her feedback will be valued and that they want to do better in the future.
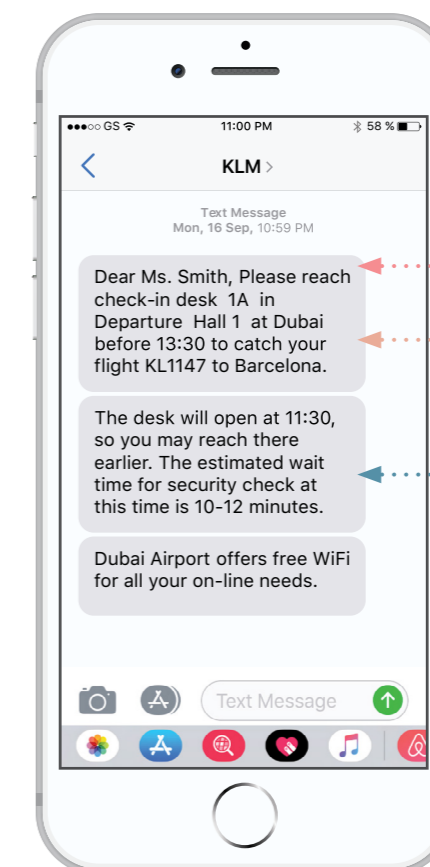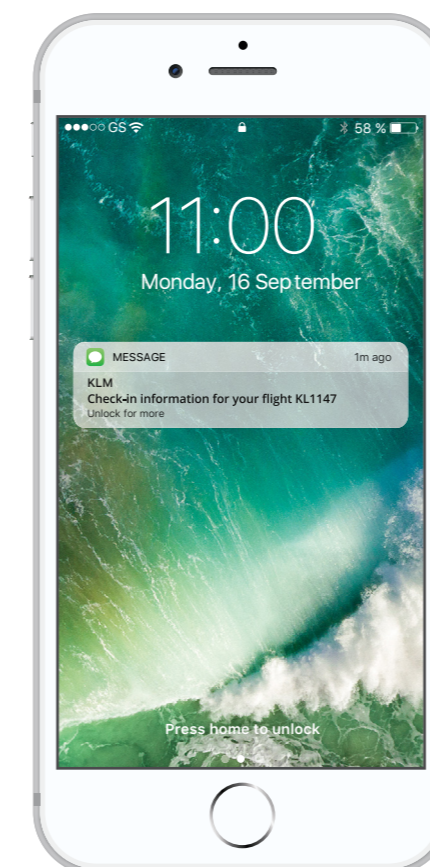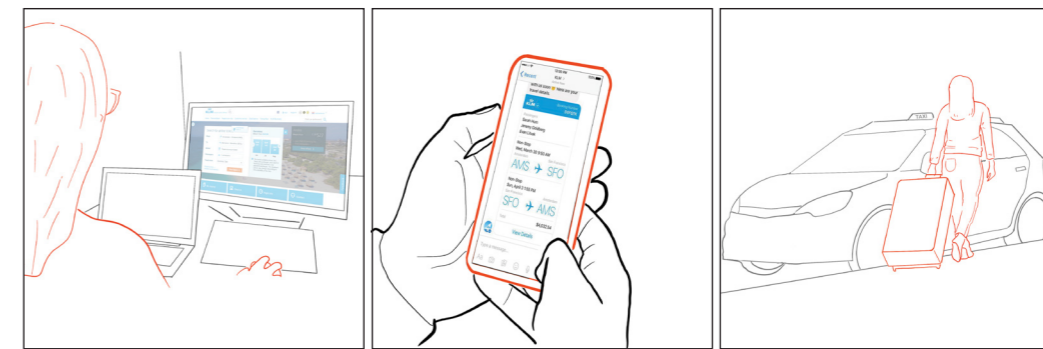

08:30
Tuesday, 17 September

MESSAGE   1m ago
KLM
Tell us about your experience of flying KLM
Unlock for more

Press home to unlock

08:30 AM

< KLM >

Dear Ms. Smith, We realise the
cancellation of flight KL1147
would have caused you to
change your plans at Oslo and
for your onward journey and are
truly sorry for that.

We know we can always do
better to make such events less
impacting for valued passengers
like you and seek your help in
getting us there. Whenever you
can spare 4 minutes of your time
please provide us feedback at:
http://bit.ly/2W7uu9h.

We truly appreciate your
suggestions and look forward to
flying you to your next
destination again soon.

Text Message

● ● ● ● ● **ACKNOWLEDGE**

● ● ● ● ● **ADVISE**

● ● ● ● ● **ASSESS**

asix

6.7 MISSED CONNECTION

Dubai
(DXB)

Schiphol
(AMS)

Barcelona
(BCN)

Day of travel: Reaching Dubai Airport

Sara's flight to Barcelona departs at 2:30 PM. Before leaving, she checks her phone to see if there are any new messages from KLM. Anticipating long lines at check-in and bag drop, she decides to leave a little early. She books a taxi to reach Dubai Airport. On the way to the airport, she receives a message from KLM giving her information regarding check-in for her flight.
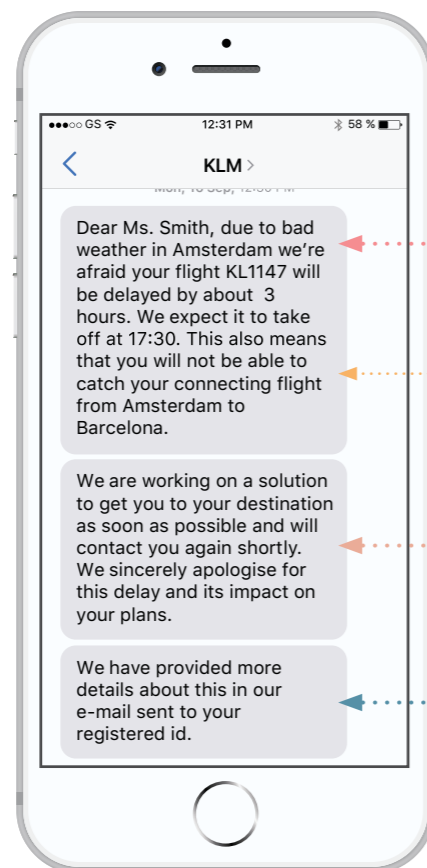

11:00
Monday, 16 September

MESSAGE   1m ago
KLM
Check-in information for your flight KL1147
Unlock for more

Press home to unlock

KLM

Text Message
Mon, 16 Sep, 10:59 PM

Dear Ms. Smith, Please reach check-in desk 1A in Departure Hall 1 at Dubai before 13:30 to catch your flight KL1147 to Barcelona.

The desk will open at 11:30, so you may reach there earlier. The estimated wait time for security check at this time is 10-12 minutes.

Dubai Airport offers free WiFi for all your on-line needs.

ACKNOWLEDGE

ADVISE

ASSIST

asix

Day of travel: Check-in, Delay notification

Sara's happy she received her check-in information beforehand. Now she doesn't have to waste time looking at the flight information screens. She proceeds to check-in, drops off her bag and proceeds to security check. She already knows how long security check might take and is pretty calm. Just after security check, she receives a message informing her that her flight to Schiphol is delayed due to weather and she will miss her connecting flight to Barcelona.

asix

12:31

Monday, 16 September

MESSAGE 1m ago
KLM
Flight delayed due to bad weather
Unlock for more

Press home to unlock

KLM

Dear Ms. Smith, due to bad weather in Amsterdam we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. This also means that you will not be able to catch your connecting flight from Amsterdam to Barcelona. — **ACKNOWLEDGE**

— **ASSURE**

We are working on a solution to get you to your destination as soon as possible and will contact you again shortly. We sincerely apologise for this delay and its impact on your plans. — **ADVISE**

We have provided more details about this in our e-mail sent to your registered id. — **ASSIST**

asix

KLM Royal Dutch Airlines

Your flight to Schiphol today has been delayed by 3 hours. Unfortunately, this means you will miss your connection to Barcelona. — **ACKNOWLEDGE**

FLIGHT NUMBER: KL1147
BOOKING CODE/PNR JGYZ3V

Dubai (DXB) 2:30 PM / 5:30 PM New Time
Amsterdam (AMS) 4:15 PM / 7:15 PM New Time

Dear Ms. Smith
We are very sorry, but due to the severe weather in Schiphol, your flight KL1147 has been delayed. This means that you will arrive in Schiphol later than planned. This also means that you will not be able to make your connecting flight to Barcelona. We realise that this is inconvenient and are doing our best to make your flight depart as soon as possible. — **ACKNOWLEDGE**

We will send you your new flight details as soon as possible via E-mail, SMS or push message. In case you would like to rebook yourself, you can do that as well with the following link-

View alternative flights >

As a start we would like to offer you **a drink and a meal** since your delay is longer than 3 hours. — **ADVISE**

Your food and beverage voucher can be printed at a blue KLM self-service kiosk located in Departure hall 1 (before security) or, T2, T4 and T6 after passport control.

Sincerely,
Mark Bakker
KLM Customer Care

Your Preferences — **ASSURE**

Boarding Pass
Your new boarding pass will be sent to you along with your new flight details. You will be automatically checked in.

Seat 12A Premium Economy
You will most likely get your preferred seat on your new flight. In case that is not possible, we will inform you and will initiate a full refund for you.

Special Vegan Meal
You will most likely get your preferred meal on your new flight. In case that is not possible, we will inform you and provide alternative meals keeping your preferences in mind.

Checked-in Luggage
Your checked-in luggage will be taken from the cancelled flight and put on the new flight. We will make sure that your checked in baggs arrive at the destination with you.

What should I do now?
Do not worry - we will send you the new flight details within the next 1-2 hours. Of course, you can also view these in the KLM app or on KLM.com. If you prefer another flight, please contact us and we will gladly look into alternatives.

View your flight details >

Can I cancel my flight and get a refund?
Yes, we will refund the costs in various cases. To find out more, please go to KLM.com or contact us.

Read more about this > — **ASSIST**

What are my rights?
Download the Assistance and compensation brochure

Assistance and compensation >

Have more questions?
Contact us via social media

Ask your question 24/7 via one of our social networks. We will do our very best to respond as soon as we can.

Or call us:
+47 22 643 752
Available from 07:00 - 22:30

KLM's easy travel app
The fastest way to check and change your flight

Read more & download

Used by 500,000+ travellers

Day of travel: Rebooking details

Sara is very angry and wants immediate solutions. She is very concerned about missing her connecting flight to Barcelona. For now she decides to wait for KLM to rebook her. She does not want to spend more money or effort in trying to find an alternate flight to Oslo. She will wait and see what KLM comes up with and then decide what to do next. A while later, she gets a message and an email from KLM informing her that she has been rebooked on another flight.

asix

13:50
Monday, 16 September

MESSAGE   5m ago
KLM
New booking for your flight KL1151 to Barcelona
Unlock for more

Press home to unlock

KLM

Text Message
Mon, 16 Sep, 01:45 PM

Dear Ms. Smith, We have rebooked you on a new flight to Barcelona.New booking is on KLM1151, SEP16, DXB-AMS-OSL departing 20:50 with PNR- KW4E9Y.   ◀ **ACKNOWLEDGE**

We would also like to offer you complementary snacks/beverages up to Euro 10. Please go to any of our agents to get your food voucher. Alternatively, the vouchers can also be found on the KLM app.   ◀ **ADVISE** / **ASSIST**

We have sent you the new flight details via Email. You can now check-in for your new flight.   ◀ **ASSURE**

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asix

KLM Royal Dutch Airlines

You have been rebooked to another flight to Barcelona departing at 8:50 PM.
You can now check-in and get your boarding pass.   ◀ **ACKNOWLEDGE**

| NEW FLIGHT NUMBER: | KL1151 |
| NEW BOOKING CODE/PNR | KW4E9Y |

Dubai (DXB) — Amsterdam (AMS) — Barcelona (BCN)

Dear Ms. Smith
We sincerely apologize for the inconvenience caused due to your flight KL1147 to Schiphol being delayed and the subsequent missing of your connecting flight. We are glad to inform you that we have rebooked you on another flight and have provided the details below.   ◀ **ACKNOWLEDGE**

Your new flight details
From:	Dubai (DXB)
To:	BArcelona (BCN)
Flight number:	KL1151
Departure:	Monday 16 September 19 20:50
Arrival:	Tuesday 17 September 19 05:35
Class:	Economy
Operated by:	KLM

Your new flight details
Name:	Sara Smith
Ticket number:	074318S132494
Flight number:	KL1151
Booking Code:	KW4E9Y

You can now check in and/or get your boarding pass(es) for your new flight to Barcelona. Please keep your booking code ready when checking in online or at the airport.

In case you do not like this option and would like to rebook yourself, you can do that as well with the following link-   ◀ **ADVISE**

View alternative flights ›

Yours sincerely,
Mark bakker
KLM Customer Care

Your Preferences

| Boarding Pass | Seat 12A Premium Economy | Special Vegan Meal | Checked-in Luggage |
| Check-In › | Change Seats › | Change Meal › | | ◀ **ASSURE**

Can I cancel my flight and get a refund?
Yes, we will refund the costs in various cases. To find out more, please go to KLM.com or contact us.
Read more about this ›

What are my rights?
Download the Assistance and compensation brochure
Assistance and compensation ›   ◀ **ASSIST**

Have more questions?
Contact us via social media
Ask your question 24/7 via one of our social networks. We will do our very best to respond as soon as we can.

Or call us:
+47 22 643 752
Available from 07:00 - 22:30

KLM's easy travel app
The fastest way to check and change your flight
Read more & download

Used by 500,000+ travellers

Day of travel: Boarding

Sara is still angry. For now she decides to avail the food and beverage voucher. She goes to one of the kiosks and manages to print out her voucher. The e-mail told her that KLM has rebooked her on another flight. Unfortunately, the new flight is going to depart a few hours later, so she decides to use the voucher and get herself a snack and some coffee. Sometime later, she gets a message from KLM informing her of her boarding gate and time for her new flight.

19:36
Monday, 16 September

MESSAGE   1m ago
KLM
Boarding starts in 15 mins from Gate D5
Unlock for more

Press home to unlock

KLM

Text Message
Mon, 16 Sep, 07:35 PM

Dear Ms. Smith, boarding will start soon in 15 mins. Your flight KL1151 to Schiphol will depart from Gate D5.
Please reach the gate before it closes at 20:05. •••••••• • **ACKNOWLEDGE**

 •••••••• • **ADVISE**

Dubai being a silent airport, so no announcements will be made. Please keep checking the status of your flight on the information screens. •••••••• • **ASSIST**

Our flight crew is eager to make your flight as comfortable as possible. Enjoy your flight!

asix

Day of travel: Take off and Landing at Schiphol

Sara is relived that she can now finally depart. She is able to board and her flight soon departs at the designated time. Soon, her flight lands in Schiphol. A few minutes after disembarking the plane, she receives a message from KLM informing her about which gate she needs to go to catch her connecting flight to Barcelona.

03:00
Tuesday, 17 September

MESSAGE   1m ago
KLM
Welcome to Amsterdam Schiphol. Go to Gate C5 for connecting flight KL1151 to Barcelona.
Unlock for more

Press home to unlock

KLM

Text Message
Tue, 17 Sep, 02:59 AM

Dear Ms Smith,
Welcome to Amsterdam Schiphol. Please proceed to Gate C5 in Terminal 1 to catch your connecting flight KL1151 to barcelona. Your checked in bag is being loaded onto your connecting flight. •••••••• • **ACKNOWLEDGE**

 •••••••• • **ADVISE**

 •••••••• • **ASSURE**

Estimated wait time for security check is approximately 10 mins.

In case you require any assistance, please approach any of our KLM agents and they will be happy to help. •••••••• • **ASSURE**

Text Message

asix

Day of travel: Take off and Landing at Barcelona

Sara rushes to her gate and boards her flight to barcelona. She is tired, but glad that she can finally be there in Barcelona to meet her boyfriend. Soon the flight lands in Barcelona. A few minutes after disembarking from the flight, she gets a message from KLM welcoming her to Barcelona and informing her about which belt her luggage will appear on.

05:35
Tuesday, 17 September

MESSAGE   1m ago
KLM
Welcome to Barcelona. bags will arrive at Belt 6
Unlock for more

Press home to unlock

05:35 AM   58 %
< KLM >

Text Message
Tue, 17 Sep, 05:34 AM

Dear Ms Smith,
Welcome to Barcelona. You may pick up your checked in luggage from Belt 6 in the arrival hall. We hope you had a pleasant flight.

· · · · · ● ACKNOWLEDGE

· · · · · ● ADVISE

Text Message

asix
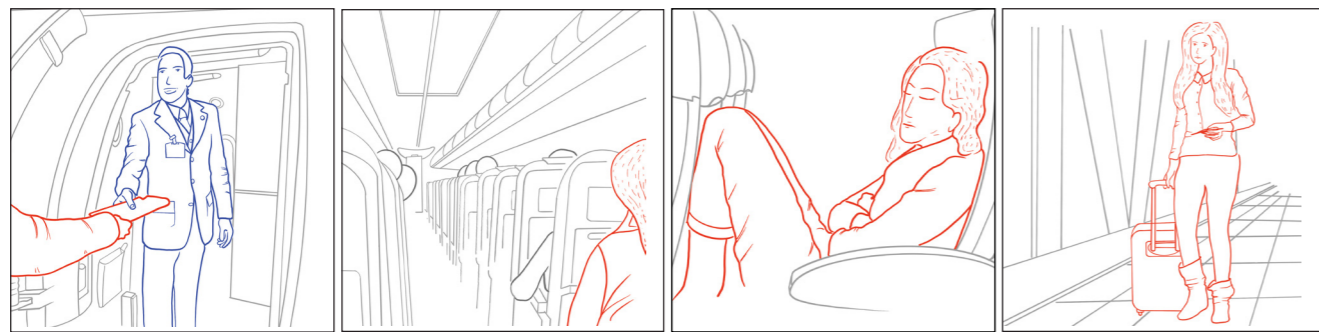
Day of travel: Meeting Boyfriend and look back

She is really happy to reach Barcelona. She meets her boyfriend and they go on home. A few hours later, she gets a final message from KLM acknowledging her delay and asking for her feedback because they want to improve their experience. KLM assures her that her feedback will be valued and that they want to do better in the future.

08:30
Tuesday, 17 September

MESSAGE   1m ago
KLM
Tell us about your experience of flying KLM
Unlock for more

Press home to unlock

08:30 AM   58 %
< KLM >

Dear Ms. Smith, We realise the delay of flight KL1147 and subsequent cancellation would have caused you to change your plans at Barcelona and are truly sorry for that.

We know we can always do better to make such events less impacting for valued passengers like you and seek your help in getting us there. Whenever you can spare 4 minutes of your time please provide us feedback at: http://bit.ly/2W7uu9h.

We truly appreciate your suggestions and look forward to flying you to your next destination again soon.

Text Message

· · · · · ● ACKNOWLEDGE

· · · · · ● ADVISE

· · · · · ● ASSESS

asix

07.
EVALUATION & VALIDATION

This chapter details out the evaluation study that was undertaken to evaluate and validate the proposed information content based on the Asix structure which was introduced in the previous chapter. The evaluation and validation was done with actual people through interviews and through the use of specially designed online questionnaires. The chapter concludes with a small discussion, conclusion and an implementation road map for the proposed concept.

7.1 The evaluation Study
7.2 Evaluation Results
7.3 Discussion
7.4 Conclusions
7.5 Implementation Plan

7.1 EVALUATION STUDY

In order to evaluate if the proposed information content based on the Asix structure actually delivered on the desired experience, a series of user tests were conducted, both in person and through online surveys. Before starting on the evaluation, a preliminary set of hypotheses was created and the tests were then designed accordingly. Two hypotheses were created and they are as follows -

H1 - Sharing of relevant, complete and feed forward information in a proactive and timely manner will greatly increase passenger confidence and help them take their next steps with greater assurance.

H2 - Sharing of relevant, complete and feed forward information in a proactive and timely manner will reassure the passenger, reduce stress and help change their perception of the disruption as well as that of KLM.

Based on these two hypotheses, a scenario was first selected. In this case, the delay scenario was selected because of two reasons -

1. It is one of the more common types of disruptions that occur and can impact a range of passengers. Delays can vary from a few minutes to a few hours depending on the situation and cause of the delay. A delay can be felt by passengers in one specific flight (in cases of technical faults) or by a huge number

of passengers when multiple flights are delayed (in cases of bad weather).

2. The uncertainty with delays is what worries passengers the most. A delay can be announced for a few minutes but can always extend longer if the situation changes. It is this uncertainty and indefinite nature of delays that makes passengers perceive a delay as much worse that a definite flight cancellation. In fact, research done by KLM also shows that cancellations are preferred to delays because they are more definite and that every one minute of delay reduces the NPS score by 1 point which is a huge negative feedback to KLM (KLM, 2019).

It is because of these two reasons that a delay scenario was selected - to see if the information content based on the Asix structure would help passengers in this scenario and help reassure them and hopefully change their perception about this event. The methodology of the evaluation tests is described in the next section.

7.1.1 Tests Methods
The user tests were conducted in two phases. The first phase consisted of testing specific samples of existing messages and new Asix messages with participants live in person. These were tested with six participants and consisted of showing both types of messages and conducting interviews afterwards. Based on the feedback and insights gathered

from these initial tests, the messages were further refined and translated into two online questionnaire which became phase two of testing. One questionnaire only showed samples of existing messages by KLM and asked participants to respond to those specific messages only. The other questionnaire showed only samples of the new messages based on the Asix structure and similarly a different group of participants was asked to respond to them. This was done to eliminate any biases the participants might generate if they saw both the original and the new messages together.

These questionnaires were then disseminated across a number of participants who then responded to them online. Care was taken to respect their privacy and only basic personal details were asked such as age, gender, purpose of travel and travelling frequency. In all 15 participants responded to the first questionnaire containing the original messages by KLM and 30 participants responded to the other questionnaire containing the new messages based on the Asix structure. The details of each test and the process of testing is explained in the next section.

7.1.2 Testing Procedure
Phase One
The tests for this phase were conducted at the faculty of Industrial Design, TU Delft with six participants. First, samples of both existing delay messages by KLM

and the new delay messages based on the Asix structure were gathered in an online medium. Then, based on the two hypotheses mentioned earlier, a series of questions were designed.

The questions were designed to measure the participants perception of the information on two dimensions - rational (H1 - Is the information clear and helpful enough for them to take their next steps) and emotions (H2 -How do they feel when they read the message). To qualitatively measure how participants feel after reading the message, a graphical cartoon based self reporting tool developed by Pieter M.A Desmet and Gaël Laurans was used. This tool called PrEmo, is a set of items that represent particular feelings, and participants can select one or more item(s) to describe their current state or indicate how well each item matches their current experience (Laurans, G. and Desmet, P.M.A. (2017). The entire questionnaire can be found in appendix D and E. Figure 7.1.2 shows some of the participants undertaking the tests.

The test was more of an A-B test where both sets of messages were introduced to the participants and then were asked a series of questions accordingly. This was followed by a follow up interview. The feedback and insights from these tests were used to refine the messages and became the building blocks of the final test which was created in the form of an online questionnaire.

Figure 7.1.2 - Examples of participants seeing the messages and responding to questions in the phase one testing. Follow up interviews were conducted after they finished answering the questionnaire.

Figure 7.1.2 - Examples of participants seeing the messages and responding to questions in the phase one testing. Follow up interviews were conducted after they finished answering the questionnaire.

Observations

One key observation from this test was that participants were clearly influenced and exhibited a bias when shown both sets of messages together. They immediately started comparing the original messages and the new designed ones. The results of this test clearly showed almost a unanimous preference towards the newly designed messages. However, when asked about it, all participants mentioned that they were comparing both sets of messages to each other and because they could see the difference between both sets of messages, they chose the new set of messages. In any test, participants should be as objective as possible and not come with any biases, hence it was decided to separate the messages in the next phase and create two completely separate questionnaires and expose them to two

completely different sets of people so as to remove the biases and get a more objective response from participants.

Phase Two Test

As mentioned before, the feedback and insights from the phase one tests were used to refine the questionnaire. At the same time, the messages were separated and two separate questionnaires were created. One questionnaire showed only the original messages from KLM and the other questionnaire only showed the new Asix messages. Both these questionnaires were shared online with two completely different sets of participants so as to ensure objectivity and to remove any biases. Similar to how the first phase test was designed, each questionnaire contained samples of messages and follow up questions about each message. The questions were designed to measure

the participants perception of the information on two dimensions - rational (H1 - Is the information clear and helpful enough for them to take their next steps) and emotions (H2 -How do they feel when they read the message). To qualitatively measure how participants feel after reading the message, a graphical cartoon based self reporting tool developed by Pieter M.A Desmet and Gaël Laurans was used. This tool called PrEmo, is a set of items that represent particular feelings, and participants can select one or more item(s) to describe their current state or indicate how well each item matches their current experience (Laurans, G. and Desmet, P.M.A. (2017). The entire questionnaire can be found in appendix F and G.

In all, 15 participants responded to the questionnaire containing the original KLM messages and 30 participants responded to the other questionnaire containing the new messages based on the Asix structure. The results and feedback from both these questionnaires are shown in the next section.

7.2 EVALUATION RESULTS

The purpose of these user tests was to determine if the proposed hypotheses introduced in section 7.1 hold true or not.

The feedback and comments from participants from both phase one and phase two tests are shown in a tabular form with both existing and new Asix messages shown together. Below is a summary of the participants who responded to the questionnaires -

Testing Phase 1				
Test Questionnaire (A-B Test)	**No. Of participants**	**Age Groups**	**Purpose of travel**	**Frequency of travel**
	Male 2 participants **Female** 4 participants	**18-25 years -** 2 participants **25-35 years -** 3 participants **Above 45 years -** 1 participant	**For leisure** 5 participants **For Business** 1 participants	**Very Frequently** 2 participants **Frequently** 2 participants **Occasionally** 2 participants
Testing Phase 2				
Test Questionnaire 1 Original Message	**Male** 5 participants **Female** 10 participants	**18-25 years -** 2 participants **25-35 years -** 7 participants **35-45 years -** 5 participant **45-60 years -** 1 participant	**For leisure** 8 participants **For Business** 2 participants **For Both** 5 participants	**Very Frequently** 1 participants **Frequently** 4 participants **Occasionally** 6 participants **Rarely** 4 participants
Test Questionnaire 2 New Messages Asix Structure	**Male** 15 participants **Female** 15 participants	**18-25 years -** 5 participants **25-35 years -** 14 participants **35-45 years -** 2 participant **45-60 years -** 4 participant **Above 60 years -** 5 participant	**For leisure** 15 participants **For Business** 4 participants **For Both** 11 participants	**Very Frequently** 3 participants **Frequently** 7 participants **Occasionally** 13 participants **Rarely** 7 participants

All the test questionnaires started off by introducing the delay scenario to participants. Then based on each stage of their journey, a specific message or piece of information was introduced.

The responses from the participants are shown in a tabular format in the following section. First the situation of phase of the journey is introduced, followed by examples of both sets of messages - original and new Asix based messages. Participants responses are recorded on the basis of two parameters which are derived from the hypotheses proposed earlier. These two parameters are -

1. Is the information clear, helpful and inform the passenger about what to do next?

2. Does the passenger feel more reassured and confident after receiving these messages?
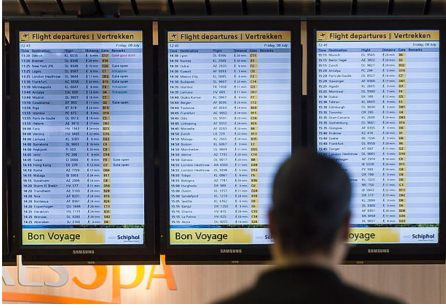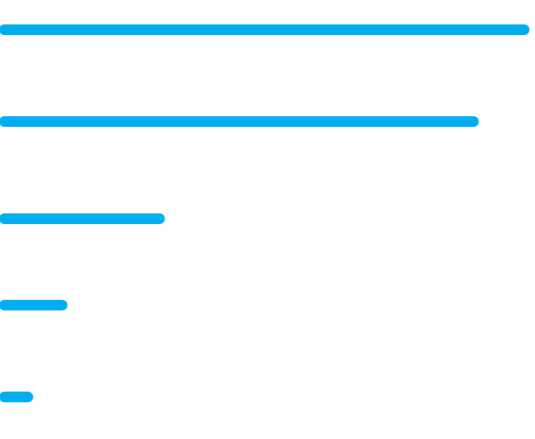
Responses from these two parameters have been shown along with actual participant comments to provide contextual reasoning and backing for their answers.

Finally, participant responses about their perception of these messages and their experience is detailed in the discussion section.

The Situation

Sara is travelling from Amsterdam to Oslo. Her flight departs at 2:30 PM. She decides to leave her house at 11:00 AM and takes a taxi to Schiphol. Just as she reaches Schiphol, she gets a message from KLM on her phone.

OLD MESSAGE	NEW MESSAGE (Asix)
	Dear Ms. Smith, Please reach check-in desk 1A in Departure Hall 1 at Schiphol before 13:30 to catch your flight KL1147 to Oslo. The desk will open at 11:30, so you may reach there earlier. The estimated wait time for security check at this time is 10-12 minutes. Schiphol offers free WiFi for all your on-line needs.

Purpose of this message?

The message is clear, helpful and informs me what I should do next.	The message is clear, helpful and informs me what I should do next.

How does this message make you feel?

I feel reassured	
I feel confident	
I feel indifferent	
I feel anxious	
I feel angry	

New Message Content (Asix Structure)

Participant comments

" It directs me to my next steps and eases my journey. I do not have to look up other info on my app or ticket or on Google."

-Participant comment

" The details about check in gate and time it would take makes me reassured."

-Participant comment

" It is very nice to know the waiting time for the check in, because 2,5 hrs sometimes is too much of waiting and while I'm going to the airport I always wonder if there is gonna be line."

-Participant comment

" I won't need to waste time at the airport trying to find my way around."
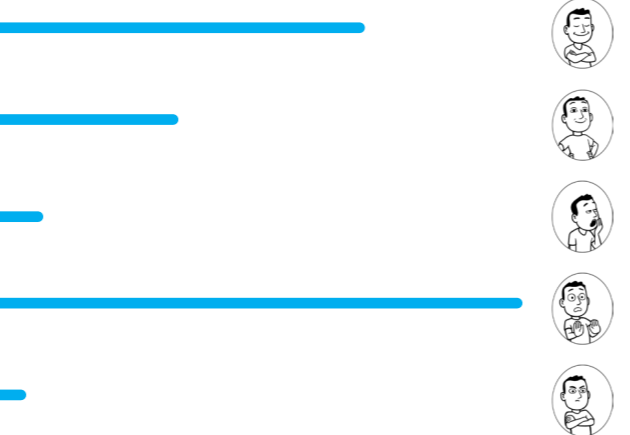
-Participant comment

" Because you gave me specific indication regarding, location, time, waiting time. I can get a coffee before standing in line. First thing you do is to stand in line to preserve the spot, this way I can reschedule my time/routine at the airport."

-Participant comment

The Situation

Sara goes ahead and drops off her check-in bag. She then proceeds towards the security check, when she receives a notification on her phone informing her that her flight to Oslo is delayed.

OLD MESSAGE	NEW MESSAGE (Asix)
Departure time of flight KL1147 on 16/09 has changed. Our apologies. Expected new time is 16/09 17:30. Check klm.com/flightstatus for the latest updates.	Dear Ms. Smith, due to bad weather in Oslo we're afraid your flight KL1147 will be delayed by about 3 hours. We expect it to take off at 17:30. We have provided more details in our e-mail sent to your registered id. We sincerely apologise for this delay and its impact on your plans. We would like to offer you complementary snacks/beverages up to Euro 10. Please use any of the blue kiosks to print your food voucher by keying in your PNR: JGYZ3V. We will keep you informed as the situation develops.

Purpose of this message?

The message has just enough information for me to know what I should do next.	The message has just enough information for me to know what I should do next.

How does this message make you feel?

- I feel reassured
- I feel confident
- I feel indifferent
- I feel anxious
- I feel angry

New Message Content (Asix Structure)

Participant comments

"all basis covered... giving incentive helps."

-Participant comment

"Angry at the situation rather than the actual message. But I have a feeling since I am already at the airport I would have known about the delay and the message probably just confirms that."

-Participant comment

"The fact that they keep us informed makes me feel reassured. However the possibility of further delay does make me feel a little anxious as I'm traveling alone."

-Participant comment

" The fact that there's really not much to do and that I'm stranded. But the €10 food coupon makes me feel like they're making an effort even though there's not much they can do about bad weather."

-Participant comment

"I feel stressed because of the situation. But the message is reassuring and gives some direction to the vague situation. I would like to speak to someone regarding my options."

-Participant comment

"Its bad weather so there will be no flight but if i can speak to someone it gives me better clarity on the further delay and alternate way out."

-Participant comment

The Situation

Sara is annoyed about the delay but decides to stay at the airport and use the KLM food and beverage voucher to buy some coffee and snacks. Around 1.5 hr before her flight departs, she gets a message on her phone informing her about her departure gate.

OLD MESSAGE	NEW MESSAGE (Asix)
Your flight KL1147 to OSLO will depart from gate C5. Enjoy your flight!	Dear Ms. Smith, boarding will start soon in 15 mins. Your flight KL1147 to OSLO will depart from Gate C5. Please reach the gate before it closes at 17:05. Schiphol being a silent airport, so no announcements will be made. Please keep checking the status of your flight on the information screens. Our pilots will try to make up for the delay in the air. Enjoy your flight!

Purpose of this message?

The message is clear, helpful and informs me what I should do next.	The message is clear, helpful and informs me what I should do next.

How does this message make you feel?

I feel reassured		
I feel confident		
I feel indifferent		
I feel anxious		
I feel angry		

New Message Content (Asix Structure)

Participant comments

"Nice touch with the pilots trying to make up for the lost time. Shows you acknowledge and care."

-Participant comment

"Realising there's no more delay is reassuring. However I'm a little anxious wondering if I could make it to the gate as I'm far from it."

-Participant comment

"The fact that they're informing me when to head to the gate. Also...usually waiting and listening for an announcement tends to stress me a little because I keep thinking I'll miss it. However knowing I will get this sms is quite reassuring as checking my phone is a lot easier than trying to catch an announcement in the potential airport chaos."

-Participant comment

"The positive tone of the message especially with the "pilots will make up for the delay" part."

-Participant comment

"I know where to go and what to do there, and i know i still have plenty of time: i don't have to rush to get there within 15 minutes."

-Participant comment

"They acknowledge the delay, remind you to come to the gate and reassure that the pilots will make up the delay as much as possible."

-Participant comment

The Situation

Sara finally boards her flight and is on her way to Oslo. 1 hr 45 mins later, her plane touches down in Oslo. After she disembarks from the plane, she receives a message from KLM informing her about her luggage belt number to collect her checked in bag.

OLD MESSAGE	NEW MESSAGE (Asix)
Welcome at Oslo! Your luggage will arrive at luggage belt number 6. - We are curious to hear your opinion on our flight information updates. Do you have a minute to provide us with your feedback? http://bit.ly/2W7uu9h. Thanks in advance.	Dear Ms Smith, Welcome to Oslo. You may pick up your checked in luggage from Belt 6 in the arrival hall. We hope you had a pleasant flight.

Purpose of this message?

The message is clear, helpful and informs me what I should do next.	The message is clear, helpful and informs me what I should do next.

How does this message make you feel?

I feel reassured		
I feel confident		
I feel indifferent		
I feel anxious		
I feel angry		

New Message Content (Asix Structure)

Participant comments

"I never know where to pick up my bag and this is very helpful."
-Participant comment

"The fact that I know the belt number and don't have to go look for it on a board."
-Participant comment

"Usually in flights before disembarking, they make an announcement over the PA but I always forget the belt no. So getting a message makes it easier to remember."
-Participant comment

"Answering my most obvious question on landing without my asking."
-Participant comment

"There's just one more thing to do, and i know how to do it."
-Participant comment

"the directions to the next step is good. But usually i get this info by the flight announcement + at the baggage pickup."
-Participant comment

The Situation

Sara leaves the airport and goes to her home. The next day, she gets a final message from KLM asking her to give feedback about her journey and flight experience.

OLD MESSAGE	NEW MESSAGE (Asix)
We are curious to hear your opinion on our flight information updates. Do you have a minute to provide us with your feedback? http://bit.ly/2W7uu9h. Thanks in advance.	Dear Ms. Smith, We realise the delay of flight KL1147 would have caused you to change your plans at Oslo and for your onward journey and are truly sorry for that. We know we can always do better to make such events less impacting for valued passengers like you and seek your help in getting us there. Whenever you can spare 4 minutes of your time please provide us feedback at: http://bit.ly/2W7uu9h. We truly appreciate your suggestions and look forward to flying you to your next destination again soon.

Purpose of this message?

This message shows that KLM cares about me	This message shows that KLM cares about me

How does this message make you feel?

I feel reassured	
I feel confident	
I feel indifferent	
I feel anxious	
I feel angry	

New Message Content (Asix Structure)

Participant comments

"The message is friendly."

-Participant comment

"There is an emotional connect."

-Participant comment

"Airlines feels for the stress caused to the customer."

-Participant comment

7.3 DISCUSSION

To begin with, the purpose of the tests were to see if the two hypotheses proposed in section 7.1 hold true or not. To recap, the two hypotheses are -

H1 - Sharing of relevant, complete and feed forward information in a proactive and timely manner will greatly increase passenger confidence and help them take their next steps with greater assurance.

H2 - Sharing of relevant, complete and feed forward information in a proactive and timely manner will reassure the passenger, reduce stress and help change their perception of the disruption as well as that of KLM.

Hypothesis 1 Result

The first hypothesis states that passengers will be more confident about taking their next steps if they receive relevant, complete and feet forward information. This hypothesis is proved right to some extent based on the responses by the participants. Participants definitely felt that the messages based on the proposed Asix structure were better both in terms of content but also in terms of tone of voice and friendliness. In addition, most felt that the information was definitely helpful enough for them to take their next steps. Of course, every passenger has their own set of requirements and needs when it comes to what information they will need at what stage. These tests have shown that a majority of the

participants really find this information helpful and feet forward. The way the messages were structured was appreciated though a couple of the passengers did remark on the amount of information presented in the message. Maybe a better format with bullet points or a refinement of the content could be a way forward, but this will have to be explored and tested further.

"Message tells me exactly where to go first. Makes a difference if it's an airport you are visiting for the first time." - participant comment

"Super clear and nice to receive this info" - participant comment

Hypothesis 2 Result

The second hypothesis states that passengers will feel more reassured and less stressed if they receive relevant, complete and feet forward information which will eventually change their perception of the disruption. This hypothesis is also proved right to some extent. Almost all the passengers appreciated the messages designed on the basis of the Asix structure both in terms of content as well in terms of tone of voice and friendliness. In almost all messages, participants reported a greater level of reassurance felt and confidence which supports the proposed hypothesis. Some passengers definitely felt that the messages felt more sincere and more human and that they felt that KLM genuinely cared for them in that

situation. This also added to the feeling of being more reassured as compared to how other participants felt when they received the original messages from KLM. However, when it comes to changing perception of the disruption through these messages, most participants reported that these messages may not be enough. While, they do appreciate the caring tone and content of the messages, they still feel very negatively about the disruption itself.

"It provides clarity as much as they can and that's good. But the damage done due to delay will still make me pretty angry." - Participant comment

Limitations of the tests

However, the effectiveness of these messages is also dependent upon two more factors - did the passenger receive the information on time when they needed it? and was the information sent proactively?. These factors are part of the 4 dimensions of information perceptions by passengers explained in chapter 5 section 4.3.1. According to that framework, passengers perceive the information on information content, information timeliness, proactive information and the information channel. It is all these 4 dimensions together which impact their perception and a deficiency in any one has the potential to create a negative perception. While the test focused more on information content, both information timeliness and proactive information sharing are

equally important. Both these factors were simulated to some extent in the testing by providing time stamps to each message so that the participants are aware of the time of receiving this message as well. But in a real disrupted scenario, it may not happen as simulated in the tests. Therefore, to make the tests even more accurate, further tests will have to be done incorporating these elements of the information experience as well.

7.4 CONCLUSION

It is clear from the user tests that messages and pieces of information created on the basis of the Asix structure are effective and are considered much more helpful as compared to the original messages sent by KLM. From the responses by the participants, it was also determined that the information presented was clear, transparent and relevant thereby satisfying the core requirements by the passengers. The personalised nature of the messages made them feel more recognised, acknowledged, confident and reassured which also increased the trustworthiness of the information. Almost all the participants agreed that all the information presented was relevant to them. Thus the proposed information design principles were satisfied.

According to KLM's desired customer experience embodied by their compass, KLM wants to care for passengers by making them feel recognised, touched and comfortable in addition to being easy to deal with. All of these aspects were reported by the participants after receiving the newly designed messages. They especially appreciated the tone of voice and the acknowledgment by KLM about the impact of the delay on their journey. Along with the tone of voice, being presented with their options and especially the immediate compensation in the form of a food and beverage voucher was also greatly appreciated and considered as KLM trying to make an effort to make them feel better. Another

aspect of the new messages which was greatly appreciated was the inclusion of positive tone messages such as - 'our pilots will try to make up for the delay in the air' and ' our flight crew is eager to make your journey as comfortable as possible'. Passengers responded really positively to these messages and felt that KLM genuinely cared for them. However, when it comes to changing perception about the disruption, most participants felt that these messages would not actually help that much in changing their perception about the event. A disruption is a real event which impacts the passengers and forces them to make changes in their plans. The pain and anguish felt during a disruption cannot be taken away just by sending these new messages, unless KLM comes up with a way to instantly transport their passengers to their destination. But what the messages did help in was changing the perception about KLM. Passengers felt that the new messages were more personalised, heartfelt, sincere and more human which definitely showed that KLM cares for them.

Therefore, it can be concluded that it is very difficult to take away the pain of having a flight delayed or cancelled. But rather than feeling abandoned or left to fend for themselves, passengers can definitely feel that KLM cares for them and recognises their situation and is doing as much as they can to make them feel better and to make them reach their destination as comfortably as possible.

It is this change in perception about KLM that is showcased here with the messages designed on the basis of the Asix structure. That is a good positive step towards positively changing the perception of the passengers during a disruption.

"I only appreciate the messages that are informing. The one regarding the delay did not feel like it would make the experience any better."

"It's good to get updates so you don't have to go looking around for a person from KLM. But in the end a delay does change plans and causes an inconvenience."

"Usually when flights get delayed, having to go to airport staff and asking them can be cumbersome and often because of the repeated questioning, the airport staff become stressed and their responses aren't very friendly. A personal message to your phone helps you feel like the brand cares and at the same time you have direct information which isn't heresay."

"I would expect more human communication or messaging via the app (if i have the app). but overall I do not feel abandoned by the air carrier and feel assured that even though their are issues, they are taken care of and I am taken care of."

7.5 IMPLEMENTATION ROAD MAP

The Asix structure leverages existing KLM systems and does not require KLM to make any new radical changes to their systems in terms of technology or R&D. In terms of feasibility and viability, the Asix structure is extremely feasible and has the potential to be implemented in the next few months. However, the true potential of the Asix structure lies with it being universally accepted and adopted by most of the concerned departments at KLM. In order to show how the Asix structure for information content can be implemented and adopted across departments, an implementation road map has been designed. This road map details out how the Asix structure can be implemented holistically in about two years.

The first year will focus more on a product manager or department taking ownership of the project and conducting more research and Asix information flows for the different information touchpoints such as Social Media, Staff, KLM App. The second year will focus more on the adoption of this structure by backend operations departments, Pax Ops (staff) along with other product teams across KLM, finally ending up in an omnichannel MVP (minimum viable product) which can be tested live in context. In the next section, the different sections of the road map are discussed in much more detail.

Figure 7.5 - The implementation Road map showing the first six months of activities.

0-6 months

The first step will be to expose this proposed Asix structure of information content along with the designed SMS and Email flows to various different product owners and strategy managers to gauge interest so that they can pick this up and take ownership of this project. Once a product owner of say disruptions team or personalisation team takes ownership of this project, the next step will be to align with other relevant departs such as Digital Studio, Customer Experience Department and Operations on this proposed Asix structure. This content structure will also be closely scrutinized and refined by the content teams and copywriters at KLM along with feedback from the CRM push team. Once these departments are on board, then more high fidelity prototypes of information flows with this structure will be created in multiple channels and tested with passengers. The hypotheses proposed in this project will also hold true for these new rounds of testing with high fidelity prototypes. Thus, more number of tests will be done to prove the hypotheses both qualitatively and quantitatively. As a start, since 50% of all communication by KLM is done through e-mails, the e-mail flow can be refined and tested with more number of people (>100) to get both qualitative and quantitative feedback (Figure 7.5).

6-12 months

Between 6 and 12 months, the focus will shift towards translating this information structure across information channels and departments. A key requirement would be to check the feasibility of integrating it with current systems within KLM such as the automated chat-bot system. At this point, this structure will also be introduced to KLM staff to get their inputs as well as introduced to the learning and guidance team who are in charge of staff training and development. To start with, the staff-passenger interaction flow on the basis of the Asix structure will have to be verified by conducting some tests. Based on those results, mini trainings and role playing exercises can be done to get a better understanding of how this structure translates to staff interactions with passengers and whether staff will be accepting of this new structure (figure 7.5.1).

12-24 months

In two years, after all the information flows have been verified and the staff have also accepted and adopted the new proposed structure, a final information guide will be created which will act as a guide for all product teams across departments who are in charge of information communication, to refer to. This will then be followed by further testing by combining information flows of multiple channels. For example, tests can be conducted to see how SMS and email can work together with this new structure, or E-mail and WhatsApp/Facebook Messenger work together or how the KLM app and

Emails and staff interaction can work together and finally, how all of these channels can work together. After all this testing, an MVP (minimum viable product) will be created and tested live for a small duration to really test the impact on passenger perception (figure 7.5.2).
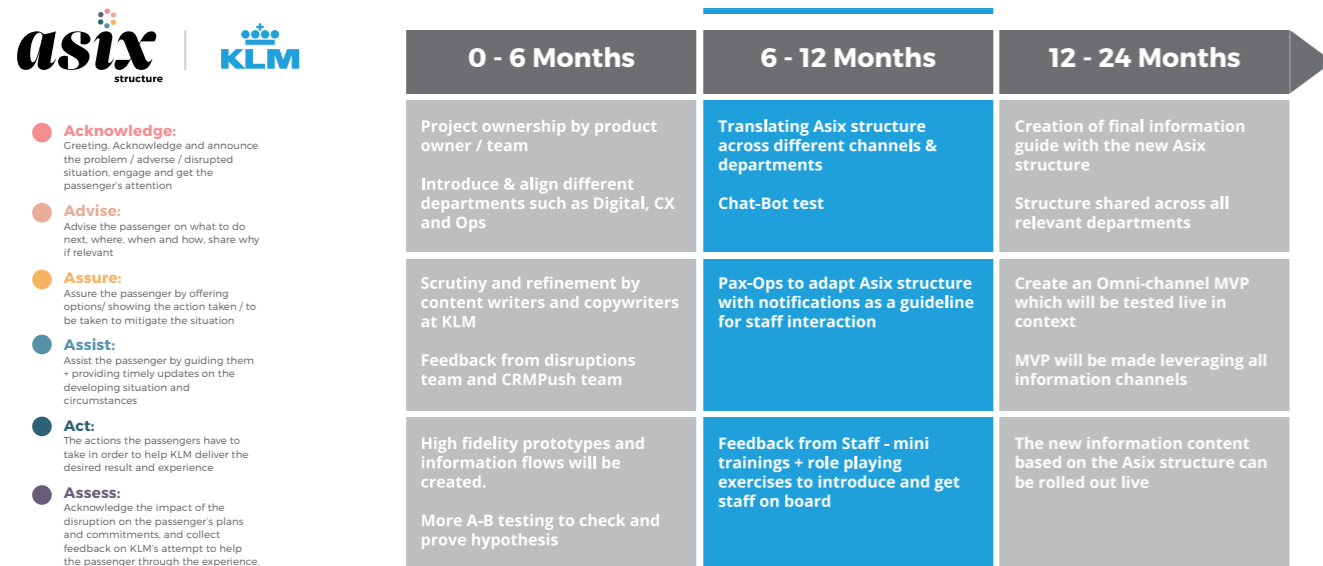
asix | **KLM**

Acknowledge:
Greeting. Acknowledge and announce the problem / adverse / disrupted situation, engage and get the passenger's attention

Advise:
Advise the passenger on what to do next, where, when and how, share why if relevant

Assure:
Assure the passenger by offering options/ showing the action taken / to be taken to mitigate the situation

Assist:
Assist the passenger by guiding them + providing timely updates on the developing situation and circumstances

Act:
The actions the passengers have to take in order to help KLM deliver the desired result and experience

Assess:
Acknowledge the impact of the disruption on the passenger's plans and commitments, and collect feedback on KLM's attempt to help the passenger through the experience.

0 - 6 Months	6 - 12 Months	12 - 24 Months
Project ownership by product owner / team Introduce & align different departments such as Digital, CX and Ops	Translating Asix structure across different channels & departments Chat-Bot test	Creation of final information guide with the new Asix structure Structure shared across all relevant departments
Scrutiny and refinement by content writers and copywriters at KLM Feedback from disruptions team and CRMPush team	Pax-Ops to adapt Asix structure with notifications as a guideline for staff interaction	Create an Omni-channel MVP which will be tested live in context MVP will be made leveraging all information channels
High fidelity prototypes and information flows will be created. More A-B testing to check and prove hypothesis	Feedback from Staff - mini trainings + role playing exercises to introduce and get staff on board	The new information content based on the Asix structure can be rolled out live

Figure 7.5.1 - The implementation Road map showing six to twelve months of activities.

asix | **KLM**

Acknowledge:
Greeting. Acknowledge and announce the problem / adverse / disrupted situation, engage and get the passenger's attention

Advise:
Advise the passenger on what to do next, where, when and how, share why if relevant

Assure:
Assure the passenger by offering options/ showing the action taken / to be taken to mitigate the situation

Assist:
Assist the passenger by guiding them + providing timely updates on the developing situation and circumstances

Act:
The actions the passengers have to take in order to help KLM deliver the desired result and experience

Assess:
Acknowledge the impact of the disruption on the passenger's plans and commitments, and collect feedback on KLM's attempt to help the passenger through the experience.

0 - 6 Months	6 - 12 Months	12 - 24 Months
Project ownership by product owner / team Introduce & align different departments such as Digital, CX and Ops	Translating Asix structure across different channels & departments Chat-Bot test	Creation of final information guide with the new Asix structure Structure shared across all relevant departments
Scrutiny and refinement by content writers and copywriters at KLM Feedback from disruptions team and CRMPush team	Pax-Ops to adapt Asix structure with notifications as a guideline for staff interaction	Create an Omni-channel MVP which will be tested live in context MVP will be made leveraging all information channels
High fidelity prototypes and information flows will be created. More A-B testing to check and prove hypothesis	Feedback from Staff - mini trainings + role playing exercises to introduce and get staff on board	The new information content based on the Asix structure can be rolled out live

Figure 7.5.2 - The implementation Road map showing twelve to twenty four months of activities.

08.
EPILOGUE

This final chapter of the thesis contains some recommendations for the project. Through these recommendations, some of the limitations and shortcomings of the project will also be discussed. In the end, this chapter will end with the final thoughts and conclusion after which will be the references section.

8.1 Recommendations
8.2 Final Thoughts
8.3 References

8.1 RECOMMENDATIONS

The thesis encountered some limitations which should be taken into consideration in the development of the Asix structure for information content. These mostly revolve around the four dimensions of information perception by passengers. While this project explored information content in great detail and was able to successfully test with that content, the same cannot be said of testing with information timeliness and proactive information sharing. As it stands, KLM is in the process of refining these particular systems, but these aspects were not able to be tested due to time and resource constraints.

Feasibility

While the structure is extremely feasible, it will still require some basic process changes. In addition, the integration and acknowledgment of passenger preferences will require multiple departments to share passenger information with each other which is not done right now. In order to ensure full feasibility, these departments should be contacted and brought on board so that the required information can be shared with the right departments at the right time.

Viability

The Asix structure is extremely viable and will not cause KLM to spend huge resources on system level changes. In addition, it has shown to have a positive impact on passenger perception especially about KLM. However, any

disruption is a negative event leading to severe monetary and reputational loss for KLM. This aspect of monetary gain or loss during a disruption was not taken into consideration in this project. It was not pertinent to the context of the project since the project approached the disruption situation from the eyes of the passengers. However, in order for KLM to take adopt this structure in all their communication, it might be an important factor to keep in mind.

8.1.1 Considerations
Greater Transparency

A defining insight from this project was how much passengers appreciate transparency and honest responses. Especially in the cases of disruptions, passengers want absolute transparency from KLM. However, due to business and legal reasons, there might be times when KLM is not able to provide certain information immediately such as a passengers right for compensation. KLM does care for passengers and wants to show that care through the experience that they provide. It might be possible in some way to make the information regarding monetary compensation more evident through either personalised messages or by having a dedicated web page which passengers can refer to. The KLM app does show this aspect of transparency to some extent but there is only a small percentage of passengers who actually use the app. For everyone else, it means they have to actively search for this piece of information

which is buried deep in layers of web pages in its current form. Therefore, explorations could be done to figure out ways to deliver this information in a more personalised and direct way to passengers who are eligible without them having to ask for it. This will definitely increase the trust that passengers have in KLM and show in a definite way that KLM empathises with the passenger's situation and wants to make their experience better.

Human Interaction

One of the defining insights from this project was the power of human to human interaction, especially between KLM staff and passengers. In a disrupted situation passengers actively seek a person to talk to because they feel more reassured by talking to a person rather than getting information by a machine (kiosk) or through their smartphones. While this project has highlighted this aspect, unfortunately it could not be properly tested due to time restrictions. But it has been included in the implementation road map as a must have. The staff interaction with passengers is an extremely powerful medium and has the potential to influence how passengers perceive their situation as well as KLM. There is a good potential to integrate the proposed Asix structure to staff interactions as well to improve the communication experience.

Physical environments

As mentioned in chapter 1 section 1.6,

it is the combination of the physical environment, human to human communication and information provided by KLM that determine the passengers overall journey experience. However, the physical environment, Schiphol airport, in this case is not under the direct influence of KLM and thus they have a limited power to change things. KLM should definitely look at the potential to make changes in the physical space to aid passengers in the event of disruption or otherwise as well.

Information consistency

This is another one of the important aspects highlighted in this project - the need for consistent information across channels and touchpoints. The Asix structure applied to the different information channels does help solve the inconsistencies to some extent but more work will be required to ensure consistency in terms of the other information touchpoints such as kiosks, the information screens and displays. While some of these also come under the ambit of physical environments (previous point), they have been mentioned separately because these touchpoints deal only with information. There is huge scope to improve the information communication by adopting the Asix structure to these touch points to create a more coherent and consistent information experience and KLM should definitely explore the possibility to do that.

8.2 FINAL THOUGHTS

Proactive information & Information timeliness

As mentioned earlier, these two aspects also play an important role in the perception of the information experience. These two factors start from the backend operations department who determine the timing and sending of the message. More in depth explorations could be done with various different scenarios to check if the messages or information were sent at the right time or not and did the passengers perceive it as being proactive or reactive.

Actionable Messages

So far, through this project, the value and importance of feed forward information with a friendly, calm and reassuring tone of voice is demonstrated. However, from the testing, it was also deduced that along with getting the information, passengers want to know their options at each stage wherever possible. Along with informing them about the situation, they also wanted to take action. Though this aspect is also determined by the technical requirements of the channel through which the information is being transmitted. For example, an SMS or Email can only inform the passenger about their situation and reassure them but through them, the passenger cannot take action on their own. Social Media channels such as Whatsapp or Facebook Messenger do offer a slightly better experience with actionable messages as the passenger is directly in contact with

a KLM representative and can change their preferences during the interaction. So far, the only channel that allows for maximum actionable information is the KLM app and rightly so. Through the App, passengers are presented with multiple options and can choose their preference and make changes as they see fit. However, the main reason this was not pursued further in the project is that only about 15% of the passengers use the App. The rest 85% of the passengers rely largely on Email and SMS with a small percentage on social media channels. It would be useful to see how the Asix structure of information content can be used to design actionable information even in channels such as SMS and Email which has the potential to impact the perception of a lot more of KLM's passengers.

The world of airline travel is extremely complex and in most cases quite stressful for most of the people involved. Add to that, the prevalence of disruptions such as delayed flights, cancelled flights and missed connections, and we get a mix of extremely frustrated and unhappy passengers. Having recognised this aspect of disruptions KLM has embarked on a promise to deliver exceptional service and show care to passengers during their journey. It can be noted that KLM service is considered one of the best when it comes to regular and non disrupted journeys. The challenge for KLM is to replicate that level of service and care even when the passengers journey is disrupted. A key factor that influences passenger perception is the information provided by KLM.

Through this project, it can be seen that disruptions are extremely negative events which lead to extremely negative emotions from passengers especially having to change their carefully planned journeys unexpectedly. At this point , passengers want to feel valued from KLM, desire recognition and want to feel that KLM understands their pain and frustration and is doing something about it. If KLM can provide this feeling of being recognised, acknowledged and empathy, it will vastly improve the passenger experience and their perception of KLM. It is here that the new proposed Asix structure for information content can have a big impact as this can be used as a guide to design and disseminate

information that is more personalised, relevant and feels more sincere, heartfelt and human.

This project shows how accepting and appreciative passengers are of receiving information based on this new structure. They preferred this type of information as compared to the old ones because it showed them as actual valued individuals and showed a level of sincerity and understanding previously missing in the old types of information communication. They truly felt that KLM cares for them which is important for KLM because that is their most desired customer experience and sentiment.

Finally, to conclude, it may not be possible to completely remove the pain and anguish of having a flight delayed, cancelled or missing a connecting flight, however, with honest, transparent and feed forward information delivered in a more sincere and human way, it is possible to at least positively change the perception of passengers about KLM and make them feel valued and cared for. As Maya Angelou famously said - "I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." And that is exactly where the power of the Asix structure for information content can have an impact. It will definitely increase trust in KLM and positively change the perception of passengers.

"People will forget what you said, people will forget what you did, but people will never forget how you made them feel."

- Maya Angelou

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Abbreviations

CX - Customer Experience
COX - Center of Excellence
NPS - Net Promoter Score
OCC - Operations Control Center
HCC - Hub Control Center
DPM - Deputy Passenger Manager
CFM - Customer Flow management
TFM - Transfer Flow management
D-Team - Disruption Team
IFE - In-Flight Entertainment