

Service design diploma

The Oslo Experience

Discovering the compact city



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otherwise noted.

Start

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Abstract

This Service design diploma is about enhancing the experience of Oslo for young travelers. By facilitating walking paths that show off Oslo as a compact city the user is guided to hidden treasures by a local chatbot.

Our collaborative partner VisitOslo wanted help facilitating good experiences in Oslo and to engage young travelers in a new way. For young travelers it is important to discover new destinations freely and independently, without missing out on the local experiences of a destination.

In this diploma we have explored new solutions to meet the expectations of both our target users and service provider. By using a variety of well founded design methodology for analyzing user experiences to create an holistic service journey, we have developed “The Oslo Experience”. Through “The Oslo Experience” we make sure that young travelers’ experience is enhanced by discovering the local treasures of the compact city.



Content

01

Introduction

- 10** Framework
- 10** Background
- 10** Motivation
- 11** Contribution
- 11** Design Proposal

02

Methods

- 14** Design Field
- 14** Project timeline
- 15** Research
- 18** Ideation
- 18** Refinement

03

Background

- 22** Relevance
- 22** VisitOslo
- 25** The compact city
- 27** Young travelers

04

Process

- 31** Young travelers
- 40** Oslo
- 42** VisitOslo
- 44** Workshops
- 48** Ideation

05

Design proposal

- 56** Proposal
- 58** The experience
- 64** Key features
- 75** Backstage
- 82** Reflections

06

References

- 88** References
- 90** Annexes
- 91** Acknowledgments



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TEA BOX
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01

Introduction

This chapter work as an introduction to our project. We will start with presenting the framework and background of our project. Then we will present our motivation and contribution, and finally a description of the design proposal.

- 10** Framework
- 10** Background
- 10** Motivation
- 11** Contribution
- 11** Design Proposal

Framework

This is a service design diploma in collaboration with VisitOslo, set in the context of tourism. The aim have been to enhance the experience of Oslo for young travelers, by designing a new service experience. Our focus has been on young travelers' experiences, to understand the mindset of young travelers, as well as digging into the strategy of Oslo (Oslo Brand strategy and VisitOslo's strategy), and creating a link between the two.

Background

VisitOslo is the official marketing organization for Oslo. One of their aims is to facilitate for good experiences during people's stay in Oslo. To achieve this VisitOslo has realized that they must take a pioneering role within digital marketing. When we started this project with VisitOslo, they suggested that we should focus on young travelers at the age between 20 to 35 as our target group, thus contributing to achieving this aim.

VisitOslo is part of the Oslo Brand Alliance, provider of brand strategy for Oslo. Part of the strategy is that Oslo should become the world's favourite compact city. By "Compact City" they mean that Oslo is compact in geography, creative fields and in society.

Motivation

In our prediploma, we were working with overlapping topics; Marthe with culture and Marie with tourism. After realising that these topics had several overlaps we decided to work together. Marthe's main motivation was to work with people's meetings with new culture, while Marie's main motivation was to work with branding through the experience of a destination. Both found it interesting to work with innovation and experiences out of the ordinary. This lead us to **our** diploma; designing for a new experience of Oslo.

Contribution

This project is first and foremost meant as an inspiration for VisitOslo on how to attract young travelers. The insight phase of this project contributes with relevant findings about young travelers: Who they are, what they value and how they travel. Our design proposal is a service that considers VisitOslo's wish to reach young travelers, as well as their goal branding Oslo as the world's favorite compact city.

Design Proposal

Our design proposal, The Oslo Experience, is based on different walking paths in Oslo, that all represent the compact city. Each pathway is divided into different zones, representing an area. Information about each area will be available on the app as well as on physical wayfinding signs.

A local chatbot named Sara, will function as a personal Oslo guide along the journey. The chatbot will have the behavior of a typical Norwegian, and will be able to tell the user about the Norwegians' cultural expression. The chatbot will also give the user relevant tips on areas to discover and what to do in that specific area. This will be based on the user's preferences, that he/she has submitted before the journey.

The Oslo Experience is a service delivered by VisitOslo. The service provides young travelers an opportunity to discover the compact city by getting to know the authentic traditions and life of the locals (the Oslofolk) freely, without missing out on experiences that the individual traveler finds relevant for him or her.

Our report

This report guides you through the process of our diploma in four main phases: the methods we used for solving our brief, the background and framework for the project, our process and finally our design proposal.



02

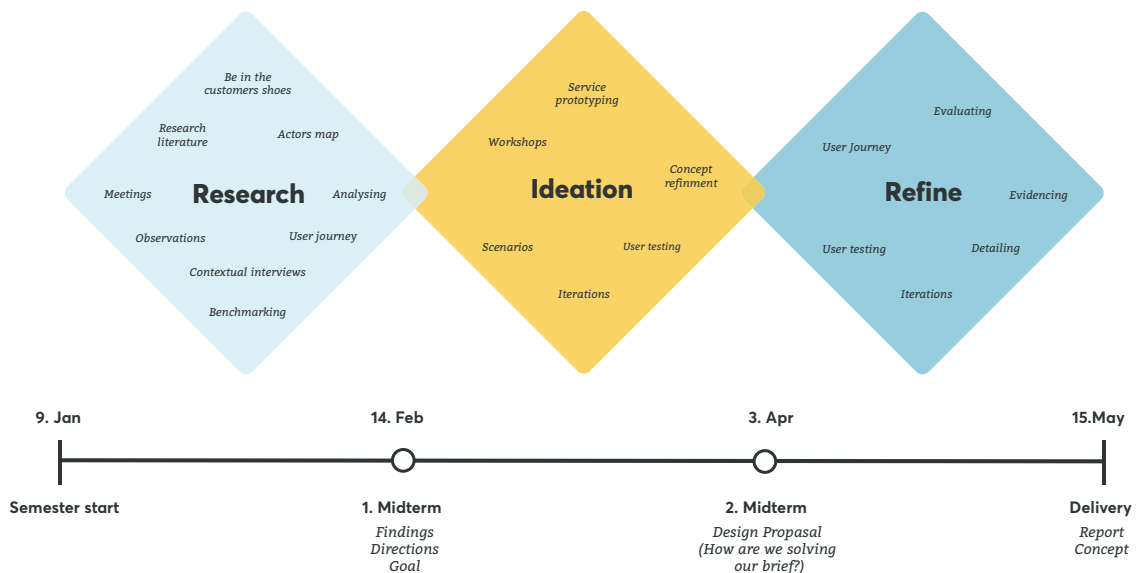
Methods

In this chapter we will present the choices of methods we used to develop our final concept the Oslo Experience. We will go through the qualitative and quantitative approaches to our research and how we built empathy with our target group through human centered design.

- 14** Design field
- 14** Project timeline
- 15** Research
- 18** Ideation
- 18** Refinement

Field: Human centred design & service design

In our diploma we are working in the field of service design, and human centered design. Our focus is on the user's experience of the service journey and how it is enabled for the service provider. We decided to apply the AT-ONE methods from "How to Design Better Services" (2014) by Simon Clatworthy, when investigating actors, touchpoints, offerings, needs and expectations. We applied the IDEO mindset for human centered design (The field guide to human-centered design, 2015) when approaching and building empathy with our users: the young travelers, Oslo inhabitants, and our collaborative partner VisitOslo.



Project timeline: How we structured this project

This is our timeline for our diploma project. It is divided into three main phases: Research, Ideation and Refinement. We planned our project around qualitative research of our users and collaborative partner throughout the project, and researched trend reports to obtain data from quantitative research about our framework: Young traveler, Oslo and VisitOslo.



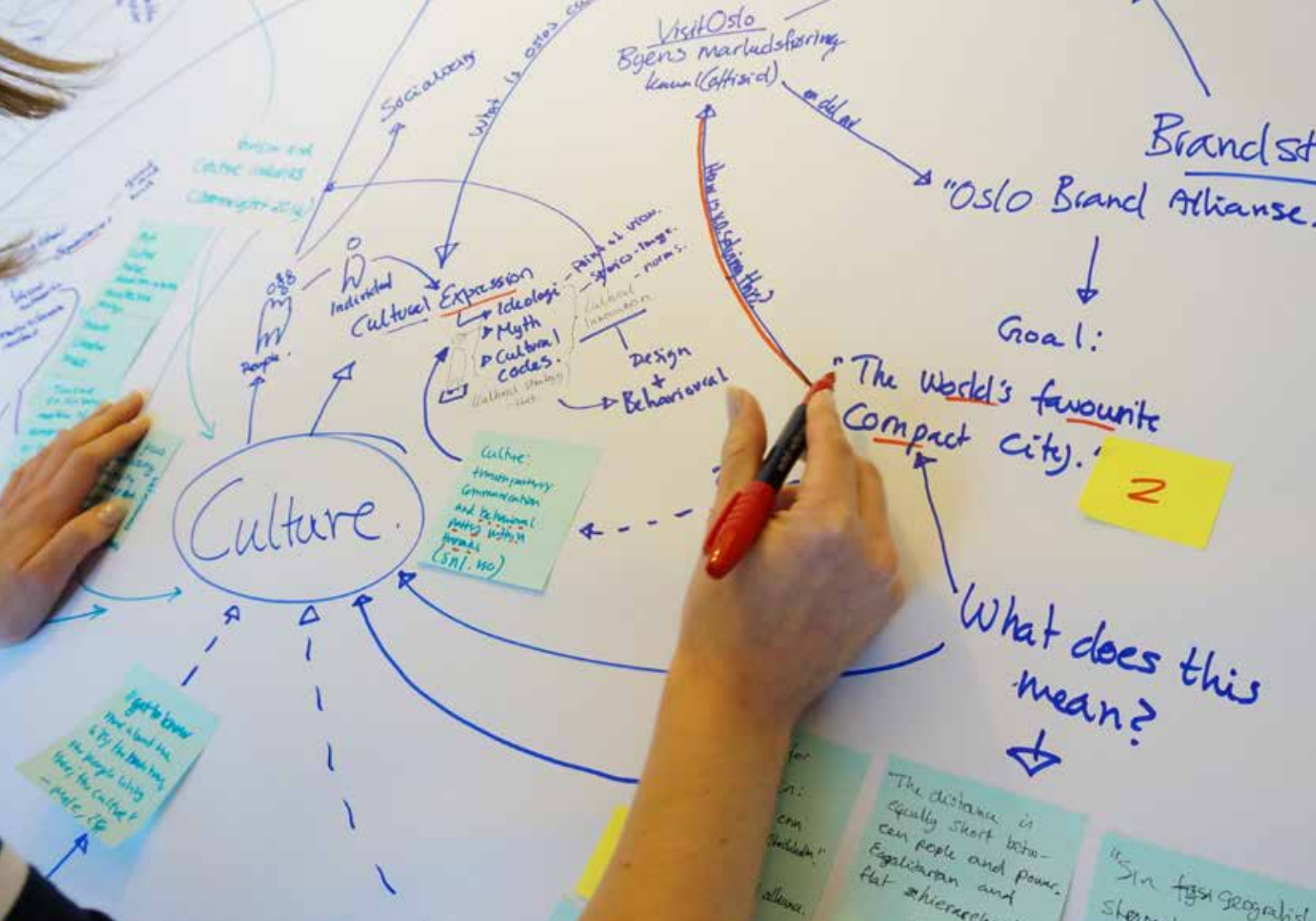
This is an overview of how we leveled out our meetings.

Meetings with VisitOslo

We set up three validation meetings with VisitOslo during our project, as well as mail correspondence with our assigned contact person in VisitOslo, PR-assistant Pia Eriksen. The meetings were held at the VisitOslo administration offices, where we brought materials to update VisitOslo on our process and validate our decisions. In these sessions we wanted validation on our understanding of VisitOslo and of their future vision for engaging young travelers.

In-depth interviews with target users

We conducted 18 in-depth interviews with the target users throughout our project. We wanted to understand why they travel, their concerns when traveling and their views on Oslo. We established an User Expert Group, which contained a group of people in the age group we worked with. They were available for interview sessions and online correspondence during our entire project. In addition to our Expert Group, we carried out seven one-time interviews with people in our target user group to get fresh reactions and feedbacks on our design decisions.



Literature on framework

We researched our topics: Tourism, culture, millennials, Oslo and VisitOslo. Information on the topics were obtained from trend reports online, and literature research. Trend reports gave us updated indicators on travel trends. VisitOslo's yearly organization reports gave us insights into VisitOslo's organizational structure and experiences. When researching and attempting to understand the term culture, and how it can be related to the field of design, we worked with Douglas Holt's "Cultural Strategy in Innovation." This phase was useful to uncover quantitative data for our topics, so that we could investigate our users with qualitative methods.

Sorting out our findings

When analyzing the findings from our target group, we used methods from design thinking and created an Empathy Map, to sort out attributes that described our target users. We created our own user journey map to create a fictive journey based on the findings from our user research, and the travel trends from our literature research phase. This map was useful in dividing and understanding detailed stages of a travel, and we also used it as a discussion tool.

(Bilde av journey map process)

State of the Art

On our user journey, we placed existing offers that our users considered noteworthy (both good and bad offerings) and offers we considered interesting for our project on our service journey map. To see how the existing offers impact the journey, it was important to understand the landscape of existing services in the the travel industry. It was also crucial to become aware of which existing services that inspired us and which we wanted to avoid.

Workshops

We conducted three ideation workshops with our target users, the employees at VisitOslo and actors or stakeholders, Oslo Municipality, NHO, Ruter and VisitOslo, whom we considered valuable for enabling the service. In these sessions we were inspired by the AT-ONE method, known as forced associations (Clatworthy, 2014) to engage the participants in ideating concepts.

Our analysis, and further ideation

To analyze the information gathered during the workshops, we created a matrix where we placed all the ideation outcomes. By using the map we could analyze any similarities and frequencies of the themes mentioned. From the analysis, we defined service experience principles to use in further concept exploration.

Service opportunity

We defined a service opportunity by evaluating our concept's innovation potential, after IDEO's criterias of viability, feasibility and desirability. (The field guide to human-centered design, 2015. p. 14). By using this method we found that our concept, the Oslo Experience, actually covers all three criterias.

Expert meeting at Making Waves

We conducted a meeting with consulting chief technology officer (CTO) Pål Rønning, and three other employees at Making Waves to get consultation and advice on the feasibility of our service.

User testing and service prototyping

To test our concept and solution, we tested the service concept through user testing and service prototyping. First we presented the digital flow, then we iterated and built a mockup of the journey. From this we iterated the chatbots tone of voice and how the user could be attracted to try out the service. Our final solution was tested on the actual pathway along Akerselva, with screens from the digital solution.





03

Background

In this chapter we will present the framework we are working with: VisitOslo, the compact city, and young travelers. We will present our initial research on these topics and their role as a framework for the rest of our process.

- 22** Relevance
- 22** VisitOslo
- 25** The compact city
- 27** Young travelers

Relevance

According to Innovation Norway (2016), tourism is one of the world's biggest industries. It is therefore not difficult to understand why tourism is one of six areas of opportunity for developments in Norway (p. 28). This was stated in Drømmeløftet 2016, a report issued by Innovation Norway. It touches upon how commercialism and information about Norway's art and culture can increase Norway as an attractive destination. (p. 41)

Oslo

In this diploma we are working with the capital of Norway, Oslo. Oslo is a small waterfront city, with a fjord, mountains and about 660 000 inhabitants, often called "Oslo-folk". SSB (2012) states that Oslo has had a steady growth as a destination in the last years.

VisitOslo

VisitOslo is the official marketing organization for Oslo. They are responsible for visitor services such as the official tourist information-office (the visitor center) and the official website (www.visitoslo.com). Their target groups includes both the visitors and the inhabitants of Oslo.

VisitOslo is a stock-based company, where the shareholders (136 in total) are companies in the region that offer tourism-related activities. In addition to the contribution from the different stakeholders, VisitOslo also has as collaboration with Oslo municipality and receives yearly contributions from the municipality.



VisitOslo's Strategy

In VisitOslo's strategy (2016) for 2016 - 2019, they present their main focus, which is to encourage visits and usage of the city. They believe that good Oslo experiences will generate even more good Oslo experiences. Oslo inhabitants and visitors are therefore their biggest marketing potential. ("VisitOslo strategiske plattform", 2016). In other words; VisitOslo aims to facilitate good experiences during people's stay in Oslo, so that later they can act as ambassadors, by telling people about their wonderful time in Oslo.

Due to increasing demands from modern tourists, the requirements for travel experiences, and destinations, are tougher than ever. Today's tourists and visitors expect both unique experiences and seamless deliveries. Stories of exciting destinations, vacations, adventures and satisfied customers are captured and shared. Because of this transparency, the key to success is to be able to deliver good experiences. (Håndbok for reisemålsutvikling, 2015, p. 17).

To achieve this VisitOslo understands that they must take a pioneering role within digital marketing and developments of new business models. We have therefore chosen to focus on experiences created at the destination and to design for a new service experience.

Oslo Brand Alliance

VisitOslo collaborates with several Oslo based organisations. One of them is the Oslo Brand Alliance, which is the provider of brand strategy for Oslo. Oslo Brand Alliance is a collaboration between Oslo Business Region, Oslo Region Alliance and VisitOslo. Together they have created a strategy for Oslo, that is presented on their webpage Oslo Brand Box (oslobrandbox.com). The strategy offers a checklist, that a company can use to check if they are on brand.

The Compact City

Part of the Oslo Brand Alliance strategy (2016) is that Oslo should become the world's favourite compact city. By "Compact City" they mean:

Geography: There are short distances between concrete and grass. That you are only minutes away from the sea or the forest and that total commuting time is one of the lowest among competitive world cities.

Society: That the distance is short between people and power. Norway is often perceived as an egalitarian society with flat hierarchies.

Creative fields: Oslo Brand Alliance also states that Oslo cultural muscles are bigger than the size implies. Oslo has close to 5.000 live performances every year, more than double that of Stockholm and Copenhagen. (Oslo Brand Box, 2016)

To be perceived as a "Compact City" is an important goal for VisitOslo. In VisitOslo's strategy (2016) for 2016-2019 it is stated that they will use their own competence to build Oslo's new position and reach their goal. Therefore we aim to follow this goal through our project.

The worlds favorite compact city



Geography



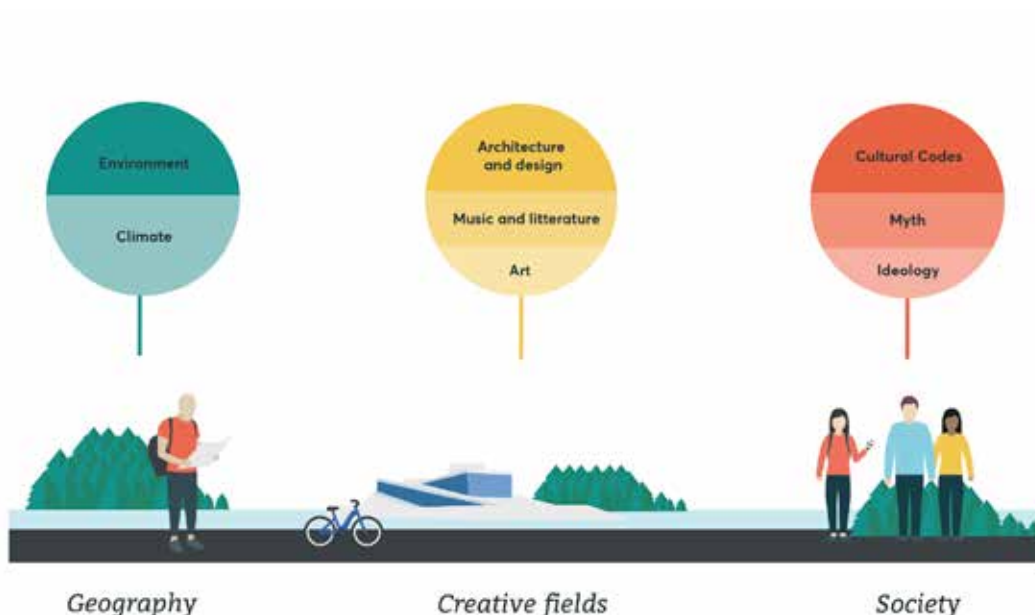
Society



Creative fields

The definition of culture

The term culture has several connotations, and we experienced early in our project that people used this term in different ways. When we use the term culture in this report, we address geography, creative fields and the cultural expression of a community. These categories have different content as shown in the model under. The content of cultural expression is based on cultural theory by Douglas Holt, author of *Cultural Strategy: How Innovative Ideologies Build Breakthrough Brands*, written with Douglas Camerao.



Culture as a competitive advantage

According to Innovation Norway, modern tourists who are interested in countries such as Norway are the same who are interested in local food, authentic experiences, local culture and national character. Innovation Norway therefore wants an increased focus on experiences that supplement nature. The goal is that a destination shall be able to offer a combination of nature, interactions with local culture and authentic environments. In most cases, culture is the competitive advantage to be used when developing new offers. (Håndbok for reisemålsutvikling, 2015, p. 25)

Young travelers

In our initial meeting with VisitOslo, they advised us to look at Young Travelers between the age of 20 to 35 as a potential Target group. This is a group they expressed a wish to reach in a new way. This is also a target group that Oslo Brand strategy (2016) focuses on. In the strategy they state that the reasoning behind this is the significantly younger population wave facing us, with a 40% growth of 25-35-year-olds over the next eight years. This opens up for an opportunity to claim the position as «the young pioneering city». Oslo Brand sees this as true for Oslo, given the growth rate of younger people and from a historic perspective, as Oslo is a relatively young world city. (Oslo brand box, 2016). That is why we have decided to target our project towards young travellers at the age of 20 to 35.

Reflections

We saw an opportunity for a new service experience delivered by VisitOslo for young travelers by using the Oslo Brand Alliance's strategy: Oslo should become the world's favourite compact city. This could be a selling point to engage young travelers during their stay in Oslo.



04

Process

In this chapter we will go through our process by presenting our findings from all our stages: research, ideation and refinement. We will start with our users, the young travelers. Then we will present the findings from our meetings and observations at VisitOslo, workshops and finally user testing and service prototyping.

31 Young travelers

40 Oslo

42 VisitOslo

44 Workshops

48 Ideation



Target user

As mentioned earlier our target group is young adults or travellers between the age of 20-35, since this is a group that VisitOslo sees a need to reach in a new way. People who are now 20-35 years old are often defined as the millennial generation. We know that this is a big age group, and that individuals in this group are in different situations. They might be studying, working, or establishing a family. Our focus have been to target our project towards travelers without children, who are either students or in their first job.

Empathy map

Based on literature research about millennials and the interviews with our target users we created this empathy map to illustrate our target group. This map have also been used as a discussion tool in different workshops. The map is divided into four parts; Actions, needs, saying and thinking. First, we will define some of the characteristics in short, before we elaborate on the ones that we find to be the most important for our project.

Actions

The millennials are masters of technology, big travelers and share moments from their life via social media. They trust friends and locals more than big travel agencies, and they are active users of Google to access information. Instagram and social media are used as an inspiration on what to do and where to travel.

Needs

They have a desire to always be connected with the world around them. They also have a need for freedom - to be able to choose for themselves, and to be able to discover and learn something new. They also have a need to be social. Money is important to them, since they may not have the best economy.

Saying

What they are saying is that they want the real experience of a city. Furthermore, they are of the opinion that locals play an important role in offering this authentic experience.

Thinking

This is a group that do not like to feel that they don't belong or to be considered a typical tourist. They are also afraid that they will miss out on what's special and relevant for them.

The empathy map is on the next page.

I like to go to places that are more quiet and not so popular to **get to know** more about the life, traditions, and **the people living there.**

Finding the **real experience of the city.**



Tech savvy



Travelling



Sharing



Trust friends



Googeling



Inspiration



I don't like that someone can look at me and know that I **don't belong here.**

Hope I don't **miss out** on anything.



Connected



Freedom



Storytelling



Money



Learn



Social

We will now go through the characteristics and needs of our target users that we consider to be the most important for our project .

The Real Experience

For our users it is very important that what they experience is “The real experience”, and not the touristy version of it. The term “The real experience” was used by several of our users and it refers to how the city is experienced by the locals, i.e. not the polished tourist landmarks and attractions. Our users do not view themselves as tourists, and they avoid too touristy places when they travel. Our interviewees would much rather seek out local and unique places and try to learn the customs and cultural codes when visiting a new destination. This was also confirmed by literature research on millennials; that the millennials want to experience new cultures, encounter and engage with local people and have authentic experiences (ITB, 2016 p. 3). These attitudes were mirrored in our interviews:

“...Going to the attractions, and then going to another place that is like more quite and not so popular, and you get to know more, about the life, and the traditions, and the people living there ; The culture. “

(Male, 26 yrs from Mexico)

“So it is about finding the real experience of a city, that is not this perfect picture that they sometimes paints.” (Male, 25 yrs from Chile)

Discovering the city by foot

All of our users have told us that they prefer to discover the city by walking. Then they are free to stumble upon local and hidden treasures:

“I like to walk (until I get tired of it) Because you see the life in the city, you get the vibe of the city.” (Female, 29 yrs from Iran)



Fear of missing out

When asked about concerns the interviewees expressed a fear of missing out on what's special and interesting for them. This fear often come up if they get lost in an uninteresting area or if an activity is

“That’s one of my concerns; regret when visiting a new city. Because it is like, I could have done more, but I didn’t.” (Male, 26 yrs from Mexico)

How our users travel

Based on findings from user interviews and literature research, we got an overview of how our users travel and what services they use along the journey. These insights were used when mapping out the user journey AS-IS, where we considered every step and every stage of the journey.

Social media as inspiration

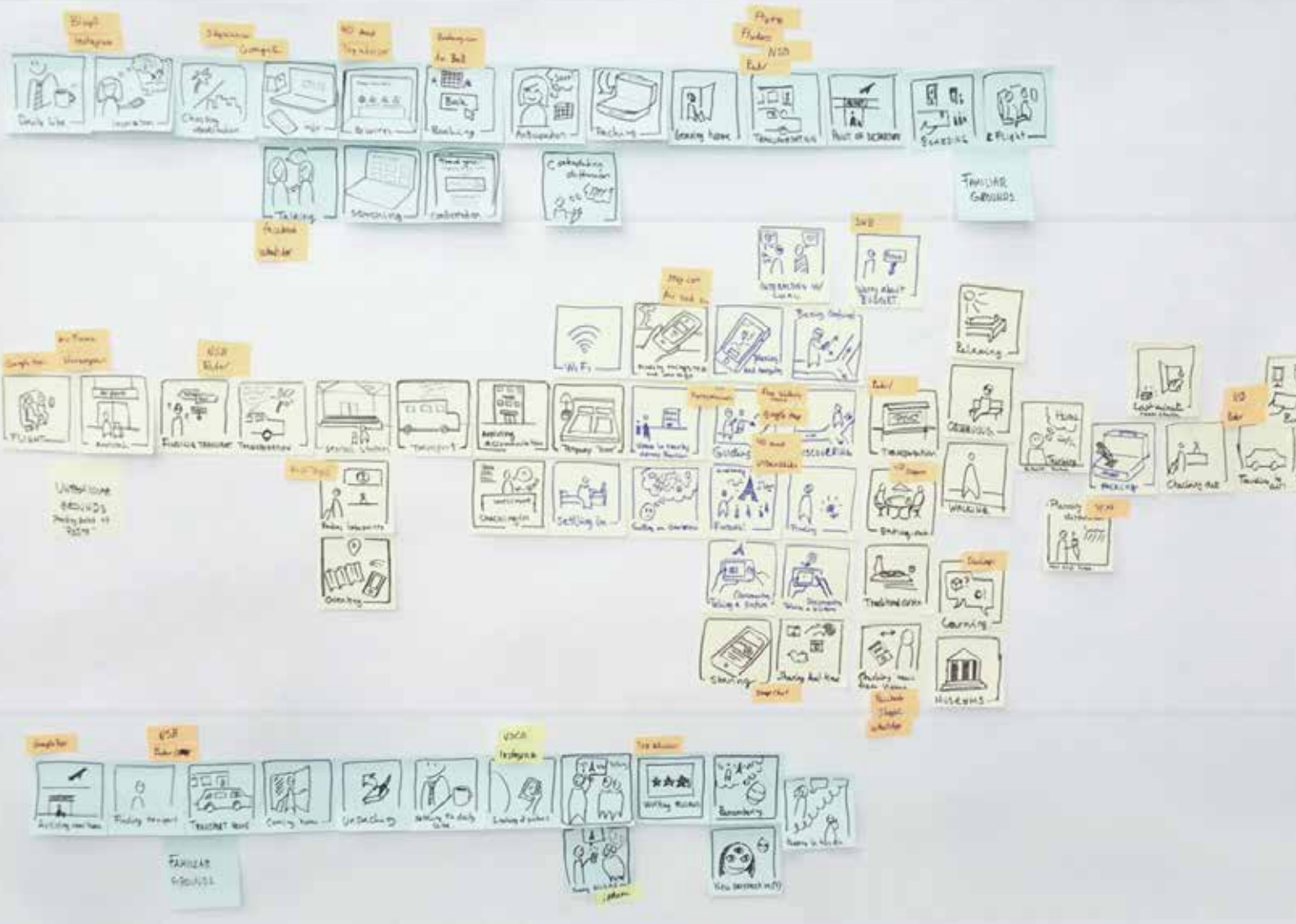
Our expert users use social media such as Instagram and Snapchat for inspiration on where to travel and what to do. According to Kyle Wong's article "How Millennials And Gen Z Transformed Tourism Marketing Through Sharing" (2016), millennials are a group that is more likely to pick a travel destination and activities based on what their peers share online over branded travel ads. (Wong, 2016, paragraph.1). This is closely linked with their need to share their experiences, both good and bad (Milord, 2016, "Millennial mindsets, part 5")

Two of our users mentioned that they preferred to use Instagram and Snapchat to get real-time information about a location. They showed us how they hashtagged a place of interest to view unfiltered and honest pictures taken by bystanders before deciding to visit the place during their stay at a new destination.

Reviews sites

In addition to social media and googling our expert users use review sites as a source of information when traveling to a new destination. The sites mentioned were Tripadvisor and Foursquare.

"I think we rely a lot on (online) reviews, on what people are saying, specially when you are booking a place or something." (Male, 25 yrs from Chile)



BEFORE



Inspiration



Information



Asking friends



Reviews



Finding deals



Leaving home

THE STAY



Arriving



Orienting



Settling in



Planning



Discovering



Sharing

AFTER



Going home



New knowledge



Storytelling



Writing Reviews



Remembering

However, we noted a split opinion about these sites. As much as they rely on the opinions of locals and people in the same age group as themselves, our interviewees did not completely trust these sites. We found that these big review sites were considered too mainstream to be sources of authentic experiences.

“I use Tripadvisor a lot, but you do not want to come from a vacation and only experienced a Tripadvisor list... And no more. Then you have had the same travel experience as everybody else. You want to stand out.” (Male, 25 yrs from Oslo)

Tips from locals

Two of our interviewees told us that they used AirBnB homes and the host actively, to get tips and recommendations when visiting a new destination. AirBnB’s hosts have until recently (November 2016) only been available for those renting apartments. But now AirBnB are taking it a step further, with AirBnB experiences. This is a new feature alongside their existing service of home sharing, where users can book “Experiences” (Porges, 2016). The experiences, which can entail multi-day activities or one-off events such as concerts, are all hosted by locals (Meltzer, 2016). In the last couple of years there has been created several apps that focus on the sharing of local opinions digitally, without the meetups that AirBnB offers. Stay.com and Google Locals are just some of the apps that focus on delivering locals’ tips on what to do and where to eat in a new city.

Discovering a city by walking

When it comes to the discover part of the journey, our users didn’t mention any particular services. But we know that our users like to discover the city by walking. A service related to discovery by foot offered here in Oslo that we find interesting, is Havnepromenaden. Havnepromenaden (The harbour promenade) is a pathway along Oslo’s waterfront, that is made accessible to the public, with 14 strategic placed orange containers that function as information towers. (Halogen, n.d.)



Photo: Didrick Stenersen

Oslo

All our users have stated that the closeness to nature is what made Oslo unique, and that it was within a walking distance or just a short metro ride from the city.

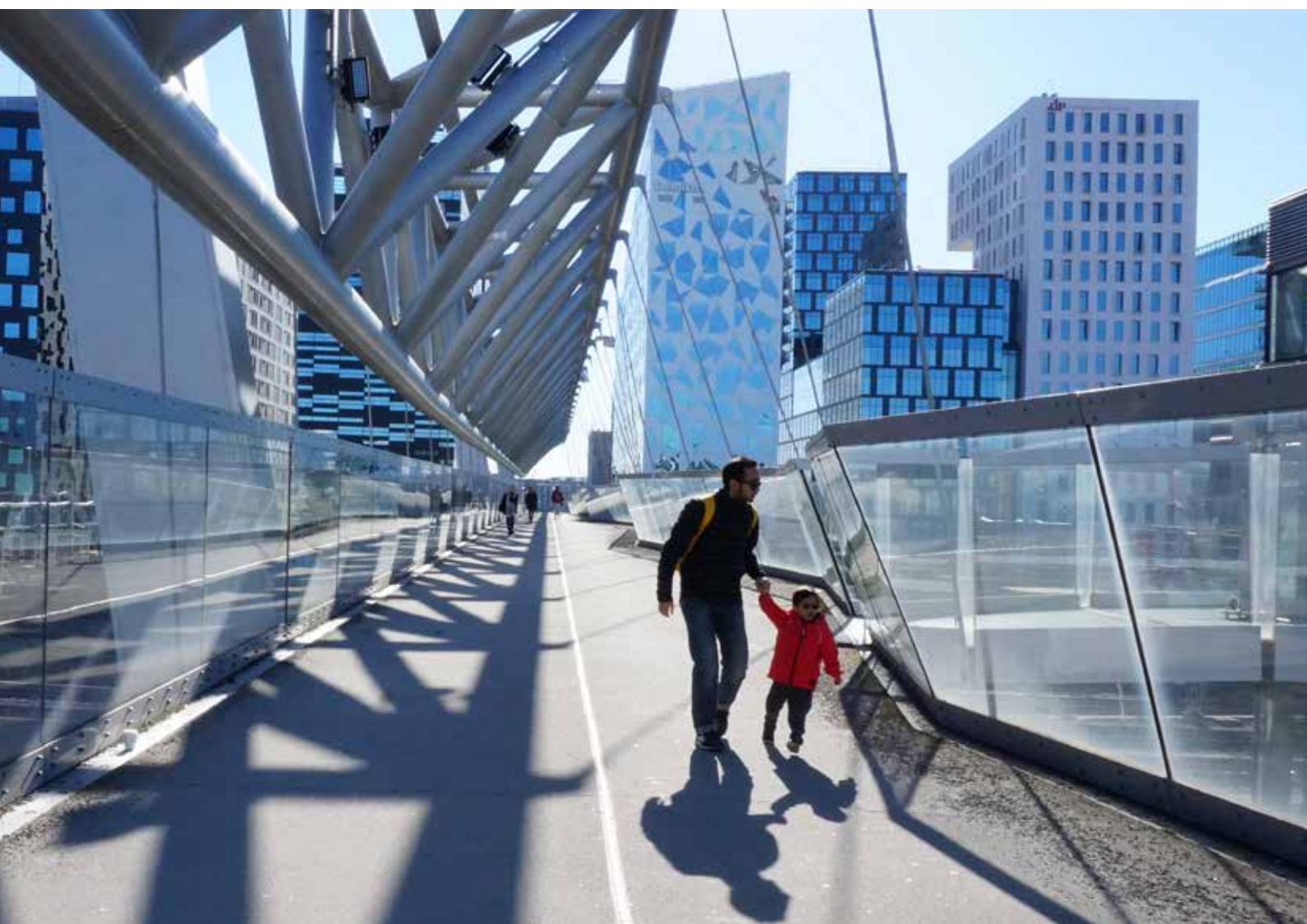
“It is not too big and not too small”

(Female, 29 yrs from Iran)

*“You can discover the city in one day, if you walk.
I think that is really nice.”* (Male, 25 yrs from Chile)

One of our interviewees stated that the closeness to the waterfront was also very compelling to him. Other elements that our expert group found valuable was the contrasts in the architecture and that there were many cultural events like concerts, festivals and likewise that they had not expected a small city to have. Our users' descriptions of Oslo resonated very well with the description of the compact city. Which made us certain about following the Oslo Brand strategy.

“It is like a small norway within norway. Because you have a bit of everything in the town. You have the fjord, the islands, the river, lake, and this and that. You can go skiing and maybe 20 minutes with subway you can be there. So that's my impression, that you can do almost everything.” (Male, 26 yrs from Mexico)



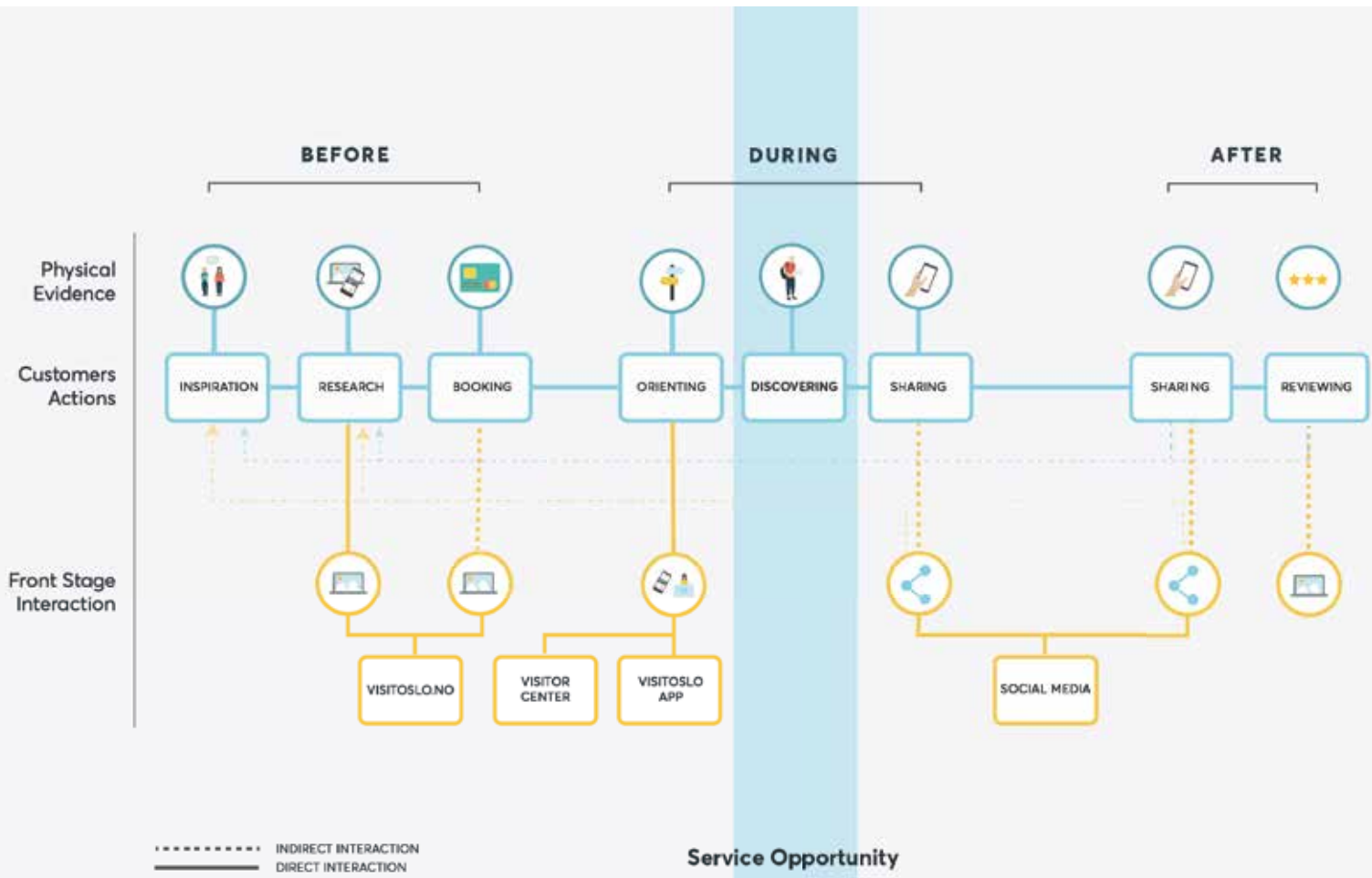
VisitOslo

The visitor center is one of VisitOslo's offerings during people's stay in Oslo. This center is related to planning and orientation. When we were observing at the visitor center, we noted that the visitors asked the employees for the Oslo Pass, a multi ticket for transportation and attractions. But also about directions on how to find the correct transport, or if they could walk to the places of interests. We noted that the visitors who asked about walking were usually the younger visitors. One 20-year old visitor saw this as a better economic option than the transportation fees.

The employees at the visitor center reported that young visitors requested advice on tourist-free places of interests, and where the locals hang out. The employees confirmed our observation about young visitors' need of walking, while older visitors request transportation. The VisitOslo employees impression of the travelers was that most did not plan their stay before coming to Oslo, but wished to get the essence of the city. Those who had planned their stay came to the center to get their choices confirmed by the staff. Since we knew about our target group's desire to walk around, we asked if they had any offers on Walking routes. They didn't have any official material, but they could provide a basic leaflet with tips from behind the counter.

“This target group (the young traveler) is looking for hidden bars; hidden pearls where the locals hang out.” (Employee, VisitOslo)

VisitOslo do not have any offers regarding the discovery part of the stay, which is a part that is favored by our users. We discussed this during a meeting with VisitOslo, where we told them about this potential. They were glad that we dared to attack the discovery part of the journey, since they see this part as a challenge for them to reach out.



VisitOslo workshop

At the workshop with VisitOslo we discussed how VisitOslo could enhance the experience of Oslo for young travellers. One of the ideas that we thought was valuable for our project was a concept, we called “the Walking Tourist Information” ; An Oslo Ambassador walking together with the tourist. This concept was closely linked to another concept we called “Real Time Communication”, where the visitor can spontaneously communicate with VisitOslo to get information or tips on place of interest.”

We worked with defining the personality traits of the new service delivered by VisitOslo. These were:

Inclusive: as in human oriented

Relevant: as in innovative and unique.

Warm and personal: to reflect authenticity.

These personality traits have been important for us when designing the new service experience.





Stakeholder workshop

During the stakeholder workshop, we discovered that there is mutual agreement between the actors, on the need for customized wayfinding signs in the city for visitors. There should be a combination of both physical signs and digital wayfinding tools, as VisitOslo pointed out that the young traveler use their phones for this. This led the discussion to the use of Google maps and places and it's advantages, like being accessible for everybody with a smart phone. A concept we co-created in the ideation reflected this topic: Wayfinding with real time updates.

Even though they all saw the need for better wayfinding, Wenche from Ruter pointed out travelers' need for random discovery. That travelers enjoy stumbling around in the city, and that even taking the wrong tram could turn into an adventure.

“It is almost enjoyable to take the wrong direction. (...) They (the visitors) are not so restricted in time, so it is not a crisis. It becomes an experience.” (Wenche Pedersen, Ruter)

Workshop users

At the workshop with users we ideated and co-created concepts. One concept was about a wayfinding service combined with self service. This service had interactive screen at the visitor center so that the user could choose his/hers own adventure based on different hints or questions. Then print the map, and go out in the city and discover the hidden treasures.

Another concept was the combination of Internet of Things and events. This concept involved using beacons to get information about the place the user is located in. A service that let you know that “something is happening here!” and then showcase different things like local music or poetry through sounds, images, videos or VR in real-time.



Service experience principles



Discovery



Authenticity



Compact city

Defining principles

Based on the initial research and insights gained from the workshops we defined three service principles to follow when designing for a new service experience:

Discovery: To offer an experience that let the users discover freely, without missing out on what is relevant to them.

Authenticity: To offer an authentic and real experience of Oslo, where our users can interact with locals.

Compact city: To emphasize the compact city, when it comes to geography, society, and its creative fields.

Ideation

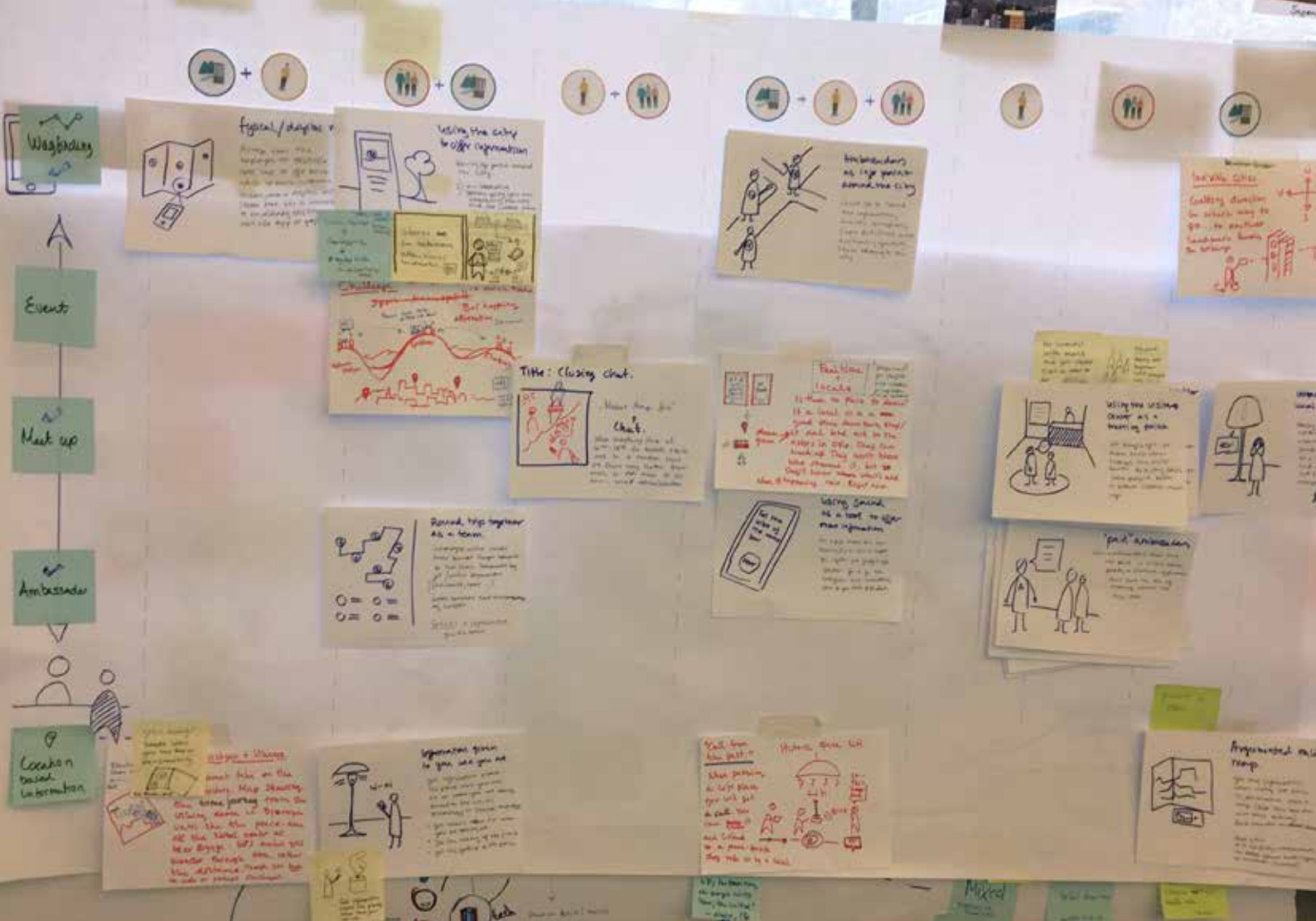
We sorted out ideas using a matrix, with categories describing the compact city on one axis and the main topics from the workshop on the other axis. The main concepts were within the topic of wayfinding, Meetups (between local and visitor), Location based recommendations, the Oslo ambassador and happenings.

We saw the most potential with concepts concerning of meet ups. Since this was something that was desired by both foreign user and VisitOslo. The only issue with this concept was that it required a big interest from locals. We therefore needed to talk to norwegians to figure out if this was something that would be feasible. In our initial tests of the concept, meetups was well received by Oslo inhabitants. But when we asked the Oslo inhabitants to take that step, hesitation and apprehension emerged. In the end we concluded that a service that facilitated for local/visitor meetup might be desirable, but not feasible nor viable. And in worst cases end with the visitor's disappointment when the local engagement didn't meet his/hers expectations.

“Initially I would not prefer to be in contact with local inhabitants, but to rather seek out to arenas to initiate contact if I want to.” (Male, 25 yrs from Oslo)

What is Chatbots?

Chatbots are in short robots sending and answering your messages. There are advanced AI chatbots like IBM Watson, but there are also basic chatbots curated for simpler functions like the CNN news bot. (Schildt, 2016) (See annex 4, p.6). A search on term chatbots in one of Norway's biggest financial newspaper, Dagens Næringsliv, shows that the faith in self learning machines as your personal advisor is on a quick rise. According to Gry Nergård, CEO for consumer policy questions at Finance Norway, Norwegians under the age of 30 have bigger faith in the usage of robots than the the rest of the population in Norway. (Bakken, 2017)



Final concept

Our concept is about enhancing the experience of Oslo for young travelers by facilitating walking paths that show off Oslo as a compact city where the user is guided to hidden treasures by a local chatbot. This posed several practical questions: Which walking paths shows off the compact city by foot? Where do the chatbot get local knowledge from and how do the chatbot know what the young traveler wants? And how will the chatbot be able to give information at the right place, at the right time?

Pathways

We began by exploring different walking paths in Oslo. From our user research Akerselva, a main river in Oslo, was often mentioned as a treasure of Oslo. We found that this showed off Oslo's compact geographical qualities in less than three hours. The pathway along the river is facilitated to meet needs such as wheelchair usage. The flowing river is easy to follow and acts as a natural wayfinder. However, we identified four different wayfindings signs along the way, and none of them in English.

After testing our service walking down the river with users, we investigated one of the user's social media and found that she had independently documented and shared her journey with her social network:

“I have never walked this path. I feel like I have seen a whole new side of Oslo!”

(Female, 21 years from Oslo)



Location based information

For location based services we research the use of beacon technology and Geo Fencing. We did most of our research online, but we did not get any real substance before consulting chief technology officer (CTO) Pål Rønning, at Making Waves. We conducted a meeting with Rønning and three other consultants to discuss the feasibility of a location based service and we were advised to use geo fencing as the enabler for our service.

Local knowledge

So where would our chatbot retrieve local knowledge? We consulted our research on local knowledge, and we considered Google as an opportunity. From our actors workshop we had already discussed the advantages of Google, and from our user interviews we knew that the target group googles information on what to do and where to go. To proof check this we gathered feedback from our expert group concerning their attitude towards the Google brand, but did not identify any apprehensiveness toward this corporation.

Basic chatbot

We were advised by Making Waves to consider basic chatbot without artificial intelligence. If we were to curate an experience along Akerselva the technology behind a basic chatbot would be feasible today. Since the basic bot lacks AI, the main challenge is to facilitate for a conversation between user and chatbot. In our experience with testing out several of the basic chatbots, it was very time consuming to type questions and frustrating when the chatbot did not understand the questions. This interaction would take away valuable time from the user (especially for those that do not have English as their first language) when they should be exploring and discovering a new place. So we iterated on predefined questions and answers to smooth the interaction between the user and the chatbot.

Chatbot personality

When we asked our users what the chatbot should act like, our users expressed that they wanted it to be practical. One of our users said: “I want it to be fast, not over do things, not like “Are you having a nice day?” (...) Just tell me, cause I know it is not a real person, so I don’t want them to act as a real person with feelings” (Female, 29 yrs from Iran). And when we asked her how a Norwegian chatbot would act like, she answered; “I think it will act exactly as I want. Cause I think Norwegians don’t give out information when you don’t ask them, but when you ask them, they give the right information right away” (Female, 29 yrs from Iran).

This impression of Norwegians matched with the rest of our foreign users. They view Norwegians as hesitant to seek out conversation. But when you get to know them they do come across as quite warm.

“I think they are really nice people and warm people. I had this expectation; I am going to Norway and it is in the north, and people are going to be different from us or from me, and they are going to be distant, cold and reserved, but it was completely different.” (Male, 26 yrs from Mexico)

The two users that we tested the experience with through service prototyping, expressed that they wanted the chatbot to take more initiative in the beginning, so that you get to know the chatbot before starting the journey. But later in the journey they thought that the chatbot should not be too visible except when they wanted help with something.

“I need this kind of service when I am in a new city, I have walked a lot, and I get tired, I am tired of googling. I want someone to tell me like for example where is the nearest good restaurant I can find.” (Female, 29 yrs from Iran)



05

Design proposal

We will now present our final design proposal, The Oslo Experience. This is not a finished developed solution, and we have not solved every detail of our service. Our focus has been on the young traveler's experience of the service journey in the stages of before, during and after, as well as how this would be enabled backstage for VisitOslo.

- 56** Proposal
- 58** The Experience
- 64** Key features
- 75** Backstage
- 82** Reflections

Service proposal

The Oslo Experience is a service delivered by VisitOslo, where young travelers can discover the compact city. By getting to know the authentic traditions and life of the locals (the Oslofolk) freely, without missing out on experiences that the individual traveler finds relevant for him or her.

The service is based on different walking paths in Oslo, that all represents the compact city. Each pathway are divided into different zones, representing an area. Information about each area will be available on the app as well on physical wayfinding signs.

A local chatbot named Sara, will function as a personal Oslo guide along the journey. The chatbot will have the behavior of a typical Norwegian, and will be able to tell the user about the Norwegians' cultural expression. The chatbot will also give the users relevant tips on areas to discover and what to do in that specific area. This will be based on the user's preferences, that he/she has submitted before the journey.

Walking paths

One of the walking paths that will be able to show off the compact city, is the walking path along Akerselva. The river path is frequently used by locals and it is connected with several "city areas" that all have something unique to offer.

VisitOslo is responsible for selecting suitable walking paths that all represent the geographical compact city (nature, urban, and waterfront). These pathways should be tried out by a team from VisitOslo who knows Oslo well and can define correct description of each area.

A map of the Akerselva river in Oslo, Norway, showing its course through the city. The river is highlighted in orange and divided into seven distinct areas. The surrounding city streets are shown in light grey, and the water bodies are in light blue. The river flows from the top right towards the bottom left, eventually emptying into the fjord.

**The pathway of Akerselva
is divided into 7 areas;**

1. Maridalen
2. Nydalen
3. Bjølsen
4. Sagene
5. Grünerløkka
6. Vaterland
7. Bjørvika

The experience

We would now present the service journey shortly through the user's perspective, before moving into the service's key features.



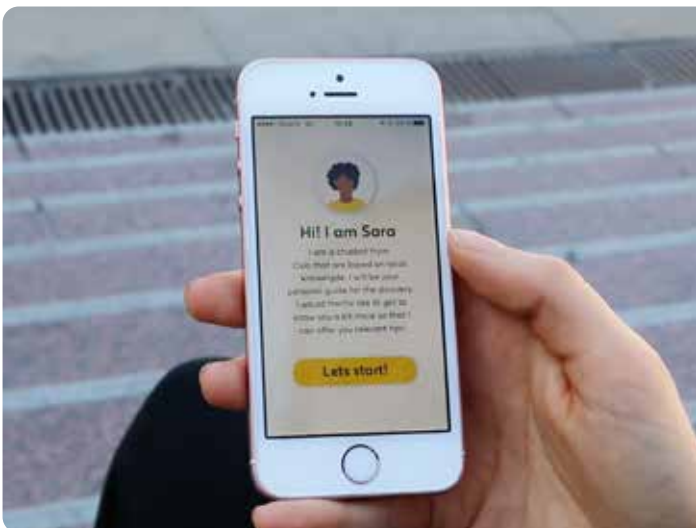
1. Teaser at Oslo Airport

An interactive info screen at the airport will give the user an introduction to VisitOslo and Sara through a chat format. The user can ask Sara for help regarding transportation and directions.



2. Info at the visitor center

More info about the Service is to find at the Visitor center (in from of communication with staff, info screens and a printed folder) and at the visit Oslo webpage.



3. Getting to know Sara

Before getting started, Sara will let the user know that she is a chatbot from Oslo based on local knowledge, and that she will be your personal guide.



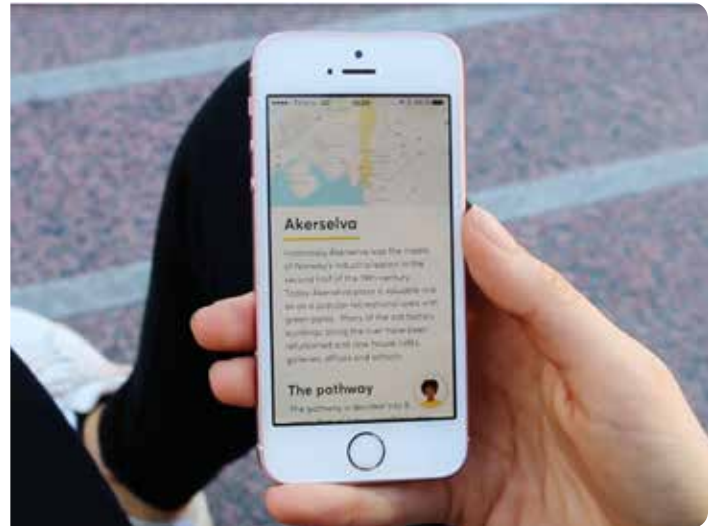
4. Deciding on moods

To be able to offer personalized tips, Sara would like to know what kind of moods the user prefer such as hipster, historic and lively.



5. What Sara needs to know

Sara would also like to know if the user has any special needs, for example if the user is a vegetarian or a wheelchair user.



6. Info about the pathway

After answering these questions, the user will get an overview of the pathways as well as information about transportation, duration of the journey and the weather.



7. Smalltalk at the bus

While sitting on the bus Sara will initiate a conversation about Norwegian culture and behavior, so that the users are prepared for interactions with Norwegians.



8. Arriving at Frysja

After the short bus trip, the user is ready to discover the compact city.



9. Following the river

The main activity is to follow the river.

10. Info about area

Along the river the user will encounter wayfinding signs letting the user know that he/she is in a new area. More info, with Instagram pictures and moods is to find on the app.



11. An area match

When the user enters an area where the area's moods matches completely with the user's chosen moods, Sara will notify the user and advise him/her to discover that area.

12. Getting directions

After deciding if he/she wants to discover an area the user will receive directions on which paths to follow.



13. Discovering an area

When the user has moved into the area, the user is ready to discover the area independently by themselves or by the help of Sara.



14. Asking sara for tips

If the user wants help from Sara, he/she can ask Sara for tips on what to do or where to eat or drink. Sara may tell the user fun facts, for example about Norwegian drinking culture.



15. Guided to local treasures

With the help from Sara the user is guided into local treasures where he/she will be able to interact with locals.



16. Back to the river

After discovering an area for a while the user returns to the river where the journey continues.



17. Directions to Bjørvika

At Vaterland, where Akerselva continues under the ground, the user needs to be guided in the right direction towards Bjørvika.



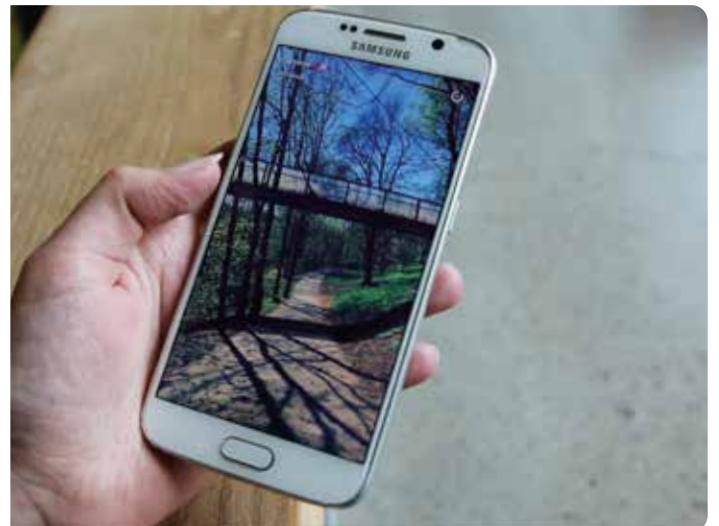
18. Ending up at Bjørvika

The journey ends at Bjørvika where the river flows out into the fjord.



19. Summary of the journey

When the journey is finished the user will receive a summary of his/hers journey with admiration from Sara.



20. Sharing the experience

The user shares their experience with their friends on social media or face to face. The summary may be used as a conversation tool.

We will now go key features of the service

Info screen at Oslo airport

The info screens at the airport function as a service teaser, where the user can get to know Sara and VisitOslo a little better. Sara will then offer the user relevant and site specific information. The user can ask for information about transportation and location, so that he/she knows how to get to the central station and VisitOslo's visitor center. The Oslo airport is strategic place for VisitOslo to be presented, since the airport is the starting point of many Oslo vacations. It is a great opportunity to make travelers aware of VisitOslo, what they offer and where they are situated. Subsequently, it will also make the user curious and intrigued about "The Oslo Experience".

Wayfinding signs

We are suggesting an upgrade of the wayfinding signs along Akerselva. The existing signs which points in two directions (Maridalen and the city center) are all in Norwegian. To meet the need of an international city we propose that Oslo municipality, VisitOslo and Akerselvas venner (providers of today's signs) work together to create new and better signs. The signs should be in English, and illustrated with icons to make them universal. In addition to the signs with directions, it is essential for our service that the different areas along the pathway are marked with an area sign.

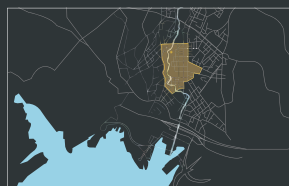
Non-digital alternatives

The service should also be available without a digital device (the phone). Even though VisitOslo wanted help in reaching young travelers, VisitOslo and Oslo should be for everyone. Physical folders with a description and map of the pathway is a non-digital alternative, together with updated wayfinding signs.


Maridalen
 3700 m

City center
 2000 m
 

infopoint 05



Grünerløkka

Grünerløkka lies on the east side of the river, behind the old industrial buildings. Here you will discover numerous of little cafés, restaurants and bars.



Akerselva

Historical Akerselva with the coast of former industrialization in the second half of the 19th century. Today, Akerselva plays a visible role as an urban recreational area with green parks. Many of the old factory buildings along the river have been established and now house cafes, galleries, offices and schools.

The pathway is divided into 7 zones that all have something unique to offer. For each area there will be a refreshing sign as well as more info here in the app.

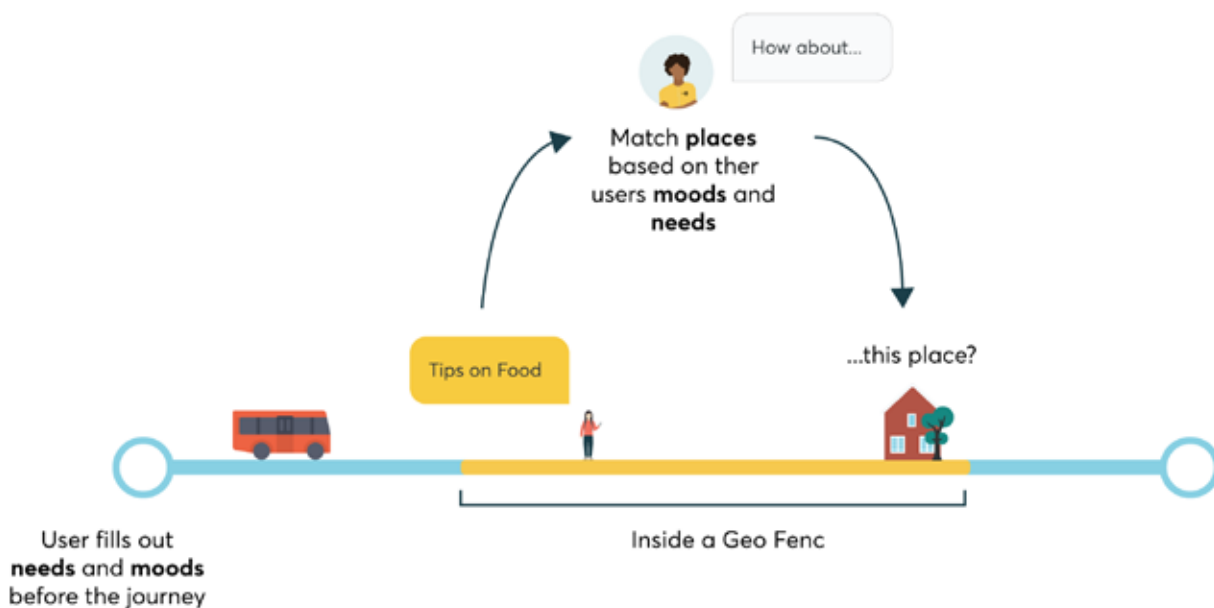
- 1 Maridalen
- 2 Nydalen
- 3 Bjølsen
- 4 Sagene
- 5 Grünerløkka
- 6 Voksenland
- 7 Bjerrika

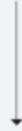


Digital Experience

Even though we want to facilitate for people not using digital devices, the optimal experience is achieved by using the app. The user will then get a personalized experience along the way, with relevant tips and more in-depth information.

An essential part of the app is the chatbot Sara, who is the user's travel companion through the compact city. The user have, at the beginning of the journey, filled out moods he or she wishes to experience and any needs Sara must take into consideration. By matching these moods with the area's moods, Sara guides the user to a place of interest that matches the user's moods and needs (vegetarian, wheelchair usage). These personalized recommendations is delivered based on the user's specific location. Personalized recommendations are important to the young travelers as he or she seeks out places where they can get a sense of belonging.





Choose moods she want to explore



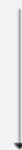
See if she is matching with the area she's visiting

Grunerløkka:



Tips on Drinks

Ask Sara for tips while out discovering the area



Sara's recommendations of nearby places matching the user's moods and needs:



Vespa & Humla

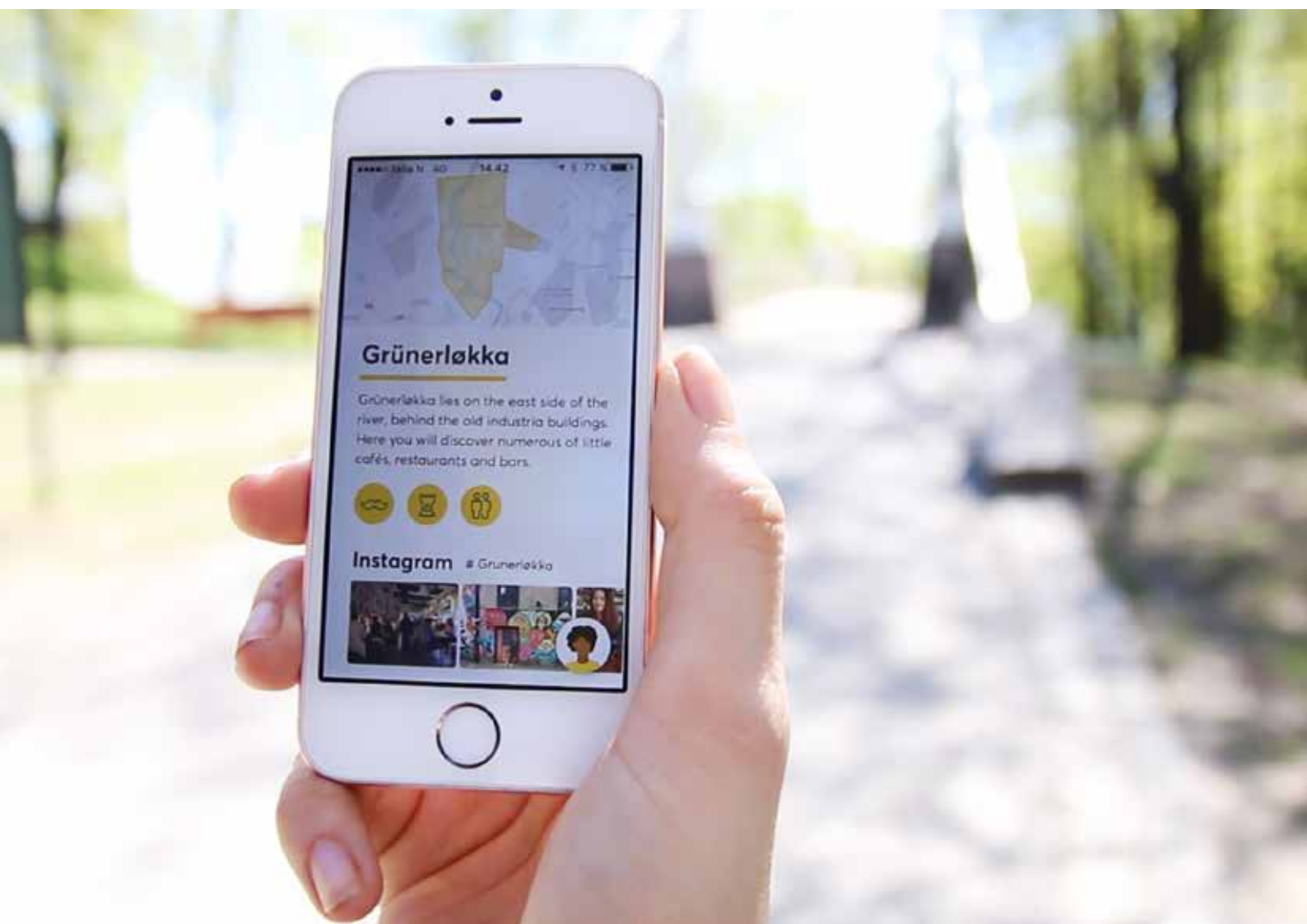


Høse Loviasas
hus



Blå







Hi Caroline! Please let me know if you need some tips :)

Food



There are many good places to eat nearby. I think you would like one of these:



Vespa & Humla



Fru Hagen



Do you want some fun facts about Norwegian food culture? :)

Tell me more





Sara, the Oslo Ambassador

We wanted her name to be a typical Oslo name, and Sara is the third most popular name in Oslo. (Statistisk sentralbyrå, 2017) Her tone of voice is consistent, so that the user always knows what to expect when interacting with her. Sara’s personality is friendly, polite and down to earth, and when addressing the user’s needs she phrases her responses in an inclusive and easy-going manner. This is essential to maintain a universal approach, and not alienate minorities such as disabled users. These traits are based on our interviewees’ impressions of the Oslo inhabitants.





Talkativeness


To not come across as a noisy app with too many push notifications, we leveled out Sara’s talkativeness over the journey based on feedback from the service prototyping. See graph above.

Small talk

Sara has a domain of curated fun and practical facts to deliver during small talk with the user. To request these facts, the user push the Tell me more-button in the chat. Sara informs the user of Oslo’s cultural expression: The cultural codes, myths and ideology. These fun and practical facts are inspired by the “The Xenophobe’s Guide to the Norwegians” for this project.


Tell me more

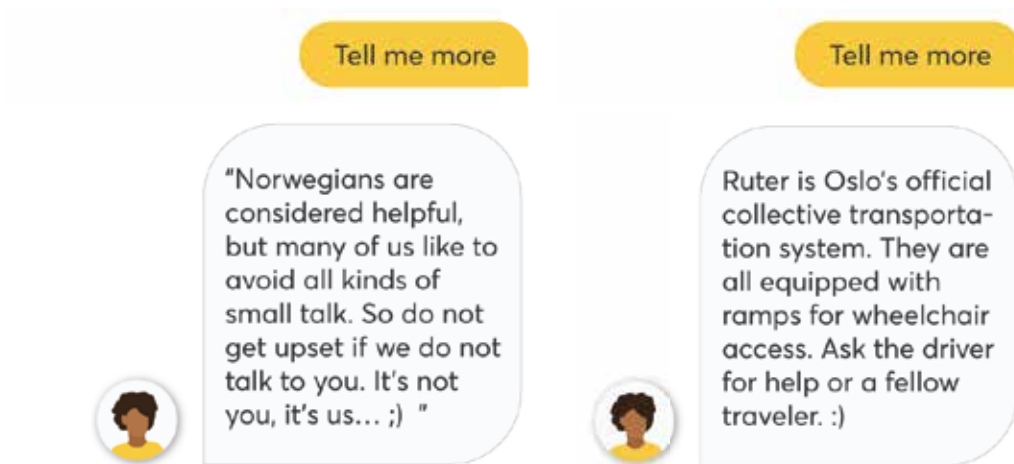
"The Norwegians put practicality before everything else! That is why there is no problem to dress for a mountain hike in the morning and wear the same clothes to the bar in the evening.



Tell me more

If you’re here on a weekend you’ll notice that the cafés and bars are almost overbooked. We Norwegians, have a strong culture and tradition for coffee, and drink more coffee per capita than any nation, except Finland.





Content of a conversation

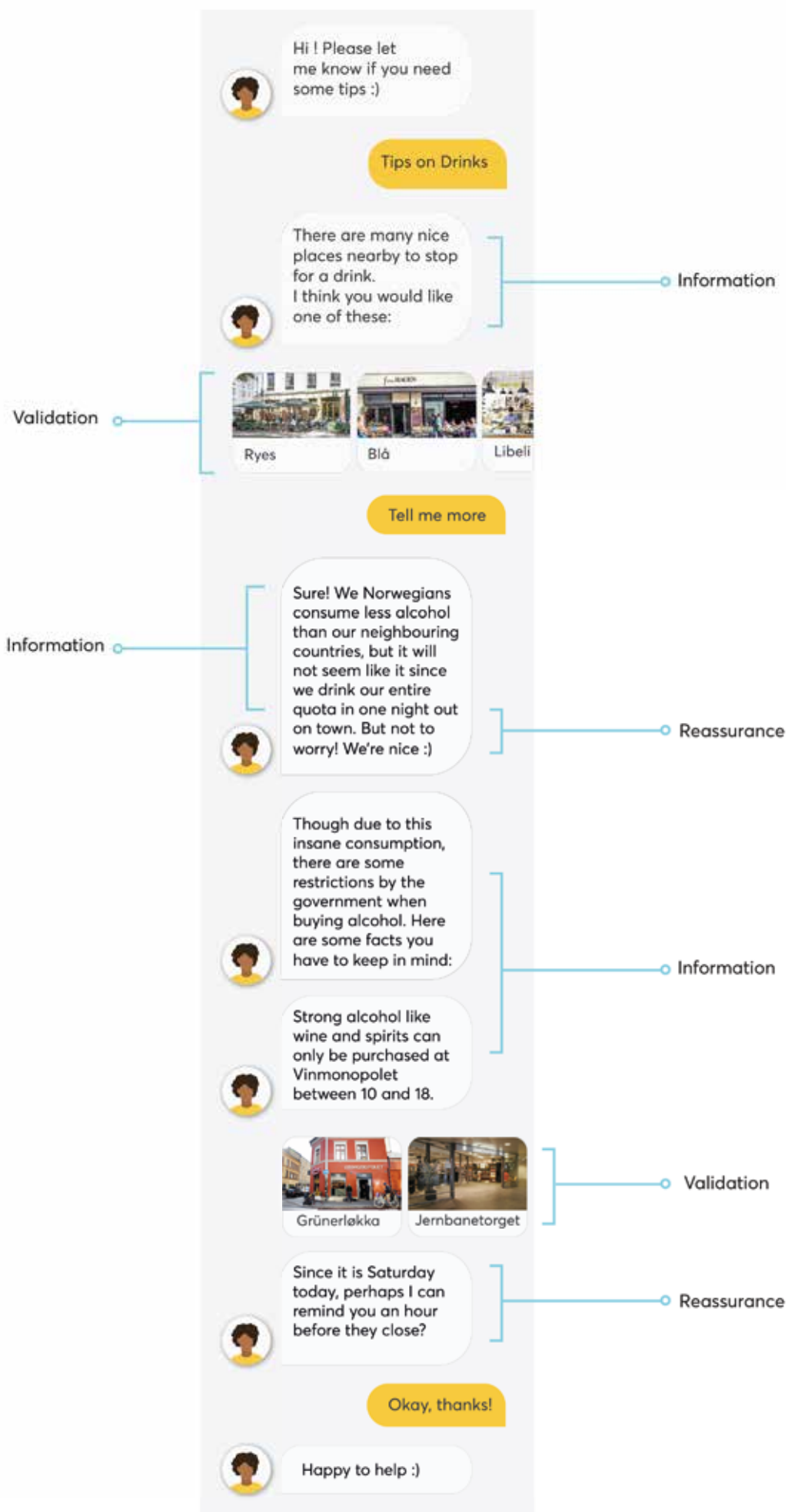
A conversation with Sara consists of information, reassurance and validation. We used the service personality traits that we agreed on at the employee workshop to govern how these features are delivered:

Information should be relevant, inclusive and fact-driven.

Reassurance should be delivered in a warm and personal tone. The chatbot should be perceived as a friendly local the user can trust.

Validation of Saras knowledge is given through real time updates with Instagram pictures, since these target groups want uncurated pictures of a place of interest.

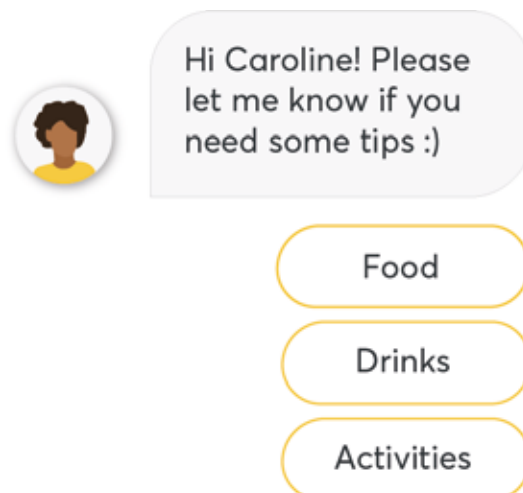
Sara is basic chatbot (see p. on basic chatbots), which means that Sara is limited by programming rules, we saw it as necessary to simplify her responses.



Interface of the chatbot

Sara is a basic chatbot. This means that Sara is powered, but also limited by rules, and consequently designed for fixed purposes. (Schlicht, 2016) In our meeting with consulting chief technology officer (CTO) Pål Rønning at Making Waves, he reckoned that a basic chatbot would be sufficient for a curated route. But a basic technology also means that the programming behind Sara is what governs her behaviour. Thus, we looked at how we could design a conversation between the user and the chatbot.

As shown in the illustration, the chatbots interface have buttons for predefined answers for the user to smooth the interaction between the user and the chatbot. In our experience with testing out several of the basic chatbots, it was very time consuming to type questions and very frustrating when the chatbot did not understand the questions. This interaction would take valuable time away from the user (especially for those that do not have english as their first language) when they should be exploring and and discover a new place.



Backstage

For the user, the overall expression of the digital service should be intuitive and simple. But behind the mask there are quite a lot of ends that need to be met to get this service up and running. Here is our suggestion for how the front end service can be solved backstage.

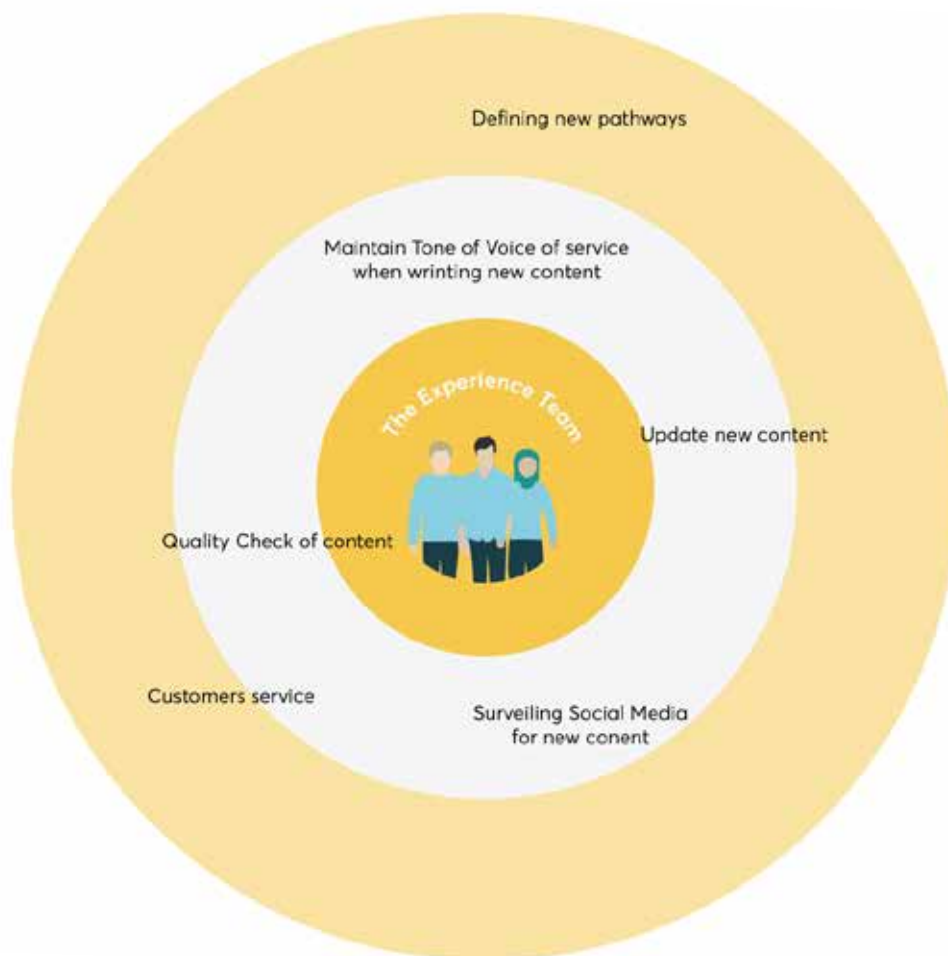




The Experience Team

One of the biggest backstage support for the service is the backstage team working on the content. This team is called the Experience Team, and their main task is updating the moods and needs on areas and places in Oslo. The Experience Team's task is to be on the lookout for new places in Oslo and label them with fitting moods. When the Experience Team investigates a place of interest, they define the atmosphere of the place by observing, interviewing and register whether or not if the place covers special needs like vegetarian food, unisex bathroom or wheel chair access. They also check the reviews on Google Places to get insights on the locals attitude towards the place. The Experience Team also quality checks the content of the database Sara is using. They are also monitoring the Instagram feed, in the same way the visitor center monitors the live Instagram feed on their premises. The investigation of places, the quality checks and monitoring of the service content is necessary to curate and maintain the quality of Sara's local knowledge, so that she can distribute relevant information for the users. We suggest that this team is a composition of employees, both from the front stage and the administration. The most important trait is that they all have a big passion for Oslo.

Task of visitOslo's Experience Team

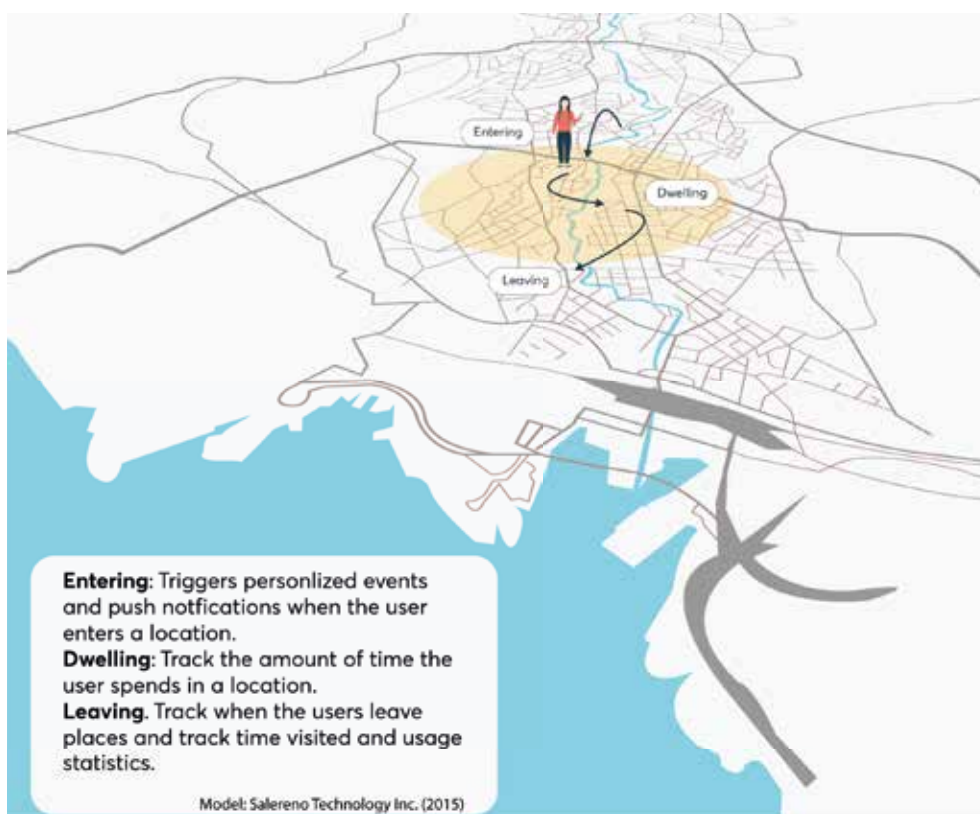


Wifi

This is a service and app that requires wifi, but using wifi abroad can be expensive. In April this year (2017) EU decided to offer free roaming in all of Europe. (Europa.Eu, cost model, 2017) For travelers from outside Europe, we suggest that VisitOslo can rent out pocket wifi to their visitors. This is something that we have discussed with VisitOslo, and their response was positive. The visitor center is strategically placed at Østbanehallen next to the central station, which makes it easy for people to stop by and pick up their pocket wifi and deliver it back after use.

Location Based Services: Geofencing

The young traveler is concerned about missing out on relevant experiences. To ensure that Sara's recommendations are relevant to the area, the walking path is supported by a Geofence: a virtual perimeter for a real-world geographic area. When the user enters a Geofence, he or she will be able to receive relevant information about that area while dwelling there and until leaving. To receive data within a Geofence, the user needs a wifi connection and this is achieved through pocket wifi or free roaming. When deciding on which location based technology to use, we conducted a meeting with consulting chief technology officer (CTO) Pål Rønning, at Making Waves. We discuss the feasibility of location based services such as Beacons and Geofencing, and we were advised to use Geofencing as the enabler for our service since beacons are high in maintenance. which makes it easy for people to stop by and pick up their pocket wifi and deliver it back after use.



Value networks

Wayfinding

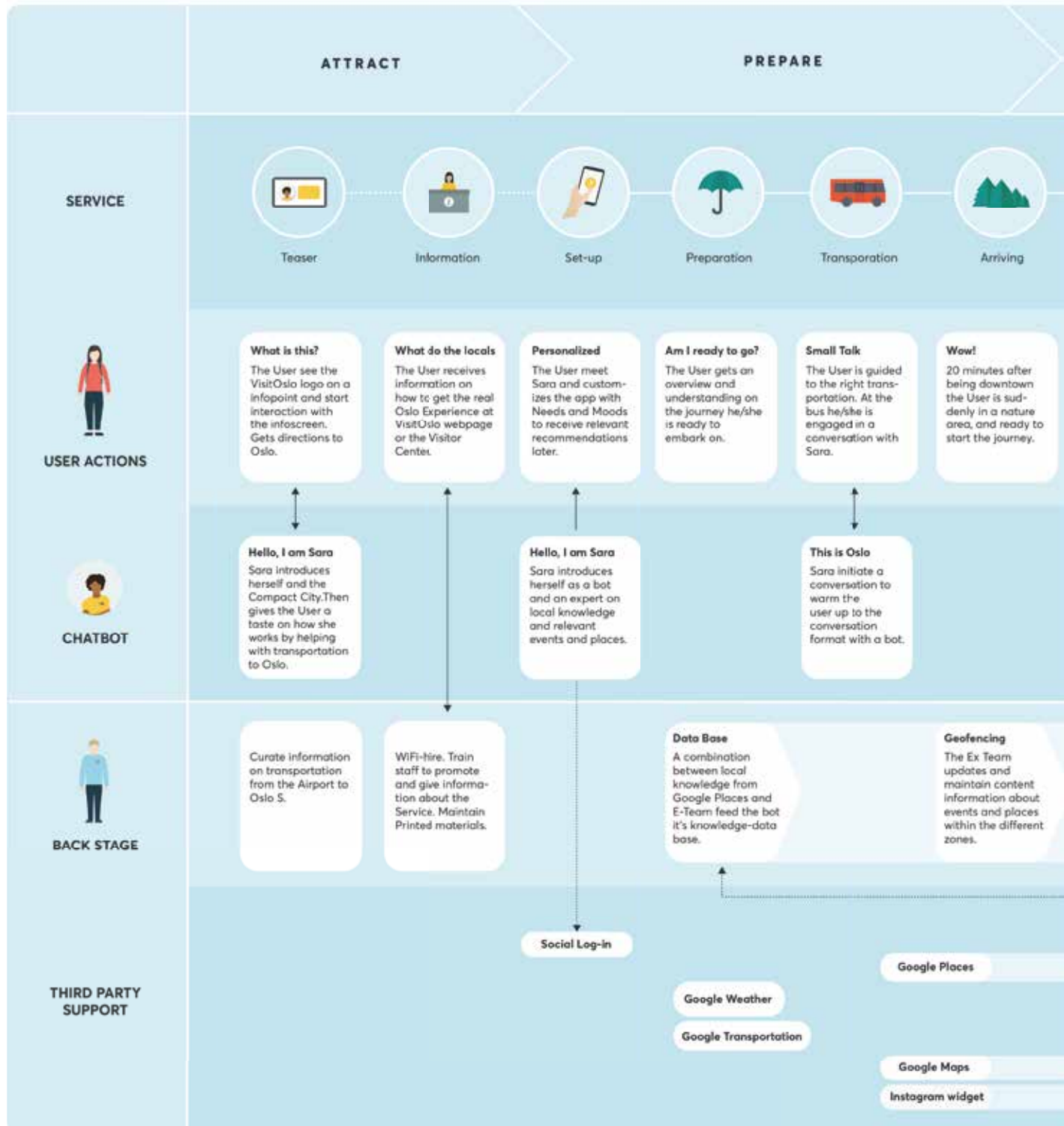
To achieve a seamless wayfinding experience there are two sets of wayfinding signs along the river, to guide the user and inform of areas nearby. VisitOslo are part of a value network who collaborate on these signs so that all interests are covered. This creates less noise along the path way, as we found four different versions of the signs along the river.

information

Sara retrieves information such as picture feeds, directions, position of a place of interest and the weather forecast from the open Application Programming Interface. These features are displayed in the app. We designed this service with Google and Instagram and the main sources of Sara's content. The app display these features which are imported via open API's or purchased packages/deals (See annex 4, p.5) . In the meeting with VisitOslo we found that they already use Google and Instagram as information sources for their webpage and screens at the visitor center. We see this cooperation as a value network for the service's digital content. From our user interviews we knew that the target group googles information and checks the latest Instagram updates on what to do and where to go. For our final decision on using Google, we gathered feedback from our expert group concerning their attitude towards the Google brand, but we did not identify any apprehensiveness toward this corporation.

Service blueprint

For originale size see annex.



DISCOVER

MEMORY



Wayfinding

Produces and maintain the wayfinding signs and updating them with relevant information to be used by both advanced and less advanced users of the route.

Analyzing data

VisitOslo will be using data from the app usage to track trends and behavioural patterns for their users.

Feedback loop

Google Timeline

Google Transportation

Reflections

Further development: Responsive websites and AI

During our concept development, we looked at possibilities for Sara to be reachable through other services, like Facebook Messenger or WhatsApp. Though we concluded that for the sake of inclusiveness (not all of us are part of social media network), VisitOslo can consider a responsive website to enable the service. Responsive websites are growing in the same phase as the mobile web and digital wearables, and therefore considered a viable business solution for the Oslo Experience. (Moss, 2015) We would also like to see Sara as a more advanced travel companion. In some years an upgrade of could be conducted of Sara: from a basic chatbot to an AI chatbot. She will then be able to help out with much more than her curated personality with tips and tricks. The user will be able to write her, without worrying about spelling mistakes, and Sara would get to know the user through their conversation and adjust her answers for an even more personalized experience of Oslo. (Schlidt, 2016)

Reception from VisitOslo

We have presented this service journey for visitOslo, and gotten positive response. Their impression was that the service was coherent and well thought through. VisitOslo see our service proposal as something completely new and innovative. This is a service that they think is feasible, as long as they put resources into it. They thought that the service was in line with all the strategies (VisitOslo, the Oslo Brand strategy and Oslo municipality's strategy.)

“Very well thought through. You have taken in consideration everything we have told you. Everything is in line with strategies.” (Pia Eriksen, VisitOslo)

Desirability, Viability and feasibility

Desirability

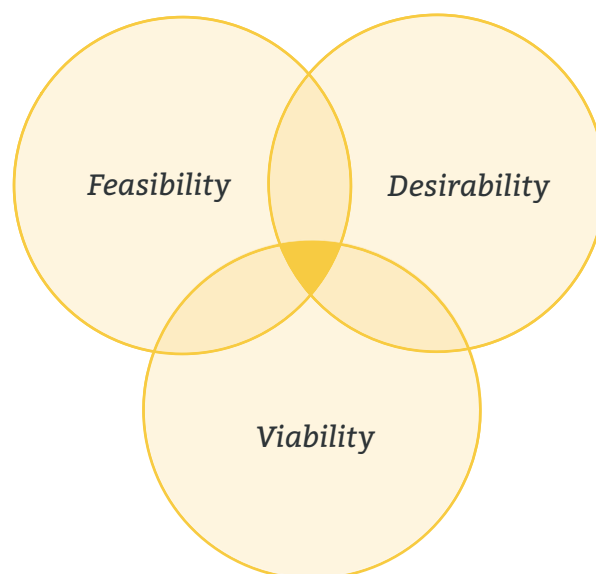
The users, the young travellers have been at the center of the process. This in combination with positive feedback from our users, convinces us that this service experience is desirable for our users.

Feasibility

The technology behind this service suggestion is based on already existing solutions and offerings. Though the combination of chatbots, geofencing and app is something we have not come across in our research, the meeting at Making Waves provided us good indicators that this combination would be technical feasible.

Viability

The service have taken in consideration both VisitOslo strategy and Oslo Brand Strategy. Visit Oslo wanted help reaching young travelers, facilitating for good Oslo experiences and delivering a new service. This are all things that we have answered designed a totally new service that enhances young travelers experience of Oslo.



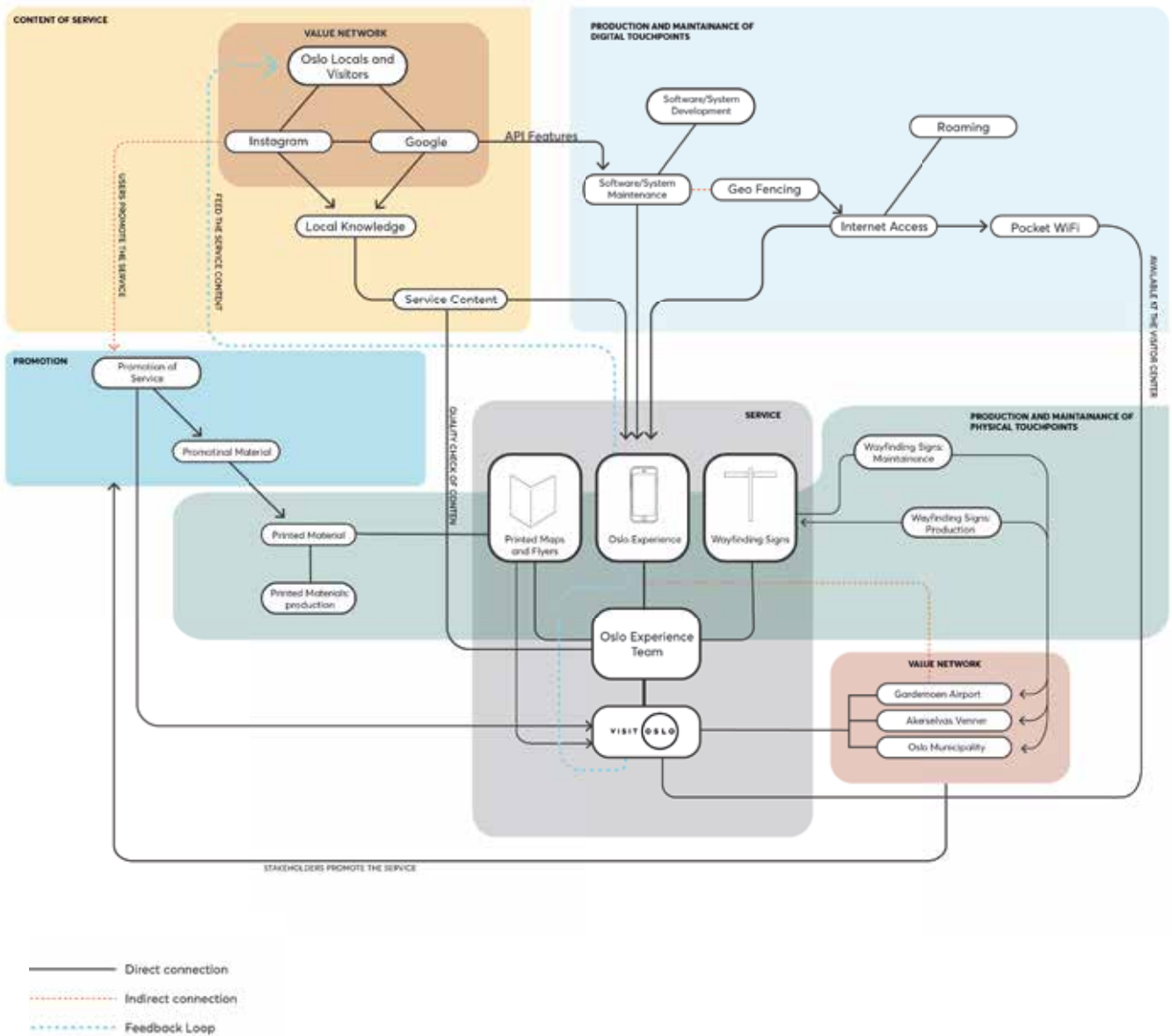
Economy

When reflecting upon our service from an economic perspective, we know that young travelers today rely on accessible information in meeting with a new culture. We therefore reckon young travelers part of the information society, which is a society “where the creation, distribution, use, integration and manipulation of information is a significant economic, and cultural activity”.(Information society. 2017, March 29) Its main drivers are digital information and communication technologies. (Network economy. 2017, February 15)

In the information society there are economic systems, and we found the branch Network Economy interesting. This means that products and services are created and value is added through social networks operating on large or global scales. In the network economy a key point is to identify value networks to gather a certain amount of knowledge. (Network economy. 2017, February 15)

In our systems map of Service Enablers we see that creating and maintaining a service such as the Oslo Experience relies on thoroughly structured networking. We therefore see The Oslo Experience App as a potential contributor to the network economy. For VisitOslo, these value networks can be used in analyzing and understanding user patterns during their discovery phase, to model new strategies that would benefit Oslo as a destination.

The Oslo Experience enablers





FAMILIAR SOUNDS

BOARDING

POINT OF DEPARTURE

IN



IN



18/5/14



06

References

.....

Here follows our reference list of the literature, reports and websites we have user in our project. And the overview of our report's annex, which consists of process pictures, detailing of research, maps and blueprint.

.....

- 88** References
- 90** Annexes
- 91** Acknowledgments

References

All photography and illustrations are the property of Marie Løken and Marthe Christensen, if not stated otherwise in the photos.

Literature

Clatworthy, Simon. How to design better services. (2014). Oslo:

Arkitektur- og designhøgskolen i Oslo

Elloway, D. (2016). Xenophobe's guide to the Norwegians. London:

Xenophobe's guides.

Holt, D., & Cameron, D. (2010). Cultural strategy: Using innovative ideologies to build breakthrough brands. Oxford University Press.

The field guide to human-centered design: design kit. (2015). San Francisco: IDEO.

Reports

Innovation Norway. (n.d.). Key figures for Norwegian travel and tourism 2015(Rep.).

Innovation Norway. (2016). Innspill til en ny retning for Norge - Drømmeløftet 2016 (Rep.).

Innovasjon Norge. (n.d.). Håndbok for reisemålsutvikling (3rd ed., Rep.). Innovasjon Norge.

ITB. (2016). ITB - World travel trends report 2016/2017 (Rep.). Berlin: Messe Berlin GmbH.

Visit Oslo. (n.d.). Årsberetning 2015, (Rep.).

Statistisk sentralbyrå. (2012). Norsk turisme (Rep.). Statistisk sentralbyrå.

Websites

Bakken, Jonas B. (2017, April 26). Skal lære roboter folkeskikk. Retrieved May 13, 2017, from <https://www.dn.no/nyheter/2017/04/26/2048/Finans/skal-laere-roboter-folkeskikk>

Europa.Eu. Mobile roaming costs. (n.d.). Retrieved May 13, 2017, from http://europa.eu/youreurope/citizens/consumers/telecoms-internet/mobile-roaming-costs/index_en.htm

Halogen. (n.d.). Havnepromenaden. Retrieved January 31, 2017, from <http://www.halogen.no/en/references/havnepromenaden-2/>

Meltzer, H. (2016, November 17). Airbnb launches trips tours and experiences with local experts. Retrieved January 31, 2017, from <http://www.telegraph.co.uk/travel/news/airbnb-launches-trips-tours-and-experiences-with-local-experts/>

Millord, M Millennial mindsets, part 5: Sharing is caring, especially for the modern traveler. (n.d.). Retrieved January 24, 2017, from <https://www.sabre.com/insights/millennial-mindsets-part-5-sharing-is-caring-especially-for-the-modern-traveler/>

Moss, Ben. The future of responsive web design. (2015, March 25). Retrieved May 13, 2017, from <https://www.webdesignerdepot.com/2015/03/the-future-of-responsive-web-design/>

Network economy. (2017, February 15). Retrieved May 13, 2017, from https://en.wikipedia.org/wiki/Network_economy

Oslo Brand Alliance. (2016). Oslo brand box. Retrieved January 11, 2017, from <http://www.oslobrandbox.no/>

Porges, S. (2016, November 22). Airbnb's Cofounder Opens Up About The Company's New 'Experiences' Features. <http://www.forbes.com/sites/sethporges/2016/11/22/airbnbs-cofounder-opens-up-about-the-companys-new-experiences-features/#78c48b1763be>

Schlicht, Matt. (2016, April 20). The Complete Beginner's Guide To Chatbots – Chatbots Magazine. Retrieved May 13, 2017, from <https://chatbotsmagazine.com/the-complete-beginner-s-guide-to-chatbots-8280b7b906ca>

Kommunefakta Oslo. (n.d.). Retrieved May 14, 2017, from <https://www.ssb.no/kommunefakta/oslo>

Statistisk sentralbyrå. (2012). Norsk turisme (Rep.). Statistisk sentralbyrå.

Wong, K. (2016, December 13). How Millennials And Gen Z Transformed Tourism Marketing Through Sharing. Retrieved May 13, 2017, from <http://www.forbes.com/sites/kylewong/2016/12/13/how-millennials-and-gen-z-transformed-tourism-marketing-through-sharing/#3b2a016ca736>

Salentro Technologies Blog. (n.d.). Retrieved May 14, 2017, from <http://blog.salentro.com/>

Annexes

1. Service Blueprint
2. Empathy Map
3. Systems Map: The Oslo Experience Enablers
4. Process pictures

All material in our annex is available in the digital version of our report.



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End

