Blended Servicescape Affordances

Case: Designing Curated Content for Chinese Passengers' Customer Journey at Helsinki Airport

Katariina Kovanen-Piippo

Laurea University of Applied Sciences

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Laurea University of Applied Sciences **Abstract**
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Katariina Kovanen-Piippo

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The purpose of this thesis was to study and develop an airport's ability to reach out to its passenger customers and to activate their information seeking behaviour in an airport's hybrid space. The objective was to explore, understand and design an airport's blended servicescape and its affordances. This was done by studying and designing omnichannel approach to curated content production and by offering curated content via different touchpoints at different stages of the customer journey. This study aimed to showcase how design thinking and service design can be applied to an airport's service development and content production. The purpose of this thesis was also to support the case organisation's strategic goals by producing new data to be used in customer experience development.

The beneficiary of this thesis is Finavia. The development work focused on Helsinki Airport, which is the largest one of the 21 airports that Finavia operates in Finland. The development project's target group was Chinese transfer passengers, due to the focus group's strategic importance to the company.

The theoretical framework was built from spatial theories, services marketing and management theories, research on customer experience and content curation, and studies related to air passengers' shopping motivation and information seeking behaviour. The theoretical framework describes key concepts related to the thesis subject, for example hybrid space, space-time-path and constraints, space accessibility, affordances, blended servicescape, content curation and customer experience.

The development task's main target was to create and test the first version of the "Curated Journeys" -concept. The development phase was done by applying service design process model and its methods. In practise this meant researching the subject, identifying the user need and problem worth solving, ideating possible solutions, creating the first version of the concept, and testing and validating the solution concept. The methods used in this development task included observation, interviews, desktop research, customer journeys, space-time paths, personas, prototyping and service blueprint. Measuring the impact of service design also played a key role.

The main result of the thesis was that adding affordances activated Chinese transfer passengers to use the airport's hybrid space and extended the time they spend at the virtual space provided by the airport. Curated content from local products and their background stories interested the target group when offered on-site at Helsinki airport through QR codes. Designing space affordances and blended servicescapes required defining the touchpoints, channels, and content based on passenger customer's needs and behavioural patterns. In addition, the identification of the space-time path and its constraints proved to be important in an airport context that emphasizes both the spatial and temporal dimension of social activity. The space-time path, affordances and hybrid space are recommended to be included in the service design methods and tools. In this thesis's case organization, curated content production should be treated as a long-term investment to developing the airport's customer experience and to supporting destination marketing.

Keywords: Affordance, blended servicescape, content curation, customer experience, space-time path

Laurea ammattikorkeakoulu **Tiivistelmä**
Tulevaisuuden johtaminen ja asiakaslähtöinen palveluliiketoiminta
Tradenomi (YAMK)

Katariina Kovanen-Piippo

Tilan tarjouma yhdistetyssä palveluympäristössä - Case: Kuratoidun sisällön muotoilu kiinalaisten matkustajien asiakaspolulle Helsinki-Vantaan lentoasemalla

Vuosi 2020 Sivut 125

Opinnäytetyön tarkoituksena oli tutkia ja kehittää lentoaseman kykyä tavoittaa matkustaja-asiakkaansa ja aktivoida heidän tiedonhakukäyttäytymistään lentoaseman hybriditilassa. Tavoitteena oli tutkia, ymmärtää ja suunnitella lentoasemien yhdistettyä palveluympäristöä ja tilan tarjoumia. Tämä tehtiin tutkimalla ja suunnittelemalla monikanavainen lähestymistapa kuratoituun sisällöntuotantoon sekä tarjoamalla kuratoitua sisältöä erilaisten kosketuspisteiden kautta asiakaspolun eri vaiheissa. Opinnäytetyön tavoitteena oli myös havainnollistaa, kuinka design-ajattelua ja palvelumuotoilua voidaan soveltaa lentoasemien palveluiden kehittämiseen ja sisällöntuotantoon. Lisäksi tarkoituksena oli tukea tapaustutkimuksen kohteena olevan organisaation strategisia tavoitteita tuottamalla uutta tietoa asiakaskokemuksen kehittämiseen.

Opinnäytetyön edunsaaja on Finavia. Kehittämisvaihe kohdistui Helsinki-Vantaan lentoasemalle, joka on suurin niistä 21 lentoasemasta, joita Finavia Suomessa operoi. Kehitysprojektin kohderyhmäksi valittiin kiinalaiset vaihtomatkustajat, koska tämä kohderyhmä on yritykselle strategisesti merkittävä.

Teoreettinen viitekehys rakennettiin tilan ja paikan teorioista, palvelumarkkinoinnin ja johtamisen teorioista, asiakaskokemuksen ja sisältökuratoinnin tutkimuksesta sekä lentomatkustajien kulutusmotivaatiota ja tiedonhakukäyttäytymistä käsittelevistä tutkimuksista. Teoreettinen viitekehys kuvasi opinnäytetyön aiheeseen liittyviä avainkäsitteitä, kuten hybriditila, aika-tila-avaruuspolku, tilan saavutettavuus, tilan tarjouma, yhdistetty palveluympäristö, sisältökuratointi ja asiakaskokemus.

Kehitystehtävässä päätavoitteena oli ”kuratoitujen polkujen” -konseptin ensimmäisen version luominen ja testaaminen. Opinnäytetyön kehittämisosuus toteutettiin soveltamalla palvelumuotoilun prosessimallia ja sen menetelmiä. Käytännössä tämä tarkoitti aiheen tutkimista, käyttäjän tarpeiden ja ratkaistavan ongelman tunnistamista, mahdollisten ratkaisujen ideointia, konseptin ensimmäisen version luomista sekä konseptin testaamista ja validointia. Tässä kehitystyössä käytettyjä menetelmiä olivat havainnointi, haastattelut, työpöytätutkimus, asiakaspolut, aika-tila avaruus, persoonat, prototyypit ja palvelumallinnus. Palvelumuotoilun vaikuttavuuden mittaaminen oli myös keskeisessä roolissa.

Opinnäytetyön päätulos oli sen todentaminen, että tilan tarjoumien lisääminen aktivoi kiinalaisia vaihtomatkustajia käyttämään lentoaseman hybriditilaa ja pidentää aikaa, jonka he viettävät lentoaseman tarjoamassa virtuaalitilassa. Kuratoidut paikalliset tuotteet ja niiden taustatarinat kiinnostivat kohderyhmää, kun tietoa tarjottiin paikan päällä Helsinki-Vantaan lentoasemalla QR-koodien kautta. Tilan tarjoumien ja yhdistettyjen palveluympäristöjen muotoilu edellytti kosketuspisteiden, kanavien ja sisällön määrittelemisen matkustaja-asiakkaan tarpeiden ja käyttäytymismallien kautta. Lisäksi aika-tila-avaruuspolun ja sen rajoitusten tunnistaminen osoittautui tärkeäksi lentoasemakontekstissa, missä korostuu sosiaalisen toiminnan tilallinen ja ajallinen ulottuvuus. Aika-tila-avaruuspolku, tilan tarjouma ja hybriditila suositellaan otettavaksi osaksi palvelumuotoilun menetelmiä ja työkaluja. Opinnäytetyön kohdeorganisaation tapauksessa kuratoitu sisällöntuotanto tulisi nähdä pitkäaikaisena investointina asiakaskokemuksen kehittämiseen ja kohdemarkkinoinnin tukemiseen.

Avainsanat: asiakaskokemus, yhdistetty palveluympäristö, sisältökuratointi, aika-tila avaruuspolku, tilan tarjouma

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1 Introduction

Air transportation is being shaped by global megatrends such as global competition for passengers, the growing middle class in Asia, the growth of emerging economies in other parts of the world, digitalization, climate change, aging population and urbanisation. Global competition for air passengers can be seen in airports increasing investments in providing a unique customer experience to attract and retain airlines and passengers. The growing middle class in Asia is having an impact on the growth in air travel as more and more people have the desire and opportunity to travel by air. The impact of digitalisation is reflected in the fact that passengers are expecting more and better digital services to make travel smoother. (Finavia Corporation 2019a, 11–12.) These three megatrends affect the developmental landscape of this thesis.

The non-aeronautical revenue from passengers represents a critical part of income for European airports' economic viability (Thelle et al. 2012, cited in Puls & Lentz 2018, 246-247). In fact, there has been a significant change in the airport business models as airports have evolved over the past few decades from a classic aeronautical-centred business to non-aeronautical-centred business (Han et al. 2014; Perng et al. 2010, cited in Han, Lee & Kim 2018, 3060). At modern international airports, it is common that a greater percentage of revenue generation from airport operation comes from non-aeronautical-centred business, like duty free shopping (Han et al., 2015 cited in Han et al. 2018, 3060). Given this paradigm shift in the airport business, efforts to support and develop passenger buying behaviour and experience at the airport can be seen as an effort to support airport's financial viability and business. It is important focus area also because the airport retail market faces competition from various shopping locations, such as tax-free shops in local city-centres, shopping malls, retail stores within hotels and shopping districts within a destination city (Jung and Han 2015 cited in Han et al. 2018, 3060.).

The development landscape of the thesis is formed around airports and their passenger customers. This study doesn't focus on airlines although they are also valued as important customers to the airport. For passengers, airports are places before or between travel destination, and they consist of mandatory process steps and waiting time. In many cases passengers don't have direct customer relationship with an airport, unless they for example park their cars at parking premises operated by the airport. They do have direct customer relationship with airlines, and might have it also with shops, restaurants, cafes and other service providers located at the airport's premises and operated by commercial partners of an airport. For travellers, shopping is one of the most popular activity they engage in at airports with their free time before flight (Crawford & Melewar 2003, cited in Lin & Chen 2013, 426-427). At the case study airport, the focus of development work is on attractive service landscapes with

smooth processes, interesting services and shopping opportunities, and good customer service so that customers can enjoy their time at the airport and hope to return one day.

Developing the passenger's shopping experience requires forming a holistic view of the passenger's journey and their points of interaction with the service provider. Interaction can happen in digital or physical servicescape or in both at the same time, giving passengers access to information and services offered by the airport operators. Different information seeking behaviour occurs with different air passenger types. This heterogeneous information seeking behaviour pattern of passenger types is advised to be recognized and utilized when designing the airport retail information provision strategies. (Chung, Wu & Chiang 2013, 25.)

However, shopping experience is not the only experience passengers are looking for. Tourism and especially customer expectations related to travelling started to change around 20 years ago. This change has been seen in new forms of tourism that depart from mass tourism and information and communication technologies that impact the creation, production and consumption of the whole travel product. A window of opportunity has opened for those in the field of travelling who adopt a perspective that values experience as an important attribute. (Stamboulisa & Skayannisb 2003, 35.) Price is known to be a key driver when passengers are making decisions about flight routes, but reputation and previous experience are also important when people compare airport options. Airports can provide space-related experiences for passengers and build their reputation in this regard as well in order to keep up with the competition. One of the most famous examples of this approach to an airport space design is presented by Changi airport with its famous attractions like inside terminal waterfall and butterfly garden. Offering experiences might in future become even more strong differentiation factor between airports. According to Tuulaniemi (2016, 82-83 properly designed service environments are a key part of a service process that translates the value of a service concept and turns it into business and competitive advantage.

This thesis explores Helsinki Airport from these perspectives and suggests new ways to design the airport's blended servicescape affordances in a way that offers opportunities for passengers to experience and learn something new. In addition to servicescape and affordances, the focus of the development task is on content curation, which is used for testing whether servicescape affordance development has impact on customer experience and behaviour. Curation can be defined as a first step of personalization, which is a strong trend in today's digital and physical services development. For instance, Future Forces 2019 report recognizes, that artificial intelligence is being utilized for creating a more personalised experience for customers, which helps them by offering more coherent curated experiences from content that otherwise would be overwhelming (Futurice 2018).

As a result of this thesis, a curated content production process model is designed and tested to serve one of the company's strategically important focus groups. This tailored model can be used for designing curated content for different target groups as a first step to customer journey personalization, which is one of the targets in the company's E-commerce vision. Most promising journey stages and touchpoints for reaching passengers with curated content are identified during this research. Also, content to support company's vision for being "Globally connected, attractive Finland" is produced during the development phase. The development task is answered by utilizing service design process and methods to ensure customer-oriented approach to development.

According to previous studies conducted at Helsinki airport, Chinese passengers have experienced difficulties finding specific products and services they would like to purchase or use while they are at the airport. Language is one of the major things causing difficulties to conduct commercial activities. The Chinese guides working at the airport assist passengers personally to find products and services. This is time consuming and service cannot reach all Chinese passengers due to limited resources. As a result of the development process, these identified challenges are addressed. Curated content for Chinese passengers is produced and its reach to the target group is tested at different touchpoints during the Chinese passengers' customers journey. Also, the impact and value of content curation is measured during the process. Suggestions for future development steps are presented in the final chapter.

Author of this thesis has worked as a service designer for Finavia since summer 2018 in two different departments: DigiPMO (Helsinki Airport organization) and Marketing, communications and customer experience (Finavia Corporation). She is the first in-house service designer working for the company. Some of the content and interpretations are based on thesis authors previous work experience from projects related to the subject.

1.1 Study Purpose and Objective

The purpose of this thesis is to research and develop the airport's ability to reach out to its passenger customers and to activate their information seeking behaviour in the airport's hybrid space. This requires defining the passenger facing digital and physical service space offered by the airport operator. The objective is to explore, understand and design the airport's blended servicescape and its affordances. The purpose of this thesis is also to explore the airport's role as a content curator and see if curated content served through new touchpoints can bring additional value for customers. This is done by studying and designing omnichannel approach to curated content production and by offering curated content via different touchpoints at different stages of the customer journey. It requires understanding passengers shopping motivations and information seeking behaviour during their end-to-end travelling journey.

The purpose of this thesis is also to support the case organisation's strategic goals by producing qualitative and quantitative data for decision making and future development of customer experience. The process model for curated content production is designed, tested and documented during the development phase.

This study showcases how design thinking and service design can be applied to an airport's customer-oriented service development and content production. Customer-oriented focus on service developments is executed by studying the target group, their buying and information seeking behaviour, their typical journey and touchpoints at the airport, and by using defined customer journeys and customer insights as a basis for developing blended servicescape affordances. It includes also measuring the impact of designed service concept. This is done during the test phase by studying if the airport can create a Chinese transfer passenger's engagement to curated commercial contend through different touchpoints during their customer journey.

Research problems are used to define what is studied in this thesis. Research problems are presented in the form of questions. The main research question is, "How to design and develop the airport's blended servicescape and its affordances?"

Other questions that guide the research and development work are:

- How to define the airport's space and spatiality of social activities?
- How is spatiality of activities linking to customer experience management?
- What is the typical information-seeking behaviour of passengers at the airport and in the travel context, and how can the airport, as a service provider, support it?
- How to understand curated content production in the context of the airport retail and experience?

The main focus of the development task is on "Curated journeys". This task originated from Finavia's Digital-Physical Marketplace Vision work. The development task has two interrelated parts:

1) "Curated journeys" in the airport's blended servicescape: research, ideate and create first version of the concept, test and validate
2) Finavia's curated content production process model: design, test and document the process model during curated content development project

Thesis proceeds according to the research-oriented development process's six stages, which are presented in Figure 1. First stage includes identifying the development object and defining the initial objectives. Second stage includes exploring the development object in theory and practice. Third stage includes defining the development task and development object. Fourth stage includes developing the theoretical framework of thesis and designing the approach and methods. Fifth stage includes implementing and publishing the development project. Sixth stage includes evaluating the development process and its outcomes. (Ojasalo, Moilanen & Ritalahti 2014, 24.) In the case of this thesis, the fourth stage approach is service design and its methods applied to achieve the development goal.

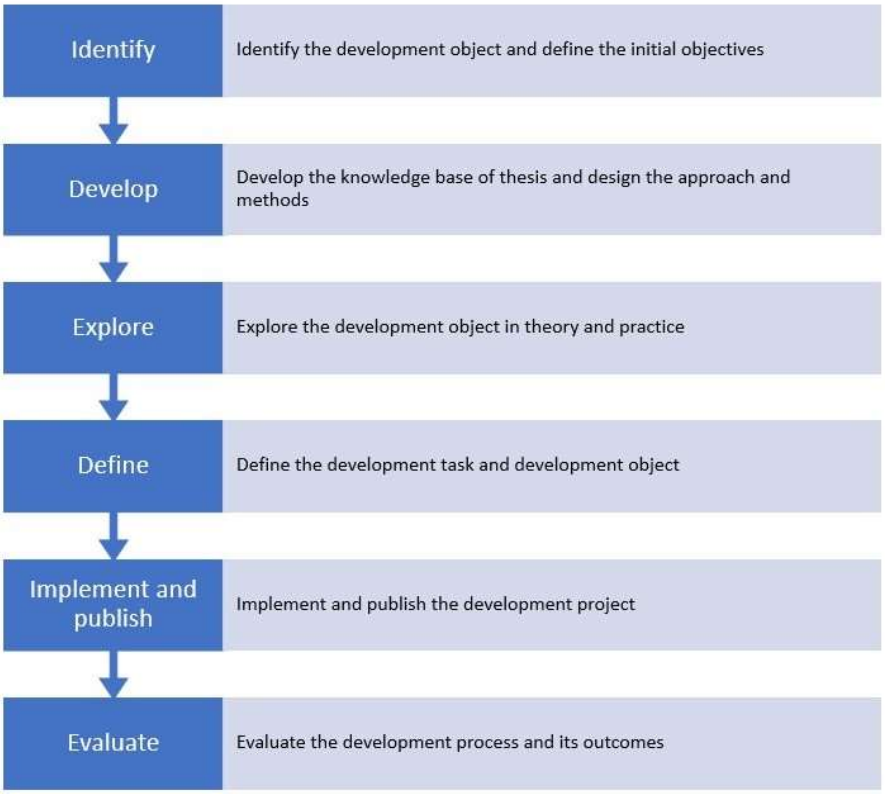


Figure 1: Research-oriented development process (Adapted from Ojasalo, Moilanen & Ritalahti 2014, 24)

This study does not include developing digital services user-interfaces, customer service processes, digital wayfinding systems, or other technologies related to subject. Information and content management and information architecture are also excluded from this study.

1.2 Structure of the Study

The study consists of four chapters. After Chapter 1 introduction, Chapter 2 presents the theoretical framework of the thesis. It describes the key concepts related to the subject of the

thesis. Chapter 3 describes the development landscape and the methodological choices for the development phase. It also describes the tools and methods used for data collection during the development phase of the thesis, as well as how the collected research material is analyzed. Chapter 4 presents empirical study and findings. Chapter 5 concludes the thesis with a reflection and suggestions for the next stages of development.

1.3 The Case Organization

This thesis focuses on aviation and travel industry. Air transportations impact on Finnish economy is significant, since it either directly or indirectly employs about 100 000 people in Finland and air transport accounts for about 3 % of the Finnish gross domestic product (GDP). (Finavia Corporation 2018a.)

Thesis's case organization is Finavia, a public limited company owned by the Finnish state. Finavia's operations are financed through the revenue generated from its airport business operations. In year 2018 the company's revenue was 373.6 million euros. (Finavia Corporation 2018a.) As a Finnish airport operator, Finavia provides airlines airport services and offers passengers facilities and services during their stay at the airport. The airport services are produced in cooperation with over 1 500 companies and other organizations. Finavia is responsible for the development and maintenance of terminal areas and runways, infrastructure of the apron, taxiways and runways, aircraft parking and apron management, ground handling, security control services, managing customer flows and situational awareness, signs, guidance, communication and assistance of passengers with reduced mobility, as well as car parking and coordination of commercial services with commercial partners. (Finavia Corporation 2019a, 25.)

The development phase of this thesis is conducted at Helsinki airport, which is the largest one of the 21 airports that Finavia operates in Finland. In year 2018 total passenger volume at all airports was 25 million (increased by 10,1% from previous year), of which nearly 21 million travelled through Helsinki airport. Transfer traffic is the fastest growing traffic type. About a third of Helsinki Airport's passengers are transfer passengers. In particular, the number of Chinese passengers is expected to grow in the coming years. Asia accounted for 14.6% of Helsinki Airport's international traffic in 2018. (Finavia Corporation 2019a, 4-5.) There is no precise information on the number of Chinese passengers at Helsinki-Vantaa, as Finavia does not have statistics on the nationalities of passengers. According to some estimates, in 2019, there were about 400 000 to 600 000 Chinese passengers at Helsinki Airport.

When competing with other European airports, Finavia sees Finland's geographical location as the basis for its competitive advantage. Other strengths include state-of-the-art operational capability, efficient use of growing airport capacity, a unique customer experience and the use of digitalisation. Company's vision is to offer passengers the best connection from

Northern Europe to the world and to promote Finland's accessibility as an attractive destination. The customer promise is “For smooth travelling”, which means setting a goal for developing a unified travelling experience with all airport agents. The values are “Safely, For customers, By developing and Responsibly”. The strategic goals consist of the best flight connections in the Nordic area, unique customer experience and responsible and profitable growth. (Finavia Corporation 2019a, 15-16.) The unique customer experience is based on defined customer experience pillars, which are “Confidence, Gift of Time, Refreshed, Finnish Experience”. Finavia has performed well in terms of customer satisfaction indicators. Customer satisfaction in 2019 in the international survey was 4.17, with scales 1-5 and 5 being the best scores. (Finavia Corporation 2019a, 4-5.)

Helsinki Airport has a strong position in passenger traffic between Europe and Asia, and this airport holds a key position in Finavia's strategy. Helsinki Airport development program was launched in 2014 and the expansion project will run till year 2023. As a result, Helsinki Airport will be able to serve 30 million passengers, with target of strengthening its position as “the leading long-haul airport in the Nordic countries and a popular hub between the East and West”. (Finavia Corporation 2019a, 18-19.) Figure 2. presents the ongoing development of the terminal space (Finavia Corporation 2020).

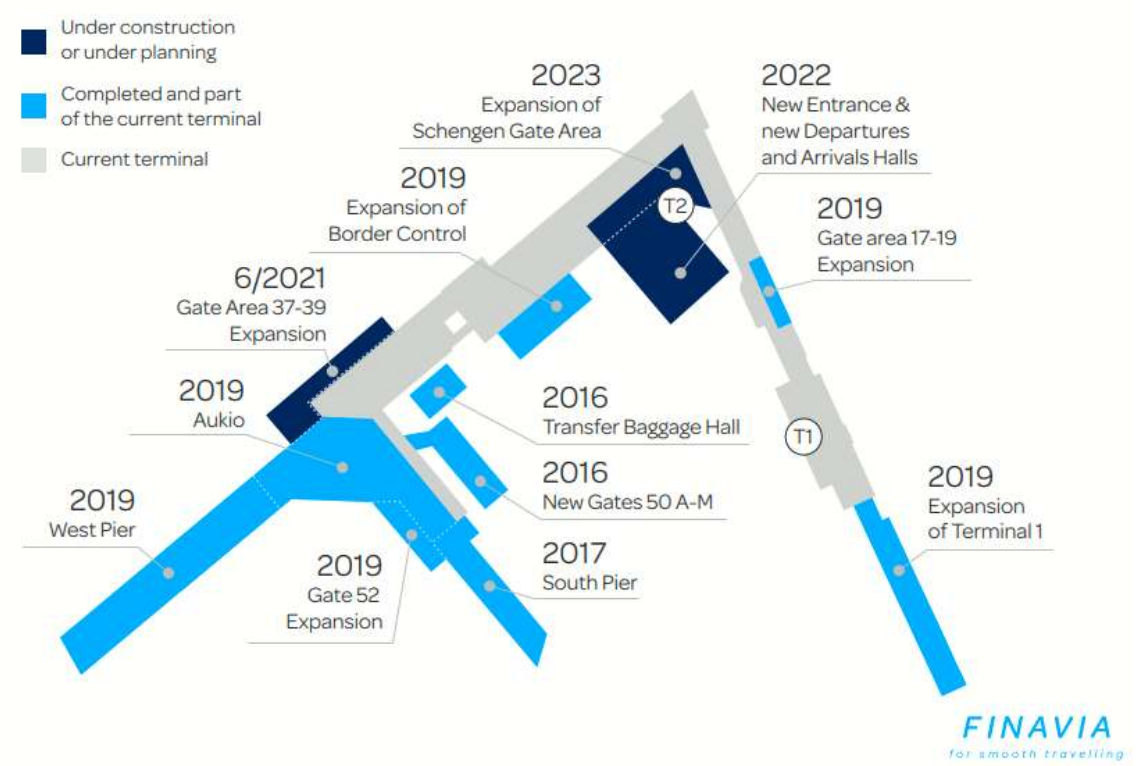


Figure 2: Development of Helsinki Airport terminal space (Reprinted from Finavia Corporation 2020)

The expansion of the terminal building, which has been completed so far, has created spatial benefits for passengers. New areas have increased clarity and passenger capacity, as well as improved the service level and customer experience. Finavia invests in modern technologies to offer new experiences and to create unique atmospheres like in “Aukio”, which is a Finnish nature multisensory experience space for passengers completed in 2019 at the airports Non-Schengen area. In addition, developing short transfer times, fast security checks and internationally acclaimed services are recognized as key factors in generating value for passengers and airlines. (Finavia Corporation 2019a, 18-24.)

2 The Relationship Between the Spatiality of Activities and the Customer Experience

The theoretical framework is built from spatial theories, services marketing and management theories, research on customer experience and content curation, and studies related to air passengers’s shopping motivation and information seeking behaviour. The theoretical framework describes key concepts related to the thesis subject and presents synthesis of the phenomena under consideration. Key concepts are for example hybrid space, space-time-path and constraints, space accessibility, affordances, blended servicescape, content curation and customer experience.

2.1 The Spatial Concepts

To understand users experience of space in relation to their goals and then using this knowledge to innovate physical spaces requires a theoretical approach to the subject. A structure called “Lefebvrian theoretical lens” is used to study the space dimensions. Henri Lefebvre’s Production of Space (1991) has formed foundation from which cross-disciplinary research related to spatial theory has evolved. Lefebvre’s theory defines the “science of space” with three-part framework that constitutes of spatial practice, representations of space, and representational spaces. These three aspects of space can also be interpreted as physical, mental and social space: “spatial practice includes not only the ongoing development of the built environment (the physical), but also how we perceive it (the mental), and the ways in which it shapes our lives (the social), all of which forms a type of spatialized practice”. (Leckie et al. 2010, cited in Gray, Burel, Graser & Gallacci 2018, 305.)

Defining the meaning of space and place is essential background and starting point for spatial experiments and perceptions. Space can be defined as “a homogenous and unorganised entity”, whereas place can be defined as: “a meaningful, organised and well-defined entity”. Meaningful equals each person forming their own perception of the world surrounding them. The same space is defined and judged according to each person’s own reference systems. Space can turn into a place when a person modifies their perception upon it and the place starts to have a meaning to them. (Pop 2014, 278; 284-285.) This definition has similarities to

space aspects like Lefebvre defined them. Pop seem to suggest that physical space develops into mental and social place.

Lefebvre's theoretical lens concentrated on physical space dimensions (Leckie et al. 2010, cited in Gray et al. 2018, 305). Miller (2007, 18-19) refers to Batty's (1997) conceptual framework for understanding the interactions between real and virtual spaces and how these "hybrid spaces" can influence both individual and collective behaviour. In this framework "Place"/"Space" is used when referring to a geographic space in real world. Geography is understood to consist of places and the abstract form of a place is called space. This is in line with Pop's definition of space and place. "Cspace" or "Computer space" refers to representations of geographic space in computer space, like places in computer games and GIS, a geographic information system used in urban planning. "Cyberspace" is understood as a new space emerging from communication by using remote computers and mobile devices, which form electronic linkages between people in virtual space and support their digital interaction. It is also a medium of sharing information about particular places. "Cyberplace" refers to real world places that are complemented and modified by digital technologies. Cyberplace consists of wired and wireless digital infrastructure embedded in certain places, also of the patterns and behaviours that are included in this digital infrastructure.

Figure 3 presents the feedback loop between these different forms of space. Real world place and space are the driving forces, computer space makes communication in cyberspace possible, and using cyberspace involves digital infrastructures of cyberplace. This feedback loop affects real world geographic space by changing patterns of our social, economic and cultural lives, also the ways we use geographic space and our use of information technologies. (Miller 2007, 18.)

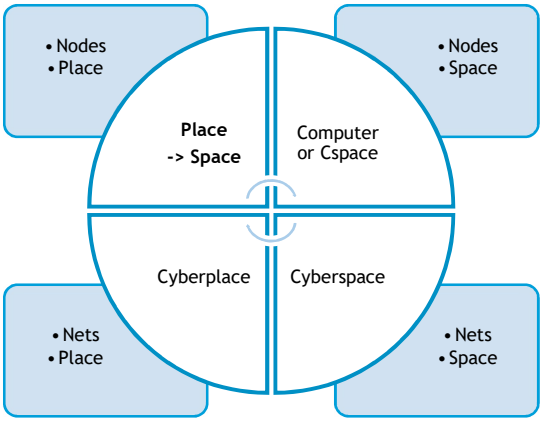


Figure 3: The emergence of virtual geography (Reprinted from Batty 1997, cited in Miller 2007, 18)

Nowadays activities are not often tight to certain physical space and time due to the use of information technologies. Activities in physical and virtual space can be substitutes for each other and virtual activities can also increase activities in physical space. For example, e-mail advertisement can lead to customer visiting a shop. (Miller 2007, 18.)

Physical and virtual space can also blend to each other and form "a hybrid space". Zook and Graham (2010, 241) define the concept of "DigiPlace" meaning the blending of physical with digital and "the ability to access the place in real time and on the move". They see this electronic visibility having an impact on peoples' perceptions of physical accessibility. Google maps is used as an example of DigiPlace. Ranking algorithms also impact perceptions of place, when peoples' own interests starting to shape and gain control over visibility and in the end influence how one interacts with physical places. (Zook and Graham 2010, 247.) Some airports offer the possibility to use their own indoor navigation, which presents a DigiPlace to users of navigation system and impacts the physical accessibility of a place.

2.2 Time Geography and Space Accessibility

One important aspect related to the user experience of the space is accessibility. Space accessibility is "the ability of individuals to conduct activities within a given environment" (Weibull 1980, cited in Miller 2007, 4). Place-based accessibility was traditionally grounded on the assumption that people must be physically present at the location of activity, but with the modern technology, people can also be "telepresent". Batty (1997) referred to this with the definition of Cyberspace. There are standard methods of measuring place-based accessibility. These are travel distance, time between locations and network connectivity by roads, public transit and other transportation systems. (Miller 2007, 5.)

People-based accessibility turns the perspective on individuals in space and time and it uses "Time geography" as a foundation. The focus is on individual, their activities in space and time, and the availability of resources to overcome spatial distance between activities and jobs-to-be done constraints in their daily lives. To measure people-based accessibility means considering different individual variables, such as age, culture, social group, ICT resources at hand, schedules and the availability of transportation options. The growth of wireless communication technologies has removed the boundary between individuals' behaviour in real space compared to virtual space. (Miller 2007, 5-6.)

Miller (2007, 10) refers to Hägerstrand (1970), who has developed Time geography perspective for viewing the impacts of instant access on societies and cities. Time geography recognizes that human activities have both spatial and temporal dimensions. This means that activities and people are available at specific locations for limited duration of time. (Miller 2007, 10.) The concept recognizes constraints on human activities, that determine if a specific activity can occur effectively in a certain place. All relevant access criteria must be met

simultaneously to make an activity possible. These constraints are access (the ability to be in location within the time window available), duration (the ability to be present for an sufficient time), capability (presence of fixed resources needed at a location), coupling (the ability to concur with a mobile entity, like a person or travelling resource) and authority (the right to occupy that part of space-time path). For example, to meet a friend (coupling) for 60 minutes (duration) to shop (capability) when shops are open (authority). (Forer, Huisman & McDowall 2010, 124.) These constraints impact space accessibility and interact with the spacing, timing and flexibility of activities. Activities can be classified as fixed or flexible. Fixed activities are those that are harder to reschedule or relocate. Flexible activities are easier to reschedule or may occur in more than one place. Fixed activities act as space-time anchors since other activities must happen at the temporal gaps between them and their location is used as basis for moving to flexible activities locations. (Miller 2007, 10-11.)

“Space-time paths” and “pace-time prism” are central constructs for Time geography. The space-time path visualizes mobility between activity locations / stations in relation to space and time. The slope of path presented in Figure 4 is determined by movement velocity. This is impacted by the availability of resources for trading time for space, which means for example individuals transportation options within that environment. Constraints lead to bundling of the individual’s space-time paths, which occur typically at activity locations / stations. The space-time prism measures individual’s accessibility to environment and its activities. Fixed activities and coupling constraints anchor space-time prisms, because they can only occur in one place. The projection of the prism to the 2D plane is called “potential path area” or “opportunity area”, that comprises of the region in geographic space where individual can be during that period of time and conduct fixed and flexible activities. (Miller 2007, 11-12.)

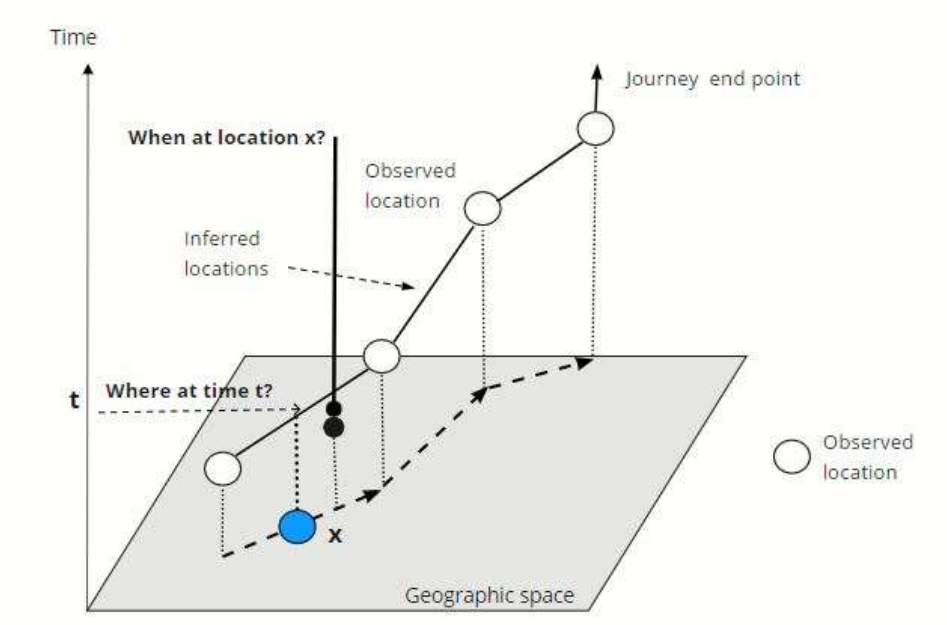


Figure 4: Space-time path representation (Reprinted from Miller 2007, 11-12)

Time geography and its constructs provide useful framework for presenting the spatial and temporal elements of people's movement and conditions needed for these movements to occur in a geographic space. The space-time path can be modelled as a set of time-stamped locations (space time control points), as well as the duration and the speed of movement between these locations of activity, which is indicated by the path's slope. The path is vertical when individual remains in place at the location point. (Bridwell 2010, 220-221.)

Yu and Shaw (2010, 108-112) have extended Hägerstrand's time geography to include also the role of virtual space as a carrier of activity. Physical space provides access channels to virtual space, since information and communication infrastructures reside in physical space. On the other way around, virtual space can feed information back to people in physical space, like in DigiPlace presented by Zook and Graham (2010, 247). After retrieving information from virtual space and using it to help making decisions, this might affect users activity patterns in physical space. According to this hybrid space concept model, physical space has two roles in supporting human activities: a carrier of physical activities and a connector for virtual activities. (Yu & Shaw 2010, 107-108.)

Yu and Shaw (2010, 108-112) also introduce new capability constraints for individuals as users of space. These are wired and wireless access to virtual space, computer skills and language skills. Internet connection is included as characteristics of environment. Authority constraints in virtual space include for example business hours and membership-access for websites. Coupling constraints include co-existence or co-location in space and/or time or no co-location in space or time depending on the communication mode.

Space-time path presented by Yu and Shaw contains all activities performed by a person. Both physical and virtual activities have location and time relation and require a portion of the space-time path. Yu and Shaw illustrate this with a diagram, which is reproduced in Figure 5. Both forms of activities can be located to space-time path according to their time references. Virtual activities are different from physical in terms of constraints and action space. Virtual activities only take place in ICT-enabled locations, but can extend to distant locations, unlike physical activities that impact only the physical proximity of space-time path. Virtual activities in space-time path can be presented as extended links from space-time path due to their extended action space. (Yu & Shaw 2010, 108-112.) The idea of a space-time path is similar to a customer journey presented in Chapter 2.7.

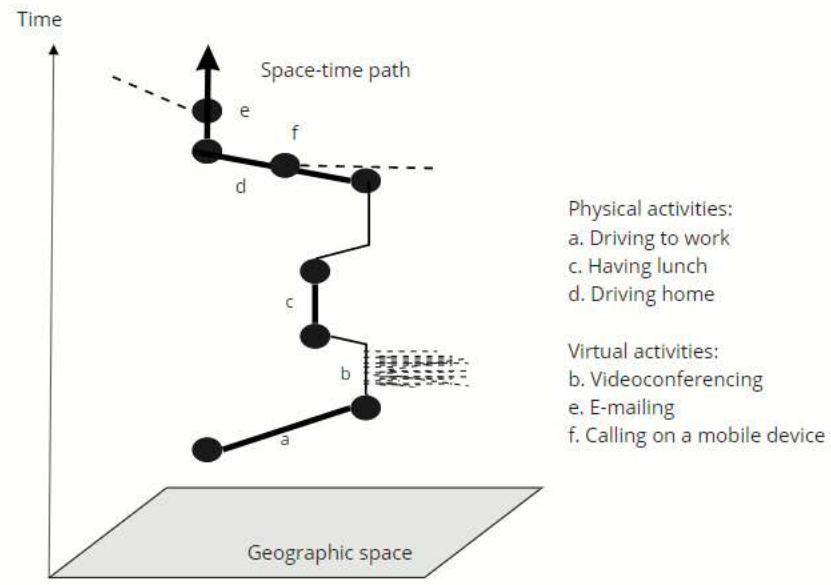


Figure 5: Space-time path with physical and virtual activities (Reprinted from Yu & Shaw 2010, 108-112)

Communication methods can also be classified based on their spatial and temporal constraints. Yu and Shaw (2010, 106) refer to Miller (2006) and present four different communication method types with respect to spatial dimensions (physical and telepresence) and temporal dimensions (synchronous and asynchronous). Synchronous physical presence requires coincide in both time and space, an example of this is face-to-face meeting. Asynchronous physical presence requires coincide in space, but not in time, examples of this are post-it notes and hospital charts. Synchronous tele-presence requires coincide in time, but not in space, examples of this are instant messaging and teleconferences. Asynchronous tele-presence doesn't require coincide with neither space nor time, examples of this are e-mails and webpages. With modern communication technology the modes of conducting human activities have shifted to tele-presence, which at the same time has changed the patterns of human behaviour (spatio-temporal activity patterns) and communication.

2.3 The Affordance Theory

Human activity at space-time path stations can be combined with the concept of affordances. May (2010) refers to Gibson (1966, 1979), who was first to introduce the concept of affordance in his “ecological perception”. The background of his approach was in Lewin’s (1936) “Topological Psychology”. Objects in the natural environment are called "affordances". The idea of this approach is that humans and animals can directly extract information about the action potential of physical objects that they see in their environment, without any representation of these affordances. The concept of affordance has been included in the theories of industrial design, architecture and interface design for Human-Computer Interaction (HCI), for example by Noman (1988) referred to by May (2010). Designers have been keen to support the idea of designed artefacts presenting affordances, because it is in line with the phrase “form follows function”, meaning that artefacts appear to be directly relevant to observers and seem to “suggest” how they could be used. (May 2010.)

Other concepts related to the concept of affordance are “affordance space” and “activity space”. Vega, Manso, Macharet, Bustos and Núñez (2018, 73-76) define affordance spaces as “spaces where humans usually perform particular activities”. Definition of the affordance space is related to the concept of affordances, meaning potential activities the environment provides to human. Rios-Martinez, Spalanzani and Laugier (2014) refer to Lindner and Eschenbach (2011) with their definition of activity space as “a social space which is constituted by means of actions performed by agents”. These concepts are related to each other, since affordance spaces are potential activity spaces. A bus stop is an example of affordance space, where the bus schedule represents an affordance for humans. The space in front of this information is defined as an affordance space, since the bus schedule can be used to access the information. When a person takes a picture of the bus schedule or reads the information, the space between a person and the object tuns into an activity space. (Rios-Martinez et al. 2014, 143-145.)

Space affordances can be created by adding to the space objects with which humans are known to interact. Different objects in the space have different interaction space requirements. For example, using a coffee machine requires less space than reading a poster, which can be done from a further distance. Space affordances can be designed and created, and their success can be studied. Performance can be evaluated by testing and measuring whether space affordance is being used as an activity space, in other words are actors interacting with the object in space. Generally, there are two conditions that need to be fulfilled to consider that an activity is being carried out: 1) the person must be inside the affordance space and 2) must be looking at the object. (Vega et al. 2018, 73-76.)

According to Barden and Sutherland (2013, 119-121, 157) it is worthwhile to convert touchpoints into decision interfaces, in other words turning objects into affordances. This changes

customers from passive followers to active decision makers, which holds a potential to generate loyalty towards a service provider. Thus, it is seen that the decision interface is central to the procurement decisions. Changes to the decision interface, such as how the products are displayed, may influence explicit decision making and impact consumers consumption decisions.

2.4 The Servicescape Perspective on Space

"Servicescape" is a perspective on space, that refers to physical space where service occurs. The term servicescape is defined as "the manmade, physical surroundings in which the service takes place". Physical servicescape design, or "service atmospherics" is suggested to produce cognitive, emotional, and sensory responses in users, meaning both customers and employees. According to Bitner (1992, 57-71), the servicescape acts as "a window into a socially constructed reality and provide cues that can be interpreted as nonverbal communication". These cues link partly to space affordances. Servicescape related meanings are interpreted individually by humans and shaped further in conversations between people. A servicescape becomes a social phenomenon, that is constructed through "the interpreted experience of being present in the physical space".

The term "social servicescape" refers to the physical service environment, but also to its human components. It identifies occasion (business or pleasure) and social density (number of people present) as factors that may influence humans experience of the servicescape. (Tombs & McColl-Kennedy 2003, cited in Bolton, McColl-Kennedy, Cheung, Gallan, Orsingher, Witell & Zaki 2018, 791-792.) "Blended servicescape" means integrating together the physical, virtual and social service landscape. Thus, the servicescape expands from physical to virtual and to social surroundings. This means that the time-logic of service exchange expands from pre-sale service to post-sale service and beyond, and also digital and non-digital service environment have interdependencies. Similar to Theory of Affordances, blended servicescape suggests that customers may also act directly on the environment and make changes to it. (Bolton et al. 2018, 793.) Blended servicescape's physical, virtual and social surroundings impact the access of servicescape and its proximity for different users.

"The Extended Servicescape" -model presents physical setting of a space as a social meeting space. Otherwise it has the same elements presented in original servicescape model. Grönroos (2015) illustrates this concept with a diagram by Sandbacka, which is reproduced in Figure 6. Investing in servicescape and how it is perceived by customers has studied to have an impact on perceived service quality. (Grönroos 2015, 398.) This perspective will be approached again in Chapter 2.6.

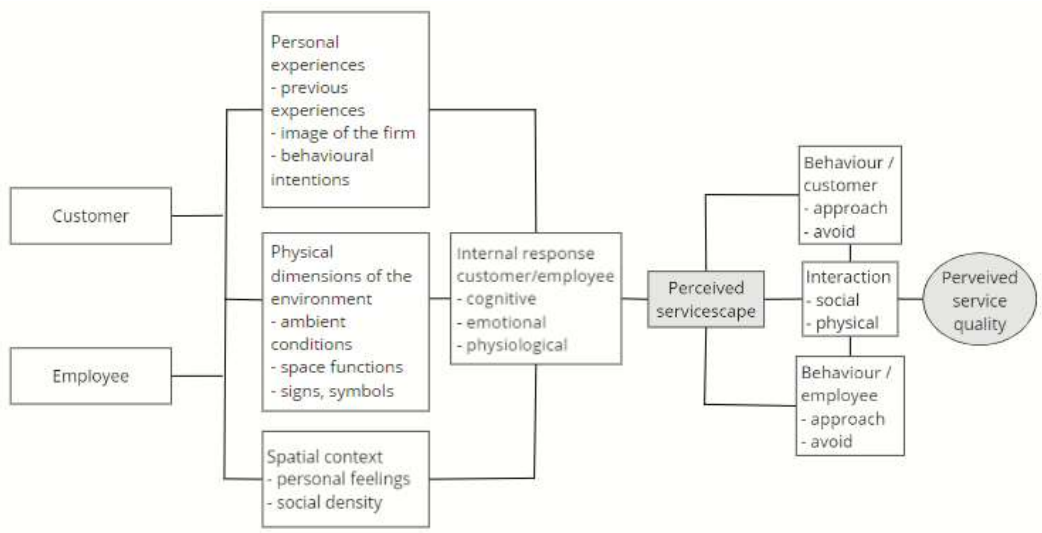


Figure 6: The Extended Servicescape model (Reprinted from Sandbacka 2006, cited in Grönroos 2015, 398)

Regarding the designing of servicescapes, there are six factors that can be used to assess the usability of a space and thus influence the user experience. These factors include accessibility, navigation, environment, suitability and comfort, functionality and services. Usability is recommended to be viewed through the chronological journey of the user, which turns orientation to the user experience. The journey begins when entering space and ends when leaving space. (Kärnä & Nenonen 2011, 150.)

2.5 Services Marketing and Management

Services can be defined as “intangible acts, processes and performances” that can be performed on a person or their property. Wilson, Zeithaml, Bitner and Gremler (2012, 5-7) refer to Lovelock (1983), who divides services into four categories by using the service process target perspective and from the extent to which service delivery is intangible. These categories are reproduced in Table 1. The largely intangible nature of services can make it difficult for the customer to distinguish between service providers. Customers themselves can also have role in the service and this needs to be communicated to customers. (Wilson et al. 2012, 5-7.)

Table 1: Service categories (Reprinted from Lovelock 1983, cited in Wilson et al. 2012, 5-7)

	People as target	**Posession/property as target**
Material functions	Services to the human body: passenger transport, healthcare	Services for human property: courier services, car repair, laundry service
Immaterial functions	Services to the human mind: education, entertainment, art, therapy	Intangible Assets and Property Services: accounting, banking, insurance, legal services

Experience can also be interpreted as a service. It is highly personal and intangible, but it can be linked to tangible artifacts, like souvenirs and photograph, that serve as a physical evidence for customers to understand the nature of the service experience. Background for experience as service is in experience economy, where memory of an experience is seen as a product. Companies in experience business do not charge for the services they deliver, but for the memories and feelings the customer leaves with after the service experience. (Pine & Gilmore 1998, cited in Wilson et al. 2012, 10.) The customer's perception and experience are influenced by design and decoration of the premises and the behavior of the staff (Wilson et al. 2012, 10-22).

The importance of space varies across different service categories. In some cases physical space is not needed at all, while technology has changed the need for presence. The service can be delivered at different time than it is consumed, for example a fully automated bank transfer service. The service may also "fall asleep" until it is used, for example insurances. (Wilson et al. 2012, 6.) The adoption of the concept of cyberspace has been suggested to be particularly important for experience-based tourism. Cyberspace or virtual space enables sharing of experience, communication amongst tourists and with destination, and provision of supplementary material before and after the visit. Spatial characteristics related to experience tourism include physical destinations being theatres of interaction, where specific spaces participate in the production of experience. (Stamboulisa & Skayannisb 2003, 42.)

Wilson et al. (2012, 11-15) refer to two main frameworks used in service management and marketing, that are IHIP (Zeithaml, Parasuraman, & Berry 1985) and Service Dominant Logic (Vargo & Lusch 2004). IHIP stands for service characteristics, which are Intangible, Heterogeneous, Inseparable and Perishable. Service dominant Logic means that all physical products are also valued based on the type of service they provide. The value of a product is the kind of service it provides, not the product itself. All companies ultimately provide service solutions, and in order to create successful solution, customers should be offered the best possible product and service combination. (Wilson et al. 2012, 11-15.)

The shift from goods-dominant logic to service-dominant logic has resulted from the fact that it is impossible for products to gain a competitive advantage on their own. This is due to fast technological development, global competition and increasing customer demand. In addition to top quality products, customers expect comprehensive customer service and a service solution to accompany the products they buy. Services marketing can be a way for companies to try to understand and segment their customers, to ensure the delivery of quality services and to strengthen their position among competitors. (Wilson et al. 2012, 9-10.) The shift from selling products to selling services has also accelerated the development of the service design industry, which has existed in its present form since the 1990's (Tuulaniemi 2016, 61).

Service Marketing Triangle is a strategic framework that sees services as making a promise and keeping it to customers. The vertices of a triangle are formed by the company, the employees or technology and the customer. Successful delivery of the service requires successful implementation of three types of marketing: internal (enabling promise: training, motivation, rewarding, right tools, etc.), interactive (delivering promise between employee and customer) and external (generating expectation / promise). Key factor is the ability and willingness of employees to deliver the service promise. Success equals the success of company's business and failure is followed by the collapse of the triangle. (Wilson et al. 2012, 18-19.)

From the customer's point of view, the 3P's Service Marketing mix (people, process, physical elements) present the evidence of the service. People are employees and customers in the service encounter. Process refers to the flow of operational activity, process steps, flexibility vs. standard, and technology vs. human. Physical evidence consists of for example communication material, service environment, warranties, technology and web pages. (Wilson et al. 2012, 90.) Another definition used in service marketing is 4P's Service Marketing mix that consists of Product, Place, Price and Promotion. These present four standardized categories of marketing variables. The marketing mix approach has been used to describe marketing as "a process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges and satisfy individual and organizational objectives". (Grönroos 2015, 279.)

2.6 Managing the Customer Experience

Managing the customer experience requires an understanding of consumer behaviour and decision making. Consumer behaviour is multidimensional, and it can be viewed from different perspectives, like decision making. Decision making process is described to start from desire formation acting as a driver. This sets "the goal to be achieved", that is the targeted result. The outcome of this phase is some form of action, which is based on information gathering and analysis that fuel the decision making. Optimal data for decision making can be described as "a perfect illustration of available opportunities that meet individual's needs and information requirements". In contradiction, the more information is left out the more incomplete or risky the opportunity might seem to a person, which might lead to abandoning the decision-making process, if the commitment to action is not compulsory. (Forer et al. 2010, 124-126.)

Löytänä and Kortesuo (2011, 7) define the customer experience as a sum of encounters, images, and feelings that the customer creates from the company's actions. Customer experience is the result of customer-company interaction, which is evaluated against customer expectations (Korkiakoski & Gerdt 2016, 25). Court, Elzinga, Mulder and Vetvik (2009) divide the consumer decision-making path into four parts: initial consideration, active comparison and evaluation, purchase, and post-purchase. The customer experience is formed by these four

steps put together. The time after purchase, when a product or service is used, is critical for future acquisition and commitment. The customer will either remain in “the loyalty loop” and advocate the company or re-enter the initial consideration and evaluation phase. Investing in helping to share positive experiences after the acquisition is in this sense worthwhile for companies. (Court et al. 2009.) Related to this, it is suggested that understanding air travellers’ decision-making process for product repurchase and recommendation, as well as discovering the driving forces of customer retention and recommendation behaviours can be one of the most critical aspects of a successful airport retail business (Han et al. 2018, 3060).

A key factor in the customer experience is “customer expectations”, which are customers’ personal beliefs about the service process or service delivery and that form a standard against which service performance is compared and evaluated. As customers evaluate the quality of service, they compare their perceptions of service performance to these reference points. For this reason, a thorough understanding of customer expectations is a critical first step in delivering “quality services”. When customers evaluate the quality of service, the focus is on the end result, the interaction and the physical environment. For example, in a restaurant, the end result is physical food, the interaction happens between the customer and the employee during the service, and the physical environment is shaped by its design and other surrounding elements that form the servicescape. (Wilson et al. 2012, 51-78.)

Measuring customer experience is about measuring the interaction between a service provider and a customer. The most commonly used measure is customer satisfaction, which is often measured with NPS score. Measuring the technical quality of the service is not enough as it is not equal to the customer's experience and perception of the quality of the service. Another typical measure related to customer experience is brand awareness and reputation. The return on investment (ROI) -tool is used for measuring how much has been invested in service development, on what timeframe and what is the expected return on this investment. (Tuulaniemi 2016, 241-245.)

A unique customer experience can help companies to achieve a more sustainable competitive advantage than with new products and services (Korkiakoski & Gerdt 2016, 48). A business model based on in-depth customer knowledge and exceptional customer experience is much harder to copy and transcend than, for example, technological know-how. A successful customer experience is reflected in company's performance, while a failed customer experience reduces sales and causes costs. Understanding the business environment of a company and its customers is the key to achieving a better customer experience. Customer experience is not about how things are, but how stakeholders experience them. (Filenius 2015, 15, 20, 31-35.) To improve the customer experience, the factors that influence customer choices should be explored. Since new products, practices and technologies are constantly coming to the

market, expectations for the customer experience are constantly changing. (Korkiakoski & Gerdt 2016, 53.)

One perspective on customers value formation is provided by Tuulaniemi (2016, 74-75), who presents customers behavior around products and services in a need-based pyramid model by Palmu Inc., which is reproduced in Figure 7. The value pyramid has been modified by adding a sample from “30 elements of value” (Bain & Company, cited in Almquist, Senior & Bloch 2016). These are illustrated in Figure 7 as circles at each level of the pyramid. The bottom of the pyramid is formed by functional aspects, that evaluates how easily and smoothly the concept fulfills the customer's goal. The next level is emotional aspects, that evaluates how well the concept fits the customer's aspirations and feelings. The highest level is formed by factors of meaningfulness, in which the key question is how the concept enables things that the customer wants to learn, realize and achieve. This indicates that service can be more than just meeting users' needs. It is producing positive emotions that leave a mark on the memory on which a distinctive customer experience is based.

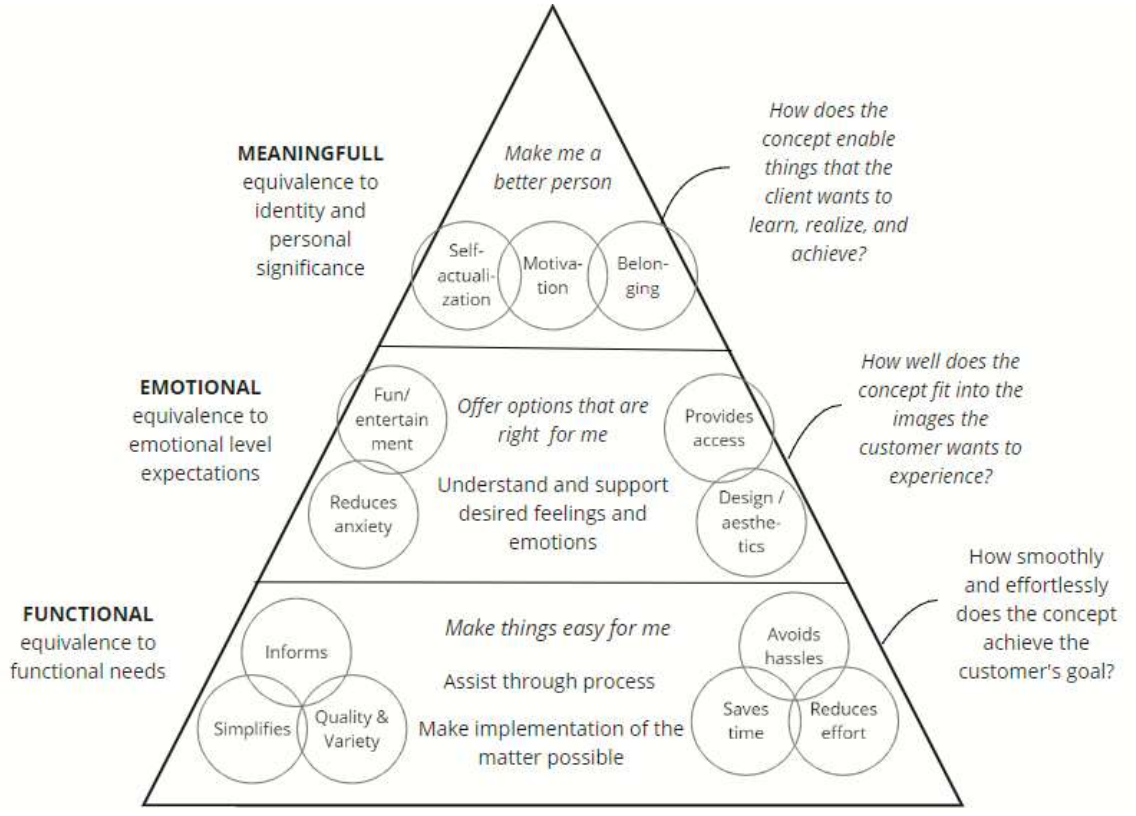


Figure 7: The value pyramid of concept design (Adapted from Palmu Inc., cited in Tuulaniemi 2016; Adapted from Bain & Company Inc., cited in Almquist, Senior & Bloch 2016)

When studying hybrid consumption, the following drivers have been found to underlie consumption decisions: taking care of oneself, connecting with others, self-actualisation,

experience-seeking, pampering and aesthetics. Omnivorous hybrid consumers seek influences for identity formation through explorative consumption. The hybrid consumer is influenced by the increased aesthetics and individualisation of consumer society. In value-for-money calculation this consumer type consider both fact-based aspects of quality and durability and emotion-based aspects of aesthetic and experience value. (Ehrnrooth & Gronroos 2013, 1813-1814.) All of these can be found from the value pyramid above.

Concepts that support the highest level of value pyramid are the ones that will differentiate service providers from others. In travel industry context Stamboulisa and Skayannisb (2003, 35) suggest, that any location or business aiming to created competitive advantage from experience should become either a learning region or a learning industry. They see that learning and culture-knowledge should be considered as a dynamic capability and a source for innovation. With these capabilities as building blocks of concepts, possibilities to offer meaningful experiences increase.

Customer experience development focuses on analysing customer experience generation factors and developing touchpoints between the customer and the company. Developing customer experience and services begins with understanding the customer's purchasing process, which can be modelled to stages and channels the customer wants to interact with. The influential factors behind consumer’s purchasing decision are customer’s own past experiences and beliefs, other people’s stories and other sources of information, marketing and branding. It should be noted that improving individual touchpoints alone is not enough to develop distinguishable customer experience. Since the share of own and earned media in relation to purchased media has grown strongly, touchpoints, or encounters with customers, are becoming even more critical to redeeming company's brand promise. (Korkiakoski & Gerdt 2016, 24-83.)

Understanding and creating value with customer experience requires a comprehensive long-term view of digital, physical and social realms of customer experience. Emergent theory of servicescape began to consider customer journey over time, and it also brings together different realms of service. It recognizes that customer experiences are path dependent and co-created in a “blended servicescape.” (Bolton et al. 2018, 791-792.) The customer experience can be conceptualized as holistic system comprising of multiple interactions across touchpoints, which involve the customer’s cognitive, affective, emotional, social and sensory elements. (Lemon and Verhoef 2016, cited in Bolton et al. 2018, 777-778). Not only the social interaction between customers and customers and employees is important, but also the role of technology, as well as the physical elements of the servicescape (Edvardsson et al. 2010, cited in Bolton et. al 2018, 777-778). AI, robots and digital twins are becoming a part of the service experience, which will have its effects on the customer experience management (Bolton et al. 2018, 800).

Servicescape presence across multiple channels and consistency across communication channels is suggested to be adopted as a new approach for service business. Physical retail presence still delivers value to many customers, but messages should be integrated across digital and physical service environment. (Ballantyne & Nilsson 2017, 233-234.) The goal is to produce "a highly personalized, consistent and integrated shopping experience across all points of contact between retailers and customers" (Bolton et al. 2018, 784).

A basic requirement for improving the customer experience is that the organization is capable of perceiving customer interaction processes and interactions. Another is a broad commitment to change within each unit of the company. In this regards, management support and commitment to change towards customer-oriented organization is a necessity. It is also important to understand that putting focus on the customer experience does not generate quick profits for companies, but it is a long-term investment. (Filenius 2015, 15.)

2.7 Curation in Retail and Travel Context

Curation is described in this chapter in the context of retail and travel. In retail, curated shopping means "recommending consumers a limited number of products that are carefully chosen by professional shoppers". The idea of curation and the role of intermediaries was first seen applied in art exhibitions and museums, where curators sort out special items for collections and displays. Later, the concept has been adopted in areas such as music, fashion, craft, and food. Sebald and Jacob (2018) refer to the notion made by Joosse and Hracs (2015), that curation should be understood in context because the scope of activities can differ depending on industry, location, and scale. (Sebald & Jacob 2018, 189.) Common to all forms of curation is certain context specific content, set principles for curation and the curator as an intermediary between the customer and the content.

Curation was first applied to offline content, but now the use has expanded to online service concepts. This has been partly because digitalization has transformed the field of retail and content is now dispersed across many channels and systems. This has challenged brands and retailers to curate consistent, effective and rich product content across all channels where they reach consumers. (Petersen 2018, 1.) Curators role is to provide consumers direction with consumer-centric, decision-oriented information, as they search for products and services to fulfil their personal needs (Sebald & Jacob 2018, 189).

Curated retailing in online shopping context is defined as "combining convenient online shopping with personal consultation service, to provide a more personalized online experience through curated product selections, orientation and decision aids, and tailor-made solutions based on the customer's preferences" (Sebald & Jacob 2018, 189). By this definition the target of curation is to assist customers shopping experience by selecting content based on their identified personal preferences. Another perspective to commercial curation is defining it as

“the interpreting, translating and shaping of the marketplace through the practice of sorting, organizing, evaluating and ascribing value(s) to specific products” (Joosse and Hracs 2015, cited in Sebald & Jacob 2018, 189). This definition emphasizes the role of curators as intermediaries impacting marketplaces by providing product recommendations.

Retailers motivations to use curation can be 1) adding a curated retailing service as an entry point for ecommerce, 2) an extension of their existing web presence, or 3) seeing it as an incentive to their customers to enter their stores (Sebald & Jacob 2018, 188). For the customers the role of curation has grown rapidly, especially among online shoppers, who otherwise would struggle with the information overload and continuous growing number of products and other content available online. This has led to a trend where online consumers use for example specialized shopping malls, where they browse pre-selected product collection based on their personal preferences. (Cha, You, Gang & Park 2018, 322.)

In order to become profitable, retailers with curated shopping in their business models should understand the motivational reasons both for and against the adoption of curated shopping (Sebald & Jacob 2018, 188). It has been studied, that there are certain advantages perceived by consumers when using curated shopping. The value of curated shopping is perceived convenience, efficiency and degree of shopping fatigue. In other words, curated shopping saves time. These factors seem to increase the motivation to use curated shopping. The negative factor is financial risk that links to trust issues, which is shown to be a significant factor preventing the use of curated shopping. Also, not all of us trust others capability to reflect our personal purchasing intention when searching and selecting products. The decision to use curated shopping is affected by personal characteristics and also previous experiences with curated shopping. (Cha et al. 2018, 323.) Turning these motivational insights into actions is a possibility to create profitable business models, since “In the future, personalized experiences and customized solutions will be critical differentiators in all retail formats” (Sebald & Jacob 2018, 194-195).

In experience-based tourism, experience is content that is created travellers interacting with various elements of a destination. Competitive advantage for business lies in intangible assets and focus is on the content in other words adding value to time spent and experience gained (Stamboulisa & Skayannisb 2003, 37-38, 42). Curator’s role is to match available service to individual needs. In order to do that they need to collect information and transform it into specialized intelligence about suppliers and customers. Their role is also to provide this content to customers. in other words, curator’s role is to act as “intelligence-based intermediaries”. By doing this, customers are empowered to meet their individual interests. (Kanellou 2000, cited in Stamboulisa & Skayannisb 2003, 37-38.)

The goal of developing own content-based and destination specific interaction with customers is to create more customer-oriented and less replicable business strategy. This strategy includes supporting customers to establish their own learning cycles. Stamboulisa and Skayannisb (2003, 37-42) have identified four stages in the cycle of user-based interactive learning, which are illustrated in Figure 8.

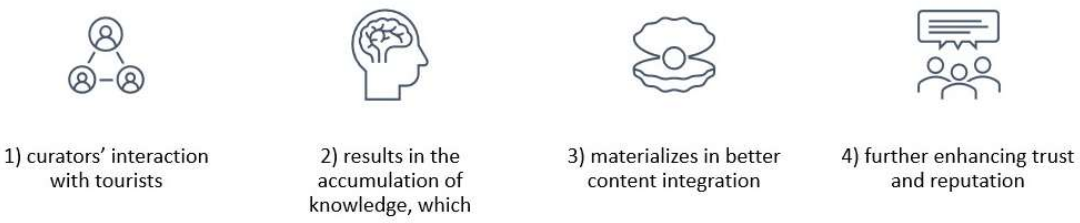


Figure 8: The cycle of user-based interactive learning (Adapted from Stamboulisa & Skayannisb 2003, 37-42)

This knowledge-creating process is seen to be the main source of competitive advantage (Stamboulisa & Skayannisb 2003, 37-42). This notion is supported also by the Value pyramid - model, where learning through concept is positioned at the highest level of pyramid (Tuulaniemi 2016, 74-75).

2.8 Air Passengers' Shopping Motivation and Information Seeking Behaviour

For the development of decision-making interfaces and content that aims to assist purchasing decisions, it is important for airports to understand the motivational factors that influence passengers' purchasing intentions. The airport space itself and travelling mood are suggested to add a special factor to air passengers' shopping motivation and information seeking behaviour. The airport's shopping environment and local shopping culture has potential to motivate and impact passenger's shopping related behaviour positively. (Chung, Wu & Chiang 2013, 25.) Traveller's consumption behaviour patterns are shown to change at the airport environment compared to consumption patterns occurring in their daily life (Omar & Kent 2001, cited in Han et al. 2018, 3061). Understanding and utilizing this will offer airport retail business certain advantages that competitors, like shopping malls lack off.

Airports are unique retail environments, where travellers may experience positive and also negative emotions. The feeling of anxiety, stress and excitement can make them react in unusual ways. Passenger customers are likely to feel time pressure for several reasons, such as long security check queues, seemingly long distances between passport control and the gates, and the non-familiar environment, which can be disorienting. To avoid the stress and anxiety, many passengers arrive early for their flights, which then increases the time they must spend at terminal building prior to departure, also known as "the dwell time". (Lin & Chen 2013,

426-427.) Long waiting time before boarding is known to increase the likelihood of travellers wandering around the terminal and seeking information with the intention to shop or out of boredom (Chung, Wu & Chiang 2013, 25).

Travellers experience emotional shifts in terms of stress and excitement during their travelling journey and this has studied to trigger their impulsive buying behaviour at the airport environment. For example, after receiving their boarding passes, stress level decreases while feeling of excitement increases for a finite period of time. This phenomenon is referred to as "happy hour". This feeling of excitement and travelling mood impact passenger customers shopping behaviour. (Scholvinck 2000; Thomas 1997, cited in Lin & Chen 2013, 427.) Especially impulsive shoppers are receptive to sudden, unexpected shopping ideas. It is suggested that time pressure and impulse buying tendency are two main characteristics which affects the relationship between shopping motivation and commercial activities in an airport retail context. (Lin & Chen 2013, 426-427.)

Motivation to shop at airports can be divided into different categories. Functional motivation is related to good price, convenience and quality shopping. Experiential motivation links to promotions and buying to indulge oneself and for experiencing. Airport-atmosphere-related motivation is seen to be linked with impulse purchasing, but also pre-planned purchasing and purchasing out of boredom. Airport-infrastructure-related motivation is impacted by service in the shops, and multilingual staff and promotional materials. (Geuens et al. 2004, cited in Lin & Chen 2013, 427.) Similar results were found in a study at Taiwan International Airport, which identified passengers shopping motivations as "favourable price and quality", "environment and communication", and "culture and atmosphere" (Lin & Chen 2013, 431-432). In addition to these, purchasing souvenirs and presents has been identified as one key shopping motivation behind shopping at airport (Perng, Chow, & Liao 2010, cited in Lin & Chen 2013, 427).

Different passenger types are studied to have different behaviour models related to shopping. Leisure travellers are shown to pre-plan their shopping, but they also tend to shop by impulse at airport premises (Puls & Lentz 2018, 246-247). Business travellers tend to do more on-site and less pre-trip information seeking. (Chung, Wu & Chiang 2013, 28.) Frequent travellers, like business travellers, are likely to do impulsive shopping. Passengers traveling to visit friends and relatives are more likely to pre-plan their purchases. (Puls & Lentz 2018, 246-247.)

Chung, Wu and Chiang (2013, 25.) suggest that developing airport retail information strategies requires recognizing and utilizing the heterogeneous information seeking behaviour patterns of air passengers. They have established four passenger clusters from a study sample collected at Taiwan airport related to passengers' information seeking behaviour. These

clusters are apathetic shoppers (23 %), traditional shoppers (26 %), mood shoppers (30 %), and shopping lovers (21 %). Apathetic shoppers are disinterested in airport shopping, unlike shopping lovers. Traditional shoppers are only interested in pre-planned and self-controlled shopping. Mood shoppers are influenced easily by the airport atmosphere. (Chung, Wu & Chiang 2013, 26.)

Traditional shoppers, mood shoppers, and shopping lovers are more active in seeking shopping related information compared to apathetic shoppers both pre-trip and on-site. Shopping lovers are most active information seekers, and they use information sources diversely ranging from personal to impersonal and commercial to non-commercial. Pre-trip information source preference for these three active clusters are in order friends, relatives and personal experience. After these top three sources comes magazines, tour guides, tourist centres, travel agents and travel websites. Least preferred sources of information are product/restaurant websites and airport websites. Pre-trip information seeking efforts are lowest amongst apathetic shoppers for most information sources studied. (Chung, Wu & Chiang 2013, 26-27.) This leads to conclusion that non-commercial sources of information are the most preferred pre-trip information channels.

What comes to on-site information seeking, shopping lovers and mood shoppers seem more active towards the use of on-site information sources compared to traditional and apathetic shoppers. This applies also to the most popular information source preference that is "wandering behaviour". Mood shoppers and shopping lovers differ from apathetic and traditional shoppers, with their greater information source preference for most on-site sources, which are in order wandering, airport map, shop clerks, travel partners, magazines and tour guides, airport brochures, tourist centres, airport staff and airline staff. Traditional shoppers seem to become like apathetic shoppers with their lack of on-site information seeking efforts, only exception being their 'wandering behaviour', which indicate that they don't use commercial channels. (Chung, Wu & Chiang 2013, 22-28.)

Other factors related to information seeking behaviour and shopping are waiting time before boarding and access convenience. Results from study by Chung, Wu and Chiang (2013, 28) indicate that waiting time before boarding is negatively associated with pre-trip information seeking, but positively correlated with on-site information seeking if travellers intend to shop. They also found that passengers' ability to conveniently access airports shopping-related information before travelling results into more active information seeking behaviour. Similarly, greater convenience for accessing on-site information assists passengers make purchase decisions at the airport. This is especially typical for mood shoppers and shopping lovers.

Convenience related to passengers' purchase intentions can be divided into decision and access convenience. Decision convenience is defined as a purchase decision that depends on which shop to use and brands or services to purchase. It is related to customer involvement (for example how much information they have acquired) and the information provided by shops/airports (for example high street prices compared to airport prices). Access convenience is primarily related to the service environment (for example terminal/shop layout and atmosphere), consumer information (for example shop location) and service system design (for example airport/terminal layout and walking distance). (Chung, Wu & Chiang 2013, 26.) Research indicates that decision convenience has the strongest relationship with air passengers' shopping behaviour, both pre-trip and on-site. Thus, an environment that supports convenient shopping decisions can convert passengers into shoppers. (Chung, Wu & Chiang 2013, 28.)

Airports' commercial environment as well as the reputation and quality of the products at airport shops have been found to be the key drivers that determine passengers' pre-planned and impulse buying tendencies. Thus, airports and shop operators should create an innovative shopping environment that has an impact on passengers' experience of entertainment, convenience and brand engagement, which might lead to motivating their impulse buying as well as pre-planned purchasing behaviour. (Lu 2014, 76.) By marketing the innovative airport environment, airport operators can convert travellers' "dwell time" into shopping time and impact their impulse buying behaviour. In addition, all attempts to reduce passengers' time pressure are valuable, such as the efficiency of transaction time and traffic flow and assistance given by sales personnel. (Lin & Chen 2013, 431-432.) Related to content, implementing detailed catalogues containing passengers' individual preferences may result in improving non-aeronautical revenue of an airport. The trend in airport retail is to consider passengers individual needs, and design commercial concepts with tailored products. (Puls & Lentz 2018, 246-247.)

2.9 Synthesis of the Theoretical Framework

The construction of the theoretical framework began by approaching the concept of space from different perspectives and frameworks. Space is defined by Miller (2007, 18-19) as the interaction of physical and virtual space, which also considers the emotional and social aspects of space. The goal of developing a customer experience related to space is that space begins to mean something to people and becomes a place according to its definition (Pop 2014, 278). For the purpose of this thesis, it is important to understand the interaction between physical and virtual spaces and how these can affect both individual and collective behaviour (Batty 1997, cited in Miller 2007, 18-19).

Related to spatial concepts, time geography addresses the accessibility of spaces. Hägerstrand (1970, cited in Miller 2007, 10) has developed Time geography perspective for viewing

human activities spatial and temporal dimensions. Yu and Shaw (2010, 108-112) added to this the role of virtual space as a carrier of human activity. One key concept related to this is space-time path, which has similarities to service design method called “customer journey” with its time-stamped locations on a journey of activities. In addition, space-time path visualises the duration and velocity of movement between these locations of activity. Space-time path also considers the different constraints people may have when conducting their daily activities in relative to space and time. This concept fits well to this thesis’s development landscape, where different constraints impact how people can interact with the airport space and its affordances.

Affordances are artefacts in space that are meaningful to observers and suggest intuitively how they could be used (May 2010). If people seize to the potential of these object, affordance space in front of object turns into activity space (Rios-Martinez, Spalanzani & Laugier 2014, 143-145). Space affordances can be designed and created, and their success can be studied, which is the case in this thesis. Service design, graphic design, UI design and marketing are examples of industries that have a role in making objects in servicescape attractive to potential users. The minimum requirement is that the person is inside the space affordance and looking at the object (Vega et al. 2018, 73-76). The goal of design and marketing should be turning objects into decision interfaces that activates people to become users (Barden and Sutherland (2013, 119-121, 157). Service Design can benefit from adapting the concepts of Human Geography presented in theoretical framework, such as the hybrid space, space-time path and space affordances.

Managing customer experience means considering the concept of blended servicescape, that impacts the customer experience and puts emphasis on the customers role in space. “Blended servicescape” means integrating the physical, social and virtual service environment, on which customers can act directly on (Bolton et al. 2018, 793). Investing in servicescape and how it is perceived by customers has impact on perceived service quality (Grönroos 2015, 398).

Based on Service Dominant Logic all physical products are valued based on the type of service they provide. This means that the value of a product is also in the service it provides. (Wilson et al. 2012, 11-15.) Experience is highly personal and intangible service, that can be linked to tangible artifacts like souvenirs. Background for viewing experience as service is in experience economy, where memory of an experience is seen as a product. (Pine & Gilmore 1998, cited in Wilson et al. 2012, 10.) Marketing means planning and executing the conception, pricing, promotion and distribution of goods and services to create exchange and satisfy individual and organizational objectives (Grönroos 2015, 279).

Customer experience is produced in customer-company interaction, which is evaluated against customer's expectations (Korkiakoski & Gerdt 2016, 25). When customers evaluate the quality of service, the focus is on the end result, the interaction and the physical environment (Wilson et al. 2012, 51-78). Managing customer experience requires understanding consumer behaviour and decision-making process, that starts from desire formation which sets "the goal to be achieved". Optimal data for decision making presents all available opportunities that cater for customers' needs and information requirements. (Forer et al. 2010, 124-126.) The customer decision-making path includes initial consideration, active comparison and evaluation, purchase, and post-purchase (Court et al. 2009). Discovering the driving forces behind customer retention and post-purchase recommendation behaviour can be one of the most critical aspects of a successful airport retail business (Han et al. 2018, 3060).

Value pyramid of customer experience (Palmu Inc., cited in Tuulaniemi 2016, 74-75) links to Lefebvre's aspects of space with physical space forming the base layer (functional), emotional the middle layer (emotional) and social the top layer (meaningful) (Leckie et al. 2010, cited in Gray et al. 2018, 305). Concepts that support the highest level of value pyramid are the ones that will differentiate service providers from others. In travel industry context, Stamboulisa and Skayannisb (2003, 35) suggest that any destination or business aiming to create competitive advantage from experience, should become either a learning region or a learning industry. This links to what is presented as the highest level of Value pyramid by Tuulaniemi (2016, 74-75).

In experience-based tourism, experience is the content created by the interaction of travellers with various elements of the destination. Developing own content-based and destination specific interaction with customers is a strategy that includes supporting customers to establish their own learning cycles about local cultures. This can provide a source of competitive advantage in tourism and travel business. (Stamboulisa & Skayannisb 2003, 37-42.)

In addition to space and services marketing, content curation was studied in retail and travel context. In retail, curated shopping means professional shoppers selecting limited number of products to be presented for customers (Sebald & Jacob 2018, 189). Curators role in travel context is to act as "intelligence-based intermediaries" and empower customers to meet their individual interests (Kanellou 2000, cited in Stamboulisa & Skayannisb 2003, 37-38). Common to all forms of curation is certain context specific content, set principles for curation and the curator working as an intermediary between the customer and the content. The value of curated shopping is perceived convenience, efficiency and degree of shopping fatigue (Cha et al. 2018, 323). Curation is a tool that can help creating personalized experiences and customized solutions, which act as critical differentiators in retail business (Sebald & Jacob 2018, 194-195). It can also be used to reduce constraints on passenger's space-time path at airport retail environment.

Air passengers' information seeking behaviour and encountered constraints impacts how they use the airport space and commercial services offered at the airport premises. Traveller's consumption behaviour patterns differ from consumption patterns occurring in everyday life (Omar & Kent 2001, cited in Han et al. 2018, 3061). Emotions impact travellers shopping behaviour and fixed activities anchor the time left for flexible activities like shopping (Lin & Chen 2013, 426-427; Miller 2007, 10-11). Time pressure and impulse buying tendency are the two main factors influencing shopping and information seeking behaviour in an airport retail context (Lin & Chen 2013, 426-427).

Motivation to shop at the airport is impacted by good price, good service, promotions, culture and atmosphere, convenience and quality shopping, also buying to indulge oneself and for experiencing. Airport-atmosphere is seen to be linked with impulse purchasing, but also preplanned purchasing. (Geuens et al. 2004, cited in Lin & Chen 2013, 427). Different passenger types are studied to have different behaviour models related to airport shopping. Chung, Wu and Chiang (2013, 25) have studied travellers at Taiwan airport and established four passenger clusters based on their information seeking behaviour. Traditional shoppers, mood shoppers, and shopping lovers are more active in seeking shopping related information both pre-trip and on-site compared to apathetic shoppers. Pre-trip information source preference for these three active passenger clusters are friends, relatives and personal experience. Least preferred sources of information are product/restaurant websites and airport websites. For on-site information seeking the most preferred source is "wandering behaviour". Other on-site sources are airport map, shop clerks, travel partners, magazines and tour guides, airport brochures, tourist centres, airport staff and airline staff. (Chung et al. 2013, 22-28.)

Passengers ability to conveniently access airports' shopping-related information pre-journey seems to lead to more active information seeking behaviour on the spot as well. Convenience related to passengers' purchase intentions can be divided into decision and access convenience. An environment that supports convenient shopping decisions can convert passengers into shoppers. (Chung et al. 2013, 26-28.) Reducing passengers' time pressure with efficient transaction times and assistance offered by sales personnel is advised to support commercial activity (Lin & Chen 2013, 431-432). Detailed product collection based on passengers' individual preferences may result improving non-aeronautical revenue of an airport (Puls & Lentz 2018, 246-247).

3 The Development Landscape

The thesis development task focuses on designing and developing airport's blended servicescape and its affordances. This is done by creating and testing the first version of the "Curated Journeys" -concept for Chinese passengers. This chapter describes the hybrid space of Helsinki Airport and the various passenger journey options. Finavia's principles and guidelines for designing the digital and physical services and servicescape are also presented here.

Batty's framework for real and virtual spaces referred by Miller (2007, 28) describes well the different forms of the airport space. In the case of an airport, a place / space is a physical space in an airport terminal, Computer space can mean, for example, an airport map that can be accessed and interacted through airport website, Cyberspace is created when a passenger reaches the airport's customer service via chat and they start to communicate, and Cyber-place is airport space that is complemented by digital services like service info screens and airport WiFi, which add digital infrastructure to an airport's physical premises and include certain patterns of use and user behaviour. The thesis development task focuses on user interaction with space, Computer space and Cyberplace, and the effects virtual activities can have in the physical space. The target is to innovate affordances in physical space that are perceived by users mentally and shape users' space related social activities (Gray et al. 2018, 305).

Helsinki Airport Physical Premises

The passenger areas inside the terminal are divided into 1) pre-security check facilities, "the landside area", and 2) post-security check facilities "the gate area". The gate area is divided by the passport control area into 1) Schengen and 2) Non-Schengen areas. These different terminal gate areas are presented in Figure 9. There are shops, restaurants, cafes, kiosks, lounges, children's playrooms etc. facilities in both sides of the passport/border control. Finnish materials are preferred when selecting construction and interior materials. Non-commercial spaces have specific themes, like the Kainuu Lounge, the BookSwap, and Aukio.

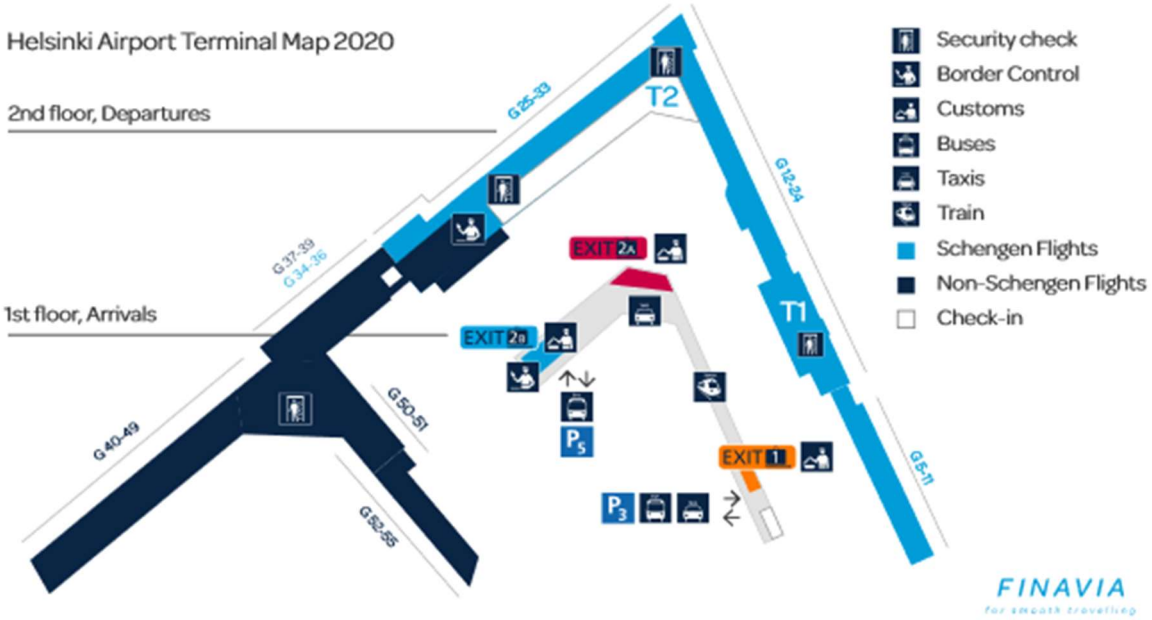


Figure 9: Helsinki airport terminal map (Reprinted from Finavia Corporation 2020)

The airport premises have been developed during recent years and the expansion work related to Helsinki Airport development programme continues yet for some years. Time layers of terminal's physical spaces can be seen when walking through terminal building. The existing premises have been designed by various architectural firms on behalf of Finavia.

Finavia's Look and Feel -concept guides the design and development of the airport's physical spaces. Premises design is based on attributes like "clarity and freshness, and Finnish nature flavoured with locality". (Finavia Corporation 2015, 4.) Helsinki Airport wayfinding guidelines define the customer's wayfinding experience and align the non-commercial and commercial passenger guidance hierarchy (Finavia Corporation 2019b). Helsinki Airport's Passenger service and development unit, Commercial department, Finavia's Marketing, communications and customer experience unit, internal and external architects and commercial operators are key stakeholders involved in the airport space design and experience delivery to passengers.

Air passengers can have six different process journeys at the airport, which affects their access to terminal space. These journey options are visualised in Figure 10. People-based space accessibility, as defined by Miller (2007, 5), is influenced by many factors and scenarios in the airport space, for example flight transfer times, traveller's journey type (arriving, transferring, departing), flight destination country (Schengen or Non-Schengen) and it can be measured with time and distance between fixed locations, like from arrival gate to departure gate. The location of the gate and time availability are known to impact passengers' commercial activities at the airport space. The average departing passengers (holiday travellers) dwell time at Helsinki Airport is 1,5 - 2 hours. For transfer-passengers the dwell time can vary from less than 1 hour up to 6 - 8 hours.

The development task focuses on Chinese travellers, who typically have 1) Schengen to Non-Schengen transfer journey or 2) Non-Schengen to Schengen transfer journey, when Helsinki Airport serve as a transfer airport to their final travel destination. The chinese travellers visiting Finland can also have 3) Non-Schengen global or 4) Non-Schengen local journey, when Finland is their travel destination. In addition to the also 5) Schengen global and 6) Schengen local are possible journey options.

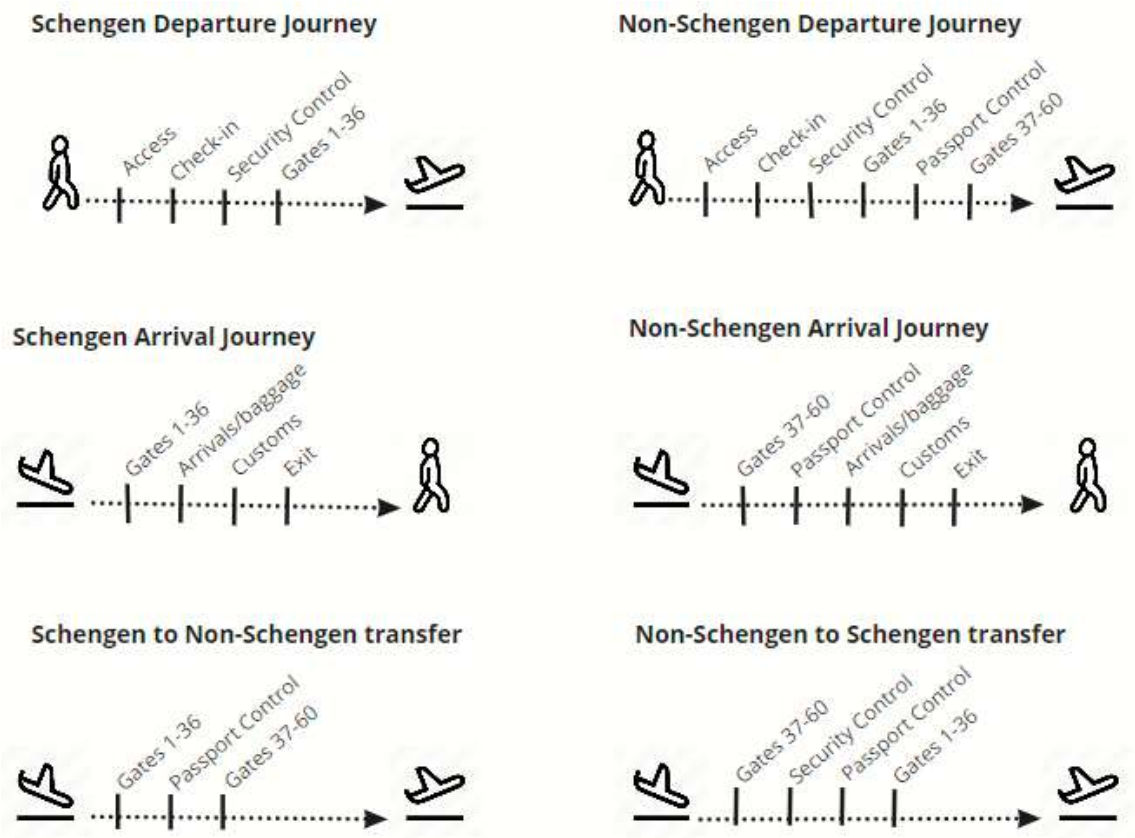


Figure 10: Helsinki airport passenger journey scenarios (Adapted from Finavia Corporation 2019b)

When revisiting the space-time path by Yu and Shaw (2010, 108-112), Figure 11 type of illustration can be drawn from Chinese passenger's customer journey at Helsinki airport. This journey presents Schengen to Non-Schengen journey, for example transfer from United Kingdom to China via Helsinki airport. There are physical and virtual activities and mandatory and voluntary tasks within a time frame. Although passenger is present at the airport's physical space, a shift from the airport operated space to space controlled by others occurs when they access digital space with their devices. This "leak" to online space from physical space is illustrated in Figure 11 below with horizontal lines.

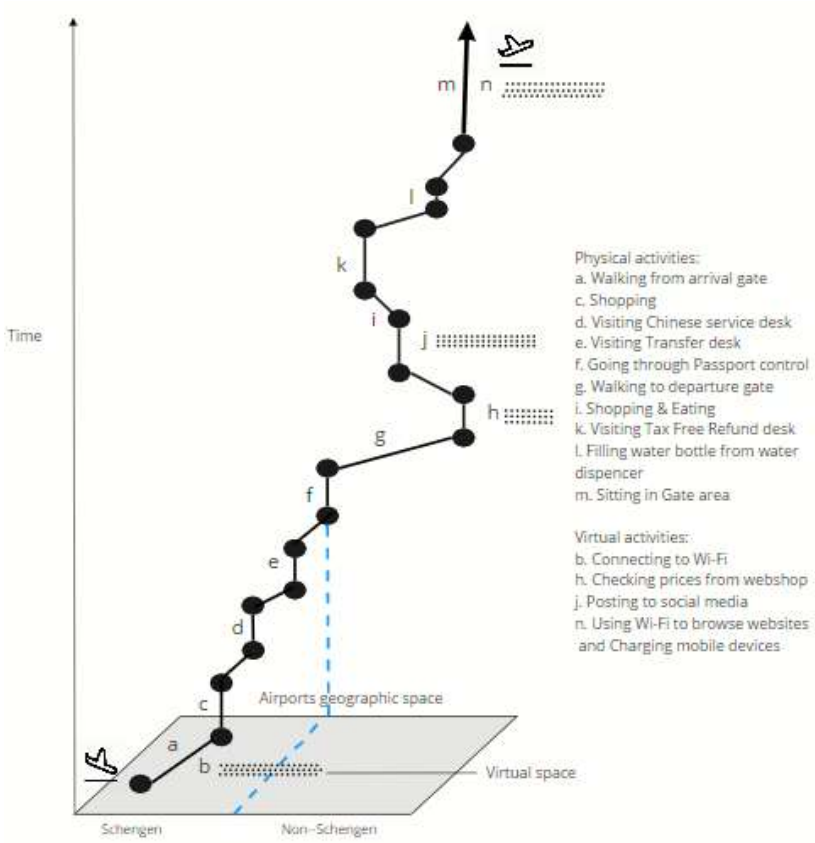


Figure 11: Space-time path of a Chinese transfer passenger (Adapted from Yu & Shaw 2010, 108-112)

Fixed activities in an airport environment are for example mandatory processes, such as security or passport control. Flexible activities can include for example shopping and eating. Fixed activities have strong link to physical space, but some of these activities can happen also virtually, like using e-gates in passport control. Fixed activities determine the use of time and space at the airport (Miller 2007, 10-11).

Digital Channels and Services

The main purpose of Finavia's passenger facing digital channels is to provide information for transferring, arriving and departing passengers. Most used service is flights information. Digital channels purpose is to support Finavia's service promise "For Smooth Travelling". In addition, the purpose is to reach passengers and activate them to use the airport services and facilities before departing to their flight.

Finavia's passenger facing digital channels include finavia.fi-website, HEL Guide – Helsinki Airport mini website (login page opening after connecting to the airport's free WiFi), Helsinki Airport mobile application, social media channels (for example Twitter, Instagram, Facebook, WeChat and Weibo), service information screens located at Helsinki Airport (22 screens),

flight information screens, and tablets at Chinese service guides desks and information desk at terminal gate area. The content in these tablets is similar to HEL Guide. Finavia offers services also to partner channels, for example Helsinki Airport digital map can be found from airline's application. These digital channels are managed by Finavia's Marketing, communications and customer experience department, except operational information content in Flight information screens.

The vision for developing Finavia's digital channels and services is "Integrated and smooth passenger experience". This means offering relevant services and information for passengers in their terms and channels. Future development plans include building integrations to relevant 3rd party messaging solutions (for example WhatsApp, Messenger and WeChat), utilizing conversational AI and developing indoor wayfinding. Digital channel performance is measured with different metrics like Customer satisfaction and Google Analytics.

Finavia's digital channels reach to passengers has room for improvement. Company's website is the main channel for reaching passengers before their trip. Since transfer passengers are important target group for Finavia, one goal for developing digital services is to increase reach to transfer passengers and connect with them digitally at the airport in order to serve them during layover. This is important goal also because, as previously stated, physical space can "leak" into digital space when passenger starts to use their mobile devices at the airport premises. If they remain in Finavia's own digital space (channels), this "escape" from the airport space will not take place, it just shifts from physical to digital. The development goal is to blend these two so that they complement each other in serving customers. Finavia's HEL Guide, that opens when passengers connect to an airport's WiFi, is a good example of this in practice.

Digital channels' service information renewal in 2019 created the basis for content curation development. The re-designing of the services information and individual service pages was driven by e-commerce development project with the goal of producing more customer-oriented display of commercial services and adding product and brand information to Finavia's digital channels, like website, HEL Guide and service information screens. In addition, the target was to assist users to navigate to most visited website content. Quick links bar on Helsinki Airport's website front page was created to serve this target.

Services for the Target Group

Finavia's focus on developing Chinese passengers' customer experience can be seen in the non-commercial and commercial service offering. Services and signs are in available in Chinese at Helsinki Airport and there are Chinese-speaking guides working at the airport, who assist passengers with shopping related matters. According to The Chinese guides, around 25 % of Chinese passengers approach this service. Services for Chinese passengers include payment

methods like AliPay and China UnionPay, Chinese-speaking shop personnel, Chinese language versions of website and HEL Guide, and also Finavia´s social media channels in Weibo, WeChat and Youku. The number of Chinese users on website is relatively low, which is in line with results from study by Chung et al. (2013, 22-28), who found that airport websites are not preferred as pre-trip information source.

Customer Experience Management

Process, Premises and People presented in Figure 12 are elements identified to impact Finavia's customer experience. Four customer experience pillars called "Confidence, Gift of Time, Refreshed and Finnish Experience" describe the feelings Finavia wants passengers to experience at Helsinki Airport. These pillars are seen as helping to keep customer promise consistent with the airport's 70,000 daily passenger encounters. (Finavia Corporation 2018a.)

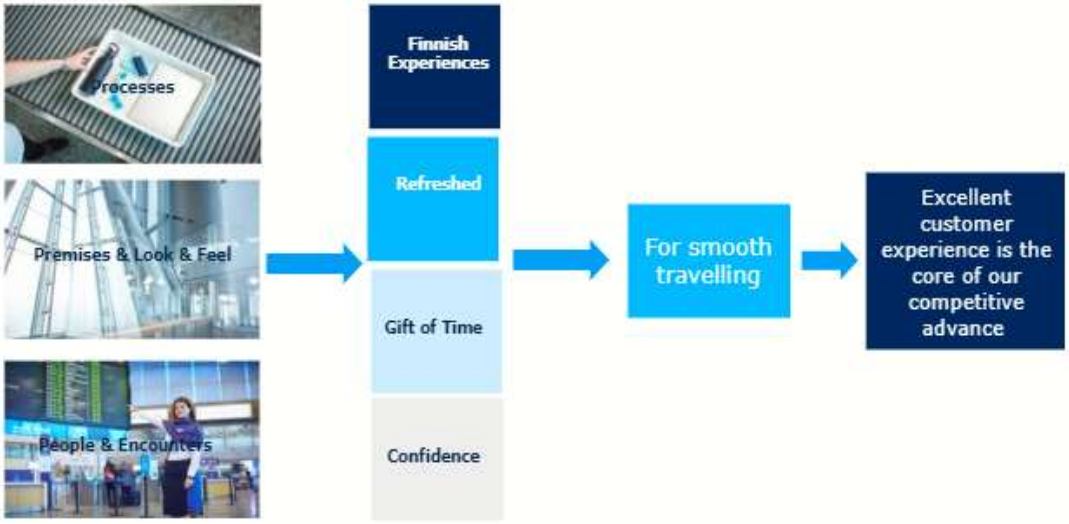


Figure 12: Finavia's customer experience management framework (Reprinted from Finavia Corporation 2018a)

The success in delivering customer experience is measured with different metrics. These are for example ASQ survey, CSAT questionnaire, customer feedback website form and Skytrax audits. In addition to these, also other customer surveys and researches are conducted to collect quantitative and qualitative data about the performance.

Content Production at Finavia

Finavia's Marketing, communication and customer experience department is responsible for brand management and content production. Marketing messages and concepts are produced in co-operation with external partners. Finavia's internal content producers are located in different departments and this network is coordinated by content manager. Helsinki Airport's

Commercial department and commercial operators have a role in commercial content production.

Designing passenger facing commercial and non-commercial content is guided by Finavia's Brand book and Tone of Voice (Finavia Corporation 2016; Finavia Corporation 2017). These are also used as design principles for Finavia's digital channels and services. HEL of an Airport -concept and Look and Feel -concept define "distinction, experiences and quality" as content cornerstones. The content should be based on "Finnish originality, and things that engage, inspire and showcase Scandinavian quality". (Finavia Corporation 2017.)

Finavia's brand hierarchy has strategical and tactical levels. The commercial content produced while making this thesis falls into tactical level of marketing communications (B2C, business to consumer). Tactical level marketing is focused on advertising Helsinki Airport's shopping possibilities and key selling points to consumers. This is done by "clear, relevant message to sell our products", which in this case are retail products, gifts and souvenirs. (Finavia Corporation no date.)

Development Task's Link to Company's Strategic Goals

Thesis development task originated from the Digital-Physical Marketplace Vision for Finavia's E-commerce, in the making of which the author of this thesis participated. This vision includes creating personalized consumer experiences for passengers. The business objective is that personalized messages and tailored content will encourage customers to purchase goods and services more efficiently. During this vision work a roadmap for curated journeys was planned. First phase includes research project for Curated journeys: ideation, first version of the concept, testing and validation. In second phase (in 2-3 years) curated content and recommendations are in use, tested and validated. Also, a team for producing curated content is build and AI is utilized for content curation. In third phase (in 5 years) the airport is developed into an experience hub with data driven personalized routes, where passengers can choose the experience they want. (Finavia Corporation 2018b.)

Development tasks:

1) Curated journeys in the airport's blended servicescape: research the subject, ideate, create first version of the concept, test and validate. This includes researching the target group, their buying and information seeking behaviour, their journey and key touchpoints, and testing Chinese transfer passengers' engagement to curated content through different touchpoints during their journey.

2) Finavia´s curated content production process model: design, test and document the process model during development project

These tasks are approached through the service design process model and by utilizing various service design tools. These development process phases and methods for material collection and analysis are described in more detail in later chapters.

3.1 Methodological Solutions

This chapter describes the research and development methods and how they are applied in this thesis. Development phase is done by using framework and methodology of service design. According to Ojasalo et al. (2014, 71-72.), the target of service design approach is much like innovation process model, but its practical implementation is characterized by a user-centric and experiential thinking and implementation. Service design means applying process and methods of design thinking and core competence of designers to service development context. Service design offers systematic, analytical and controlled process to guide service development, while at the same time it harnesses creativity. It provides a user-oriented perspective, clear process and tools for service development and business decision making. With the help of these tools and methods, intangible services can be easily visualized, concretized and quickly tested.

Five design thinking principles are descriptive to service design thinking. These principles are 1) user-centricity, 2) co-creation, 3) sequencing, 4) visibility and 5) holistic perspective. User-centricity means that services should be experienced by stepping into the shoes of customers. Co-creation is described as involving all relevant stakeholders in the process of designing services. Sequencing means that the service should be visualized as a path or a sequence of related functions. By doing this, the service class and their access points form the service path. Visibility means making intangible services visible by physical artifacts. The holistic aspect of the approach means that the design process should consider the entire service environment related to the service being developed. (Stickdorn & Schneider 2011, 34-45.)

Service design can be used for service development in different levels: organizations strategy, business models, processes, servicescape and customer service. Service design development tasks can be categorized to at least five categories: 1) service processes and touchpoints, 2) service products and offerings, 3) service communications, sales and marketing, 4) company's internal operations and 5) company’s business development. (Koivisto, Säynäjäkangas & Forsberg 2019, 57.) Despite the category, it is advised to link design solutions to company’s strategic goals. Their validity is easier to justify when they relate to a broader picture and link to a company's vision for the future (Kuurre 2018). The main goal for applying service design is to create additional value to both customers and business. For customers this can mean a service experience that is intuitive, useful and desirable, and for business a service concept that is compelling, profitable and distinctive. (Ojasalo et al. 2014, 71-72.) This is in line with the definition of design thinking, which is “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what

viable business strategy can convert into customer value and market opportunity" (Brown 2008, cited in Ojasalo, Koskelo & Nousiainen 2015, 200).

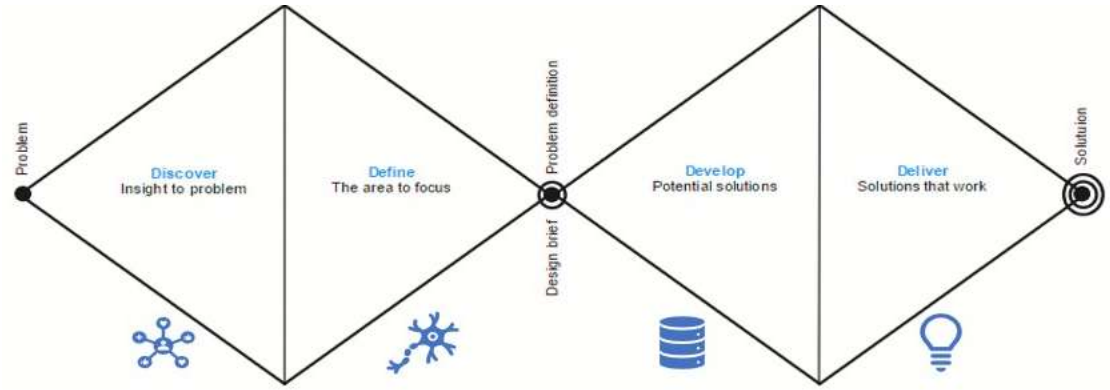
One reference framework for describing the design process is the British Design Council's (2015) Double Diamond Model (Figure 13). It divides the design process into four steps of discovery, definition, development and delivery. The four steps in the process model are used for solving a service problem by utilizing different service design tools and methods. The methods applied in the first two phases are used to define the problem, and the methods in the following two phases are used to suggest solutions to it. Visualizing the process in a diamond shape results from the diverging and converging phases of the design and problem-solving process. In divergence, opportunities are searched and in convergence decisions are made and information is being reduced to decisions. (Stickdorn & Schneider 2011, 124-126.) Although the model has been criticized for appearing too static for a design process that is non-linear and iterative, it can well be used for categorizing service design methods and tools best suited for different stages of the process.

Figure 13: Double Diamond -process model (Adapted from British Design Council 2015)

The iterative and complex nature of the service design process should be kept in mind. At any stage of the process, reversing a step or even starting all over again is possible. (Stickdorn & Schneider 2011, 124-126.) It's a learning process and learning should be seen as one of the results of doing service design projects.

The development phase of this thesis is done by applying the "Double Diamond" -process model and service design tools and methods used for researching the subject, identifying the customer and business needs, ideating the possible solutions that fit to needs, creating first version of the concept, and testing and validating the solution concept. The methods the

author of this thesis has selected to serve each stage of the development process are presented in Figure 14. as a list under the process model.



Discover-methods

Desktop research: excisting qualitative and quantitative data, company's strategy materials

Theme interviews with stakeholders

Theoretical framework

Description of development landscape: digital, physical and social space and its affordances

Current state analysis

Workshops: kick-off

Define-methods

Service walkthrough and observation

Current customer space-time path + journey options

Hotjar questionare on digital channels (Chinese)

Analyzing and clustering research data: affinity diagram

First QR-code test

Interviewing stakeholders

Defining key touchpoints in blended servicescape

Workshop: defining development target and criteria for curation

Persona description

Design brief

Develop-methods

Benchmarking

Stakeholder mapping

Workshop: content & solution ideation

Sketching solutions, prototype iteration

Workshop: planning blended servicescaspe affordance experiment

Preparing experiment: test plan & communication + production and installation of touchpoints

Testing the solution prototype

Setting up the measuring analytics

Deliver-methods

Collecting quantitative data (Hotjar heatmap & Google Analytics) and analyzing results

Target group theme interviews

Service blueprint –model: Curated content production process model

Curated content -concept description

Future space-time path of curated journeys

Figure 14: Double Diamond process model and methods used in thesis's development phase (Adapted from British Design Council 2015)

Active involvement of stakeholders and setting up a multidisciplinary team for collaboration are key elements in service design approach. An ideal team consists of, for example, customers, employees and management, as well as engineers, designers and other stakeholders involved both in service design and delivery. (Hertto, Rönnholm & Ketola 2014, 160-163.) It is suggested, that although collaborative design is time consuming, the project, clients and participating organizations benefit from it (Steen, Manschot & De Koning 2011, 59). Partners involved in workshops facilitated by author of this thesis are presented in Figure 15. In Develop phase some partners' role was to contribute to producing the prototype materials. The roles are described more in chapter 4.

Figure 15: Collaboration partners in co-design workshops

Author of this thesis was responsible for preparing and facilitating the co-design workshops, as well as selecting and using service design tools and methods presented in Figure 14. Selecting the right tools for each step is important so that the results in each phase gives optimal ground for work to-be-done in the following phase. Appendix 1. describes in detail the process and scheduling of the development project.

3.1.1 Methodological Solutions in the Discover Phase

The discover phase's tools and techniques aim to increase customer understanding and new insights to subject are sought by using different research methods. This phase is very much research-driven in nature, but it might require workshopping to define the development objectives. Methods can be for example interviews, research plan, system map, synthesis wall, emotional journey, journey map, diary study, ecosystem map, observation, empathy map, stakeholders map and desktop research. (Service Design Tools 2019.) Mapping the baseline by doing analysis of the current state of the customer experience should be done internally, within organization, with customers and in a competitive environment (Korkiakoski & Gerdt 2016, 18).

The methods used in this development case included desktop research, theme interviews with stakeholders (commercial managers, Chinese guides), observations, service walkthrough, stakeholder maps, strategy mapping, workshops and benchmarking. In addition to these, a quantitative internet survey was conducted on Finavia's website by thesis author in order to collect research data and to improve understanding of the current situation. The survey was targeted to the Chinese language version of the site and translated into Chinese to support the natural language of respondents with intent to increase the response rate. No background information was collected on the respondents and it was a limited survey with only two multiple-choice questions. Still, survey results gave complementary insights for discussion during development and decision making.

3.1.2 Methodological Solutions in the Define Phase

The Define phase goal is to identify and select a focus area for the design process. The data and insights collected at this stage are grouped and categorized to find key insights. After this phase the problem definition is clear and a design brief exists, that guides the ideation of solutions to the problem. Define-phase tools and techniques include for example brainstorming, concept walkthrough, mind map, narratives, issue cards, hypothesis generation and experience principles. (Service Design Tools 2019).

The service design methods used in this development case included customer persona, customer journey in space-time path, use case scenario, affinity diagram and design drivers. Personas are used for presenting insights about the target group and for guiding focus during service design process. According to Goodwin (2009, 229), a good persona description should include character attributes such as persona's attitudes towards the service, level of education or training, persona's interests, values and description of their typical day. Personas are not equal to segments, that are traditionally used in marketing as a tool for diversify target groups for marketing actions.

Service use case situations can be illustrated by using scenarios that describe the behaviour of a persona or a specific target group. A good user scenario includes the main character, the place of action, the situation and the purpose of using the service. Scenarios work as a tool to evaluate and communicate the idea of a new service or issues with current service from customer perspective. (Sinkkonen, Nuutila & Törmä 2009, 135-137.)

The service can also be described by structuring the service into a service path, service sessions, and touchpoints. The service path (also known as the customer journey) consists of service sessions via number of touchpoints through which the customer experiences, senses and sees the service. Touchpoints can be divided into channels, objects, action models, and people. The service path describes what the customer perceives on the time axis related to the service usage and how he or she experiences the so-called user interface of the service. The service path includes pre-service, the actual service, and after-sales service. (Koivisto 2011, 49-51, 55.)

Design drivers summarize the service offering and present the need the service responds to. Design drivers illustrate customer needs, customer goals and customer motivations. (Tuulaniemi 2016, 69.) According to Cooper, Reimann and Cron (2014, 106-108), design drivers can also be formed by using persona descriptions and scenarios, and by taking into account the business needs. Design drivers determine what service needs to be able to do before designing how the service will look, feel, and function. Author of this thesis documented a design brief with design drivers and presented it to partners responsible for the design and production of the test material.

3.1.3 Methodological Solutions in the Develop Phase

After defining the core problem and making the design brief, the design process moves to the second part of the "diamond". The findings collected in the Discover and Define phases are turned into new ideas and concepts and tested with the help of visual prototypes. Examples of methods, tools and techniques for this phase include user scenarios, user stories, concept walkthrough, experience prototypes, role play, service image, and service prototype (Service Design Tools 2019). A concept document can also be used to visualize the suggested solution. Conceptualization aims at creative solutions, individual and organizational learning, mapping the future and concretizing alternatives to support the strategic decision-making of a company (Keinonen & Jääskö 2004, 35). Prototypes and other visualizations of solution proposals are a great help when it comes to depicting and testing a new service or service model across different channels from customer and service production perspective. Feedback from prototype tests can be used to further develop the concept and iterate on the solution. (Hertto et al. 2011, 160-163.)

Ideating possible solutions was done with the relevant stakeholders in a ideation workshop prepared and facilitated by author of this thesis. The theme of the workshop was content curation and website page layout. Following workshop concentrated on iterating the solution prototype prepared by marketing company based on the previous workshop. Author of this thesis prepared the test plan to guide the testing of the prototype, which included defining the methods for collecting feedback and measuring the success of the pilot. Test preparations included the production of prototypes and their installations, also thesis author communicating the test to partners and making guidelines for staff, as well as setting up measurement channels to measure the impact of touchpoint experiment. According to Tuulaniemi (2016, 241-245), measuring intangible services is possible with properly set key performance indicators (KPIs), when they are well designed and reflect business challenges, such as number of new customers, customer experience, sales, resource utilization, queuing times, bounce rate, and so on. The impact of service design is evaluated in relation to the improvement of the service process or sales.

During the test period passenger interviews were conducted by author of this thesis, to get more insights for validating the concept. This means testing the value of storytelling as a method to engage consumers with local brands at the airport. Semi-structured theme interview was used as a method to collect qualitative data about Chinese passengers' experiences, thoughts and feelings. The purpose of the interviews was to study the significance of the phenomenon to the target group and help interpreting the quantitative study results from prototype test (Ojasalo, Moilanen & Ritalahti 2009, 95-98). An interview is one of the most used data collection methods in the research and development work. It is used for deepening the knowledge and clarifying matters regarding the research topic. It is recommended to combine

the interview with other methods in the research and development work. (Ojasalo et al. 2009, 95-97.) An interview is seen as a valuable method for gathering qualitative research material, because during an interview situation researcher can study things in depth, ask for refinement and try to understand the motives in detail, thus reaching deeper level of understanding the phenomenon. (Hirsjärvi & Hurme 2008, 34-35, 47-48.)

Theme interview structure included both closed and open questions. The interview proceeded by discussing around pre-defined themes derived from thesis's research questions. Altogether six Chinese adults were interviewed at the Helsinki airport gate area in January 2020. Interview sessions were not agreed in advance. Passengers were approached at airport gate area, main criteria being their nationality and age. Interviews were taped so that interviewer could focus on asking questions, discussing and observing interviewees reactions to questions. Recording interviews also saves time because interviews were done "on the spot" at the airport. The interview frame with its questions can be found in Appendix 2.

3.1.4 Methodological Solutions in the Deliver Phase

The Deliver phase includes selecting, defining and documenting solutions that work. The purpose is to transfer new or improved service concepts into the organization. Suitable tools include value proposition canvas, system map, user stories, stakeholder map, service blueprint, service roadmap, service specifications and business model canvas (Service Design Tools 2019). Concepts are validated with business owners and a roadmap for future implementations is often produced during this phase.

In the Deliver phase of the process, test results were analyzed to evaluate the impact of prototype and new touchpoints. Service blueprint was used to finalize and visualize the concept and content curation process model. Service blueprints can be used to visualize customer interaction processes from the perspective of the customer and the service provider, develop new service innovations and improve existing services using flow chart format. Service blueprint is used for describing service process, touchpoints and service evidence from customer perspective. (Britner, Ostrom & Morgan 2008, 87-88.)

3.2 Material Collection

This chapter describes what kind of material is collected and how it is collected in different parts of the process. A detailed process is presented in Appendix 1 of this thesis.

3.2.1 Material Collection in the Discover Phase

Goal in the Discover phase was to research the subject and collect existing data about the subject. Quick interviews with the Chinese guides "on the spot" produced qualitative data about the information needs of Chinese passengers at Helsinki airport. Databases like ScienceDirect and ProQuest were used for building theoretical framework that also framed the

development phase actions. Finavia's strategy materials and development programs were used as a source to describe the development landscape. The current state analysis and target group's needs were identified by studying company's previous research around the subject, such as Transfer Passenger Study, Chinese Customers Information Needs reported by the Chinese guides, Transfer Passenger Needs Assessment, Chinese Passengers at Helsinki Airport, Flight Passenger Study, Brand Image Study and Segmentation Study. This was mostly qualitative study material.

Google Analytics was used to collect existing quantitative data about channel usage in Chinese language and all languages. Users most visited pages were studied to see what they search for from digital channels. Data was collected from year 2019 (1.1.2019-31.12.2019). The channels studied were website, HEL Guide and Service info screens. Finavia's Chinese social media channels Wechat and Weibo were also studied. The target was to understand the channel usage and commercial information seeking behaviour of Chinese passengers and to compare it with the behaviour of all users. This data helped to define how Chinese passengers currently use the airport's digital space. During the prototype test period (10.1.2020-14.2.2020) user data from Chinese language website and HEL Guide was collected to analyse the performance of new touchpoints leading to curated content.

The Chinese guides interviews produced qualitative data about target group's information seeking behaviour and their commercial aspirations. This interview data was used to define content for experiment, key touchpoints and for visualizing the Chinese passengers' journey on a space-time path at the airport.

A short survey on the Chinese language website's Shops and Restaurants -section was used to collect data from October 2019 to January 2020. The same survey was on HEL Guide's service section called "Shop&Dine" during December to January for reaching the Chinese passengers on-the-spot at the airport. Both questionnaires were translated to Chinese for better reach of the target group considering their language skills. Survey was first published in Chinese language version and later in English language version to get comparative data about the subject from broader audience. The target of the survey was to research 1) why and at which stage of their journey Chinese passengers use commercial information offered at Helsinki Airport website and 2) would they like to see information about local products, local food offering or something else. When interpreting the results, it was noted that the results are exclusively for the respondents of the survey and cannot be generalized (Ojasalo et al. 2009, 108-111). Survey questions are listed in Appendix 3.

The current state analysis was done using the material gathered in the Discover phase to study digital, physical and social realms of servicescape and the current touchpoints offered to the Chinese target group. In addition, content curation at Helsinki airport in its present

state was studied by going through the content and touchpoints in digital and physical servicescape.

3.2.2 Material Collection in the Define Phase

The goal of the Define phase was to define the problem and identify the need to which the solution was to be designed. Material gathering included observing Chinese passengers at key passenger touchpoints on-site at the airport terminal. Also, service walkthrough for different types of journeys was done and insights from this documented to Miro online tool. The journey to focus the development upon was decided based on Discover phase research, which included talking with the Chinese guides working at the airport.

The Define phase included thesis author hosting a co-design workshops with different stakeholders, such as commercial managers, digital channels manager, content manager and supplier's service designer. Workshops and meetings around the subject of curation were held with business owners to define key concepts and criteria for curating the content for pilot phase. The notes from these workshops were documented to Miro board. During the summer 2019 first QR code test was conducted in co-operation with e-commerce manager and supplier's service designer to collect preliminary insights about reaching passengers through different touchpoints in terminal via QR codes. Language used in the test was English, so this experiment was targeted to broader audience than just Chinese. Quantitative data from this test was collected via Google Analytics.

A relevant part of this phase was to analyse and cluster data from previous research and interviews conducted for thesis and other related projects. Combining the theoretical background to target group insights helped author of this thesis to define user persona and visualize space-time path for the experiment. Design drivers were formed during analysis and clustering of the research material. Finavia's guidelines for content production were used when writing the design brief to marketing company. Design brief material guided the development of prototypes, a project lead by author of this thesis.

3.2.3 Material Collection in the Develop Phase

During the Develop phase the goal was to ideate and develop potential solutions and test them with users. Defining evaluation criteria was an important part of this phase. Workshops with relevant stakeholders were held to design prototype content and layout. Benchmarking other solutions was done to see if and how other airports are communicating local experiences on their websites. One example is Frankfurt Airport's way of presentation national festive called "Octoberfest" as a content page on their website (Appendix 4). Frankfurt also has different layout and visual design for their Chinese version of the website compared to English language version (Appendix 5). Ideas for designing the touchpoints between physical and digital service space were not found during online benchmarking.

The scope of the experiment and how to measure the success was defined with business owner in the end of October. Design brief was presented to company's internal stakeholders when designing the content and website layout. This included managing the content and website layout production in cooperation with external partner. Product information was gathered by author of this thesis from different sources for producing the content to experiment. The website was built by author of this thesis by using a program called Drupal.

Guidance related to the content experiment was communicated to commercial operators selected for this pilot and to the Chinese guides working at the airport by email and by meeting them in person. Other materials produced in this phase were prototypes (stickers, point of sale (POS) -material to shops and hand material for the Chinese guides) and website content. Heatmaps were set on content website to track user behaviour during experiment phase.

During the experiment, the QR code stickers used as touchpoints to content were added by author of this thesis to different locations defined during previous phases of the service design process. The locations of the stickers is presented in Figure 16. Since the target journey was Schengen-to-Non-Schengen transfer journey, the focus was more on Non-Schengen area, where passengers of this type head to spend their waiting time. Previous studies have shown that passengers tend to seek the departure gate and after locating it continue to flexible activities, like shopping before boarding to flight.

Figure 16: QR code touchpoints location at the airport terminal

The location of shop premises included in this experiment are presented in Figure 17. Point of sale -material was delivered to shops, as well as the guidance material to shop personnel (Appendix 6.). Commercial operators were reached by email during the experiment to get their feedback on the process.

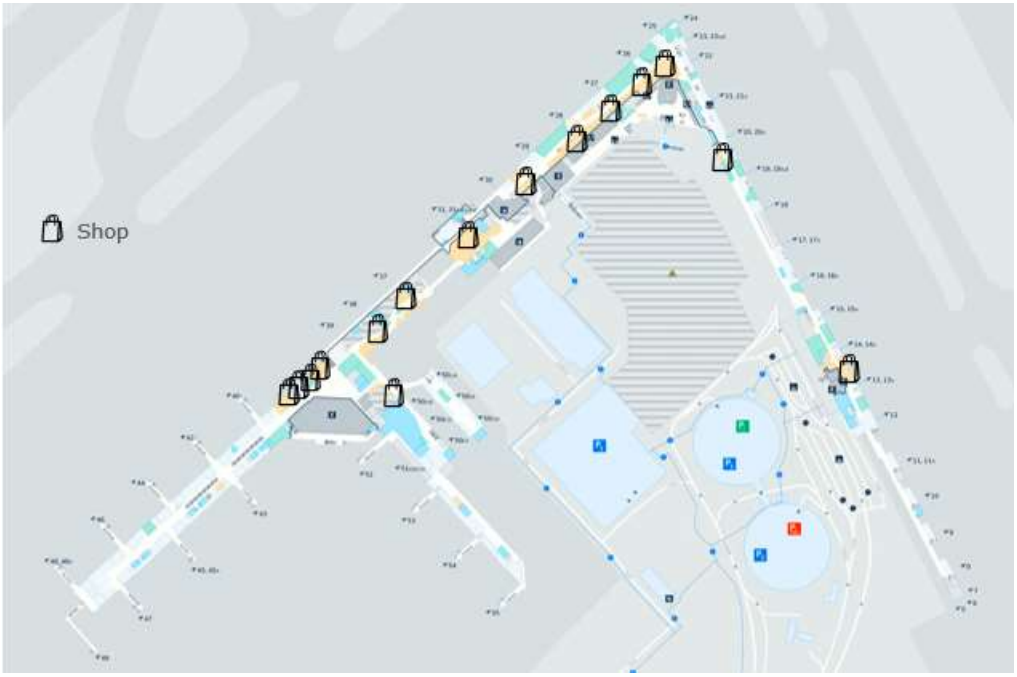


Figure 17: Shops locations at the airport terminal

After the test period of five (5) weeks quantitative data about the touchpoint performance was collected. Hotjar's heatmap-tool was used to track the user behaviour and interaction with the curated content on webpage. Heatmap shows in visual form for example how far users scroll down a page and are they interacting with some content element while they are on page (Hotjar 2020). To get comparative data, a heatmap was also set on Chinese language landing page of Helsinki Airport Website. Button link to curated content page was on that page, so heatmap was also used to track how many users reach curated content from landing page.

During the test period, research data was also gathered via Google Analytics for site usage and traffic sources to determine the QR code performance. The QR codes were tracked separately in Google Analytics to measure different touchpoints performance. This was done by using Campaign URL Builder for adding campaign parameters to URLs so campaign could be followed in Google Analytics. Each sticker had unique QR code created with QR code generator. QR codes were marked with identification letter to assist placing the unique stickers to right location.

Theme interviews were conducted during the experiment. Interview questions were focused on a Chinese passenger's information seeking and shopping behaviour at different stages of their travelling journey. The target was to describe how a Chinese passenger access information related to the airport's commercial offering and to study the phenomena of content curation at an airport context. Also, insights were needed to interpret the quantitative results from the affordance experimentation. Goal was to gain more deeper understanding of how to reach, engage and activate the target group with digital content in an airport's physical space. The objective was also to understand the content requirements for product information that adds value to the target group.

3.2.4 Material Collection in the Deliver Phase

The Deliver Phase was targeted to finalize the concept solution and deliver the results to the case organisation. The material collected in this phase included analysis of the test results and writing concept description including service blueprint as process model for curated content production. Validating concept with business owners and stakeholders remains to be done in the future.

3.3 Description of the Material Analysis

This chapter describes how the material from different phases of the service design process has been analyzed to answer the research questions and development target. This analysis followed the general model of qualitative research, which involves the collection and preparation of material, the reduction of material, the identification and interpretation of repetitive structures in the material, and the critical examination of all stages (Ojasalo et al. 2014, 138).

3.3.1 Material Analysis in the Discover Phase

In the Discover phase, documentary analysis was done by gathering insights from research material to post-its. This was done to reduce the amount of material, but also to cluster and analyse data to identify key insights. Information from Post-it's was documented to excel for making it easier to search and identify patterns and key words. Insights were labelled to following categories: needs, expectations, products, services, brands, and general target group information.

All the research and workshop materials were collected, documented and mapped to online whiteboard called "Miro" by author of this thesis. Figure 18. is a print screen picture of this board. This is an online tool that is used in the organization. Collecting and clustering large amount of data and documenting it was easier with this visual tool than by traditional methods.

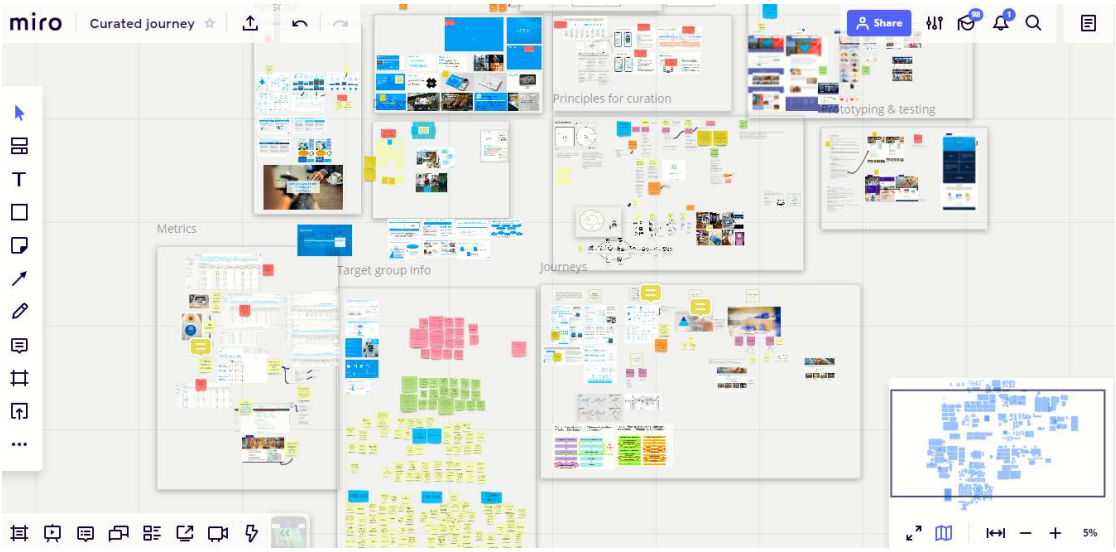


Figure 18: Research data collected on Miro online whiteboard

Quantitative data collected by short survey on website and HEL Guide was treated as complementary to other research material. It has been linked, for example, to qualitative interview findings. This survey data was collected and prepared by using Hotjar's own result visualization tool that uses poll questions as topic.

3.3.2 Material Analysis in the Define Phase

In the Define phase, content analysis was done in a data-driven manner. This means using data reduction, grouping and abstraction. According to Ojasalo et al. (2009, 124-125) data reduction means that data is compressed and fragmented to parts. After this data is grouped, which means that concepts or content with the same meaning are grouped, classified, and named. Abstraction in the end means generating generic concepts by making simplifications. Content analysis is used for describing content with words and seeking to search and identify meanings in texts (Ojasalo et al. 2009, 122). Service design method called Affinity diagram is similar to this approach. The results present the concepts that are formed based on these classifications and their content.

Themes derived from research questions and development task were used to group the research data and insights. Some service design canvases, like Value proposition canvas, were used to structure insights from research material.

3.3.3 Material Analysis in the Develop Phase

In the Develop phase, the recorded interview data was transcribed from audio into a written form. The recordings were transcribed word by word. The material analysis started as Ojasalo et al. (2009, 99.) suggests, by reading the material thoroughly multiple times. The material was then categorized and linked to the theoretical framework, as well as to research

questions and development task. Transcribed material was clustered by interview themes, then interpreted and connected with the theoretical framework.

Since the interviews were theme interviews, it was natural to use thematising to analyse the data. Thematising examines issues that are common to several interviewees. These issues can be related to interview themes or be something unexpected. Studying the regularities that appear in the interview material give the analysis depth. There are different ways to examine connections, like typing and extreme grouping. Typing means grouping things or interviewees into two or more types based on something that is relevant to the development task. Extreme grouping means finding opposites from interviewees answers and the classification is derived from the phenomena central to the development task. The data can also be analyzed by searching for occurred abnormalities relative to the subject. (Ojasalo et al. 2009, 99-100.)

Quantitative research material was collected during the touchpoint experiment in Google Analytics. Variables studied in Google Analytics were pageview, unique pageview, sessions/user and average time on page. These variables are defined by Google Analytics:

- "Pageview is defined as a view of a page on your site that is being tracked by the Analytics tracking code. If a user clicks reload after reaching the page, this is counted as an additional pageview. If a user navigates to a different page and then returns to the original page, a second pageview is recorded as well."

- "A unique pageview, as seen in the Content Overview report, aggregates pageviews that are generated by the same user during the same session. A unique pageview represents the number of sessions during which that page was viewed one or more times. Analytics measures both sessions and users in your account."

- "Sessions represent the number of individual sessions initiated by all the users to your site. If a user is inactive on your site for 30 minutes or more, any future activity is attributed to a new session. Users that leave your site and return within 30 minutes are counted as part of the original session. The initial session by a user during any given date range is considered to be an additional session and an additional user. Any future sessions from the same user during the selected time period are counted as additional sessions, but not as additional users. The average amount of time users spent viewing a specified page or screen, or set of pages or screens."

- "Average time on page means the average amount of time users spent viewing a specified page or screen, or set of pages or screens."

Average time on page is a key performance indicator for a content webpage, especially if users are targeted to consume the content, not to interact with elements on page. Average

time on page helps to determine which pages are the most engaging for users. Scroll tracking is another good tool to understand content engagement. (Google Analytics 2020.) Hotjar's heatmap-tool was used to track scrolling behaviour on content page.

3.3.4 Material Analysis in the Deliver Phase

During the Deliver phase, the content analysis was done by a theory-driven manner. Ojasalo et al. (2014,140-141) describe this type of content analysis meaning that concepts and the classification of the analysis is based on a previous theory framework or concept system. Theory-based content analysis begins by constructing the analysis framework. After this, things from data are located either fitting inside the analysis frame and or being outside the analysis frame. Theory-driven analysis framework is a way of testing the structured theoretical framework in a new environment. This approach fits to the last chapter of this thesis, where there is a dialogue between results and theoretical framework.

In the end of material analysis, interpretations aim to bring out something new about the target phenomenon. The source of interpretation can be earlier theory or research. In qualitative research, making interpretations has started with the formation of the research questions and it has been present in all stages of the research process. Tactics of "meaning creation" include, for example, pattern finding, seeing plausibility, clustering, making comparisons or contrasts, building a logical chain of events, noting relationships between variables and making conceptual or theoretical coherence. Research includes creating synthesis of the observations and partial results, bringing together the key results and providing a reasoned answer to the research questions. The conclusions of the research are drawn from the synthesis. (Ojasalo et al. 2014, 143-144.)

4 Empirical Study and Findings

This chapter describes the empirical study and findings from different phases of the service design process. The findings from the empirical study are presented in relation to the thesis's development goals and research questions. The outcomes from different stages of the design process are presented in the Figure 19. The outcomes from Defining the problem -part of the Double Diamond included for example customer and business needs, motives and pain points, and design brief that guided developing the solution for the experimentation. The outcomes from Solving the problem -part of the Double Diamond included for example producing test material, planning the test and executing it. Suggestions for future development was done by author of this thesis after analysing the experiment results and making synthesis of the observations and results.

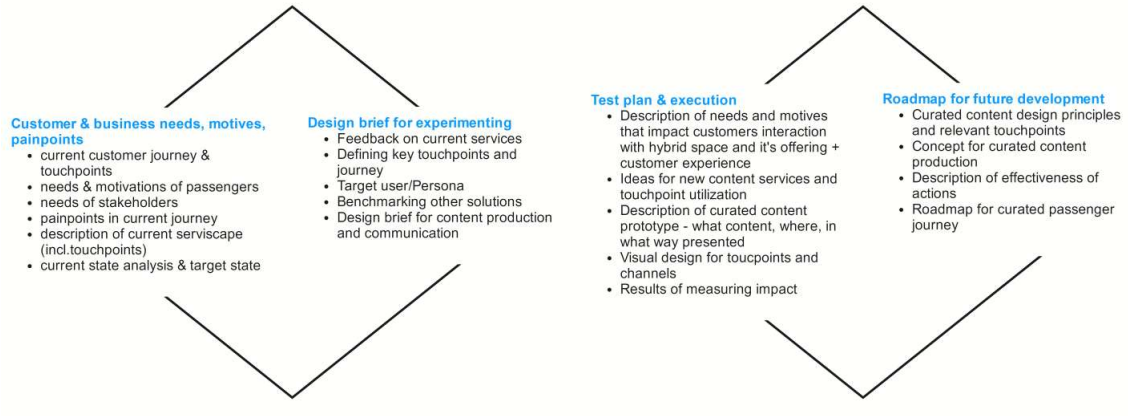


Figure 19: Service design process outcomes from the project

The outcomes from different stages of the design process are not all described in detail, since some are more related to producing prototype than answering to this thesis's research questions and development targets. Findings that are relevant for this purpose are presented here. Some of the outcomes, like space-time path of current passenger journey and the current state of digital and physical service space have been presented already in the previous chapters. Those are not re-introduced in this chapter.

4.1 Empirical Study and Findings in the Discover Phase

4.1.1 Current State Analysis

The current state analysis on content curation at Helsinki airport was done by studying the online and offline commercial content. In Shops and Restaurants -front page a selection of Helsinki airport's shops can be found in three categories, which are Top Brands, Beauty, and Wellness & Duty-Free Shopping. All shops can be viewed by clicking a link on page. (Finavia Corporation 2019c.) This can be considered as a first phase of compiling the online content regarding shopping possibilities at Helsinki Airport.

From Figure 20. It can be seen that the Shops-page has different categories for filtering the content. These are Books & Magazines, Cosmetics, Design, Duty Free, Electronics, Fashion, Grocery, Kiosk, Pharmacy, Souvenirs, Watches and Jewellery. Users can also view shops based on their location at the terminal: Before security and After security. (Finavia Corporation 2019d.)

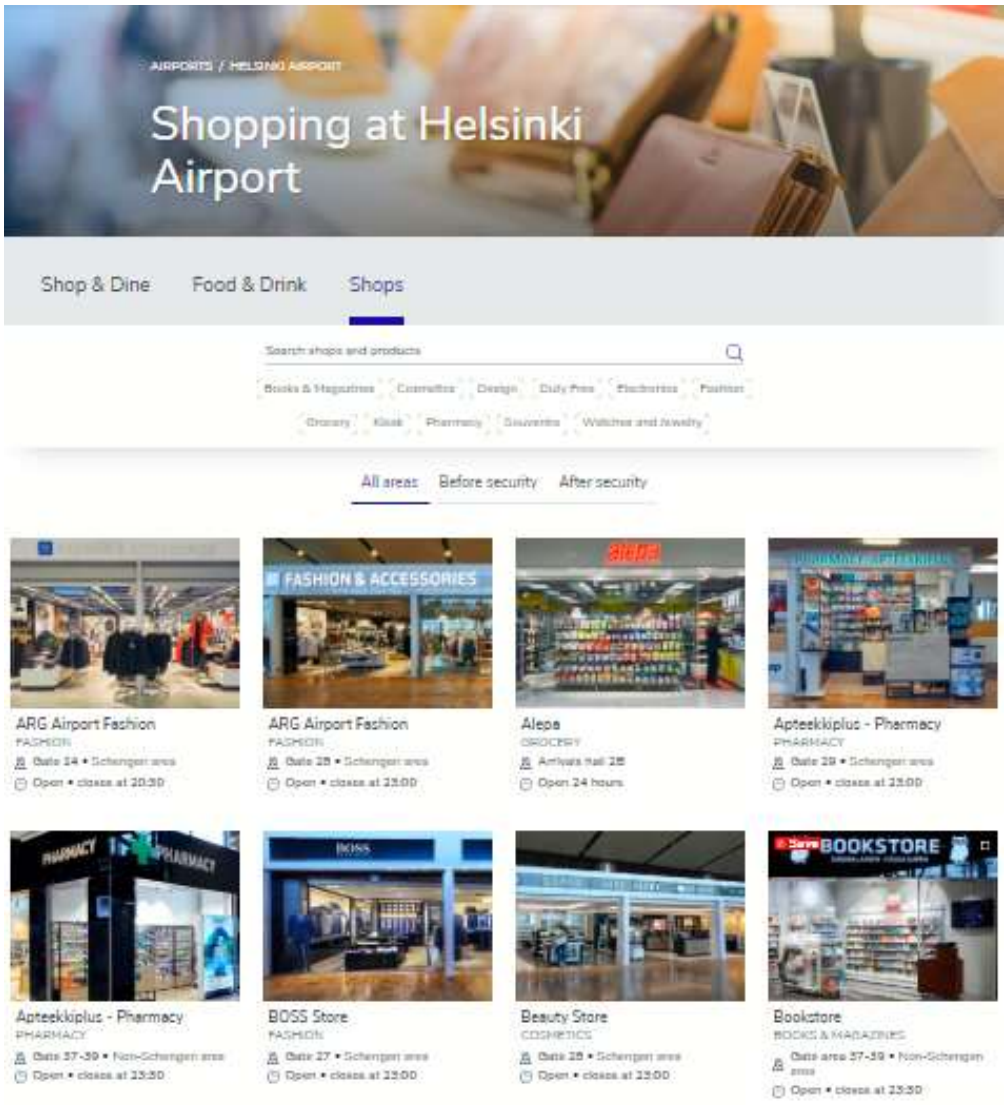


Figure 20: Current stage of content curation at Helsinki Airport website

Neither of these pages presents local specialities. Also, no category for “Finnish design” or “local brands” exists. A specific shop content page can have descriptive text that mentions local products are available at these premises, for example Iittala store description presented in Figure 21. (Finavia Corporation 2019e). This shop specific content can also be found from a Chinese language version.

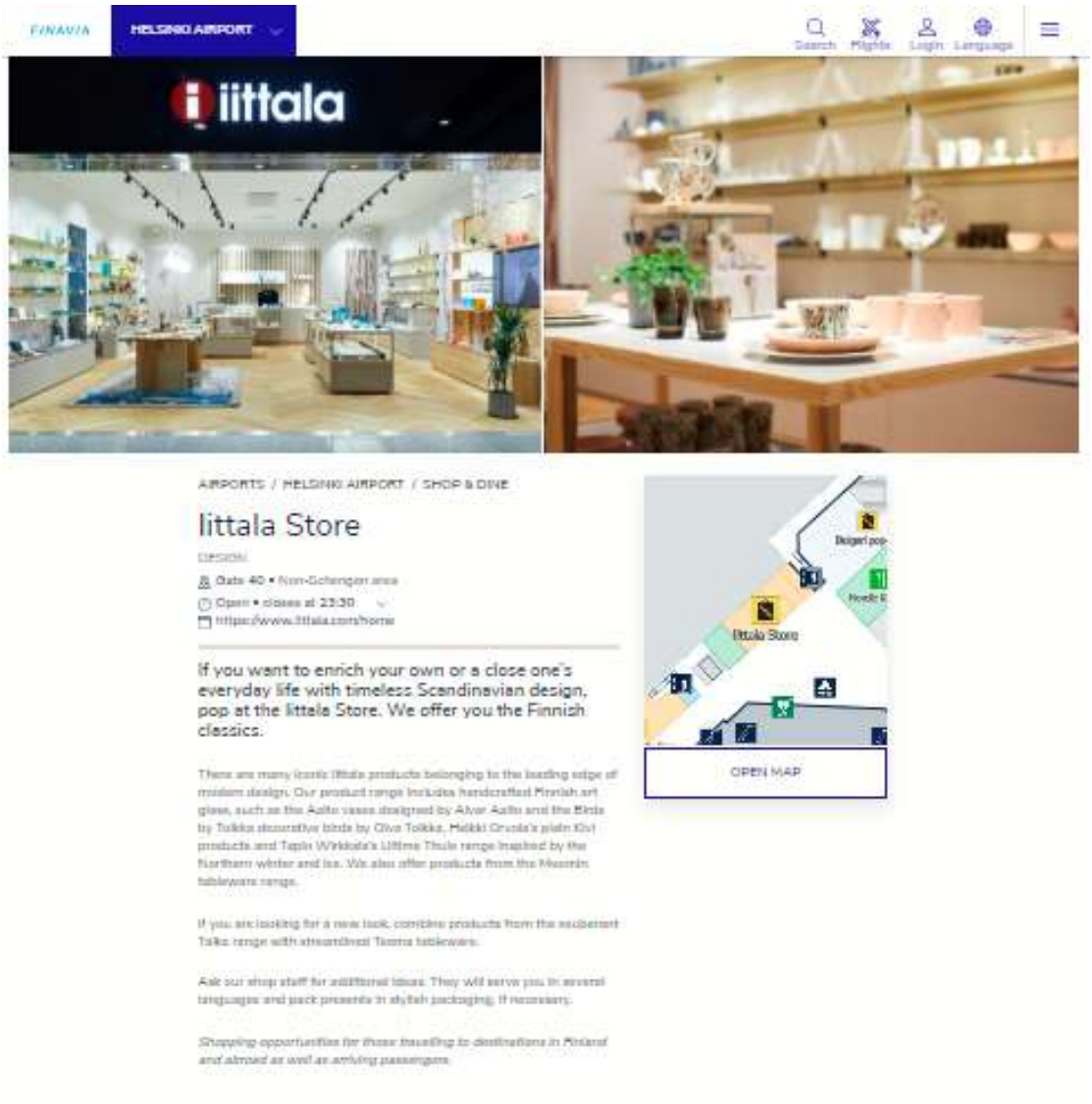


Figure 21: Iittala store content page from Helsinki airport website

Finavia's commercial campaigns have utilized content curation, like in the Happy Collection campaign 2019 presented in Figure 22., which filtered and compiled offline content to online. The campaign site was built to showcase the Finnish specialties and products in the form of recommended itineraries. One target of the campaign was to ease the product findability at the airport by linking the digital to physical with adds on screens and stickers on-site in shops.

Figure 22: The Happy Collection-campaign material (Reprinted from Finavia Corporation 2019)

There is also curated content in the physical airport premises. The touchpoints to this content are the Chinese guides' brochures and the showcases on the Chinese guides' service desks (Figure 23). There are also different advertisement materials at the airport premises. Inside shops, curation can be seen for example as point of sale -material and product information on digital screens (Figure 24).

Figure 23: Curated product selection in a showcase at the Chinese guides desk

Figure 24: Product curation at shop level

The guidance given by the Chinese guides working at the airport premises has been getting good feedback from the Chinese passengers. It is a good touchpoint for personal assistance related to shopping and other information. Chinese guides print brochures assisting shopping related decision making have also been complimented by Chinese passengers. The current material doesn't focus on telling products background stories, but product image and brand names. The current state analysis concludes that the airport's own digital channels do not provide detailed product-level information to customers.

4.1.2 Current Digital Touchpoint Usage

Channel usage data from Finavia's website was studied with Google Analytics first during the Discover phase in the end of 2019 and then again in the beginning of 2020 during the Develop and Deliver phases. Total website usage data was compared to the data on Chinese language version of the website. The results show that the share of Chinese language version users is 0,5 % of all website users (all language versions) and 0,3 % of all sessions. Otherwise the behaviour and device usage is similar compared to all users. Around 70 % of users browse with mobile devices.

Helsinki airport website application, also known as HEL Guide, reached over double the number of users that visited the website during year 2019. About 3% of all users have a Chinese language setting in their browser. Chinese user's average session duration was noticeably more when compared to the session duration of all users of HEL Guide. Users are located in Finland, which is due to the channel availability only on-site at Helsinki airport after login

into Helsinki airport's WiFi network. Also, this channel is used with mobile devices and the share of mobile users is the same than with website (70 %). The most used pages by unique pageviews are landing page, HSL advertisement and flight information. HEL Guide has had Chinese language version working since the beginning of December 2019. Unique pageviews in that period were almost 55 000, with the landing page naturally being the most popular content (76,5 %), after that comes content pages like flight info, map and shops.

Helsinki Airport digital map is reached from various sources like service info screens, website, HEL guide, Helsinki airport mobile application, and airline digital channels. Chinese language version of the map reached only 2 % of the amount of all users on map. Of course, Chinese target group could be using the map with language being set on English. The average Chinese version map user spends around 1 minutes looking at the map, which is somewhat less when compared to all users.

The service info screens at the airport premises reached in total over 100 000 sessions during 2019 and the average session duration was around 3 minutes. Service info screens were used with Chinese language settings 7,5 % of all the sessions, with average time on page a bit over 1 minutes. Chinese language was selected most often on SIS screens located in arrivals hall 2A, gate 28, gate 25, Aukio area and gate 21. This channel is typically used for finding a specific information about shops, restaurants and services, as well as for navigating to these services.

Finavia's Weibo account has around 48 000 followers at monthly basis and there are around 15 posts per month (November 2019). The channel's performance is measured by shares, likes and impression. In November the most popular post was called "TOP3 Finnish brans in HEL" that can be seen in Figure 25.

Figure 25: Weibos' most popular post in November 2019

Helsinki Airport's WeChat had 2 500 followers in November 2019. WeChat account has articles on themes like "Can I leave Helsinki airport during a long transfer. The channel's performance is measured by impressions and engagement.

Comparing to the estimated 400 000 - 600 000 Chinese passengers per year, the Helsinki Airport website usage is quite low among the Chinese target group. This is in line with the study by Chung et al. (2013, 26-27) at Taiwan airport, who found that the airport websites are not the preferred information source for passengers. Since website doesn't reach that many of the Chinese passengers, also the map usage remains low. Still, the data from these channels imply that almost all Chinese website users also visit the digital map. HEL Guide seems more promising channel to reach Chinese passengers on-site. The number of users of Chinese-language content on service information screens is relatively small. It can be that some use the English version. According to the Chinese service guides, Chinese passengers prefer using personal service instead of digital channels. The reach to the target group via Chinese social media channels is quite low at the moment, with Weibo being the better performing channel.

4.1.3 The Target Group, Their Needs and Current Customer Journey

As mentioned, the target group is Chinese transfer passengers. Description of the target group is presented in Figure 26 and it is based on insights collected from previous studies at Helsinki Airport. According to these previous studies, less than one third of the Chinese at Helsinki Airport receive information before coming to the airport. The preferred information source is social media. The results from a study by Chung et al. (2013, 26-27) support this notion. Chinese passengers tend to rely on recommendations. They worry about obligatory airport process to some extent. They value personal service and the possibility to use Chinese language.

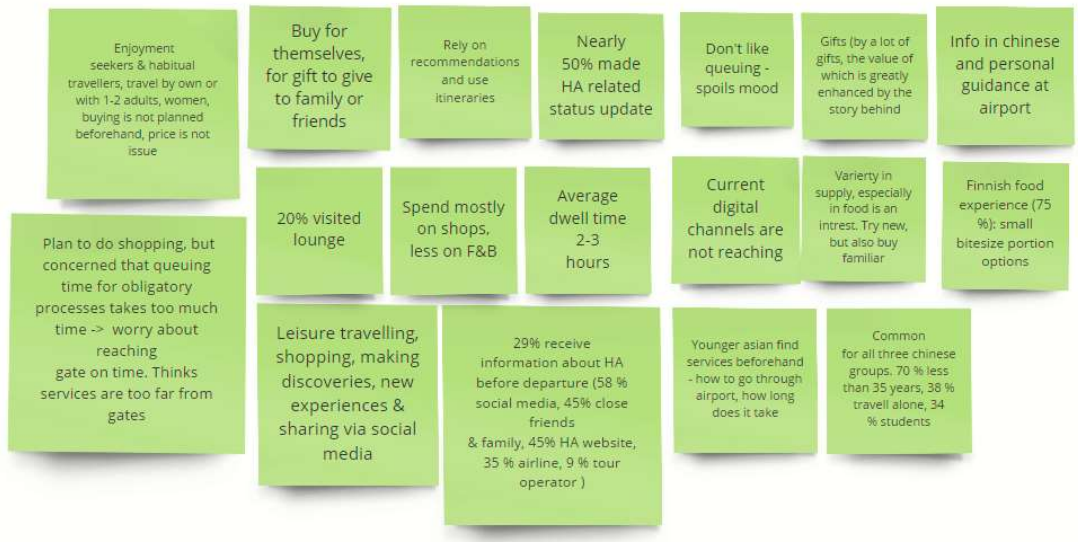


Figure 26: The target group information from previous research

Finavia's Segmentation study has identified three Chinese airport customer personas, which are named as Local seeker, Active shopper and Traditional (Finavia Corporation 2019f). The persona description, that was used to guide the curated content experiment design work, was done by combining the Local seeker and the Active shopper. The decision to combine these two personas was supported by the findings from Discover phase and considering the hybrid consumer type known to exist.[1] Also Chung et al. (2013, 25) identified passenger clusters called Mood shoppers and Shopping lovers that fit the persona description based on their information seeking behaviour. Based on research, a following persona description was used in designing the solution prototype:

- Chinese, 25–45 years old, most likely female, a leisure traveller that sees the airport as an important and interesting place for shopping
- Skilled in using digital services, active in social media and sharing experiences
- Values the possibility to use Chinese language at the airport
- Spends time at the airport doing shopping and eating. Interested in familiar global brands, and Finnish products and local food
- Might plan purchases beforehand and might have a shopping list, but also does mood shopping. Buys products for friends and family on request, also presents to bring home as souvenirs
- Values easy access to products, finding good deals, comparing prices and a possibility to have a good overview of the selection at the airport. Communicating the story and product features will make local products and services more attractive and easier to purchase.

Chinese passengers' service level expectations are descried in Figure 27. The target for Finavia is to reach the highest level of the pyramid, which is called Exceptional. (Finavia Corporation 2019f.) This breakdown of service level values is similar to the value pyramid presented

[1] A study on hybrid consumers found that a continuum of hybrid consumption types exists, who opt for both premium and budget alternatives but ignore midrange alternatives. This trading up and trading down is known to happen even within the same product category. The decision-making seem to be linked to personality, taste and values that products present to hybrid consumer in a given situation. (Ehrnrooth & Gronroos 2013, 1793-1795.)

in theoretical framework. In that model, the bottom-up levels were called “functional, emotional and meaningful” (Palmu Inc., cited in Tuulaniemi 2016, 74-75).

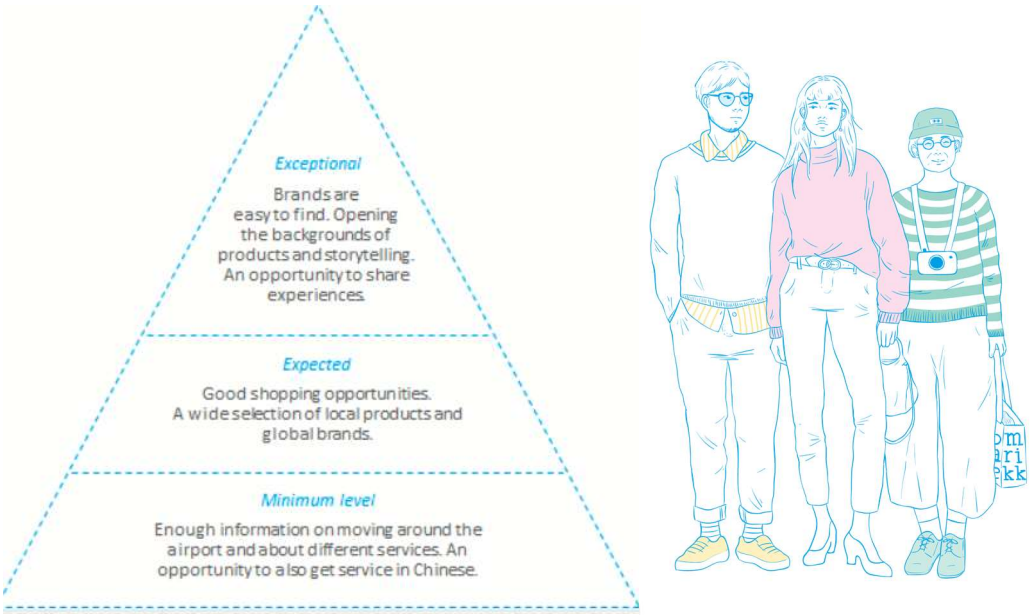


Figure 27: Chinese passengers’ experience of service levels at Helsinki Airport (Reprinted from Finavia Corporation 2019f)

Current touchpoints were studied during Service walkthrough sessions at the terminal from Schengen area to Non-Schengen area. Participants were author of this thesis, partner’s service designer and commercial coordinator. Observations were documented by taking notes and pictures. Some of the touchpoints are visualized in Figure 28. with photographs.

Figure 28: Chinese passengers’ touchpoints at the airport’s premises

The Chinese guides were also interviewed for determining the key touchpoints and typical passenger behaviour related to seeking commercial information. The most potential path for Chinese transfer passengers' commercial activities seems to be when they are returning from trip. For example after visiting London, Helsinki Airport is the last airport before flight back home, so it is a last chance to do duty free shopping. They shop on both sides of the passport control, but eventually head to Non-Schengen area, since flights to China depart from that area and they tend to look for their departure gate for anchoring their position at the airport space.

4.2 Empirical Study and Findings in the Define Phase

4.2.1 Space-time Path of a Chinese Passenger

The Chinese passenger's journey has many touchpoints, which were observed during the Service walkthrough. Journey visualization in Figure 29 presents the key touchpoints and illustrates how blended servicescape is formed during a passenger's space-time path, a concept presented by Miller (2007, 11-12). The dark points are fixed activities on the Schengen to Non-Schengen journey, while others are flexible activities for passenger to choose from.

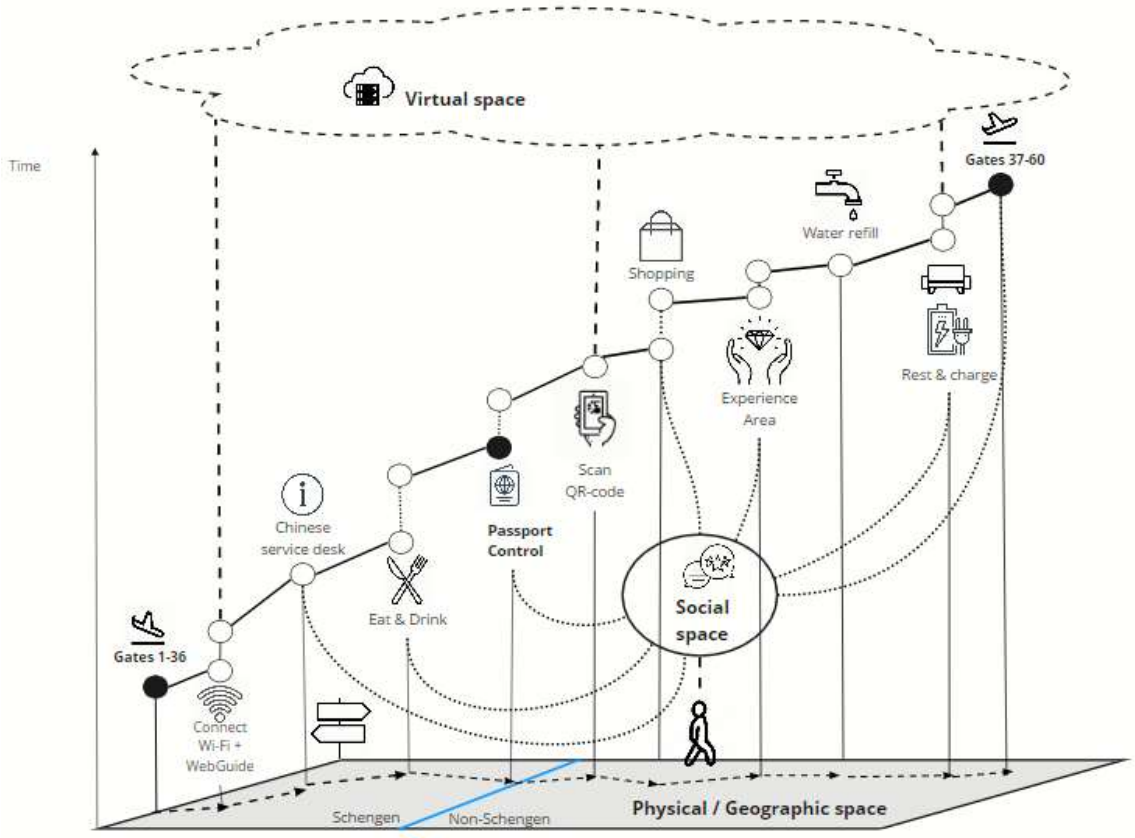


Figure 29: A journey of a Chinese passenger in a blended servicescape (Adapted from Miller 2007, 11-12)

The spatiality of social activities at the airport space can be seen to include the physical, virtual/digital and social realms of space. Passenger's journey on the space-time path is built from fixed and flexible touchpoints that can provide affordances with access to virtual space.

By visualizing the same curated content customer journey in the space-time path, like in Figure 30., the transitions from physical to digital can be more clearly understood. Increasing airport-operated affordances with access to digital space increases the potential to reach passengers and manage their customer experience in airport's digital space.

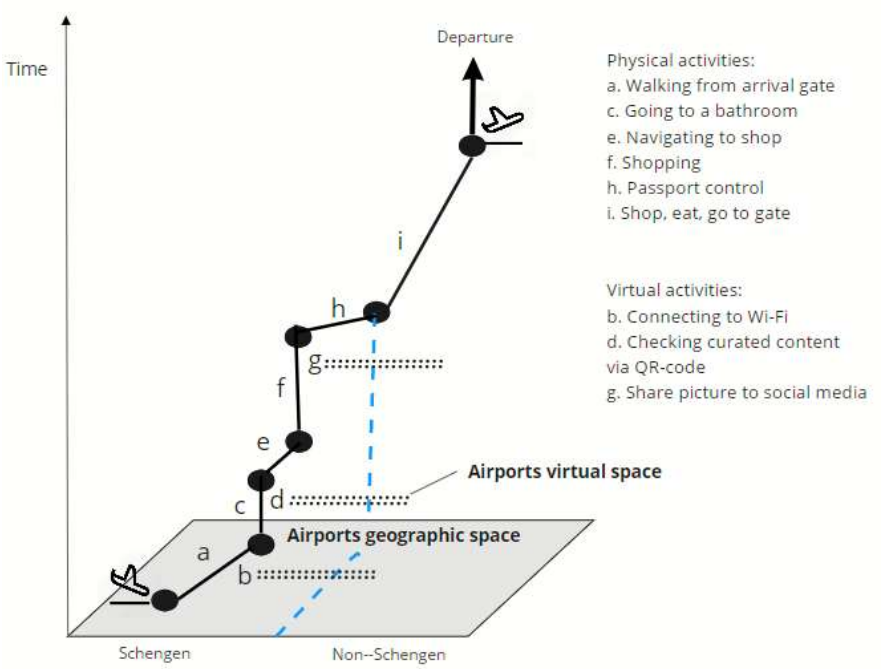


Figure 30: Curated content on Space-time path of Chinese transfer passenger (Adapted from Yu & Shaw 2010, 108-112)

4.2.2 First QR Code Test

The first QR code test was done during 10.7.-25.10.2019. The overall objective of the test was to drive traffic to HEL Guide content. The test was done to find out 1) if adding QR codes at different locations around the airport would drive passengers to visit HEL Guide content and 2) if passengers would scan QR codes. The goal of the test was also to identify ideal locations to place these QR code stickers. The test target group was English speaking transfers passengers, and the language of the touchpoints and content was English.

The test locations were selected by observing the airport space and passenger behaviour during their journey at the airport. This was done by author of this thesis and partner's service designer. Service info screen popularity was examined by looking at sessions data from Finavia's Google Analytics report. QR code stickers were placed in different touchpoints

around the airport. These locations were service info screens (three in Schengen and three in Non-Schengen), charging / electric plug poles close to gates (five locations in Non-Schengen), bathrooms (two in Non-Schengen), info desk (Non-Schengen), The Chinese guides desk (one in Schengen, one in Non-Schengen), Tellu-robot (Non-Schengen), children's playroom (Schengen) and smoking area (two in Non-Schengen).

QR code stickers had a call to action in English for scanning the code to get information about the airport and flight schedules. All QR codes had individual url-addresses behind the code, so during the test the source of traffic could be identified and traced to certain stickers in certain locations.

This experiment reached over 1 600 users. Average session duration was over 2 minutes and on average 2 pages were viewed during these sessions. Most popular source for traffic was Tellu-robot at Non-Schengen area with over 1 100 sessions, with average session duration of 1:30 minutes. After the robot most sessions came from two toilets in Non-Schengen area of the airport. Fourth most popular touchpoint was smoking room in Non-Schengen, located right after the security control. Other touchpoints reached less than 100 sessions per touchpoint. (Figure 31).

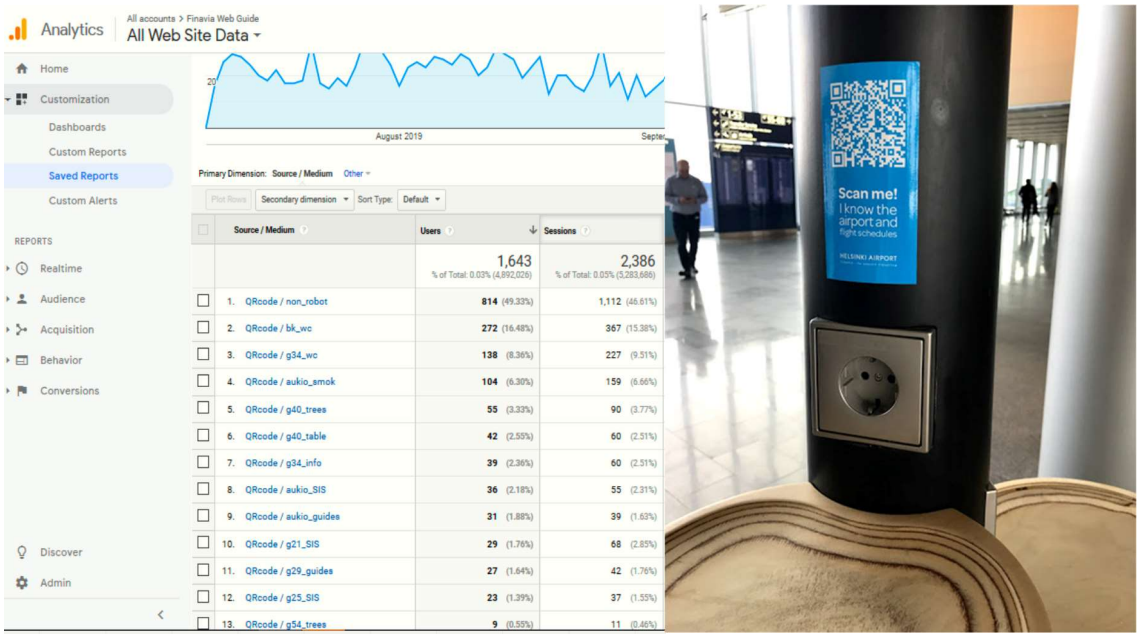


Figure 31: First QR code test results in Google Analytics and one of the touchpoints

Results show that only 5,5 % of users were using Chinese language as a browser language. Testing the QR codes helped to define which touchpoints created traffic to content, how long the sessions from different touchpoint lasted and what was the language of the browser. It became clear that it is important to define the right moments on a passenger journey to

reach the target group. When they are reached, they seem to spend relatively long time on the digital space offered by the airport.

4.2.3 Questionnaire on the Chinese Shop&Dine Page

To find out what kind of information Chinese passengers are looking for, a short Chinese language pop-up questionnaire was set on the Chinese Shop&Dine -section of website and HEL Guide, which is seen in Figure 32. The questionnaire had multiple-choice questions, allowing the respondent to choose more than one of the response options. The questions were: What is the reason you are visiting our website? What other information would you like to see?

Figure 32: Website questionnaire

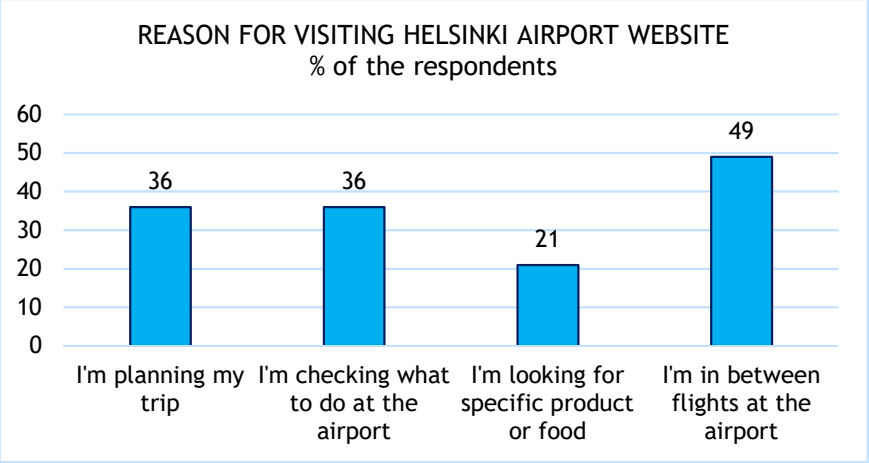
The questionnaire was done by Hotjar tool and on Helsinki airport website it was set to show on desktops, tablets and phones. The questionnaire was located at URL starting with https://www.finavia.fi/zh/jichang/heerxinjijichang/jichangfuwu/gouwu, URL starting with https://www.finavia.fi/zh/jichang/heerxinjijichang/jichangfuwu/canyin and URL starting with https://www.finavia.fi/zh/jichang/heerxinjijichang/gouwu-yu-canyin. On HEL Guide the questionnaire was set to open only on desktops and mobile phones, so that it wouldn't interrupt the operation of the Chinese guides service desk where the tablets present HEL Guide content. Poll was located at URL starting with http://wifi.helsinkiairport.fi/zh/shiwu-yinliao-liebiao/ and URL starting with http://wifi.helsinkiairport.fi/zh/shang-dian-liebiao/.

On Helsinki airport's website the questionnaire reached in total 94 respondents during 4.11.2019-23.1.2020. Out of the 94 respondents, 34 % originated from China, others from destinations like United Kingdom, Austria and Sweden. This indicates that airport's website is

reached when users are located outside the airport and might indicate that users are reaching the site when starting to return from their journey. Questionnaire on HEL Guide reached only 30 respondents during time period of 6.11.2019-17.1.2020. All respondents were in Finland, since HEL Guide cannot be reached from elsewhere.

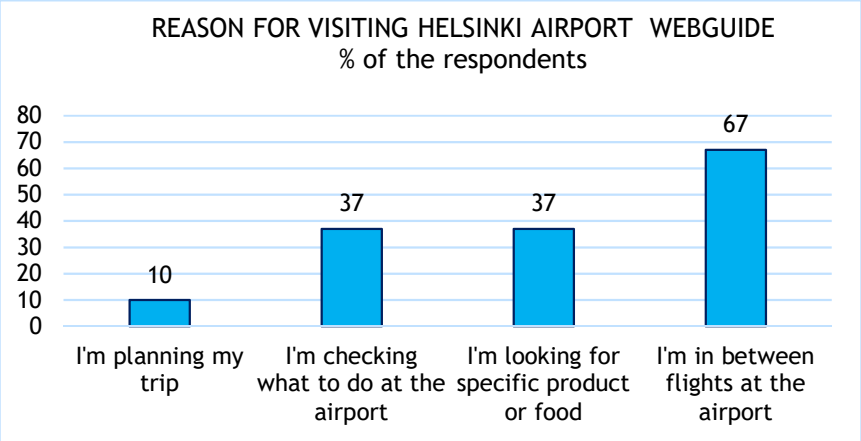
Following tables 2-6 present the results from the questionnaire. Results are presented by comparing answers given through these two different channels. From the website, 36 % of the respondents were planning their trip at Helsinki airport. 49 % of the respondents stated that they were in between flights at the airport. Since only around 10 % of the respondents were in Finland, they must have been in other countries' airports. So, half of the respondents were so called transfer passengers. Related to information search, 36 % were checking what to do at the airport and 21 % was searching for some specific product or food type. These results are presented in Table 2.

Table 2: Reasons to visit website's Shop&Dine (Chinese)



From questionnaire on Chinese version of HEL Guide, 10 % of the respondents were planning their trip. They were located at Helsinki Airport, since the HEL Guide is not reachable from elsewhere. 67 % of the respondents stated that they were in between flights at the airport. About information needs, 37 % were checking what to do at the airport and 37 % were searching for some specific product or food type. These results are presented in Table 3. Although samples are not equal in size for these two digital channels and both samples are quite small compared to the amount of users on these channels, this result supports the assumption that when a Chinese passenger is on-site at the airport premises, the information search is activated and the information level needs get more specific, in this case product level.

Table 3: Reasons to visit HEL Guide's Shop&Dine (Chinese)



On the question of "What other information you would like to see?", the respondents were given three multiple-choice options. As can be seen from Table 4., On Helsinki airport web-site, 42 % were looking for Finnish products and 30 % Finnish food. The option "Other" were chosen by 65 % of the respondents. Since the questionnaire was focussed on studying the need for information regarding Finnish products and food, there was no open-end question that might have explained the "Other"-category.

Table 4: Information needs at website Shop&Dine (Chinese)

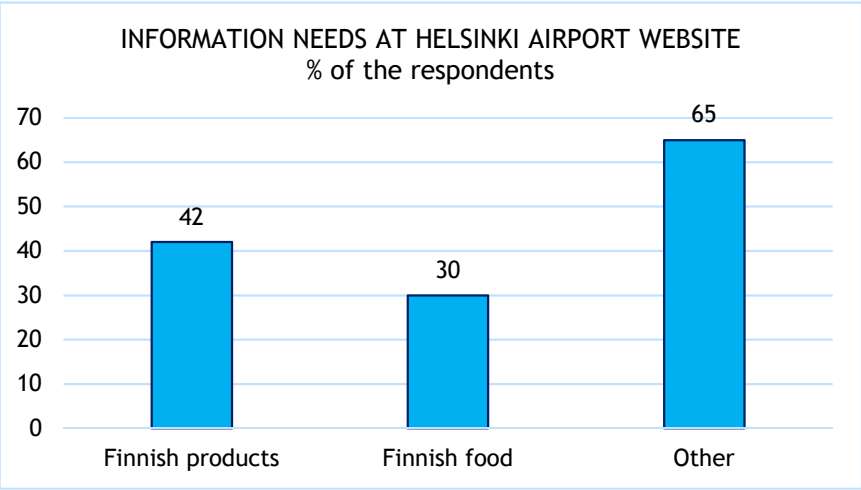
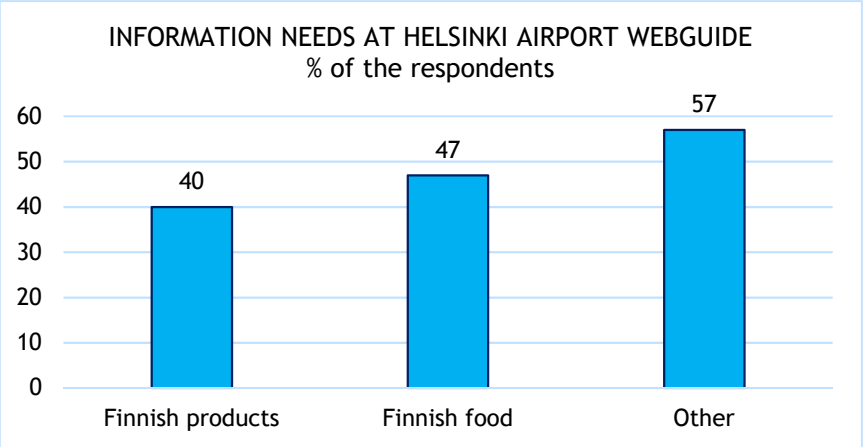


Table 5. presents the results to the same question from HEL Guide. Out of the respondents, 40 % would have liked to see information about Finnish products, which is quite the same as on website. There is a difference in the information needs regarding Finnish food, since 47 % of the respondent were interested in this type of information, while on website the amount was 30 %. This difference might mean that when Chinese passenger customers are on-spot at the location, they get curious about the local food culture. The option "Other" is selected by 57 % of the respondents.

Table 5: Information needs at HEL Guide's Shop&Dine (Chinese)



Some indication of this “Other”-class content might come from English version of the questionare that was placed on website’s Shop&Dine-section. Reasons to visit the Helsinki airport website are presented in Table 6. The amount of respondents were 197 and the poll was active during 7.-21.1.2020. The questions in the survey were multiple-choice questions. Out of the respondents, almost 50 % were planning their future trip, so they were at the pre-journey stage. Only 13 % of the respondents stated to be looking for a specific product or a food type, which is less compared to the Chinese questionnaires results.

Table 6: Reasons for visiting website's Shop&Dine (English)

The answers to an open question “What other information would you like to see at Shop&Dine?” were: “Selection, a specific product, Prices, Iittala products, vegan and vegetarian food & products, Moomin, Suunto watch, Alcohol, Menus to see dishes, sim card, Brands available in duty free, Complete list of the brand selling in the store, Restaurant, Shops,

Allergy, Specific prices for food, Airport map, shops in the airport, Marimekko, skagen watch, Hotels, It would be nice to see current discounts, Tax free products, night time opening hours, Koskue, Electronics, お土産探し(Souveniers), Duty Free". Thus, these users were searching for a detailed product information from the Helsinki airport's website.

4.2.4 Value Proposition and Design Brief

Development issues were identified based on Chinese passengers needs. The insights collected to Miro online-whiteboard are presented in Figure 33. These needs were identified from research material collected in Discover-phase.

Figure 33: Development issues based on Chinese target group's needs

The current problems of the target group were related to insufficient product knowledge and product discoverability. The need to improve communication about the local products and their findability affected this thesis's development work targets, since they were included in the design drivers for the prototype.

After understanding the current needs and problems related to the airport´s commercial content and servicescape, a value proposition for customers and business was defined by author of this thesis and re-defined with business owners. The persona goals were used to set the requirements for the potential service solution. The solution design also needed to consider the

Time geography related constraints defined by Hägerstrand that Forer et al. (2010, 124) referred to. These constraints affect the shopping activities at the airport, such as the limited duration of the passenger's dwell time with mandatory process steps which impact the commercial opportunity area. The scenario for the target user was defined: "to shop with a friend (capability and coupling) for 60 minutes (duration) when shops are open in Non-Schengen area of the airport (authority). Thus the solution requirements are assistance finding shops in the airport's physical space and the availability of shopping possibilities at both sides of the airport premises (Schengen and Non-Schengen). It was also important to consider individual capabilities that may cause access related constraints, like in this case the language issues (Yu & Shaw 2010, 108-112).

The potential solution should produce the following value to target group customers:

- Improved knowledge of a local services & products and the background stories in visual form
- Efficient buying process & confident feeling about finding products -> clear route and easy access to gift purchase for fast transfers
- Reach information conveniently at the location without having to search for information
- Follow familiar behaviour pattern
- Personal relevance -> curated content based on personal preferences
- Service and information in own language
- Improving sense of place and control over the time and space for easy recognition
- Receiving the Finnish experience and learning about new cultures
- Opportunity to share experiences to others

The potential solution should produce the following value to business:

- Reaching transfer passengers with relevant commercial offering -> Commercial services marketing and supporting sales
- Reaching the customer on right time, place and channel (touchpoints: digital & physical & social)
- Developing new engaging content to digital channels

- Activate customers to purchase goods and services that fit to their personal needs
- Be more active towards customers and make an effort by suggesting (curated content)
- Support brand image and ease recommending
- Better customer experience by supporting the customer experience pillar of “Finnish Experiences”. Possibility to learn and experience ”the third country in between”
- Support Chinese service guides work
- To test, measure and learn from the new approach to service development

The scope of the Curated Journeys -experiment was defined together with the Helsinki Airports commercial department. The target of the experiment was to 1) test and evaluate the concept and a new operating model and 2) measure and validate the effectiveness of curated content offering from touchpoints at the terminal space. Finavia’s role was decided to be the defining and producing of content and proposing participation to experiment for certain retail operators. The focus of the experiment was decided to include only retail, in order to keep the scale of experiment manageable. Product selection was defined to include both top selling products and local specialties.

Measuring the impact on sales, as the commercial department suggested, required being able to keep a record of product purchases during the experiment. For this reason, the shop operators were asked to give a postcard at cash register if a Chinese customer would mention seeing the product information online or when visiting the Chinese guides service desk at terminal. Digital channel analytics was also used to provide data to measure the performance.

Curated content experiment was defined with a use case scenario on a Chinese customer’s journey. This visualization is presented in Figure 34. In this use case the journey starts from the airport, due to the target groups non-active use of airport’s information channels pre-journey. The journey ends at home, at after sales phase, where passenger hands over the gift or starts to use the product, in addition to sharing experiences to social networks and/or social media. The time after the purchase and re-living the experience was seen critical for further purchases by Court et al. (2009), or in this case returning to destination to experience more or recommending the destination to others. In this scenario the Chinese guides desk, Service info screens and restrooms are presented as potential touchpoints to reach the curated content. This is due to finding from previous QR code test and service walkthrough. The passenger’s role in a service is to read the QR code, browse the website content and start acting upon the content with the target being making the purchase. The Figure 34 also visualizes how the airport’s physical affordance space turns into digital activity space, which

results to activity in blended servicescape (digital, physical and social space) managed by the airport.

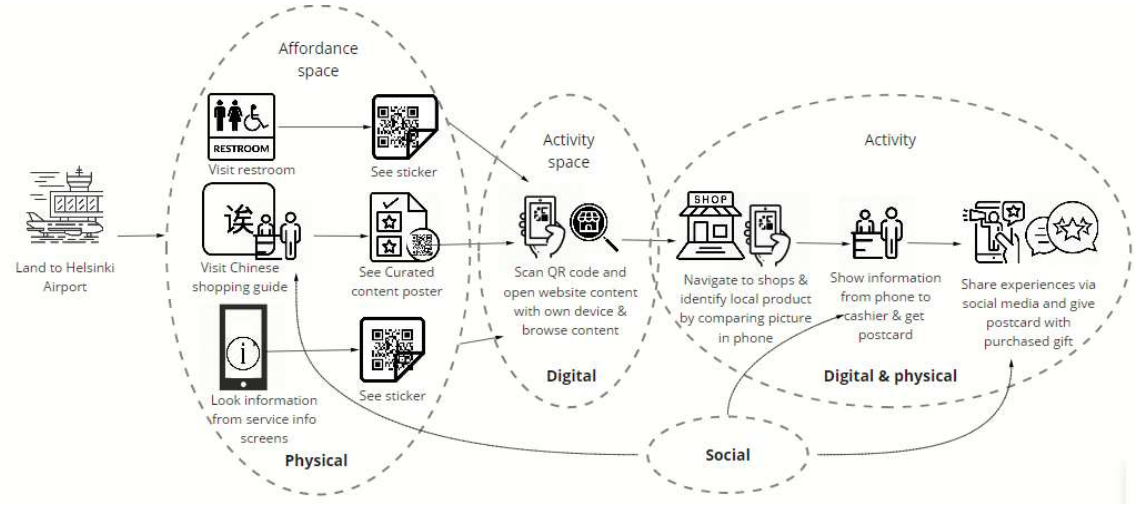


Figure 34: Curated content customer journey with touchpoints

The visualization presented in Figure 34 helped to explain the idea of the experiment to stakeholders from customer perspective as well as show operators their role in the process for delivering the service. It also served as a basis for service blueprint of the curated journey, that was done to define the future roles and responsibilities for implementing the concept as a permanent operating model.

Design drivers were formed during the Define phase of the process by analysing research material and with the help of persona description. Design drivers were defined using desktop-research, but also in workshops with stakeholders. The data-driven design drivers are presented in Figure 35. These design drivers guided the development of prototypes. They were also used as an evaluation criterion in the Deliver phase of the process.

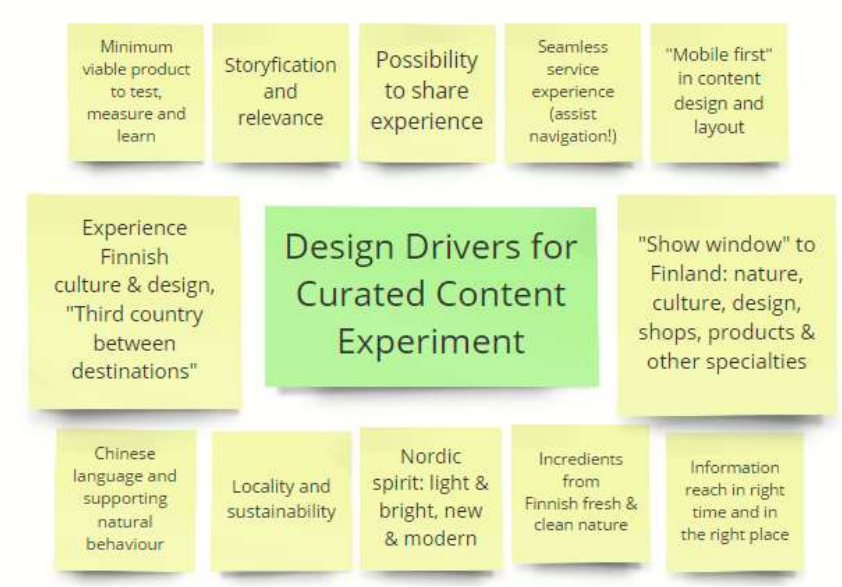


Figure 35: Design Drivers for experiment's material design and production

The design brief was written and presented by author of this thesis to a marketing company, that was recruited to produce the visuals and the copy text for the experiment. The design brief included requirements that were based on persona's needs and design drivers. This meant describing the functional needs and experience attributes, also considering the brand attributes and the business objectives and constraints. The requirements in the design brief were:

- Inspiring and versatile selection of products and services
- Local specialties and communication about the peculiar to Finns
    - Engaging pictures and stories behind products
    - Local appeal, supporting Finavia's brand image and tone of voice
- Improving the sense of place and control over time and space
    - Information on finding the presented content in physical premises / knowledge of the airport areas, map and gate information
    - Clear and effective communication in all channels
- New experiences through educational and engaging content
    - Interesting content to share on social media
- Attentive and personal service experience

- Communicating in Chinese
- Building a webpage layout with mobile-first principle

The idea of product stories was supported by findings from hybrid consumer study. It suggested for companies to increase their concentration on the emotional value of their product or service, especially if they don't wish to compete with price. This means engaging consumers emotionally or finding ways to turn something mundane into an experience. (Ehrnrooth & Gronroos 2013, 1816.)

After giving the design brief, the marketing company started designing the visuals and text copy. The project manager on behalf of Finavia was the author of this thesis, who was also responsible for selecting the products to be promoted and for recruiting operators to participate in the experiment.

4.3 Empirical Study and Findings in the Develop Phase

4.3.1 Developing the Solution

The product selection was influenced by previous research on the subject and discussions with relevant stakeholders, like the Chinese guides, commercial department personnel and marketing department personnel. Guides were asked about the products and brands Chinese customers are looking for. Product information from previous campaigns was also browsed through. Figure 36 illustrates the main product categories Chinese customers are looking to purchase and also the selection for the content experiment.

Figure 36: Chinese customers' product purchases at Helsinki Airport

Inspiration for product selection was taken from Finavia's Brand study (Finavia Corporation 2018c.). In this study Helsinki Airport was defined by passengers with elements of Finnish nature and Scandinavian design, which are presented in Figure 37 with photographs. This clear distinction was also targeted in the content production for experiment.

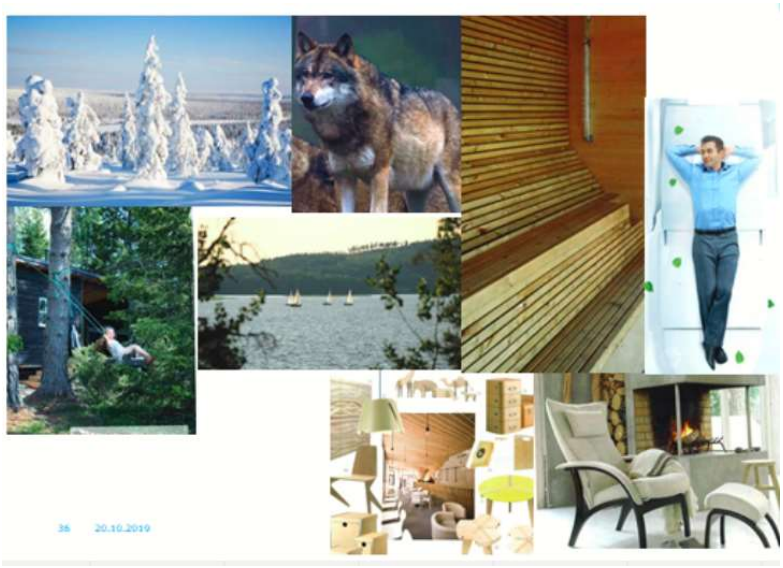


Figure 37: Helsinki airport's brand image (Reprinted from Finavia Corporation 2018c)

Content curation was done by asnwering the question of what is Helsinki Airport specially known for. The criteria for curation was defined by these attributes:

- Truly and genuinly Finnish origin
- Organic, local products and food
- Small producers, made near
- Sustainable, durable, organic materials
- Story, a feeling of Finnishness

The product selection would represent Finnish taste and design. Both special products and selling points were selected, as agreed with Finavia's commercial department business owner and managers. The price range of the selected products supported the findings from hybrid consumers' purchasing behaviour (Ehrnrooth & Gronroos 2013, 1793). The experiment was planned in details during a small workshop with author of this thesis, Finavia's Digital channels development manager and partner's service designer. The outcome of this workshop is visualized in Figure 38.

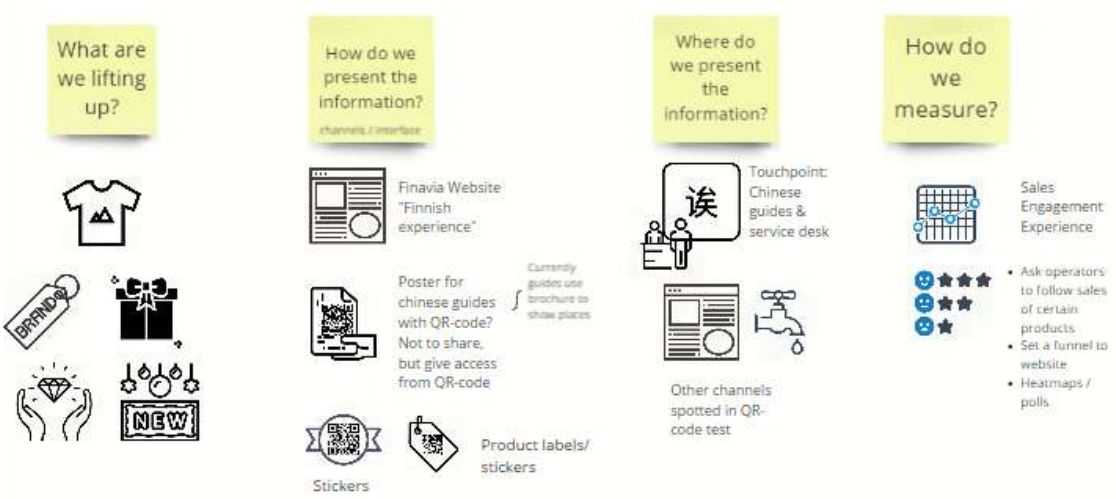


Figure 38: Results from the blended servicescape experiment -workshop

Stakeholder mapping was used to define internal and external stakeholders for the experiment. Stakeholder map is visualized in Figure 39. The internal stakeholders of the experiment were Finavia's Commercial department, Digital channel development, IT, and Marketing, communication and customer experience department. Author of this thesis works in Finavia's Marketing, communication and customer experience department, so the ownership of the experiment project falls into that department. Ownership means leading the co-operation for defining the product selection criteria, managing the project, and also handpicking the content and steering the material production and communicating with operators and other external partners.

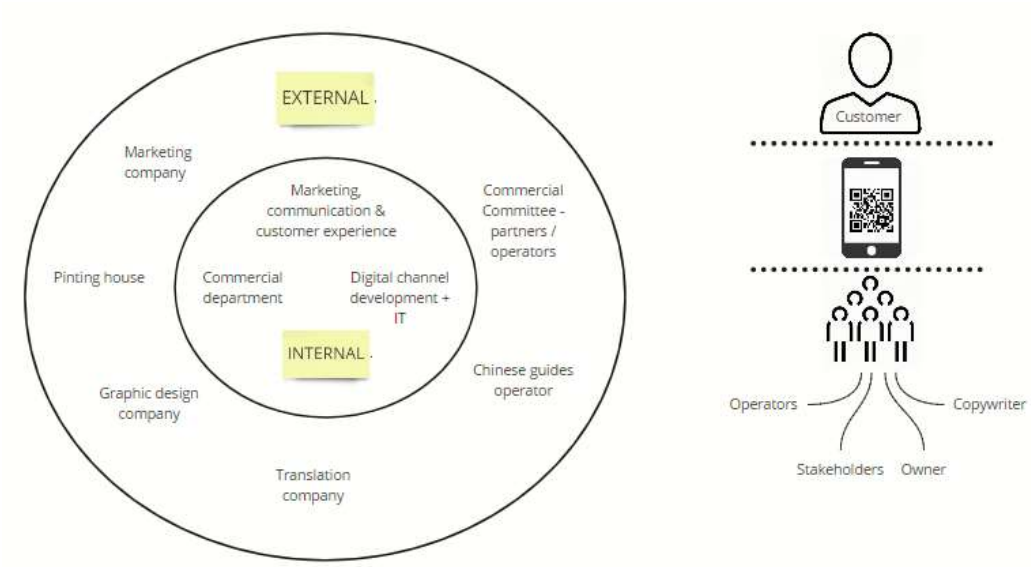


Figure 39: Stakeholder map of the experiment project phase

The cooperation with external partners involved producing the content and the practical implementation of the pilot to shops and to the Chinese guides. The marketing company's role was to plan and design the Chinese commercial landing page on website, QR code stickers, Point of Sale -label tags, A4-poster to the Chinese guides, and a postcard based on the design brief. These specific affordance touchpoint solutions were defined during a design brief workshop. Technical production of the website was done by the project manager, that is author of this thesis. The solution prototypes' visual layout was produced by the marketing company. It was iterated in a workshop thesis author held with Finavia's Digital channel development, IT and Commercial department, from which the photographs in Figure 40. are taken.

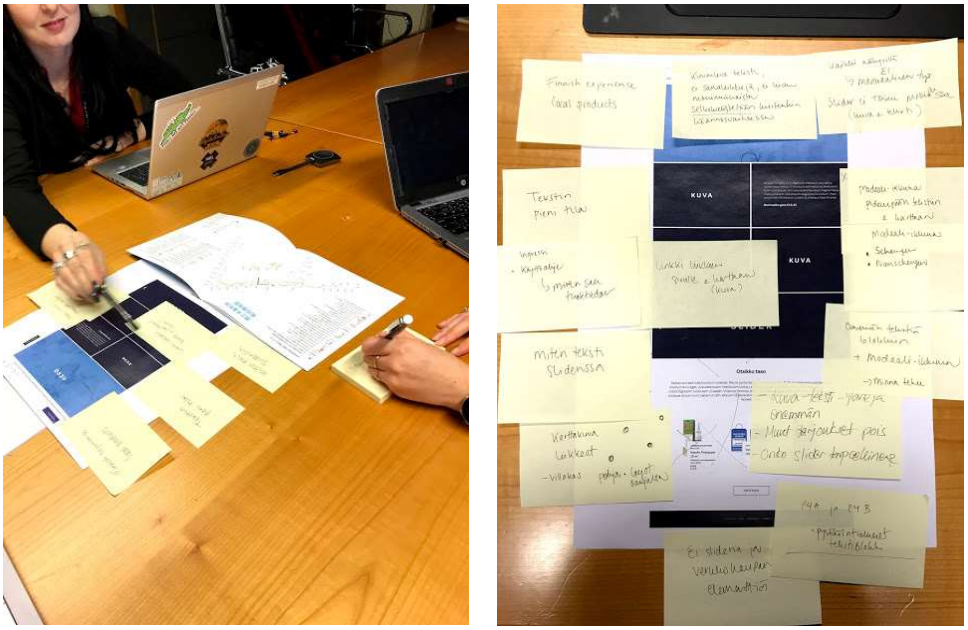


Figure 40: Iteration of curated content website's layout, elements and interaction

The following operators at Helsinki airport were asked to participate in the experiment: Lindroos, Dufry, FineFood, Fiskars-Iittala and Kankurin tupa. The products chosen for content experiment were: Iittala Ultima Thule glassware, Fazer Festive 5 chocolate, Snow Flower jewellery by Kalevala Jewelry, Organic Bilberry Powder, Reindeer Hide, Iittala Class Bird by Toikka, Lumene Valo cosmetics, Suunto 9 Baro Titanium Leather China Edition watch and Finlandia – Loose Leaf Tea. This selection presents both premium and budget alternatives, so they fit to hybrid consumers shopping preferences regarding the price (Ehrnrooth & Gronroos 2013, 1793). The website content visuals and example of one of the product stories is presented in Figure 41.

Figure 41: Curated content website layout visuals

In the experiment materials, consistency throughout channels were kept by using the Finavia's tone of voice guide and band book when producing content and visual layouts for prototypes. Translating the commercial content copy text from English to Chinese required uncomplicated and clear text, which is in line with the tone of voice guidelines. All product text copies can be found from Appendix 7.

4.3.2 Testing the Solution Prototype

The experiment period was defined to be five weeks, which seemed adequate time to track the user behaviour with new touchpoints and interaction with the content. The experiment started 9th of January and ended on 14th of February. The experiment began by distributing the point of sale -material and an guidance letter to shops. The QR code stickers were installed at predefined touchpoints at Schengen and Non-Schengen parts of the terminal. Two stickers were installed at landside area of the terminal, which means the area before security control. Examples of installed touchpoint materials can be seen in Figure 42.

Figure 42: QR-sticker at water refill point and Point of sale -material at shop

In this experiment, an affordance and activity space were tested by creating potential activity spaces with affordance stickers (Vega et al. 2018, 73-76). QR code sticker is suggested to be a natural affordance for a Chinese customer. The space in front of this object (QR code sticker) is an affordance space. Reading the sticker text and scanning the QR code with mobile phone makes the space between the sticker and the person an activity space. This is illustrated in Figure 43. Space dimensions in both cases presented in Figure 42. are similar due to font size. The text aims to activate a person to scan the code and read the text.

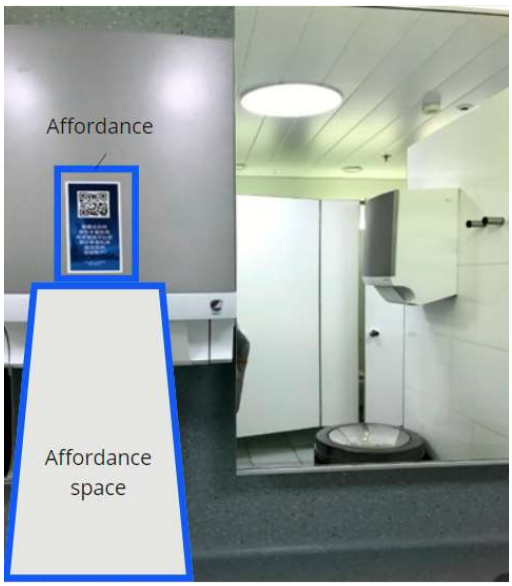


Figure 43: The new affordance and affordance space created during the experiment

The success of these space affordances was studied by measuring actors' interaction with the object in space, thus seeing if an affordance space is transforming into an activity space. Designing the affordance stickers included considering how to get actors inside the space affordance and looking at the object, but also studying touchpoints and converting them into decision interfaces with QR codes on stickers and POS-material. The goal was to transform customers into active decision makers. (Vega et al. 2018, 73-76; Barden and Sutherland 2013, 119-121, 157.)

As part of the project practicalities, communication with operators was done by e-mails before, during and after the experiment. Feedback was asked in middle of running the experiment. In the end of the experiment, remaining postcards were collected from shops and experiment materials were advised to be taken of the shops.

4.4 Empirical Study and Findings in the Deliver Phase

4.4.1 Quantitative Data on Curated Content

During the test period, data was collected on a heatmap, interviewing passengers, and tracking site usage and sources (QR code performance) with Google Analytics. QR codes had individual URLs, so during the test, the source of traffic could be identified and targeted to specific stickers in specific locations.

The Heatmap Data

A heatmap is defined as "a graphical representation of website data where values are depicted by colour". This tool helps to analyse how users interact with content and to optimize further development. (Hotjar 2020.) A Heatmap of curated content page was recorded from 14th of January and it tracked 172 pageviews during the test period of five weeks. Almost 90 % of the pageviews were done with mobile phones. Heatmap shows that 24,2 % of mobile users reached the bottom of the page, 33,3 % read all the product stories, and 50 % read first 4 out of 9 stories. From desktop users 63,2 % reached the bottom of the page. Chinese language version of Helsinki Airport front page was also tracked by using Heatmap. Results show that 17,7 % of mobile phone users reached the bottom of the page, on desktop this was 25,2 %. This heatmap was recorded from 25th of January and it tracked 246 pageviews. Out of all pageviews, 47 % were made on a desktop computer and 53 % were made on a phone. The heatmaps referred here can be viewed from Appendix 8.

Google Analytics Data

Google Analytics data was used to measure the performance of the QR code stickers. During the test period, 10.1.-14.2.2020, the curated content page was the fourth most popular page on the Chinese-language website. The most popular Chinese-language content page in terms

of pageviews was Helsinki airport shops (1140), second was Helsinki airport front page (1123), third was departing flights page (455), fourth was curated content (432) and fifth was Food and drink (318). Out of the top 5 pages, average time on curated content page was the longest (3:21 minutes). The second longest time was spent on the departing flights page (01:01 minutes). The sources for top Chinese website pages were 1. Google, 2. Baidu, 3. QR-code and 4. Finnair.com. Google was used to reach Shops and front page, Baidu was used to reach front page, QR code was used to reach curated content and Finnair website was channel to reach Shops.

When tracking the countries of origin of the session, the data show that the Helsinki Airport Chinese language website's front page is most often accessed from China, Finland, United Kingdom, Hongkong and Japan. Traffic to Shops-page comes from United Kingdom, United States, Sweden, Italy, and France. This might indicate that Chinese travellers returning from their journey are looking for Helsinki airport's shopping related information, as Helsinki airport is their final destination before returning to home. Users located in China are visiting Helsinki airport front page, shops page, flight page, arriving flights, departing flights and duty-free service page. Chinese users in Finland are visiting Helsinki airport frontpage, Curated Content, Shops, Restaurants, and Departing Flights pages. This indicates the impact of QR-codes as a source of traffic to website, since Curated content website increases its popularity when Finland is the country where the session originates.

The curated content page had a total of 432 pageviews, of which 326 (76%) came via QR code, 49 (11%) from Baidu, 37 (9%) from Google, and 17 (4%) directly. The average time spent on a curated content page was 03:21 minutes. The results can be seen in Table 7. In the first (English) QR code test, the average time on the page was 2:18 minutes.

Table 7: Curated content pageviews by traffic source

Page	Source	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit
		432 % of Total: 0.01% (3,847,426)	**378** % of Total: 0.02% (2,436,685)	**00:03:21** Avg for View: 00:01:38 (104.89%)	**292** % of Total: 0.02% (1,229,503)	**74.66%** Avg for View: 37.87% (97.14%)	**62.96%** Avg for View: 31.96% (97.03%)
1. /zh/jichang/heerxinjijichang/bendetechan	QRcode	**326** (75.46%)	286 (75.66%)	00:04:02	286 (97.95%)	75.17%	72.09%
2. /zh/jichang/heerxinjijichang/bendetechan	google	**37** (8.56%)	32 (8.47%)	00:00:37	0 (0.00%)	0.00%	24.32%
3. /zh/jichang/heerxinjijichang/bendetechan	baidu	**32** (7.41%)	26 (6.88%)	00:02:23	0 (0.00%)	0.00%	18.75%
4. /zh/jichang/heerxinjijichang/bendetechan	(direct)	**17** (3.94%)	17 (4.50%)	00:13:17	3 (1.03%)	0.00%	64.71%
5. /zh/jichang/heerxinjijichang/bendetechan	baidu.com	**17** (3.94%)	14 (3.70%)	00:01:22	3 (1.03%)	100.00%	52.94%
6. /zh/jichang/heerxinjijichang/bendetechan	so.m.sm.cn	**3** (0.69%)	3 (0.79%)	00:00:00	0 (0.00%)	0.00%	100.00%

Based on the test results, the audience reached by the content were interested in stories. They spent longer than average on the website familiarizing themselves with the content,

especially when QR codes were the channel used to access the content. In that case, the average time on page was 04:02 minutes.

The five most popular locations for QR-stickers were (scanned x times):

1) Tellu-Robot in Non-Schengen next to Aukio: 80

2) Toilet next to gate 21 in Schengen: 66

3) Toilet next to Burger king in Non-Schengen: 29

4) Chinese guides desk next to gate 29 in Schengen: 15

5) Hot&cold-water refill machines next to gates 43-45 in Non-Schengen: 11

Other locations, a total of 16 locations, produced 64 scans, 0-9 scans per location. The Chinese guides brochures located in Schengen and Non-Schengen didn't perform that well when scanning was considered a measure. The location specific results are presented in Appendix 9.

Point-of-sale material in stores next to products' price tags produced a total of 63 scans. The scans were scattered in different places. Location-specific results are presented in Appendix 10. Top five locations and number of QR code scans:

1) Duty free in Schengen: 16

2) Duty free in Non-Schengen: 11

3) Finspiration in Schengen: 10

4) Lindroos in Non-Schengen: 9

5) Iittala in Schengen: 7

The Chinese guides followed the customers' interest in curated content at their service point for a bit more than a week, from 10th to 19th of January. They calculated that a total of 30 customers were interested in the Finnish curated content brochure. These Chinese customers were interested in the products and took pictures of the print material on their phones. There was no indication that the content had a direct impact on sales growth based on the number of postcards distributed from shops.

4.4.2 Qualitative Interviews with the Chinese Passengers

Chinese passengers were interviewed at Helsinki airport gate area. Of the six (6) interviews, four were conducted in the Non-Schengen area (10.1.2020 and 15.1.2020) and two in the

Schengen area (15.1.2020). Most of the interviews were done while passengers were waiting for the flight to depart. Few were approached as they were wandering around the airport. All interviews were conducted in English.

Interviewees were aged between 20 to 35 years and travelling for leisure. Most of them were transfer passengers who were first time at Helsinki airport. They were travelling to Chengdu, London, Iceland and Rovaniemi. Few of them had been to Helsinki airport multiple times. They were all social media users. Wechat and Weibo were the most popular social media channels. Whatsup and Instagram were also mentioned as channels used by some outside mainland China. The use of QR codes was familiar because they use them in China, where it is a common way to get more information and even buy products.

“In China we scan more often than here. We are from city were Alipay is really popular, all this QR codes are quite popular. When we pay we use Alipay and just scan. It is quite convenient.”

When asked about the familiarity of Helsinki airport, answers varied from not knowing anything before arriving to Helsinki Airport to knowing it really well.

The reason for not knowing was the short time between flights, which did not make it seem worthwhile to invest in getting to know the place beforehand. The reasons for knowing was pre-trip information seeking and previous experience from being at the airport for many times. This seems to support the notion made by Miller (2010, 11-12) of time being a major constraint on human activities, and if the temporal gap between fixed activities is known to be short, this seem to be restricting human activities even before arriving to space.

Most used source for pre-trip shopping information is recommendations from friends and family members. Digital channels used for pre-trip information search were airline websites, TripAdvisor, search engines, and also “some Chinese website” for shopping recommendations. This last-mentioned content was shopping tips regarding famous souvenirs, like Fazer chocolate and Marimekko. In addition to digital channels, also travel books were mentioned as a source of pre-trip shopping information, which in this case lead to buying Marimekko products at Helsinki airport. In addition, Finnair flight to Helsinki had inspired shopping.

“I see this brand [Marimekko] in airline. I see their cup is from this brand. I bought three of these [bags]. I also tried their chocolate [Fazer] at airline. I thought it was delicious, so I bought three”.

Helsinki Airport digital channels were not familiar information sources for Chinese transfer passengers. If they use the airport websites, it’s for checking product information or flight schedules for picking up a friend from the airport. The lack of airport website usage was

explained, for example by short transfer time, which leads not feeling the need to acquire information about the airport.

To conclude, the pre-trip shopping information source preference seem to follow the findings from Chung et al. (2013), with the preference being friends or relatives, including social media and personal experience. Other channels are websites, information during flight (airlines) and print material. A few mentioned that their mobile devices had a pre-filled shopping list to assist with shopping on behalf of friends and shopping for souvenirs. Convenience, efficiency and support for memory was mentioned as drivers for making shopping lists. In general, planning shopping beforehand was not that common behaviour pattern.

“I wrote beforehand what to bring for friends and co-workers. Make a list to phone, because I buy much for different people.” The value of shopping list is efficiency, being systematic when at the airport, and not to use the dwell time wondering what to buy.

On-site information source preference was wandering around the terminal premises, also a result in line with the findings from study by Chung et al. (2013). This wandering behaviour, described as “just walk around”, seemed to be the most typical strategy for Chinese people who end up shopping.

“Sometimes I like check around, like spend one hour. If something special I can buy. I usually just walk around.”

“I like to walk around. I just look around, see a shop and go inside”.

Helsinki Airport's services for Chinese passengers at the airport were somewhat familiar. A Chinese shopping brochure distributed from a Chinese guides service point was mentioned as a source of information for shopping. It was used to help find products and services at the airport. The service of the Chinese shopping guides at the airport was appreciated as a good service.

“Chinese guides gave guidance to something even I didn’t know. Now they told about hot water refill, even I didn´t know that. I found the place and refilled my bottle. Chinese guides offer first map. It is in Chinese which is more convenient.”

The use of Chinese at the airport in various contexts is appreciated, as is payment with Alipay, which is a familiar method of payment for Chinese. Being able to communicate at a foreign airport in your native language is considered a positive surprise. Getting information in your own language seems to support the formation of a good customer experience.

“I see Chinese everywhere, everything is in Chinese. I don’t know why I see everything in Chinese, but it is very convenient.”

Inactive on-site information seeking behaviour was explained by various constraints. The short dwell time between flights is one reason and another is related to physical constraints such as tiredness. The time between flights is used to recover from the previous flight before heading on to the next. Shopping opportunities are noted when walking from the arrival gate to the departure gate, but fatigue may prevent you from shopping. Yu and Shaw Yu and Shaw (2010, 108-112) mentioned these physical human factors or “individual ability” and its limiting effect on space activity and use of affordances.

The correlation between waiting time and pre-trip information seeking activity is in line with the results of the study by Chung et al. (2013, 27). Active commercial service users have dwell time of 3 to 6 hours and passive users one hour or less. Active passengers tend to use the time available to wander at the airport and buy souvenirs such as cosmetics and chocolate. The dwell time thus affects passengers’ shopping behaviour and activities in relation to the provision of services. In relation to time geography (Miller 2007, 11-12), this means that at different dwell times, people have different space-time prisms that indicate their access to and availability of airport space and its affordances, or to other service providers’ spaces via mobile devices. On a space-time path, this means that between fixed functions, they have individual opportunities and constraints that affect access to the flexible functions offered by the airport or other service providers.

If passengers plan shopping in advance, they appear to be the Shopping lovers type (Chung et al. 2013, 25). They search commercial content most preferably from Chinese channels and look for recommendations on local products. After landing at the airport, they connect to a WiFi network, start wandering around, and decide, based on external factors, which stores to enter. This also applies to Mood shoppers (Chung et al. 2013, 25). Shopping lovers look for information also before arriving at the airport during the flight and at touchpoints at the airport, such as QR code stickers. Mood shoppers are more like "Just when we see and like it, we buy it". Interviewees could also be identified for Traditional shopper and Apathetic shopper -type behaviour. Time and personal capacity constraints can change potential shoppers into Apathetic shopper -type.

In terms of airport shopping behaviour, shopping at airports is typical of transfer and departing passengers. They prefer local products as souvenirs such as Lumene, Fazer and Marimekko, but also duty-free products from international brands such as Lancôme, Kenzo and Joe Malone. If you are unfamiliar with local brands, you may need help identifying Finnish products. The role of travel guides was mentioned in this context. “This is traditional and famous in Finland” seem to be the qualities that Chinese are looking for in products they buy for friends and family. Buying souvenirs is an important incentive for Chinese shopping: “You have to take back something as a gift”.

In summary, the shopping information preference for on-site shopping is wandering and "just looking", Chinese guides at the airport and their brochure, personal experience and shopping list made beforehand. Also, QR codes for WeChat and Curated content got mentioned. Thus, there is some indication that it is worthwhile to convert touchpoints into decision interfaces like Barden and Sutherland (2013, 119-121, 157) suggests. In this case these are QR code stickers with access to content, which can activate passengers as decision makers.

"Yes, I scan this QR code you have here. I can just get into a Chinese website. It´s very convenient. I didn't know this QR before I came here, but when I scanned, I think it is very convenient. You can see everything in Chinese, have everything that is famous for souvenirs. It also told me where I can find the brand. I also bought this [shows Lumene product from shopping bags]. I bought three of these."

The idea of getting recommendations from the airport seems to be an unfamiliar concept. Social media and friends are considered a better source for product recommendations. This is in line with people's general tendency to shift their decision-making process to social networks. Social media has become a decision-making place where decisions are influenced by friends and other influencers. (Ballantyne & Nilsson 2017, 233-234.)

"Maybe it's a habit, but when we travel to other countries, we search information from our social media, where many people share their information, maybe also coordinates to buy something. Like Weibo and Red book. We always use that."

This description of space usage fits well with DigiPlace as defined by Zook and Graham (2010, 241). Physical and digital space blends, and people's personal needs shape the way they decide to access the site and interact with it. At the same time, the activity space is also expanding from physical to digital based on recommendations published on social media. Social media has an impact on customer choices.

In terms of content, the stories behind the products and their backgrounds are of interest to some travellers, but in these, the image is a priority. The language preference is clearly Chinese. One problem with product descriptions was language barrier and limitation related to individual features (Yu & Shaw 2010, 108-112). The need to use a translation service to understand the content is a clear barrier to accessibility. The development proposals included that Helsinki-Vantaa Airport could add signs next to things considered a Finnish experience to help Chinese passengers detect meaningful content.

"For those who haven't had time for research, it's easier to know and understand, like big picture and some words next to it."

Local buying recommendations on-site at airport are considered valuable to make shopping more efficient, in a situation where they need advice. The recommendations made by travel guides in person for the tourist were mentioned in this context. At least in travel destinations, the stories related to store premises had influenced the customer experience and made the shopping experience more meaningful.

Some interviewees were shown curated content to hear their thoughts evoked by image and text. It became clear that seeing product images can evoke memories of seeing and using these products before. The value these stories bring to customer was suggested to be culture communication, in other words, getting to be more familiar with Finnish cultures through stories. An interesting story can also lead to the purchase of an unknown product. Stories can be used to justify the decision to purchase a specific product as a gift to relatives or to remind herself/himself of the trip. Like Stamboulisa and Skayannisb (2003, 41) suggested, the socially produced experience connected with physical artefact (souvenir) doesn't have to be confined in space and time, so the tourist may interact with it after the return to home and re-live the experience, which extend the destination–tourist interaction. This supports the idea of designing experience related content and linking it to local products, to add their value as representations of travel destination or "the third country in between", that can be re-lived when using the product after journey.

There appeared to be two types of social media users: active and inactive. Sharing on social media during stay at Helsinki Airport was not common. Content shared on social media at the airport has been mostly images of famous brands. Pictures of the Marimekko bag, the Longchamp bag and a picture of the interior of the Moomin store were shared with WeChat for friends to see. The reason for taking the pictures was that people considered themselves fans of these brands.

"I like this picture [shows picture of Marimekko bag from Instagram account], because this flower is very beautiful. I bought three of these. Oh my god, I'm a big fan."

The Aukio area and bird singing sounds were mentioned as a Finnish experience during the time spend at the airport. Happy New Year! -text on the wall was mentioned to be worth taking a picture off. Images taken of these had not been shared on social media. In addition, the boarding of a cute puppy dog with its owner was considered exciting, because this is not possible in China and the experience was shared with friends back home via an instant messaging platform. The Chinese passengers interviewed didn't seem that active sharing experiences and content to social media. Interviewees did not appear to be very active in sharing experiences and content on social media. However, some brand-related posts were made on social media. Of course, it should be noted that the pictures taken can also be shared with friends in other ways and at least they prolong the possibility of reminiscing about the trip.

4.4.3 Service Blueprint for Content Production Model

Part of the development work was to create a process model for curated content production. The first version of the content production model was designed and tested during the experiment by writer of this thesis. Now that the first version of the concept has been designed, the next step is to continue implementing and further developing the model. This requires a co-design workshop with relevant stakeholders. Current curated content process model was documented by visualizing it with a service design tool called the Service Blueprint, presented in Figure 44. The process is presented in the form of a flow chart, taking into account the front-stage of the service that is visible to customer and also the back-stage of service, which is not visible to the customer (Britner, Ostrom & Morgan 2008, 87-88).

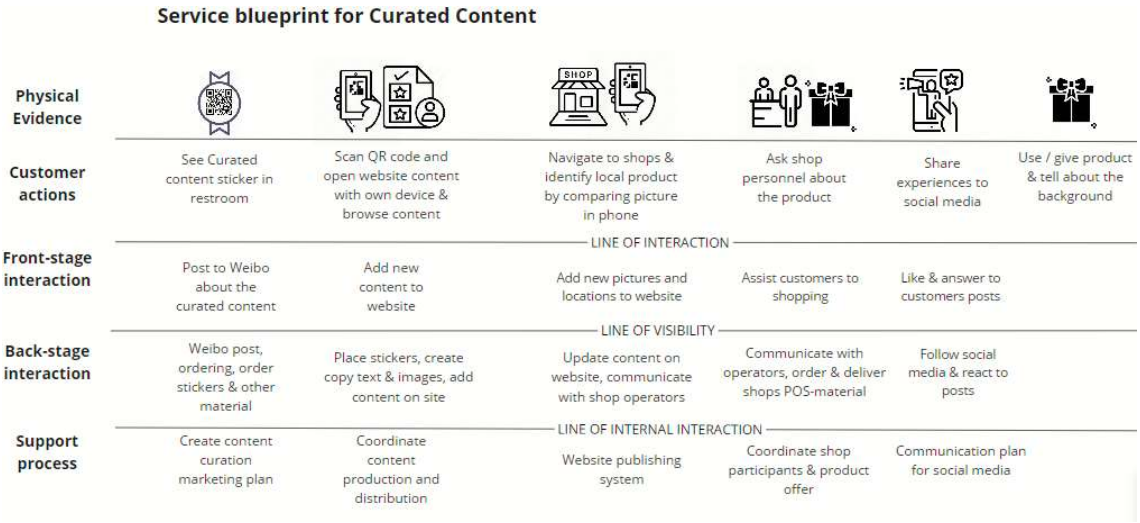


Figure 44: Service Blueprint of curated content process

The service blueprint model helps to discuss and decide the necessary roles and responsibilities within the organization in relation to the curated content process. The stakeholder map of the process at the time of this experiment was shown in Figure 39. It can be considered as a starting point when considering actors in the process of continuous content curation.

4.5 The Main Results of the Development Project

The Chinese are an important target group for Helsinki airport and both physical and digital services are developed to cater for their information and guidance needs. Current airport digital channels are not reaching the Chinese target group that well, especially Finavia's website is currently not the channel they use to search for information. At the airport they prefer personal service and tend to rely on wandering behaviour, but on the other hand they also use HEL Guide as a channel to search for commercial information. Chinese users engage to HEL Guide's content more than passengers in general. It seems that they are willing to use the airport's digital space when they conveniently reach it. After getting the content in their own

device, they spend quite long time familiarizing themselves with the content. There might be a potential for the airport to catch the “leaks” from the airport’s physical space to other operators’ digital spaces by offering own relevant content.

Based on the HEL guide and the website questionnaire, Chinese passengers are looking for local products’ information, more when they are at the airport premises. Product information is usually among the things people look for on airport websites. For example, from the HEL Guide, Chinese users visit the Shops section. Chinese passengers use the airport’s website as a digital space to search for information when they return from a trip home. At this point in the trip, they may still have plans to shop at the last foreign airport before returning home, for example looking for duty-free items to buy. While the Chinese are willing to use the digital space of the airport, the social space in the form of personal service is valued, as are the recommendations made by Chinese guides.

The main components of Helsinki airport’s servicescape include physical, virtual and social elements presented in this thesis. There are touchpoints for accessing the virtual space if the passenger is willing to look for them. These are for example HEL Guide, which opens when connected to a WiFi network and it can also be accessed via tablets at Chinese guides desks and info desks at the terminal, as well as Service info Screens around the airport terminal. Of course, passengers also use google and other search engines with their own devices. What has been lacking is the stories of Finnishness behind products and on-site direct access to specific product information.

Acquiring cultural knowledge as personal capital is identified as one factor that motivates studying product-related content from local products. Recognition of brands as well-known local brands also has a strong impact on the willingness to share content on social media. People want to share things that others are also interested in, which increases the feeling of togetherness, which is the highest level in the value pyramid presented in the theoretical framework.

Experiencing the “local” by buying products is of interest to the target group. One reason for this is that giving gifts and souvenirs is important in Chinese culture. Curated content reached the target group well compared to other website content, but traffic to the content page was generated through touchpoints installed at the airport during the experiment, not through the website landing page. Thus, QR code stickers and curated content can work as an affordance for passengers and transform physical servicescape into blended one. Restrooms and the Robot are attractive touchpoints and work as points of access to content. This might indicate that in these places people have time, are bored and are more open to doing content search and exploring opportunities. The most popular sources were located in both Schengen and Non-Schengen, indicating that both of the airport gate areas can be used to reach Chinese

passengers. Stores have competing information when products are presented on site and customer service is available, so stories may not matter in the context of a store, unless they can help make a decision between two similar products. However, some of the traffic to the curated content page came from shops' POS-material.

Curated content seems to prolong the length of time a Chinese traveller spends on the site, which may result from different location and point of journey of user reaching the web content than in a normal website visit. When comparing users located at the airport premises when visiting the airport's digital space, the average duration on a curated content page was 3:21 minutes, while users of the Chinese version of HEL Guide spend an average of 1:26 minutes browsing content. There are many possible reasons for the difference. One is that the HEL Guide opens unexpectedly when a WiFi connection is opened, and information retrieval is not currently active from a traveller's perspective, and people may have some constraints that affect the willingness to use that digital space at that very moment. Curated content, on the other hand, is willingly accessed and the user already has knowledge of the content, which is presumably an interesting topic based on the text of the touchpoint label. It may be that this information has made the user an active decision maker (Barden & Sutherland 2013, 119-121, 157).

To reach the target group, the visual material should be placed where it is possible to reach people after fixed airport activities when they have the time and the right state of mind to search for information. In this experiment, the robot and toilets seemed to be such places. The theoretical framework proposed offering content to activate impulse shopping for those who wander around or are bored at gates. The results of an empirical study did not show that curated content would activate people to shop. Still, it is possible that they increase awareness of local cultures and provide an opportunity to learn and gain Finnish experience. Qualitative interviews suggest that brands and products should be highlighted in a way that inspires content sharing on social media and networks, in other words, expanding the social space into the digital space. The backgrounds of the products are considered interesting, and especially strong message when they are presented by real people and the attributes of the product presentation are "local, quality, authentic Finnish product"

Stickers with QR code seem to act as affordance points that also turn affordance space into an activity space for some Chinese passengers. Based on the analytics data and interviews, some of the target group are willing and happy to scan the QR code and explore the content. Thus, it can be said to be one way of reaching and engaging Chinese passengers to digital content in physical space of an airport.

One solution to facilitate interaction between passengers and commercial partners is to get passengers' attention by providing curated content in the digital and physical space of the

airport. The airport should maintain its role as an impartial intermediary between the traveling customer and the operators. Roles should be defined and resources allocated to content production. A curated content concept, like the airport customer experience, should be managed in the context of blended servicescape, taking into account all elements of the airport space.

5 Conclusions and Reflection

This chapter presents analysis of the results, conclusions and recommendations for future research and development. This chapter also comments on the purpose and the objective from the perspective of the theoretical framework and the development project. This includes reflecting the process, for example what limitations have been encountered that might impact the results.

5.1 Result Analysis

The aim of the thesis was to study and test whether the new service (curated content distributed through new touchpoints) provides added value to the customer and the organization. This was done by ensuring that service development design drivers support organizations' strategically aligned customer experience goals. Results were evaluated using existing data research tools such as Google Analytics and Hotjar, but also theme interviews with users. The curated content experiment did not directly affect sales according to shared postcard tracking data, but qualitative data showed indications of an impact on sales and customer experience. Such content production should be seen more as an investment in customer experience and customer retention over a longer period of time, especially if the content is not accompanied by price reduction campaigns.

The results of the Discover phase of the process as well as the theme interviews in the Deliver phase are similar to Han et al. (2018, 3061), who found that air passengers' shopping motives and probability of engaging in shopping activities at the airport increase because of the following factors: tax-free products, spare time while waiting for the flight, social influence (for example accompanying traveler), authenticity of local products, traveling atmosphere, exotic and attractive shopping environment (store interior design / product display), convenience (reducing time spent shopping, saving aggravation, less effort to find and visit stores) and purchase occasion (for example shopping for a gift). Any solution concepts that affect these constraints are seen as worth testing.

One key outcome is the usability of space-time path as a tool to visualize the different dimensions of space and also the different constraints that affect passengers' access to airport space during their journey. This tool can be used, for example, to describe potential scenarios for different types of passengers and to communicate the effect the duration of fixed

locations has on their customer journey to the remaining dwell time at the airport. It proved to be a useful tool in designing blended servicescape affordances for passengers' journey.

Helsinki Airport can be considered a cyberplace that offers passengers digital infrastructure and services on-site in the airport's physical premises but also off-site. To assist find these opportunities, physical material related to the curated content was produced in an attempt to utilize the target group's space-time activity patterns. In order to do this, the Chinese transfer passengers information seeking behaviour was studied and the communication methods used were based on spatial and temporal constraints (Yu & Shaw 2010, 106): synchronous physical presence (Chinese guides and shop personnel), Asynchronous physical presence (POS-material and stickers) and Asynchronous tele-presence (webpage). Since the majority of the target group tend to just walk around and does not search for pre-trip information on airport channels, digital services should also be marketed and made visible on airport premises.

Managing the airport customer experience by understanding the service environment as a combination of physical, virtual and social space (blended servicescape) is seen as creating competitiveness in relation to other airports. The provision of value-added virtual services, in this case QR code affordances, increases the attractiveness of the airport's virtual space. For some travelers, an online presence is more natural than a physical presence, especially if the situation is felt uncomfortable or personal space is sought. Especially in unfamiliar places, it may be more comfortable to be socially present through a mobile device that indirectly shifts the presence away from the physical space. Reaching these passengers requires access to the online space from physical space to be intuitive and easy. QR code stickers and POS materials are one possible solution for connecting passengers to digital content in the physical space and helping the wayfinding to relevant content at the airport premises. It is also important to design these touchpoints and content so that they are of interest and value to users, so that it motivates them to reach the content and act on it.

The curated content production model developed during the thesis can be used to curate commercial content for different user groups at different stages of their customer journey. Some potential journey stages and touchpoints where passengers are reached by curated content were identified during this study. These are places where they get bored or wander around looking for store-related information or product discounts. The use of visual material, famous local brands, and familiar language seem to be good ways to attract users to the content. The feedback from some operators was that in stores, textual background information may not be that interesting to customers because at that point, customers are more interested in the look and features of the product. Point of sale -material is still a way to remove constraints related to finding products for those who are activated through a QR sticker located elsewhere.

In this thesis, content curation was linked to service development and service marketing. The approach was that curated content is a relevant service designed to activate people to learn, experience and buy. The role of storyteller and experience builder should be more prominently part of the collaboration between the airport's marketing, communications and customer experience department, commercial department and commercial actors. Telling stories about products and local culture allows learning and might engage to shopping for extending the experience back home. Based on the theme interviews, decision-making related to acquisition and recommending (posting to social media) was influenced by functional (quality, effort reduction), emotional (design and aesthetics), and relevant (sense of belonging) needs. (Palmu Inc., quoted in Tuulaniemi 2016; Bain & Company Inc., quoted in Almquist, Senior & Bloch 2016). Understanding air passengers' decision-making processes and driving forces for product purchase and recommendation were suggested to be prioritized as one of the most critical aspects of a successful airport retail business (Han et al. 2018, 3060).

As the development phase of this thesis has shown, designing affordances to the airport's blended servicescape should be done by using service design process and methods that are well suited to customer-oriented service development. Measuring the impact of service design is important and it also helps management see the measurable benefits of service design. Based on the results of different metrics, curated content worked well compared to other digital content aimed at Chinese.

5.2 Wider Applicability of Findings

Understanding the spatiality of social activities at the airport brings a new perspective to the design of customer experiences in the airport environment. Considering the formation of the airport space as a structure of physical, mental and social space, it is possible to renew the appearance of the physical space and affect customer loyalty when the airport space becomes a personally relevant place. In particular, the social space can be a new perspective for airports that are still looking for ways to have a direct customer relationship with passengers.

The results suggest that commercial content that includes stories of local culture is of interest to the target group. Experiencing the local culture after returning home is a way to prolong the memory of the trip, which is a reason for travellers to buy souvenirs. Stories can lead to learning, which was considered as one element in building concepts that provide meaningful experiences. Airports have an untapped opportunity to take advantage of something that competing airports do not have in a competitive situation, the local culture.

This thesis tested the curated content QR codes and print material as a solution for making virtual service visible to Chinese customers at the airport physical premises. Attracting passengers to use the airport's virtual space is recommended because competition for

passengers' dwell time is real also at the airport, as mobile devices provide access from airport physical space to virtual, with unlimited competition against airport operators, for example in the form of online shopping. Using an iterative process of service design is highly advised to assure that the content and solution reach customers, address their potential limitations on service use, and add value to their journey.

5.3 Evaluation of Development Settings and Reliability and Validity of Results

Throughout the thesis process, decisions have been made that have guided the work forward and influenced the outcome. It is important to reflect these decisions and their potential impact when assessing the reliability of the thesis, and to explain why something has been done and something has not been done at different stages of the research and development. (Saaranen-Kauppinen & Puusniekka 2006.) A presupposition was made about the research subject, but it didn't affect the acquisition and analysis of the material. The presupposition was that the offering of curated content on relevant channels and touchpoints would activate passengers as users of the airport's blended servicescape and improve their customer experience. The focus was on finding the customer's problem-worth-solving and producing a solution concept for it.

In quantitative research, reliability and validity are key concepts related to reliability. The purpose of the validity is to examine whether the study is valid, in other words it has been carried out thoroughly and the results and conclusions obtained are "correct". The validity of qualitative research can be understood as credibility and how well the researcher conveys and communicates the structures produced by the subject for the understanding of others. Research can never produce a complete understanding of things. (Saaranen-Kauppinen & Puusniekka 2006.) This leaves room for the further research and development topics presented in the next chapter. The validity of this study has been sought by researching the subject thoroughly using a number of tools and methods. The use of the methods and their outcome have been documented for others to see and evaluate. Also, the link to theoretical framework is provided.

The reliability of a qualitative research can be evaluated from three different perspectives: the use of a particular method, the time durability, and the consistency of the results. The first means evaluating under what circumstances the method used is reliable and consistent. The second means the permanence of measurements and observations at different times. The third is the consistency of the results collected at the same time by different instruments. (Kirk and Miller 1986, cited in Saaranen-Kauppinen & Puusniekka 2006.)

The use of service design as a process and method for development work is considered reliable because, due to its research-driven nature, it is well suited as an approach to the thesis's research-driven development process. Recording interviews increases the reliability of the

study. The recording gives the author of the thesis and others the opportunity to return to the material and the interpretation of the interview is not based on the researcher's memory (Saaranen-Kauppinen & Puusniekka 2006). The use of quotations helps the reader to distinguish between the concepts used by the author of the thesis and the concepts of the interviewees. However, it is advisable to note that participants may have answered some questions in a socially acceptable way, although it seemed that they expressed their views directly. For the reliability of the results, it is good to collect them using different methods. The results were measured during the experiment using a variety of qualitative and quantitative methods that helped evaluate the performance of the solution and its potential to influence the customer experience of this target group. The space concepts used in the theoretical framework support the time durability of the thesis results. Human behaviour, consumer trends and technologies are changing and to some extent are culturally dependent, so the solution may become obsolete over time and may not be suitable for all customer groups, but the basic framework and concepts used to understand airport space are not likely to change.

Some limitations related to the development phase were encountered. For instance, the number of users reached by the experiment was small because the experiment was launched in January, and after two weeks the Coronavirus affected the number of Chinese passengers at the airport. Generalizations can still be made to some extent, but this leaves room for further research on the subject. Another limitation to making broader generalizations is related to the cultural diversity of airport customers and the various passenger types at the airport. The target group is transferring Chinese passengers, thus excluding departing and arriving passengers as well as passengers from other cultures. The passenger journey focus is mainly on “at the airport” part of the passenger journey. The interviews were conducted in English, which seemed to have some effect on the depth of the interviewees’ responses.

5.4 Further Development Topics

Further development topics are related to the scalability of the curated content experiment and the incorporation of the operating model into the permanent activities of the organization. Testing the content with wider audience would be interesting and also an iteration of content and touchpoint design. Therefore, it is proposed to expand content production to other languages, such as English, Japanese and Russian.

Testing content on channels familiar and popular with the Chinese target audience should be done in the next step. At Weibo, brand-related messages seem to have potential that can be explored more. Curated content should be tested by making Weibo messages and tracking impressions, engagement, and sharing as a measure. Social media platforms offer a possibility to learn and interact with customers and also to engage them more with content as mentioned by Ballantyne and Nilsson (2017, 233-234). Weibo as a channel would have been tested already during the thesis if the Coronavirus had not affected the social media content plan. In

addition, affordance stickers with QR codes should lead to these channels familiar to Chinese, which they expect to open after scanning the QR codes. It is advisable to continue to research the right, partners' or Finavia's, digital and physical channels to reach passenger groups and deliver personalized messages. From the company's own digital spaces, the HEL Guide should be tested for its better reach to the Chinese target group compared to website.

English-language content could be tested by linking it to a website's flight information service, which is already designed to provide commercial recommendations related to customers' journey based on flights selection. On the website, the product carousel could be tested as a way to display local product recommendations that could be attached to the Shops and Restaurant -page. However, a separate content page should still be used if QR code touchpoints, such as now stickers in the physical space of the airport, are considered as an intermediary between the physical and virtual service space. The technical solution could be that the page is hidden from navigation.

Implementing curated content production as a permanent operating model for developing the customer experience requires defining the owner for the process and the content. This means agreeing on roles and responsibilities related to creating curated product recommendations and stories and managing curated customer journeys. It should be examined whether it should be a team that produces curated content, or one person responsible for managing the production of images and copy texts in cooperation with commercial operators and managing rotation of product selection in a way that favours all commercial partners. Content should be produced and stored in a place, from which it can be distributed to different channels, such as print, HEL Guide, service info screens, and social media. In the future, airport passenger services should be able to link product recommendations to instant messaging conversations with passengers. Also, conversational AI should also be able to access content when handling chat conversations. This leads to the need of defining all the necessary content requirements based on potential use cases, such as location and route directions to the nearest place where particular product can be found.

An iteration of affordance design involving user testing is recommended to be done to test the impact of more visually engaging touchpoints that have bigger affordance space than those used in this experiment. Also, other touchpoints could be tested to activate passengers, such as gate areas. Although bathrooms attract users, as well as Robot, it might not be the most desirable place for brands to showcase themselves. The company's Look and feel -concept, as well as how it defines the use of different locations for commercial purposes, should be taken into account. In the gate area, the stories of products found in shops near that gate should be highlighted. This should be done with respect to advertising sales.

Indicators other than those used in this work to assess the impact of service quality and service design should be tested. For example, adding a feedback query to a curated content page and interviewing customers about the content, while performing user testing on an iterated prototype. The impact of customers' commercial behaviour can be monitored by adding a special offer to a curated content page and tracking the impact of the offer on sales. Here, however, it is good to keep in mind that active content production is an investment in the customer experience, the benefits of which can be experienced in the longer term. The most important thing for airports is to be active towards the customer and provide relevant content in the right way and in the right place, thus showing a desire to serve and consider the customer.

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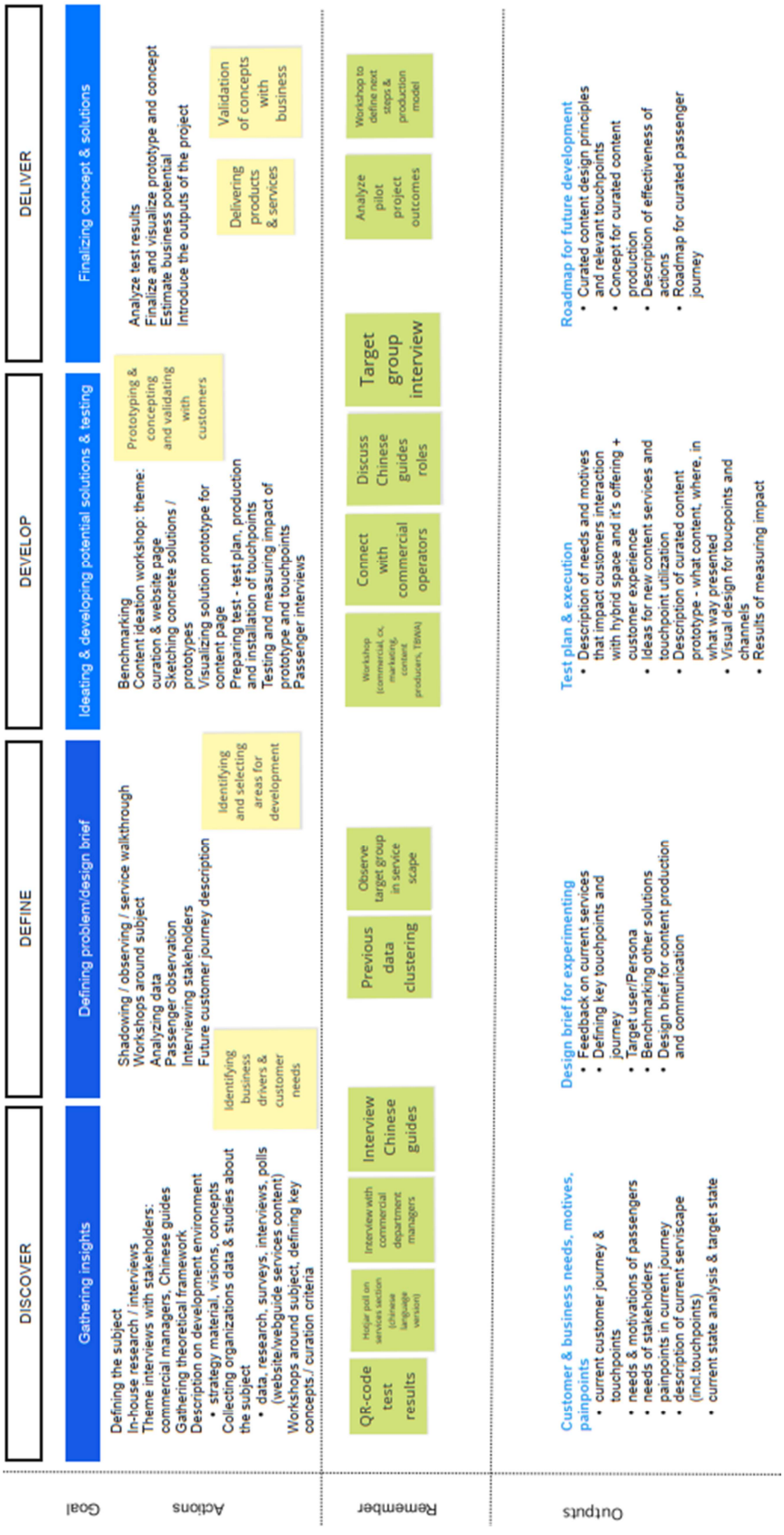
Appendix 1: The Development Process



Appendix 2: The Interview Questions

Interview questions

JOURNEY POINT

1. Interview location & time:

BACKGROUND QUESTIONS

2. Age, Nationality
3. Did you visit Finland or are you transferring flights?
4. From which country did you figh here? What is your flight destination?
5. How many hours do you have between flights?
6. What´s the purpose of your trip
    a. business or
    b. holiday?
7. Is this your first time in Helsinki airport?
8. Did you know anything about the Helsinki airport before coming here?
    a. Where did you get the information?
9. Have you used WiFi here at airport?
10. Social media channels in use?
    a. How do you use them?
11. Have you used social media today at airport?
12. Have you used Helsinki Airport digital channels (website, WiFi landing page, WeChat)

THEME QUESTIONS

1. When you travel, do you buy things at the airports?
2. When you want to buy something, how do you find information about what is here, like the shopping offering?
3. Did you plan your purchases before coming at airport?
4. Have you bought souvenirs/gifts/products from airport today?
    a. YES: What did you buy? Any local Finnish products?
    b. Did you buy after or before passport control? (KARTTA)
    c. NO: Any reason why not? What prevents you from shopping?
    d. Are you still looking to buy something? What are you looking to buy?
5. How did you decide what to buy? Which channels used to make decision? (LISTA)
    a. recommendations from friends or family
    b. product information in website
    c. inflight shopping guide, magazines
    d. In shops (suggested by sales personnel, randomly)
    e. chinese service guides
    f. Service info screens
    g. Adds
    h. Blogs
    i. Ask someone
6. How did you look for products to buy?
    a. Did you have any problems finding what to buy?
    b. How could we have made it easier?

7. Have you used QR codes to get more information about shopping possibilities? (a) in general and b) at airports)
    a. Where do you usually scan this QR codes?
8. How would you like the product information be offered to you? (picture, text, price, digital, physical)
9. Could airport make you recommendations of what to buy?
    a. What would be best way to get these recommendations?
    b. Do you check or follow blogs with recommendations? Can you tell me about them?
10. Would you like the gift reciever to know why you bought a specific product?
    a. What would you like to tell about the product?
    b. What would be the best way?
11. Have you enconter any issues, problems when doing shopping at airport?
    a. for example to communicate with sales person, language issues, finding specific product?
    b. How did you solve the problem?
12. Have you experienced anything Finnish / local today at airport?
    a. Shared anything to social media? During which state/location?
    b. Took pictures of products, food etc.? To share or just to remember?

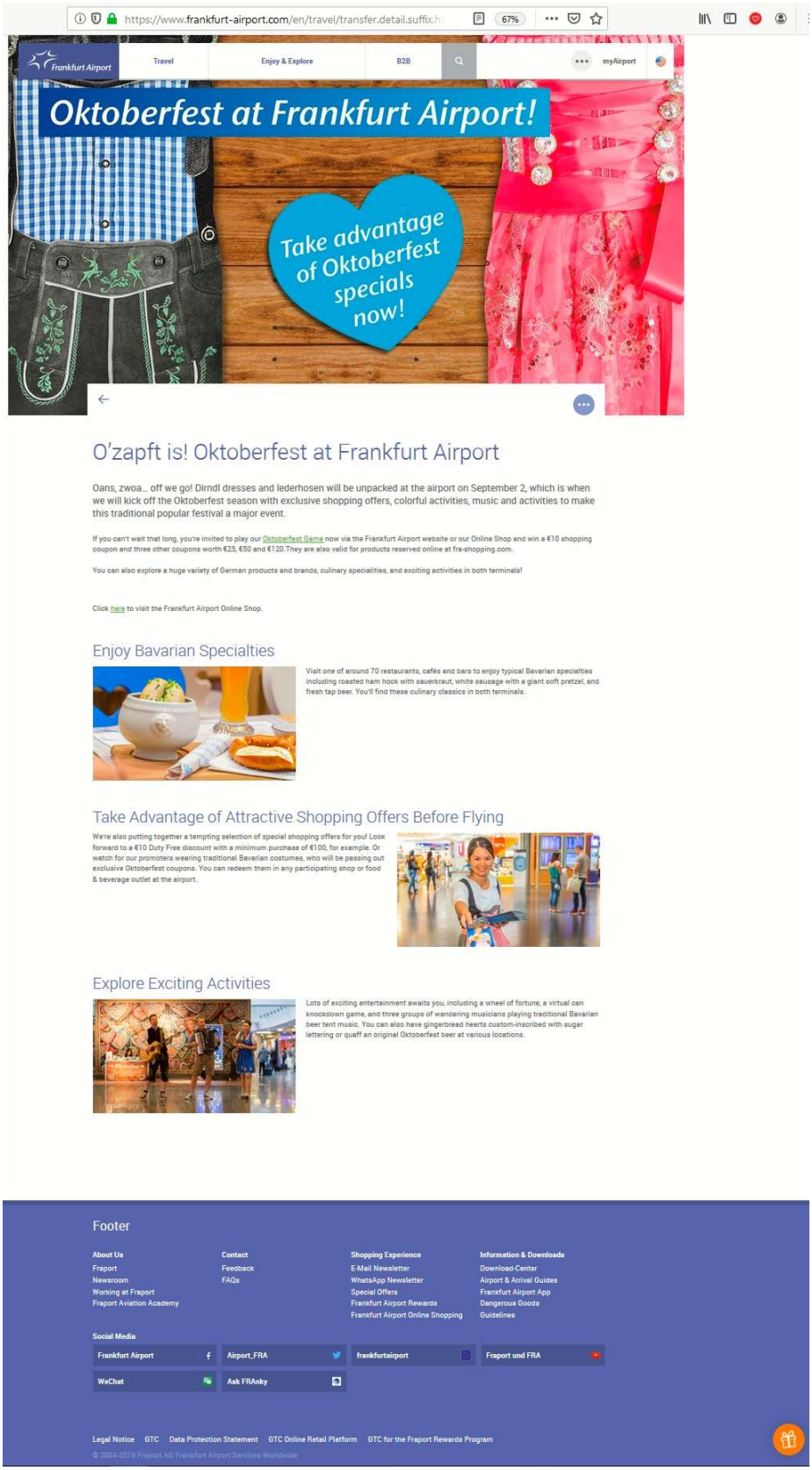
Thank you for your time! Have a nice flight and hope to see you again here at Helsinki Airport!

Appendix 3: Feedback Survey Questions on Shop & Dine -pages

Hotjar feedback questionare - Finavia.fi
Shop & Dine

EN	**ZN**
What is the reason you are visiting our website? (1/2)	**您**访问我们网站的原因是？（1/2）
I'm planning my trip	**我正在**计划我的行程。
I'm checking what to do at the airport	**我在**查找可以在机场做什么**？**
I'm looking for specific product or food	**我在找某种商品或**饮食。
I'm in between flights at the airport	**我在此**转机。
What other information would you like to see? (2/2)	**您**还想看到哪些其他信息？（2/2）
Finnish products	**芬**兰特产
Finnish food	**芬**兰美**食**
Other	**其他**
Thank you for answering our Poll. Your feedback is highly appreciated and will be used in our service development!	谢谢您的回答。我们非常感激您的反馈并会将其用于改善我们的服务。

Appendix 4: Frankfurt Airport Website's Oktoberfest Content Page



Appendix 5: Content Curation for Chinese Passengers at Frankfurt Airport´s website

Appendix 6: Guidance to Operators

Finavia is testing curated commercial content for Chinese travelers. The goal is to improve the customer experience and increase commercial sales. Your store has been requested to participate in this experiment and the following products have been selected from your product range: **Snow Flower by Kalevala Jewelry** and **Suunto 9 Baro Titanium Leather China Edition -watch**
The duration of the experiment is: **10.1. - 14.2.2020**
In your shop, this experiment will appear and work as follows:

1. Next to the item (s) on the shelf is the following Point of sale material

Local specialities at Helsinki Airport

The unique Snow Flower Brooch, by the famous Finnish jewelry brand Kalevala, celebrates the diversity of Finnish nature. For decades, Kalevala jewelry have been among the favourites of Finns. Every piece of their jewelry tells a story: legends from history, stories of our time or glimpses of the future. Their unique products are handmade in Finland.

See the traditional Finnish products available at Helsinki Airport

Local specialities at Helsinki Airport

Finland is known for its high tech innovations, especially health technology. Among the most common health technology products Finns use are sports watches that help to keep track on the activity level of your daily life. The legendary Finnish brand Suunto designs sports watches to last - try Suunto 9 Baro Titanium Leather China Edition! The watch is produced in Finland, yet has its features in Chinese.
See the traditional Finnish products available at Helsinki Airport.

2. Postcard to customer (text: Greetings from Finland!)

Person at the cash register will give a postcard when customer is purchasing the specific product. The postcard will be issued ONLY if the customer mentions that he/she has seen the product on the website of Helsinki-Vantaa Airport or heard about it through Chinese guides. In this case, the customer is likely to be a Chinese traveller, as the experiment is conducted in Chinese only. The purpose of the postcard is to track the sales of these certain products as a result of the experiment. At the end of the experiment, remaining postcards will be collected from the store.
Thank you for taking part in this experiment and looking forward to the results! Please let me know if you have any questions.

Best regards, Katariina, firstname.lastname @ finavia.fi, Tel. +358 40 xxx xxxx, Finavia.com

Appendix 7: Curated Content Products and Their Stories

Iittala Ultima Thule is the legendary Finnish design glassware, inspired by ice. Ultima Thule's designer Wirkkala spent almost a thousand hours with at the Iittala Glass Factory to recreate this unique piece depicting Nordic nature. There are several different glassware in the collection, and if you visit a Finn, it is very likely that you find Ultima Thules in their cupboard.

Wild bilberry is nature's own superfood, loved by all the Finns. Bilberries grow in arctic conditions in Finnish forests, and for over hundreds of years they have been part of Finns' healthy diets. Organic Bilberry Powder is produced of whole dried Finnish bilberries. One tablespoon of the powder corresponds almost 1,5 dl of fresh berries. Use the Arctic superfood in yoghurt, baking or smoothie.

Finland's pure nature offers countless Arctic ingredients - the secret for the Nordic healthy glow. Finnish cosmetics brand Lumene uses antioxidant-rich wild cloudberry and pure arctic spring water in their popular products that are up to 97% naturally derived. The Nordic-C products are infused with brightening vitamin C.

Finns love to drink hot drinks, especially during the cold and dark winter. A cup of tea, a warm blanket and a fireplace - perfect way to end a winter day! Finlandia Loose Leaf Tea combines the traditional flavor of black tea with Finnish blueberries and cornflowers. Tea can't get any more Finnish than this!

Toikka Bird by Iittala is one of the most iconic pieces of interior decoration. The collection is designed by the world-renowned Finnish glassmaking artist Oiva Toikka. Each bird is unique, as they are individually mouth blown, and represent Nordic nature in a timeless way. The Ruby Bird has a unique cranberry red color with dots picking up the light brilliantly.

The unique Snow Flower Brooch, by the famous Finnish jewelry brand Kalevala, celebrates the diversity of Finnish nature. For decades, Kalevala Jewelry have been among the favourites of Finns. Every piece of their jewelry tells a story: legends from history, stories of our time or glimpses of the future. Their unique products are handmade in Finland.

Finland is known for its high tech innovations, especially health technology. Among the most common health technology products Finns use are sports watches that help to keep track on the activity level of your daily life. The legendary Finnish brand Suunto designs sports watches to last - try Suunto 9 Baro Titanium Leather China Edition! The watch is produced in Finland, yet has its features in Chinese.

If you are travelling in Lapland, you can't avoid seeing reindeer wandering freely in the nature. There are almost 200,000 reindeer in Finland and they are herded throughout the year in Lapland. Thanks to its softness, Finns use reindeer hides as rugs, on top of chairs and on the walls.

Childhood's summer holidays, Christmas Eve with family, nightless nights with friends, Valentine's Day with your loved one, Friday evening at a movie theater... There is a limitless number of memories attached to Fazer's chocolate, as Finns enjoy it in all the situations one can imagine. Fazer Festive 5 combines five favourite flavors of Finns in one package. If you taste one Finnish candy, pick Fazer's chocolate!

Appendix 8: Heatmap of Helsinki Airport Chinese Landing Page and Curated Content Page

Place	Location details	QR code ID / stic	Medium	Sticker style	Amou	URL	QR co	ID in analytics	Results 10.1.-14.2.2020
SIS screens	Arrivals 2A (p30 & p28)	A	Sticker	Rectangle-ve	2	https://wwv	A	2A_SIS	5
SIS screens	Land departures 1 (T1 aula)	B	Sticker	Rectangle-ve	1	https://wwv	B	T1_SIS	0
SIS screens	gate 21	C	Sticker	Rectangle-ve	1	https://wwv	C	g21_SIS	7
SIS screens	gate 25	D	Sticker	Rectangle-ve	1	https://wwv	D	g25_SIS	6
SIS screens	gate 28	E	Sticker	Rectangle-ve	1	https://wwv	E	g28_SIS	4
SIS screens	Gate 40	F	Sticker	Rectangle-ve	1	https://wwv	F	g40_SIS	4
SIS screens	Gate 42	G	Sticker	Rectangle-ve	1	https://wwv	G	g42_SIS	0
SIS screens	gate 53	H	Sticker	Rectangle-ve	1	https://wwv	H	g53_SIS	0
SIS screens	Aukio	I	Sticker	Rectangle-ve	1	https://wwv	I	aukio_SIS	0
Water refill points	Next to gate 43 and 45	J	Sticker	Rectangle-ve	2	https://wwv	J	g43_water	11
Water refill points	Next to gate 54 and 53	K	Sticker	Rectangle-ve	2	https://wwv	K	g54_water	2
Water refill points in washrooms	near Gates 12–13	L	Sticker	Rectangle-ve	2	https://wwv	L	g12_wc	0
washrooms	Next to gate 21	M	Sticker	Rectangle-ve	2	https://wwv	M	g21_wc	66
washrooms	Nose west wing ladies	N	Sticker	Rectangle-ve	2	https://wwv	N	g40_wc	9
washrooms	Next to gate 32	O	Sticker	Rectangle-ve	2	https://wwv	O	g32_wc	4
washrooms	next to BK	P	Sticker	Rectangle-ve	4+4	https://wwv	P	bk_wc	29
washrooms	Gate 34	Q	Sticker	Rectangle-ve	4+4	https://wwv	Q	g34_wc	9
Info desk	Gate 34	R	Sticker	Rectangle-ve	2	https://wwv	R	g34_info	7
Chinese guides desks	gate 29	V	Sticker	Rectangle-ve	2	https://www.f	v	g29_guides	15
Chinese guides desks	Aukio	W	Sticker	Rectangle-ve	2	https://www.f	w	aukio_guides	7
Tellu-robot	Non-Schengen	U	Sticker	Rectangle-ve	2	https://wwv	U	non_robot	80
									265

Place	Location details	QR code ID / stic	Medium	Sticker style	Amou	URL	QR co ID in analytics		Results 10.1.-14.2.2020
A4 - Chinese Guides	gate 29	S	A4			https://www.f	S	g29_A4	1
	Aukio	T	A4			https://www.f	T	aukio_A4	2
									3
POS-material									
Iittala Store	Gate 28	X	POS-material			https://www	X	g28_iittala	7
	Gate 40	Y	POS-material			https://www	Y	g40_iittala	2
Helsinki Duty Free	gates 13 & 22	Z	POS-material			https://www	Z	schengen_duty	16
	gates 40 & 52, and next to the passp	Å	POS-material			https://www	Å	nose_duty	11
Shop at Lindroos	gates 27	Ä	POS-material			https://www	Ä	g27_lindroos	5
	gates 37-39	Ö	POS-material			https://www	~~Ö~~	g37-39_lindroos	9
Shop at Kalevala, Suunto, Lappo	gate 40	AA	POS-material			https://www	AA	g40_kalevala	3
Shop at FineFood	gates 19 & 29	AB	POS-material			https://www	AB	schengen_finefood	0
	gates 37-39	AC	POS-material			https://www	AC	g37-39_finefood	0
Shop at Finspiration	gate 26	AD	POS-material			https://www	AD	g26_finspiration	10
	gate 40	AE	POS-material			https://www	AE	g40_finspiration	0
									63