



Heart To Heart

Exploring the potential of improved blood donation
experiences through service and interaction design

Name: Kevin Ehrenberg & Adelin Gashi

Supervisors: Kaja Misvær Kistorp &
Lars Marcus Vedeler

External supervisor: Caterina Forno

Field: Service and interaction design

Abstract

Heart To Heart is a service and interaction design diploma project that explores how design can improve different aspects of blood donation in Norway, ultimately to address the constant need for new donors. We have uncovered eight key findings that form the basis for our designs. The end result is a series of prototypes across an improved user journey, with a focus on facilitating meaningful and seamless blood donation experiences. In addition we consider what organizational developments such solutions might require. The aim is to contribute to advancing the conversation around the ongoing digitalization of blood donation in Norway.

Table of content

01 Introduction	04	05 Re-scoping	60
Motivation	08	The whole donor journey	62
Approach	11	App as the red thread	64
Methods	12	Digitalization	67
Background	15	Defining goals & values	68
02 Gathering insight	16	06 Prototyping & testing	70
Desk research	18	Prototyping	73
User research	22	Testing and iterating	76
03 Findings	28	07 Final proposal	82
Analyses	30	User journey	84
Key findings	31	Digital solutions	94
04 Ideating & co-creation	48	Feedback	118
How might we	50	08 Taking it further	122
Co-creation workshop	52	09 Conclusion	128
Nudge card ideation	56	10 Reflections	132
		Thank you	137
		References	138



01

Intro- duction

Among the countless topics to choose from, this chapter presents why we wanted to work with blood donation for our diploma project, our motivation and approach. We conclude the chapter with an overview of methods used, as well as background information about the topic.

Motivation

You have somewhere between 4 to 6 liters of blood in your body (Norwegian Red Cross, n.d.-a). Half a liter of this can be enough to save three lives (Norwegian Red Cross, n.d.-b). Every day, the small sacrifice of time and energy that blood donors make means everything for somebody else.

We believe there is an untapped resource of people willing to donate blood that for some reason never have. Having never donated blood ourselves, we could relate to this and began wondering why this was the case. Curiosity about this sparked our interest in exploring the topic.

Our greatest motivation has been to use our diploma as an opportunity to make a difference. As a voluntary activity, blood donation is highly dependent on positive user experiences. It is a complex and intriguing issue and the more we looked into it, the more we could see the potential that design could hold for making valuable contributions in this field.





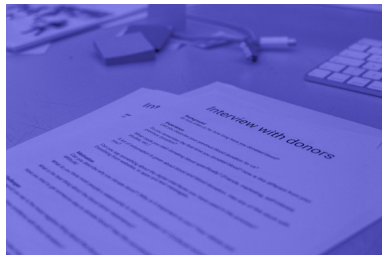
Approach

This diploma has been an explorative, donor-experience-oriented process where extensive insight work has provided the foundation for iteration and testing towards the final design delivery.

With a focus on exploring the service from the donor point of view, we also made sure to actively involve the blood bank staff and secondary users like non-donors. This is because we wanted to approach the topic on multiple levels and include perspectives from everyone involved.

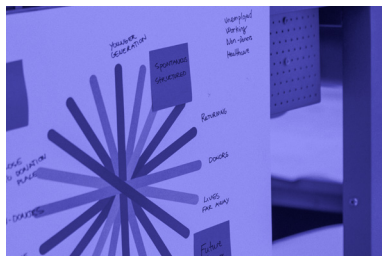
As a service in the process of being digitalized, blood donation is particularly relevant for a cross-disciplinary interaction and service design approach. Initially we had imagined a process where working with service design would form a basis for us to build upon with interaction design. The reality has been a more integrated and cohesive process than this simplified outline, and has borrowed from the two disciplines to various degrees throughout.

Methods



Interviews

Structured conversations with stakeholders to reveal various experiences and understandings



User-compass

Visual tool to support diversification of interview subjects to ensure a more representative cross section



Analysis of insights

Systematic comparison of interviews to reveal patterns, recurring themes and emergent topics



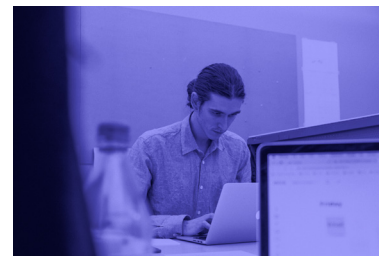
Self-ethnography

Experiencing the service first-hand, while taking notes and pictures, to get a richer sense of the service



Design probes

Objects or tasks given to subjects to interact with in their own situation without the presence of the designer



Desk research

Reading scientific papers, strategy reports and other online documents to learn more about the context



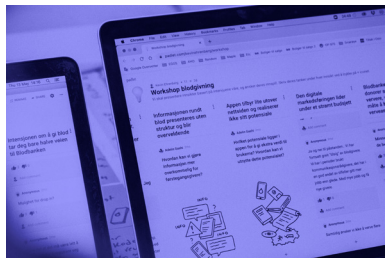
Developing findings

Iterative writing and illustration process to create actionable claims rooted in insight material



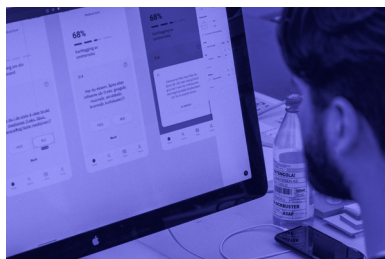
Nudge cards ideation

Systematic ideation using cards that translate nudge theory into actionable prompts



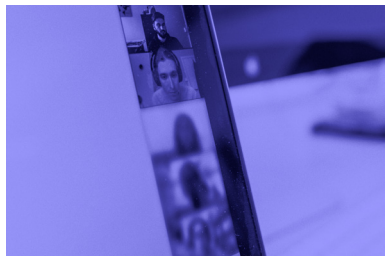
Remote co-creation workshop

Involving stakeholders in the ideation process through facilitating a dialog based on findings



Prototyping

Iterative creation of solution proposals on various levels, from quick mockups, to high-fidelity representations



Testing

Showing prototypes, screens or other material to stakeholders for reactions and feedback



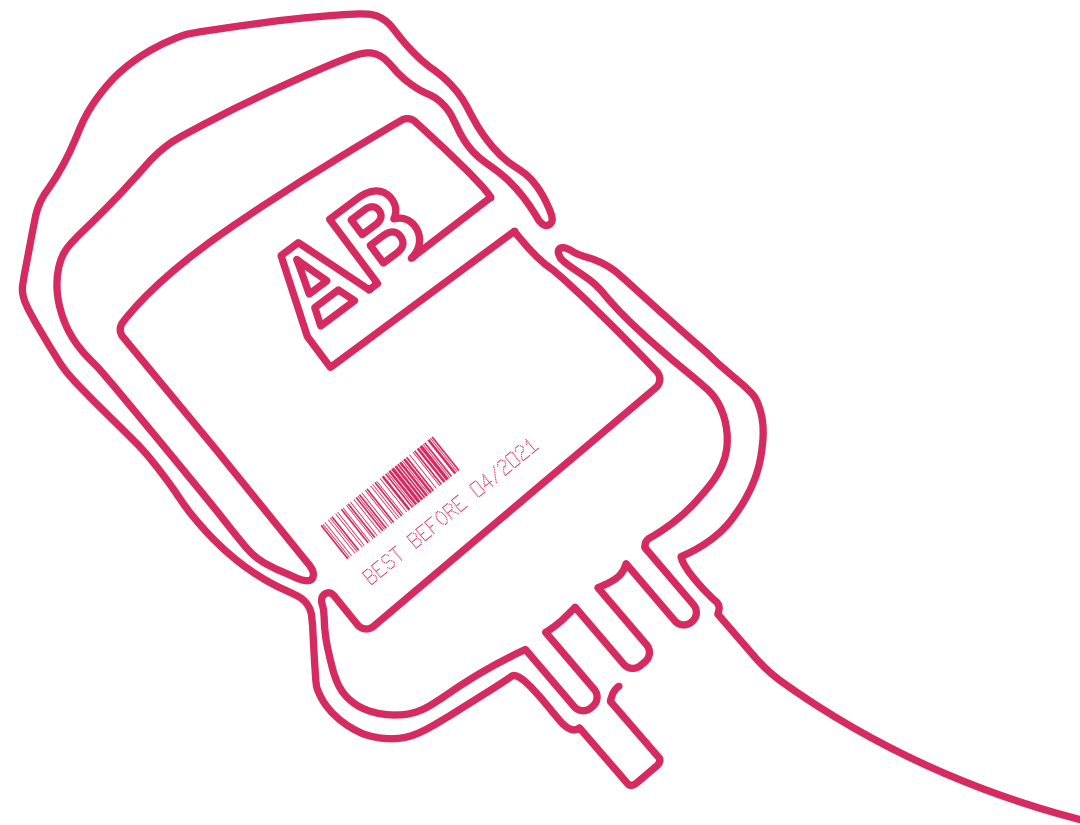
User journey mapping

Depicting the experience in a systematic way to understand and improve the service or specific elements of it

Background

Blood is a living material that cannot be made artificially, and patients who need transfusions depend on donors for their treatment. Because blood has a limited shelf life, it is essential that the blood bank continuously receive new donations (Norwegian Red Cross, n.d.-c).

Each year, out of the 100,000 blood donors in Norway about 20,000 can no longer donate due to various reasons, meaning there's a constant need for new donors just to break even (Hoang & Østgård, 2020).

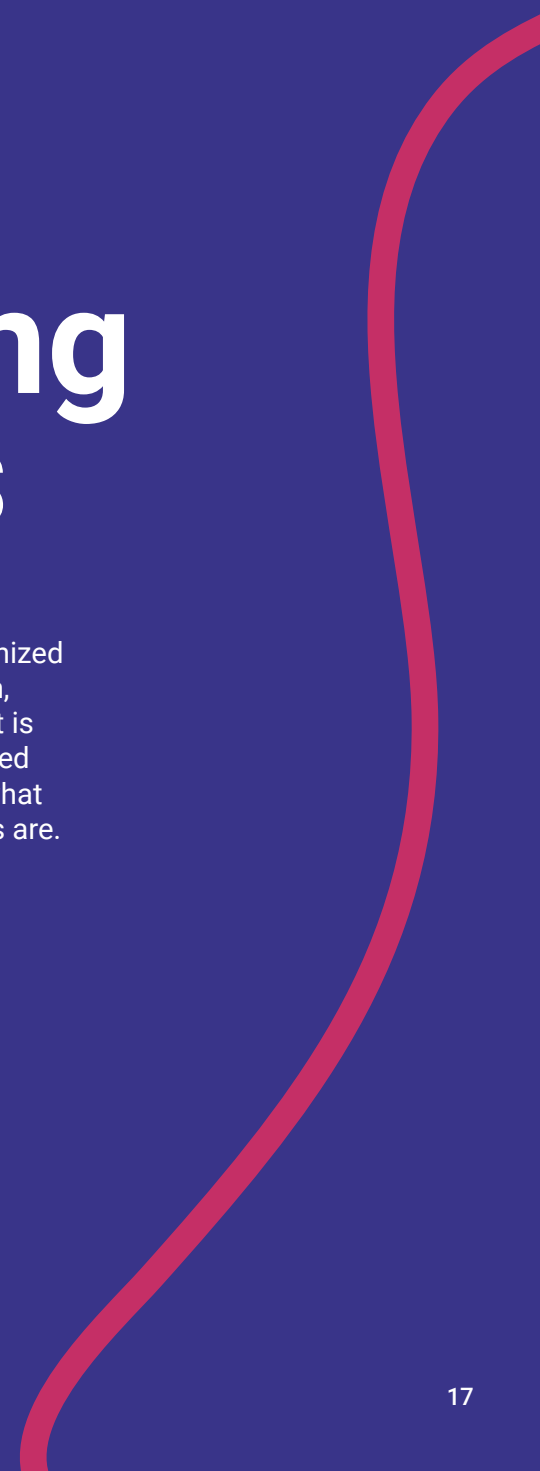




02

Gathering insights

The way in which blood donation is organized varies from country to country (Olaussen, 2012). In this chapter, we describe how it is organized in Norway, why we have focused on Oslo, which actors are involved and what the most important recent developments are.



Desk research

30

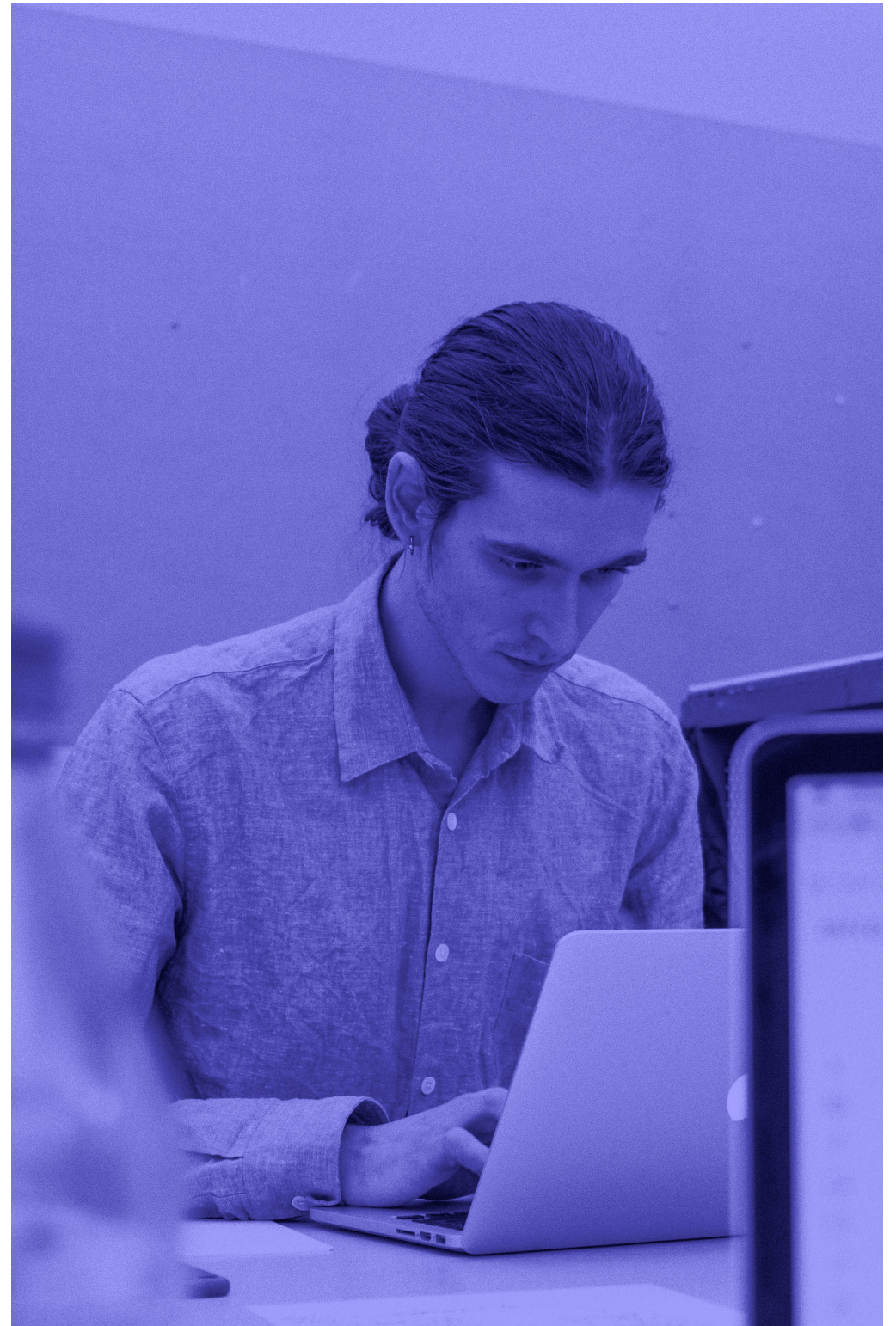


Organization

There are 30 blood banks in Norway, separately owned and run by the various health trusts. (Hoang & Østgård, 2020). There is no national blood donor registry, and blood banks do not share donor data with one another because of data-security concerns (Waksvik, 2017).

The Oslo Blood Bank

Our diploma focuses on the Oslo Blood Bank, which is the largest in Norway with by far the highest need for blood products. This is because the most blood-intensive treatments and operations are centralized at the Oslo University Hospital (OUS) (Olaussen, 2012). Not able to be self-sufficient for blood supply, OUS must receive blood from other blood banks in addition to the Oslo Blood Bank (The Oslo Blood Bank, n.d.).





The Red Cross Blood Program

Before there were blood banks, donations typically happened directly within families until the Norwegian Red Cross established a registry of donors in 1933. The Red Cross has been involved throughout the entire history of blood donation in Norway, working alongside the blood banks and even running their own at one point. Today, the Red Cross continues to contribute, among other things, by distributing information and recruiting over 90% of the blood donors in Norway (Norwegian Red Cross, n.d.-a).

Recent developments

The Oslo Blood Bank has recently launched the Blodbanken app, to improve communication with donors and reduce the frequency of donors meeting up when not qualified to donate. Six other blood banks have been included in the app.

As with many other services, the Oslo Blood Bank has also experienced an acceleration in the pace of digitalization due to the Covid-19 pandemic. Donors must be interviewed before each appointment, and interviews are now offered online, which has received very positive feedback.

The next step is the launch of a long awaited online booking system, allowing donors to reschedule, cancel or manually set up appointments, thus easing staff workloads and saving donors time and frustration. However, this has been in the works for years, perpetually postponed due to data-security concerns.

User research

In order to understand how the service is experienced, we needed input from those currently experiencing it. Our main method for this has been conducting interviews.

Users

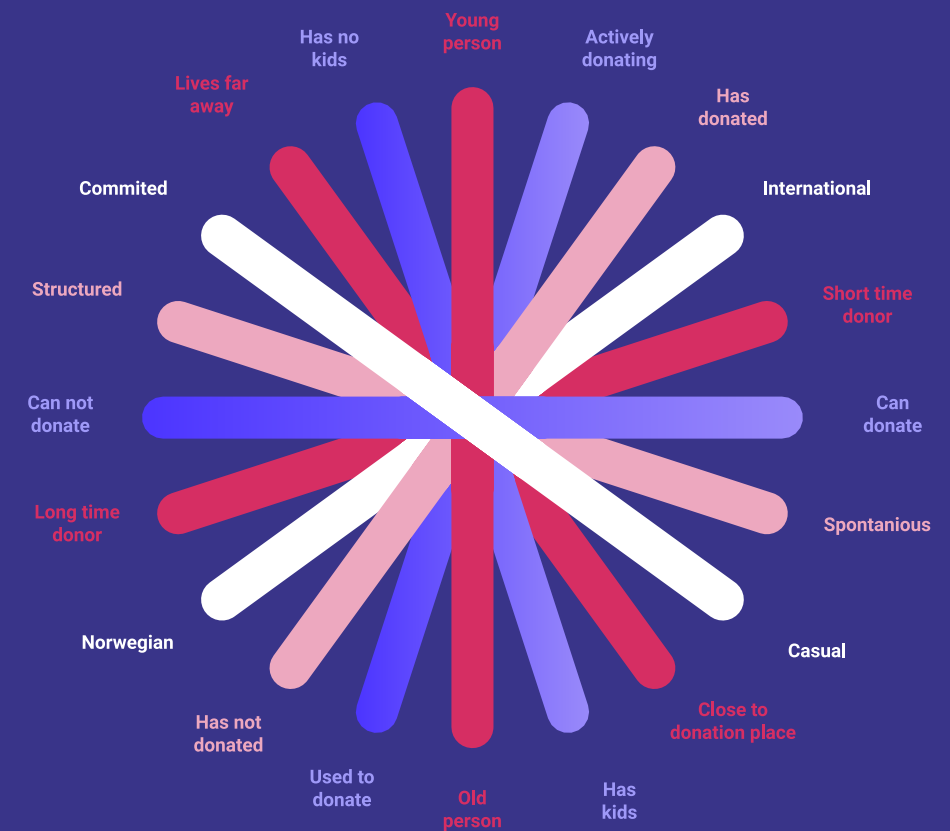
We focused on donors as our main user group, because we wanted to explore why people donate and what that experience is like. To ensure a representative cross-section of donors, we developed a user compass to help us include donors with a wide variety of personalities and life situations.

We also spoke to non-donors and people who had been rejected as donors for reasons of medical situation or sexual orientation. This provided valuable insight into how the service is perceived from different outside perspectives.

Interviews

We conducted interviews with twelve blood donors, four non-donors, two receivers of blood transfusions and seven staff members at the Oslo Blood Bank and the Red Cross Blood Program. Although Covid-19 restrictions limited our choice of insight methods, conducting interviews remotely meant we were able to conduct more than initially expected. After a certain amount of interviews, information started being repeated, but new subtleties and perspectives nevertheless emerged.

Using the same interview guide within the interviewee categories, with only minor iterations, we could more easily compare their perspectives. We also kept our questions and style of interviewing open enough for the subjects to share things beyond what was specifically asked.





Experiencing the experience

Parallel to this, we also donated blood ourselves. This self-ethnography gave us a first-person experience of the service, improving our understanding of the context in which we would be designing. Details like how the automated emails look, the feeling of the physical space, the tone of voice used by staff and how the gifts were displayed all affect the experience. This also allowed us to systematically map the user journey in detail, paying particular attention to digital touchpoints.

Experience probes

Using experience probes, we were able to get more direct in-the-moment perspectives from two donors who had appointments early in our project. The first donor was asked to take photos with their phone during the donation. This was valuable because Covid-19 restrictions prevented us from visiting the blood banks ourselves without an appointment. The second donor provided an introspective view, being given a short list of questions to reflect on before, during and after donating blood.



03

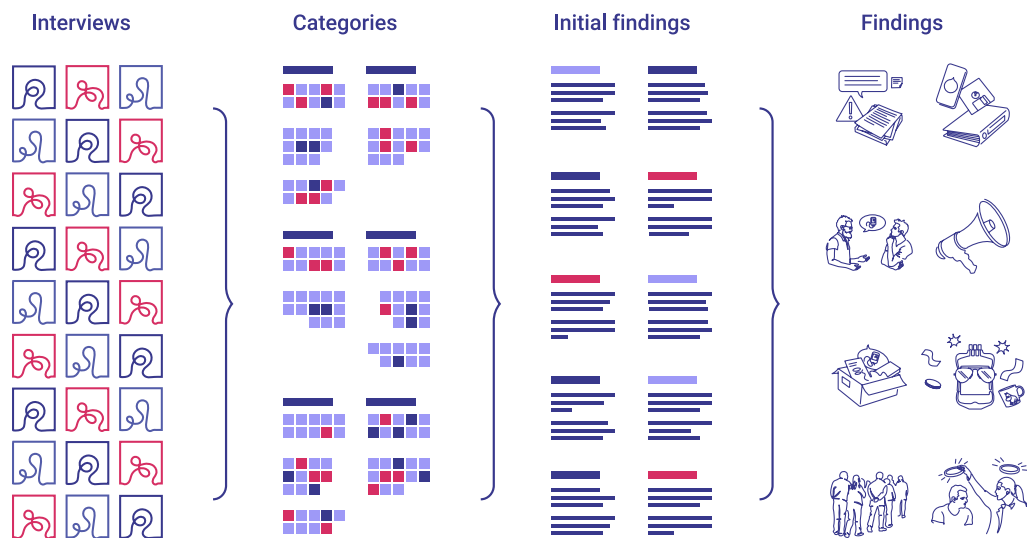
Findings

Having gained a better understanding of the topic through desk and user research, this chapter presents how we analysed the data to develop eight key findings to summarize our insights.

Analysis & Key findings

All interview notes were taken using sticky notes in Miro. The notes were then reviewed to highlight those that best captured the interviews. Grouping these into clusters and sub-clusters, we wrote short explanations for each. Using drawing to explore metaphors and ideas, we iterated until we had a handful of findings summarizing the essence of what we had learned.

It was important that these were engaging, easy to understand and that they would spark ideas. We tested this by presenting them to fellow students for feedback. This helped ensure that they were specific and actionable and kept a firm footing in the interviews.



1/8

The information around blood donation becomes overwhelming for new donors



Differing rules between blood banks, unclear systems and information overload creates a threshold for starting the donation journey, highlighting the need for a clearer information structure.

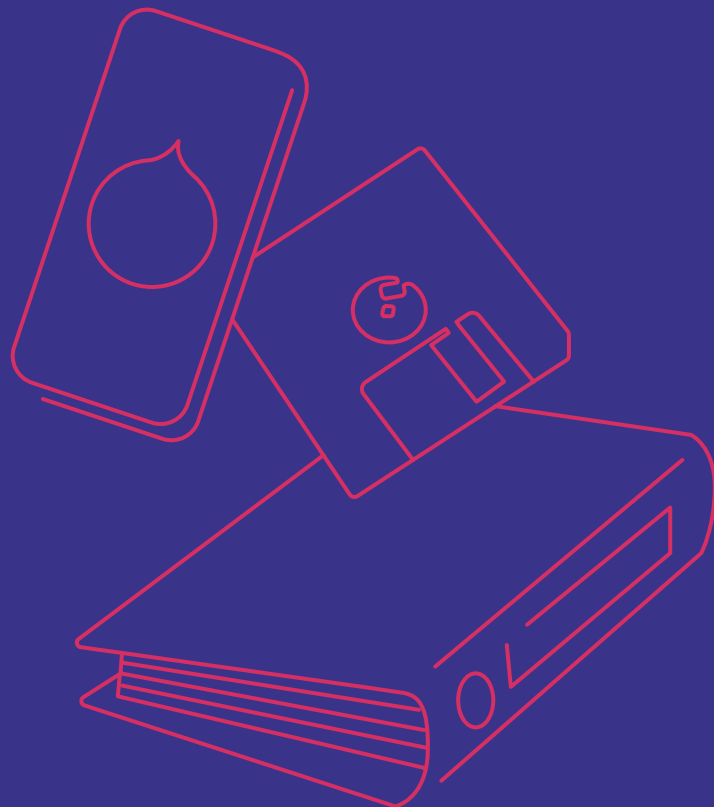
General knowledge about blood donation exists, but is limited and not clearly expressed in people's lives, an observation others have made as well (Fredriksen, 2017). For example, it is not common to know one's own blood type. Many interviewees reported having been overwhelmed by getting a lot of information at once during the onboarding, rather than receiving it over a longer timeframe. In the digital touchpoints, the same information is presented to everyone regardless of where they are in the process. This means established donors are still told to become donors, and those who haven't started yet are encouraged to recruit others.

"A lot of people don't really think about it. They aren't aware of the need for more blood and for more blood donors" - Donor

"It seems to me that having several websites with the same information is a big problem. It just makes things more confusing." - Donor

2/8

The app offers little beyond the website and does not realize its potential



New digital solutions are being developed, but risk not reaching their full potential to support a cohesive and optimal user journey. The system as a whole is still perceived as outdated from the donor point of view.

Though a step in the right direction, the Blodbanken app lacks a clear purpose and offers little beyond the Oslo Blood Bank's website. As a recurring touchpoint, it has potential for smoothing out painpoints and offering extra value for the users. Yet many people are increasingly tired of having "an app for every little thing" (Qutub, n.d.) and will only desire an app that provides real extra value. There is also another app for donors called Blodgiver which is developed by the Hammerfest Blood Bank. In addition to this, the blood bank in Østfold is also in the process of developing an app of their own. Besides being an ineffective use of resources, this is confusing for donors.

"I know they have an app, but I don't really understand what I'm supposed to use it for." - Donor

"The app is actually the only technical thing we've been successful in implementing, so we are actually quite proud of it. It is very simple, but that is on purpose, so that we could actually launch it" - Nurse

3/8

Digital marketing is under-prioritized



Healthcare workers tasked with digital marketing lack the resources, capacity and competencies to communicate well with potential new donors. They are medical professionals, not marketers. Despite being a great message, blood donation lacks a megaphone.

Creating engaging content on social media is challenging. Although the Oslo Blood Bank is present on Facebook and Instagram, their content lacks a clear and consistent concept, which results in an undefined feed without clear purpose. If prioritized more, social media could offer a way to recruit new donors, as well as making blood donation more a part of everyday life.

"It depends who you want to reach, but young people are on social media." - Donor

"We don't have a proper communication department. It's us who have a medical education who are on social media trying to reach people. Medical staff have it as an extra task, like one might have an extra task of ordering supplies." - Nurse

4/8

The blood bank views donors as their best recruiters, but lacks the means to support their recruitment work



Donors are happy to speak well of the service, but don't seem interested in being committed ambassadors. Word of mouth attracts new donors, but the success rate could be improved if donors had better help from the blood bank.

The staff know how important a positive donor experience is and work hard to facilitate this, often making donors feel like everyday heroes. This is among the best experiences in the whole donor journey. The staff encourage donors to recruit others, but further steps are largely out of their hands and out of sight. When talking about the service, donors we talked to tend to use quite a different approach than the blood bank, highlighting how easy and pleasant the experience is rather than insisting on its importance.

"It's important to make the donors feel taken care of, so they can spread the message to others" - Nurse

"I have spoken well of it, but I haven't gone in to try and recruit anyone" - Donor

5/8

Intention only gets you half the way to the blood bank



Deciding to donate blood often becomes the first step in forgetting all about donating blood. Much like getting a recommendation for a movie, enthusiasm soon dissipates, and forgetting about it becomes easier than looking for information.

Life is full of distractions fighting for our attention, and the spark of thinking that one might want to start donating blood is far too easily squashed by other demands and offers that come our way. Donors recruiting others don't want to be pushy and therefore don't hold others accountable if they don't follow through on their intention. Practical aspects often get in the way, and the system does not offer enough help to overcome these, making the threshold just a little too high, and for many there is not enough push to get them in the door.

"The hardest thing is to get over the threshold of registering, of just getting in the door the first time" - Donor

"My impression is when I talk to friends about blood donation most of them react by saying "how wonderful, I want to do that too" but they've never gotten around to it." - Donor

6/8

Making blood donation too attractive can incentivise dishonesty



Blood safety for receivers depends on donors answering control questions honestly. It is therefore important that people donate blood for the right reasons, and not for external rewards that could motivate them to lie about things that would stop them from donating.

For each visit, donors get a small gift as travel compensation, but these are often seen as rewards. These gifts are important for donors, making them feel appreciated and giving them something to look forward to. Some miss a sense of rewarding progression and getting some recognition of having been there a specific number of times. Non-altruistic elements are an important part of donor motivation, but should be used with caution to avoid putting pressure on donating and thereby negatively affecting blood security.

"We don't want it to be too attractive because then people might come for other reasons. It is important that people come because they wish to donate blood, and not because it's a free health check up" - Nurse

"More variation of the gifts would be nice. I understand that they can't be really expensive things, but variation is fun." - Donor

7/8

Too many new donors at once can overwhelm the system and create long queues



Registering new donors is resource intensive, and the capacity can be overrun if too many people sign up at once. Instead, the blood bank needs a continuous and steady stream of new donors over time.

Today's bottleneck means that the need to constantly recruit must be balanced against the need to not to have donors arrive all at once. This issue has several sides to be considered. One is about avoiding spikes in registrations. Another side is about effectivizing the system to be able to handle more new registrations. A third side is about mitigating the negative effects of long waiting times for new donors through expectation management and follow up.

"But we have to be careful with campaigns. We could have a super-campaign going year round, but then there's a risk of overwhelming the blood banks, which results in bad experiences for the donors." - Red Cross staff

"One might not mind too much having to wait, as long as one feels updated." - Donor

8/8

Rejected candidates leave with an unrealized desire to contribute



One of the toughest jobs for the staff is to reject people who want to donate but are not qualified. Some can never donate, and these also deserve a good experience. Others can perhaps donate later, but tend to not return if once having been rejected.

Rejection is never a good experience, but rejecting candidates as skillfully and early as possible can mitigate the sting. In theory, rejected candidates can still contribute by recruiting others, but this is unlikely because people will generally only want to share what they feel ownership of and connection to. A plea for assistance can therefore feel irrelevant and make the experience even more negative, instead of providing a more satisfactory ending. For those who can donate later, or who have to take a break from being a donor, the focus should be on keeping them in the loop and making it easy for them to return.

"The hardest part of the job is rejecting people who are very convinced that they can donate blood. People react very differently. Some can begin crying because they can't donate blood." - Nurse

"It is voluntary, but when you're in the system, it feels like taking a break isn't an option. It feels like you have to break up with the blood bank." - Ex-donor

Completing these findings was a clear milestone for the rest of the process going forward, and provided a basis for ideation and evaluation of subsequent concepts.

04

Ideating & co-creating

Based on our findings, we developed associated How-Might-We questions to guide the process forward, conducted a remote co-creation workshop with relevant stakeholders and used nudging as a framework for ideation.

How might we

To make the findings more actionable and give them direction related to the various needs and desires we had identified, we developed several How-Might-We questions for each of the eight findings.



HMW enable the blood bank to communicate their service and information in a clear and unified way?

HMW present information to make it more accessible and delightful for first time donors?

HMW make users feel confident they have all the information they need?



HMW utilize the potential of an app to create more value for donors?

HMW ensure that the app becomes donors' preferred way to interact with the blood bank?



HMW ensure digital competence development for the staff at the blood bank?

HMW market the brand and experience of the Oslo Blood Bank?

HMW increase awareness of the service in the population?



HMW make spreading the word about blood donation easy and rewarding?



HMW remove thresholds to start the donation journey?



HMW find new ways to reward donation intention and action without incentivizing dishonesty?

HMW make sure donors feel appreciated throughout the whole journey?



HMW streamline the recruitment system so it can handle spikes in donor registrations?

HMW ensure a steady flow of new donor registrations?

HMW limit and improve the waiting time for new donors?



HMW manage potential donors' expectations so they are prepared for rejection?

HMW reject applicants in an understanding, clear and friendly way?

HMW follow up and keep in touch with donors who can donate later?

Co-creation workshop

The findings presented in the previous chapter provided the structure for a remote two-hour co-creation workshop. Both blood donors and staff from the Oslo Blood Bank and the Red Cross Blood Program participated in the workshop.

Goals for the workshop

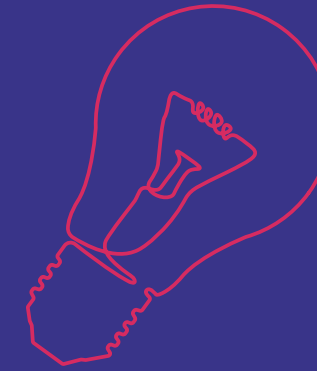
To check if the findings still made sense to the various stakeholders, we wanted to give them the opportunity to nuance and challenge them. We also wanted to know if these findings would spark ideas and which of them seemed the most important and relevant.

An important goal was also to facilitate a discussion across stakeholder groups which might not typically happen in other settings. It was also important to create buy-in among the stakeholders, not necessarily for our specific outcome, but for the designerly approach our diploma represents. Engaging them in co-creative reflection was important because any changes to the system would have to be implemented or mediated by them.

Structure and approach

Because the workshop was remote we decided on a quite rigid structure. We presented the findings one at a time, followed by a corresponding how-might-we question, to give the participants a useful frame in which to think creatively. The participants would first write their thoughts and reflections as comments under our question. This gave them the time and space to think for themselves without being too disturbed by the input of other participants. We then opened up for oral discussion to get more nuance and perspective on the different comments, before moving on to the next insight.

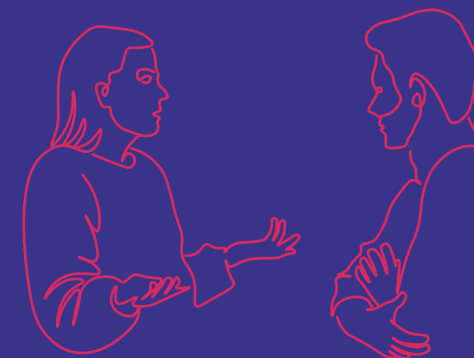
We ended the workshop by having the participants comment on which insights and ideas they felt were the most important from the workshop. This gave us a good indication of where to focus our attention going forward. Issues around the organisation of information were highlighted as particularly important.



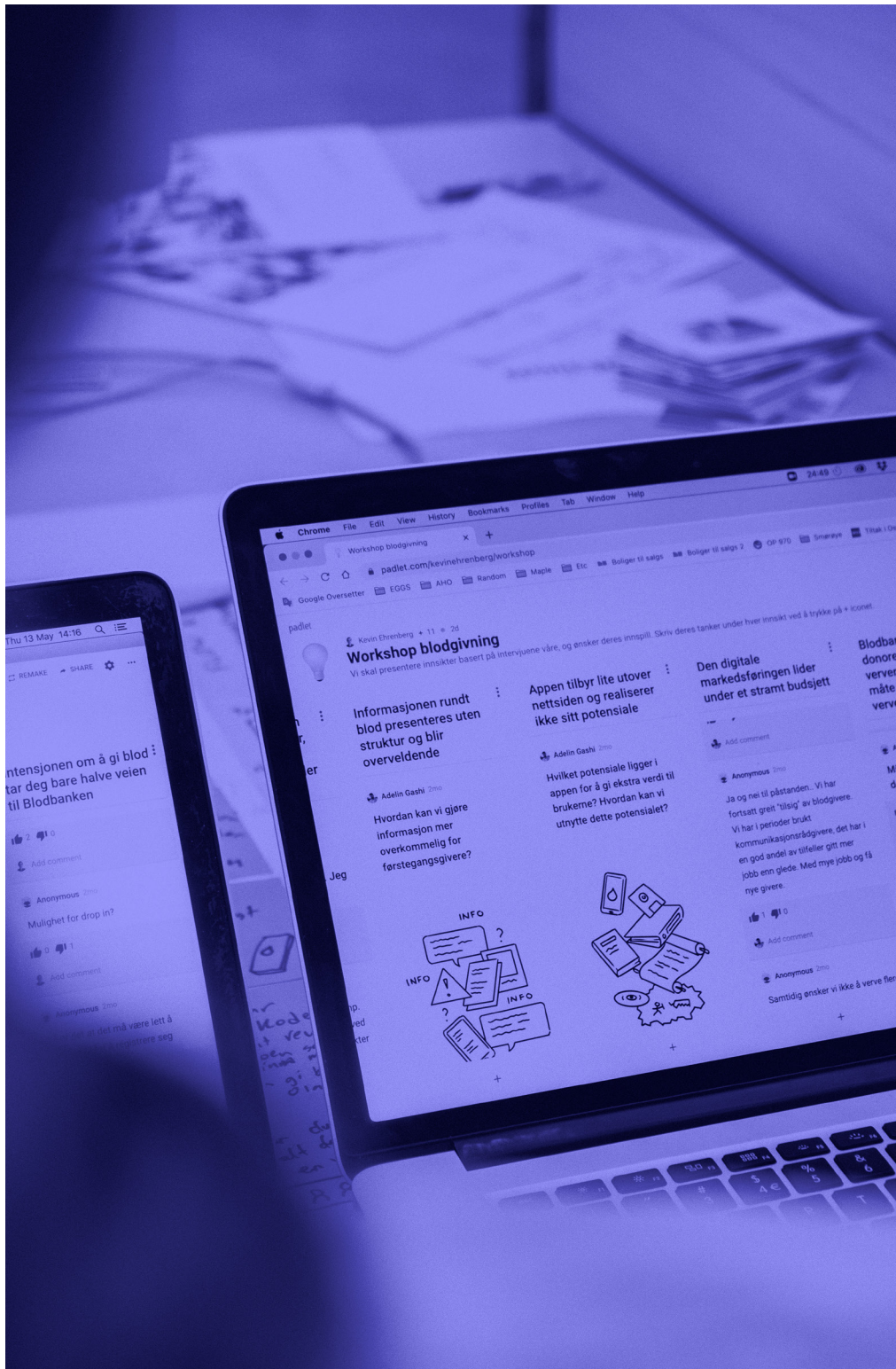
Generating new ideas



Validate the insights



Facilitating a discussion



Outcome of the workshop

The workshop was a milestone for us in many ways, where we were able to tie up a lot of loose ends. The discussions, reactions, feedback and ideas we got from the participants helped give direction to the project going forward. Letting donors bring forth their perspectives directly for the staff to respond to also gave us more insight into the nuances of various questions.

The ideas generated in the workshop were mostly modest, limited in scope, and focused on immediate issues with linear solutions. We did however get a lot of new insight into the various restrictions that ideas would have to overcome in order to be realized.

Suggestions for new features and developments were often followed by how this would be difficult or impossible to realistically implement.

"A chat function would be nice, but this is one of those things that would be hard to get approved." - Nurse

"We will never be able to send sensitive information through the app" - Nurse

Technical restrictions were not the only issues stopping ideas though, as other factors like finding good collaboration partners was a challenge as well.

"It often kind of stops with those who we would like to collaborate with. You have to meet the right people in different systems." - Nurse

All in all, the experience was positive, and our impression was that one of the most significant things holding back innovation in the blood bank is the endless restrictions that even we felt when trying to conduct this workshop.

Nudge card ideation

Nudging

Because what we are trying to do is essentially to affect people's behavior, nudging became a relevant framework to explore. Nudging is all about changing the environment around a choice to alter people's behaviour, without forbidding alternatives or changing the economic incentives. (Thaler & Sunstein, 2009, p. 6)

We feel this framework is particularly relevant for the topic, because the blood bank is really most interested in recruiting those who genuinely want to donate blood, rather than convincing those who would rather not.

Although nudging is being used in certain ways for blood donation, it seems to us underutilized. One example of where nudging could be used more deliberately is in communication, where the following data point is often used for recruitment: "Even though half the population will need blood products during their lifetime, less than two percent actually donate blood." (Norwegian Red Cross, 2019). This rather shocking statistic might seem like it should motivate people to start donating. According to nudge theory however, it might instead contribute to nudging people away from donating. This is because most people tend to unconsciously want to conform to the standard: Most people don't donate > I want to be like most people > then I don't need to donate (Thaler & Sunstein, 2009, p. 72). A more effective strategy might be simply stating the number of people who do donate. This large number could make donating seem normal and nudge the reader towards signing up themselves.





Nudge cards

To work with this we have used Compte Bureau's Nudge Cards, a series of twenty cards translating nudge theory into actionable prompts for ideation (Compte Bureau, 2020).

From the insight phase and the workshop we felt there was most potential in focusing on recruitment and onboarding, to address the underlying need for more donors. Based on this scoping, we created a rough timeline, which we populated with ideas by going through the cards one at a time. This helped us internalize the theory and resulted in many new ideas based on nudging.

Having generated plenty of ideas and concepts, both alone and together with users, we still lacked an overarching concept to tie our project together. Continuous attempts eventually led us to the final scoping and framing of our project.

05

Re-scoping

In scoping the project further we found we had to include the whole donor journey rather than focusing on just one part. We focused the solution space by deciding to explore improvements to the app and how this relates to the topic of digitalization in general. We conclude this chapter by defining goals and values for our final design proposals.

The whole donor journey

Throughout our ideation we attempted scoping the project in various ways, particularly to focus on recruitment, as this was the part of the donor journey with most issues and potential. We found while ideating however that it did not make sense to exclude the rest of the journey.

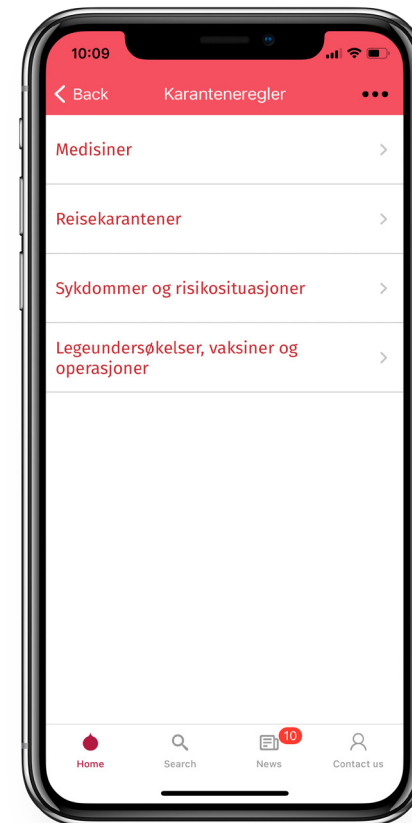
For one thing, many concepts, for example nudging donors to recruit others, necessarily involve designing for existing donors as well. Furthermore, the onboarding is particularly long. By the time you have donated your first unit of blood, two months will have passed at least, and you will have gone through almost every part of the donor journey. Therefore, to design for a good recruitment and onboarding experience, we saw that we had to design for the whole donor journey as well.



The app as the red thread

The challenge then became tying our solution proposals together in a coherent format. With the potential to be a central and recurring touchpoint, the app could serve as a red thread for our concepts and ideas. This lets us define more clearly the purpose of the app and what kind of value it should add for the donors. Exploring how a better app could support the blood donor journey became our way to design a better blood donor journey.

To learn more we spoke to the CEO of Sunsoft Publishing, the company who developed the current app. This gave us a clearer picture of how the process had been, the goals of the app, as well as how they continue working with the blood bank. The app has already begun solving problems for the blood bank and donors. What we hope to do is show how much more potential an app could hold, both for the user experience and also as a part of the larger digital shift within the blood bank.



The current app

Digitalization

For new digital solutions to be integrated and provide value in the healthcare system, they must be seen in the larger context of digitalization.

Digitalization is a broad term describing the transition from analog, often paper based solutions, processes and systems to new and better digital alternatives. Simply put, it means using digital technology to renew, simplify and improve services (Ministry of Local Government and Modernisation, 2014).

The official strategy for digitalization of public services, One Digital Public Sector (Ministry of Local Government and Modernisation, 2019), highlights the need for public services to be experienced as seamless and integrated. It outlines an increase in sharing of data between public services and states that more tasks will be performed digitally. Increasing digital competence is also seen as a critical factor.

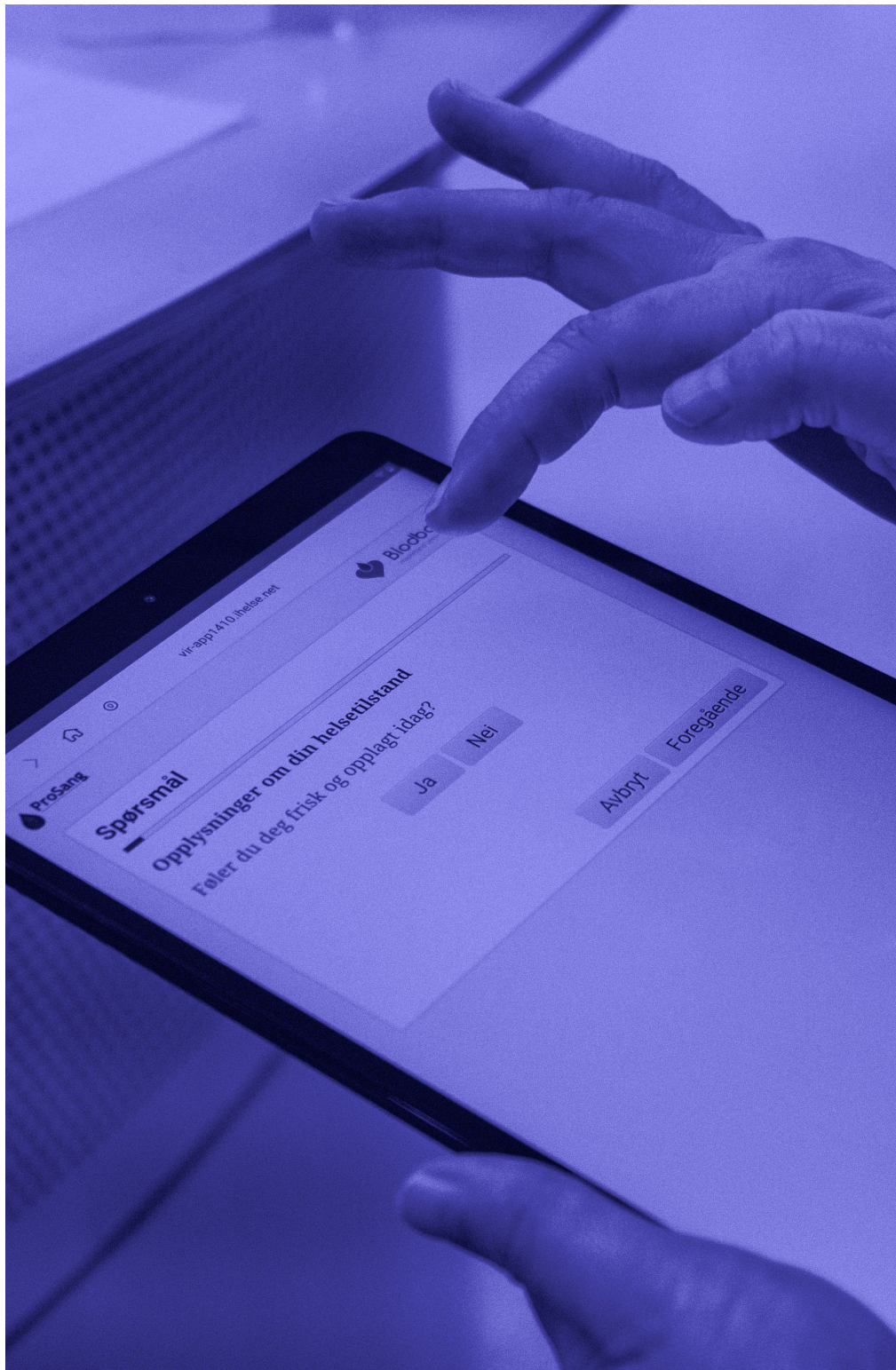
For solutions like ours to be implemented, it really is a discussion about prioritizing digitalization. This is the discussion we want our project to contribute to. By showing a concrete vision for a future where specific digital solutions contribute to improving the experience and the system as a whole, we believe that we can help lift this conversation to a new level.

Visiting The Bergen Blood Bank

The Bergen Blood Bank has come further than Oslo in terms of digitization, and we were lucky enough to be able to visit them during our project, to have a look at how their new solutions are implemented and to talk to their staff.

They use the same app as in Oslo, but it links to their online booking system. Because Oslo uses a different IT system, their booking solution will look different. The Bergen Blood Bank has also implemented a digital version of the medical form which donors fill out on tablets in the waiting room. The plan is for Oslo to implement the same digital form in their donation centers.

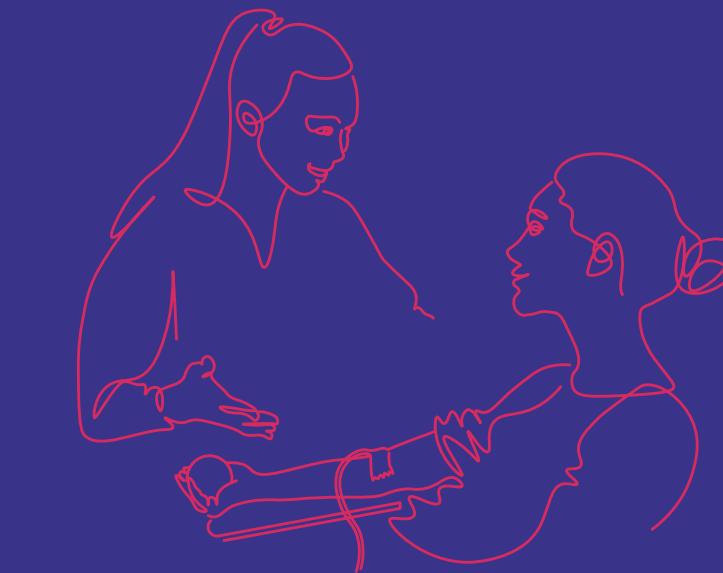
Visiting Bergen showed us what we could expect the next developments for Oslo to look like. Our concepts would also have to take things further than what had been done in Bergen for our project to bring new things to the table.



Defining goals and values

Goals

An obvious goal for a design project is to solve real problems that feel important and relevant for the various stakeholders. Just focusing on these, however, would limit our project to very linear and incremental processes. Although important, we wanted to do more and really contribute to positive change and development in the long term. The challenge became finding a balance between these two levels and making sure our design proposals deliver on both.



Values

We wanted to be explicit about the type of experience we are trying to design for. The current experience is already very positive in many ways, and we wanted to enhance this, while also being clear about how we are improving it. Therefore, we landed on two values we feel reflect how our designs should affect the experience: Meaningful and Seamless

Meaningful

A quote from an interview that really stuck with us was one donor's description of the donor experience as "a meaningful break from everyday life". This feeling of meaningfulness both motivates and rewards while also supporting honesty and thereby blood safety. As something the service already does very well, it was important that this be designed for also in the digital solutions we proposed.

Seamless

As an important goal for digitalization in general, and an area for improvement for the blood donor service specifically, designing for more seamless experiences is really one of the most significant added values of digitalization in this setting. In a world with increasing demands on our attention and rising expectations for convenience, a crucial aspect is making sure that from the donor perspective "things just work".

06

Prototyping & testing

Having established our scope and goals, we began making prototypes from the ideas we had generated so far. We tested these with donors and blood bank staff, iterating on and improving them towards our final delivery.

Prototyping

From ideas to prototypes

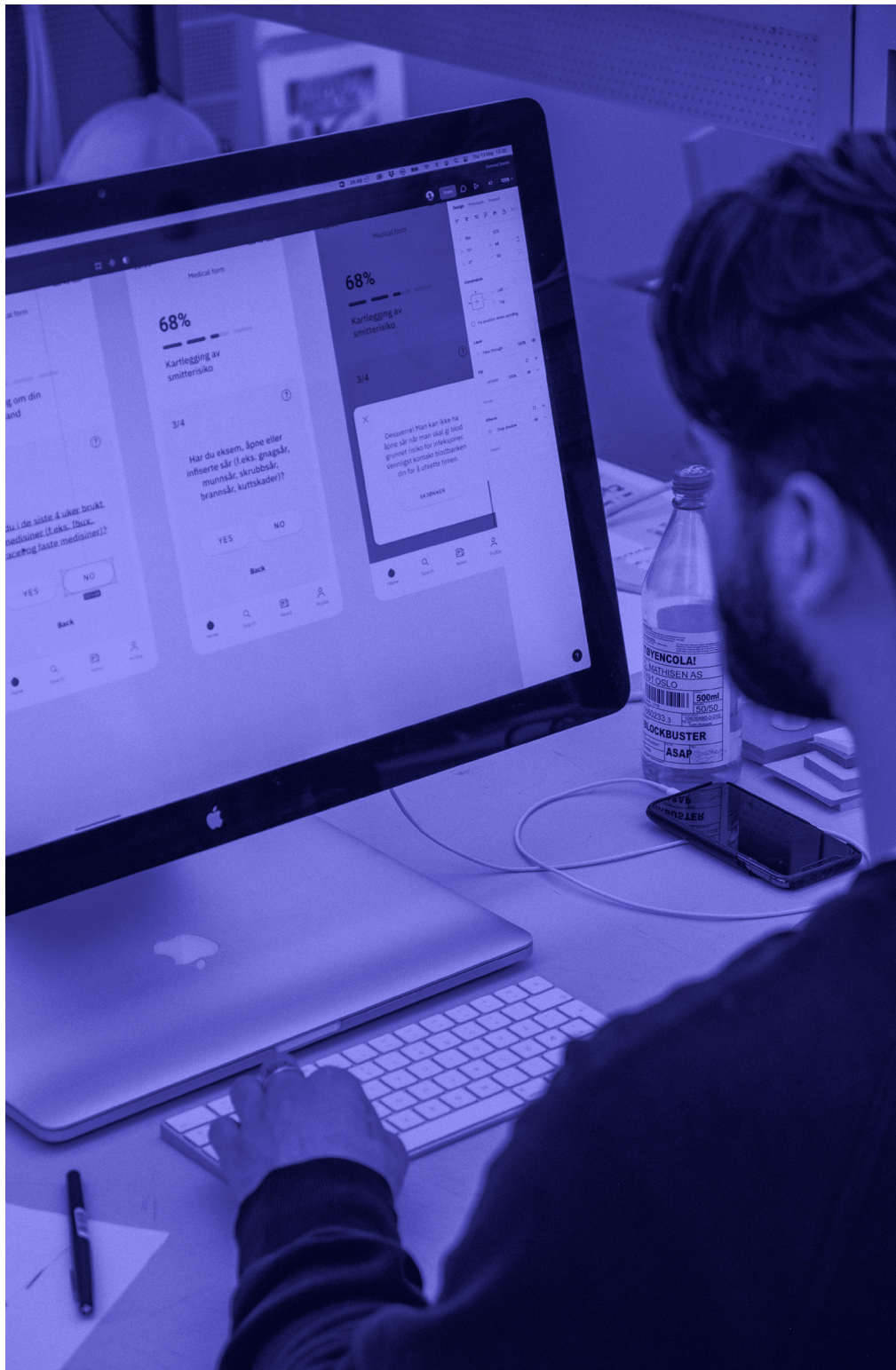
To decide which ideas we should take further, we linked them to the various findings and needs we had identified to see which provided the most value. We also considered them by placing them along a rough user journey to get an idea of how the individual ideas could affect the whole experience. This led us to a handful of concepts we wanted to explore through prototyping.

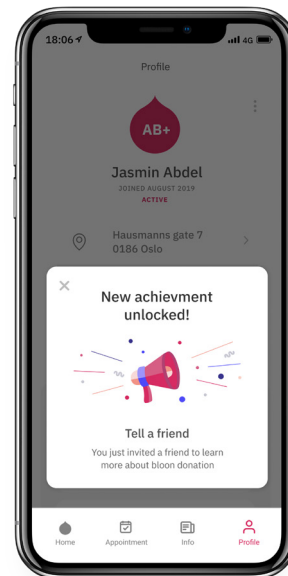
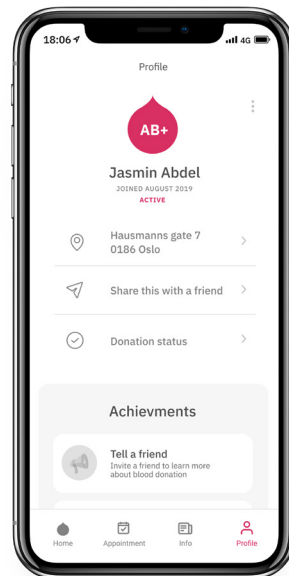
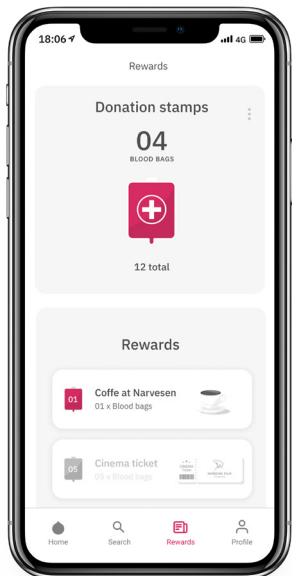
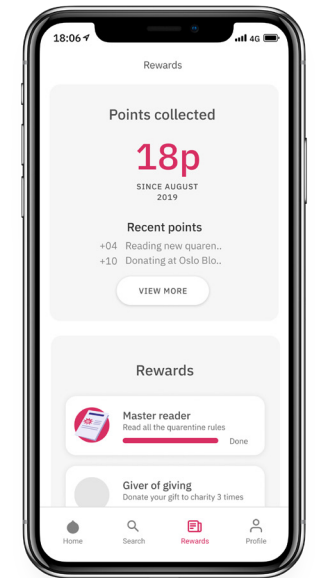
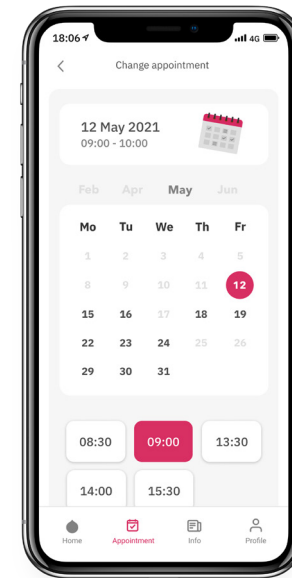
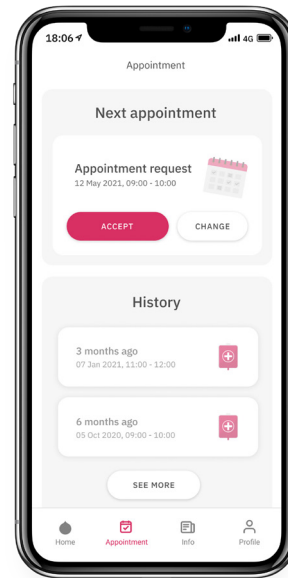
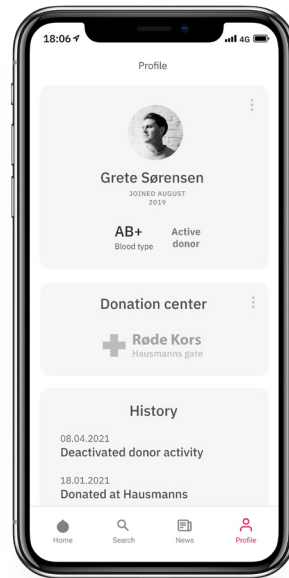
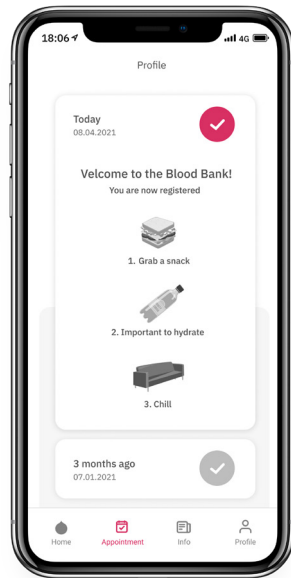
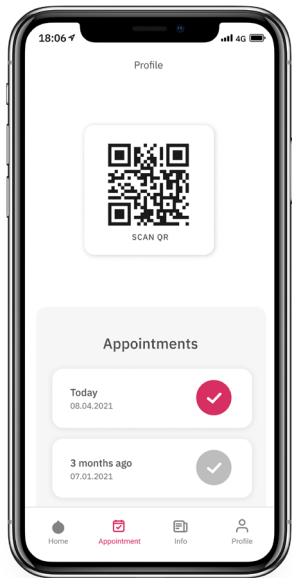
Fidelity of the prototypes

Our goal was to cover a lot of ground, rather than to focus on optimizing just one small part. The prototyping explored how various concepts could look and feel and how they might fit into and provide value across the user journey.

We wanted the prototypes to feel finished, and give the testers a clear idea of how this could end up looking, while still keeping it quite neutral from potentially distracting elements like branding.

One example of a concept we wanted to explore further was appointment management. As mentioned, a solution for this is already being developed. However, as this is an important challenge for donors (Fredriksen, 2017), we wanted to look at how a more integrated version might affect the experience.





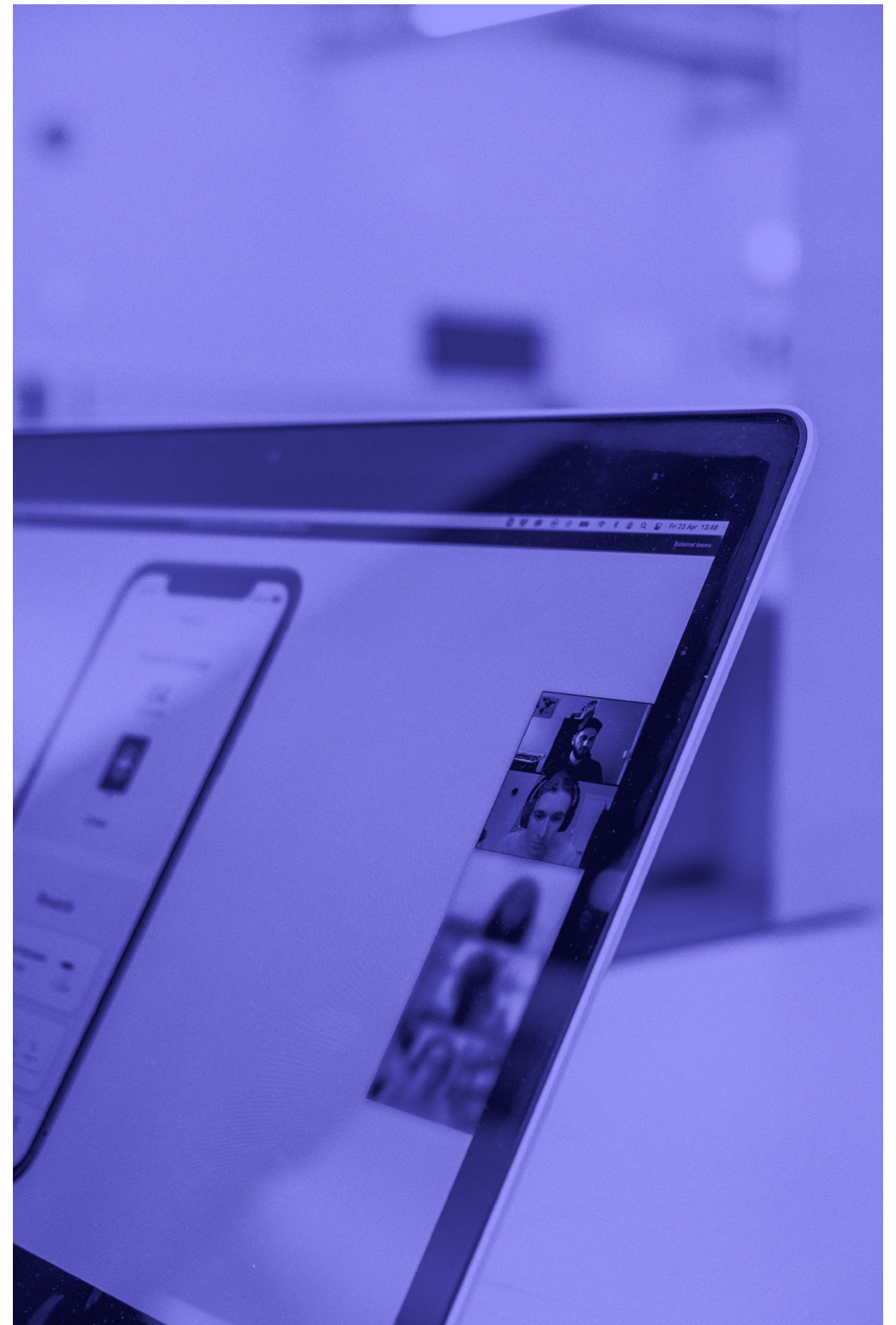
Testing and iterating

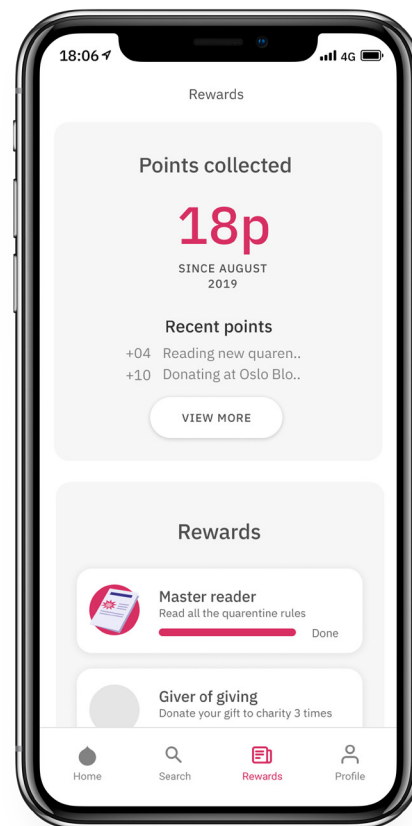
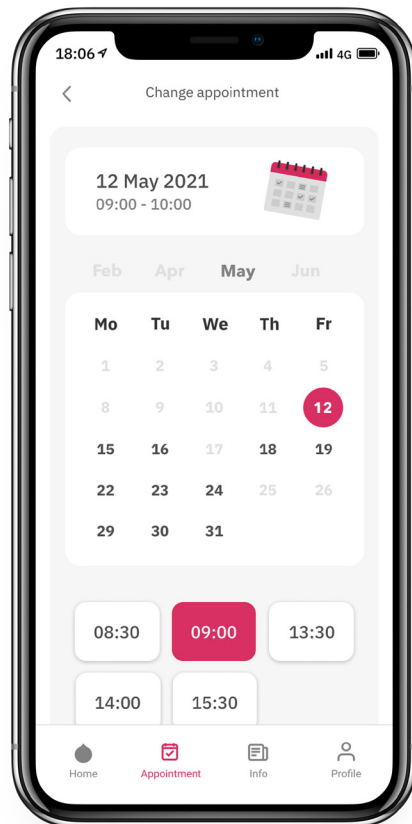
Testing our prototypes was an iterative process involving both donors and blood bank staff. The goals were to validate or disconfirm our assumptions and get feedback on which concepts provided the most value and in what ways.

How did we test?

Our wide scoping became relevant for what to focus on when testing our prototypes, where we spent more time testing desirability than usability. This meant there was more of a focus on facilitating a discussion around each prototype rather than on observing how the testers interacted with them.

All tests were conducted remotely, where we took testers through the prototypes one at a time, followed by discussing their reactions and reflections. We held both individual and group testing sessions to get different types of feedback.





Feedback and results

In general, we could confirm that many of our concepts were in fact desirable and felt relevant to the different stakeholders. Some ideas needed significant changes, while others were cut out entirely.

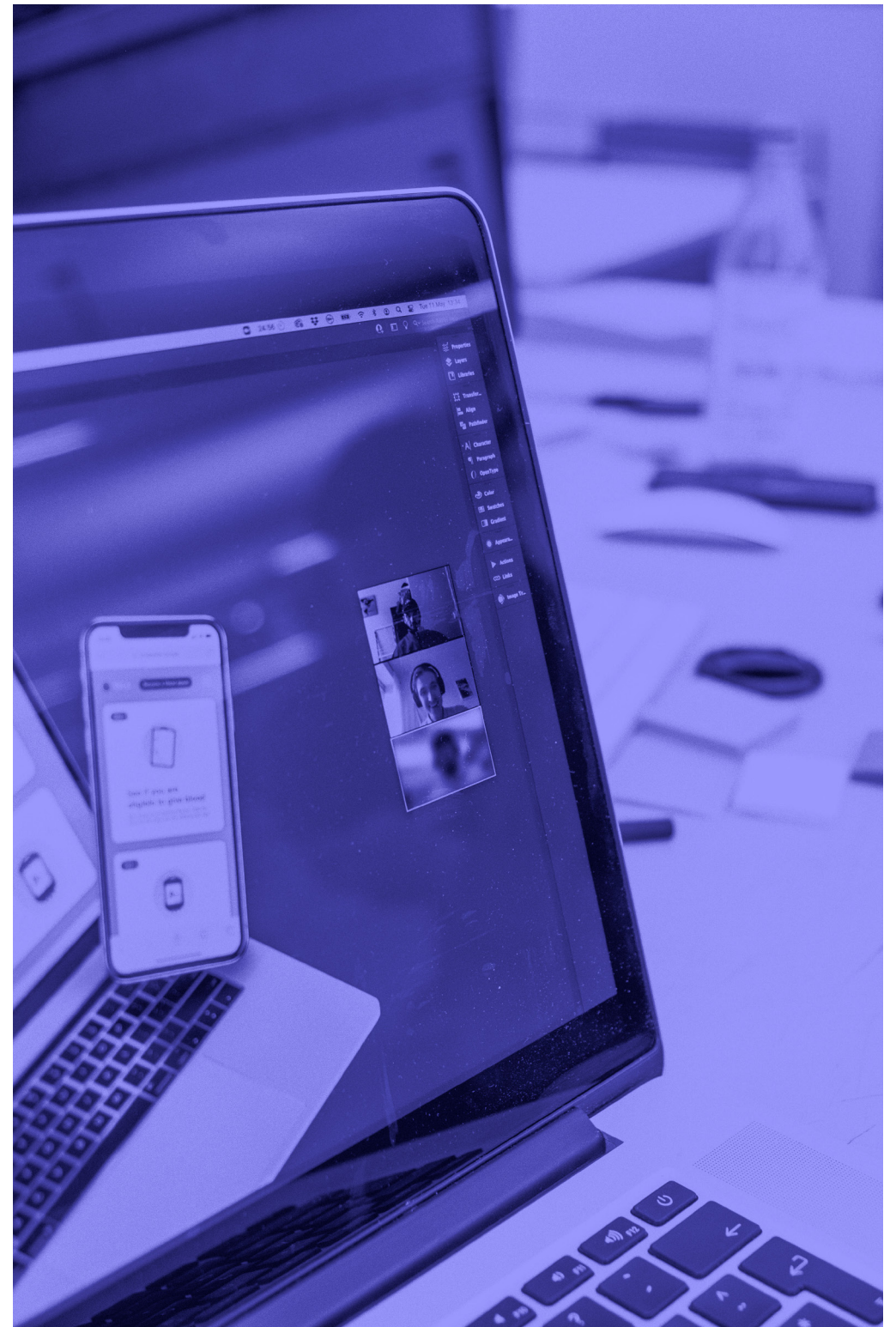
For example, developing a point system in the app was a concept that quickly proved complicated and ultimately undesirable. Some elements, like validating badges, got positive feedback and were recycled into other prototypes.

A prototype that got very positive feedback is our version of a seamlessly integrated booking system in the app. Testers said it gave an impression of professionalism and an increased feeling of flexibility.

Beyond helping us iterate and improve our prototypes, this also helped lift the discussion with the blood bank to another level. The discussion became much more possibility-focused, about how these things could be realized, and less restriction-oriented, about why it could not be done. The blood bank testers also reflected on what our prototypes could mean for them going forward.

"If these particular ideas get implemented or not, they are something to work towards" - Nurse

The process of prototyping and testing gave us a good idea of which concepts could provide value for donors and for the blood bank. We also saw the value of concrete examples for elevating discussions. Iterating on the prototypes and on how they would make sense as part of facilitating a consistent experience, we eventually worked them into the final delivery.



A large, bold, blue number '07' is positioned on the left side of the page. A thick, red, wavy line graphic starts from the top left, curves across the top, and then loops down and across the right side of the page, partially overlapping the text on the right page.

07

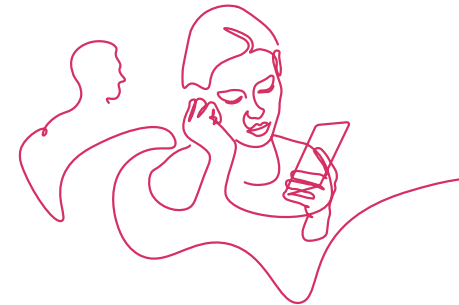
Final proposal

Having explored the topic through our diploma project, the result is a series of design proposals forming a vision for further development of the blood donor experience and system. The deliverables are a user map showing a proposed seamless and meaningful blood donor experience and the specific digital solutions that facilitate this. Detailing the various proposals, we show how they add value and contribute towards the underlying need for more donors.

With the goal to affect change in the system, we offer our considerations on what organizational changes might be needed to realize and support our proposed scenario. The aim is to contribute to the discussion of how the service should evolve over time.

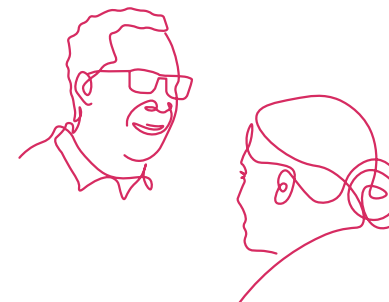
User journey

The user journey we present in this chapter illustrates how our design proposals facilitate a meaningful and seamless experience. There are several ways to present a user journey, with varying levels of information. We have chosen to present ours in a stripped down comic book style, in order to focus on the donor's perspective and the way our proposed solutions affect flow through various phases. A more detailed tour of each solution is presented in the section following this.



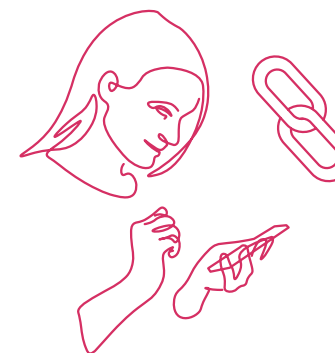
This is Emilie. Although familiar with the concept of blood donation, she has never considered becoming a donor herself.

Scrolling through Instagram during her daily commute to work, she notices a post from the Oslo Blood Bank in her feed, with an interesting fun fact about blood donation.



At work she mentions the fun fact in conversation with her colleague Thomas. As it turns out, Thomas is actually a blood donor. Emilie comments that maybe she should donate blood too.

Thomas tells her that he could easily invite her. He opens the blood bank app and sends Emilie an invitation.



After the conversation she opens the link in the text message she got from Thomas, which leads her to a website for registering as a blood donor.

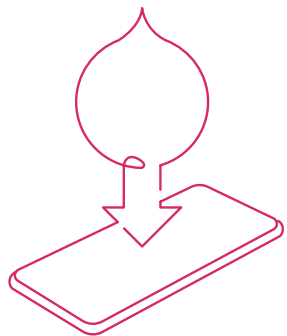
It seems pretty simple to sign up. Above the input fields is a short explanation that not everyone can become donors, as there are a number of rules in place to ensure safety for receivers.



Completing a small list of questions she learns that she meets the minimum requirements.

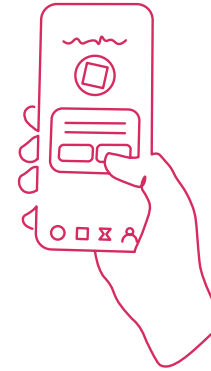


She registers using BankID, confirms her contact information and receives a confirmation that she is now registered to become a blood donor.



She follows the prompt to download the blood donor app.

Opening the app, she sees a step-by-step guide showing her what will happen next. She feels this gives her a better overview of the process and feels more confident about what is in store for her. The next step is to take a blood sample.



A card pops up showing that she will receive new appointments automatically which she can choose to accept or to change.

She sees that her next appointment is already booked. The date suits her well, and she accepts.

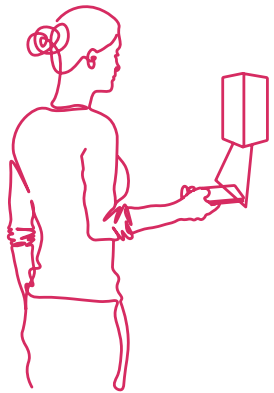


As expected, on the day of her appointment, the app notifies her that the medical form is ready to be filled out. Filling out the form, she enjoys the illustrations for each question.

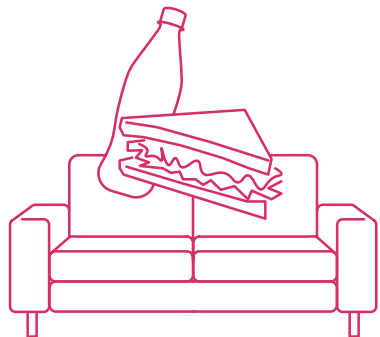


After completing the form, she is made aware that she also needs to be interviewed, which she can do online.

During the online interview the friendly doctor follows up various questions and answers the questions that Emilie has.



Arriving at the blood bank, Emilie feels uncertain of what to do. She notices a clearly marked check-in station at the entrance that instructs her to register by scanning the QR code on the homescreen of her app.



When she does this, a welcome message and a step-by-step guide appear telling her to feel free to take a soft drink and any food in the fridge and to relax until a staff member calls her name.

Feeling more secure, she grabs a soda and takes a seat on one of the couches.



Before long, a nurse calls her up.

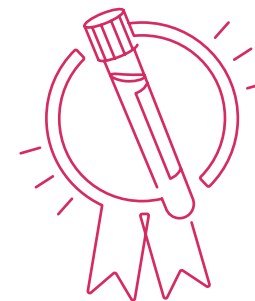


She takes a seat in the donor chair, and the nurse takes a few samples of blood, explaining what they test for with each one, and that Emilie will be contacted if they find anything unexpected.



The nurse thanks Emilie and tells her that she can choose a gift at the exit as a compensation for travel costs.

Emilie feels almost overwhelmed by the gratitude the staff have expressed and is positively surprised that she can collect a gift already. She thought she had to wait until actually donating blood before bringing home a moomin cup.



Emilie sees that she has unlocked her first badge in the app for having completed the first step towards becoming a blood donor, along with a message that she will receive a new appointment some time during the next 5 to 8 weeks.

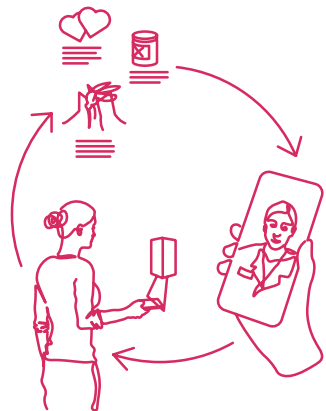
Motivated to continue the journey, she goes home with a warm glowing feeling, and looks forward to her next appointment.



Six weeks later, Emilie receives a notification of a new appointment. Unfortunately, she has an important meeting that day.



Moving her appointment takes a few clicks, and she is pleased that she could fix this so easily.



On the day of her first blood donation, she goes through the same steps of filling out the medical form, getting interviewed and registering her arrival. Knowing what to do, she feels more confident than last time.

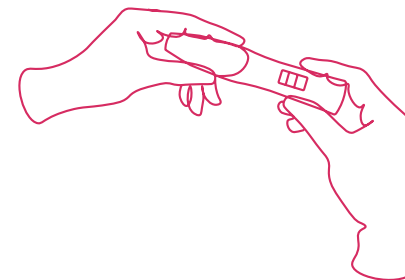


Emilie takes a seat in the donor chair, and a nurse talks her through the process as she disinfects her arm and inserts the needle.

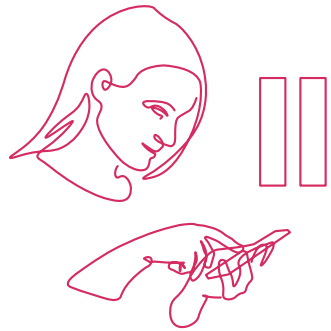
Before long the machine makes a sound, and the bag is full. Emilie is told to remain seated for fifteen minutes to relax. Sipping her soda, Emilie feels a peaceful sense of pride at having contributed, perhaps even saving lives.



As she leaves, she gets an extra acknowledgement in the app. Having already been thanked by the friendly nurse, this feels like a thank you from the blood bank as a whole.

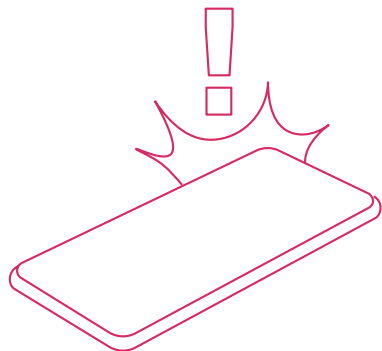


Emilie continues as a blood donor for a while, until one day she finds out that she is pregnant.



Checking the quarantine rules in the app, she sees that she has to wait until a year after giving birth before being able to donate again.

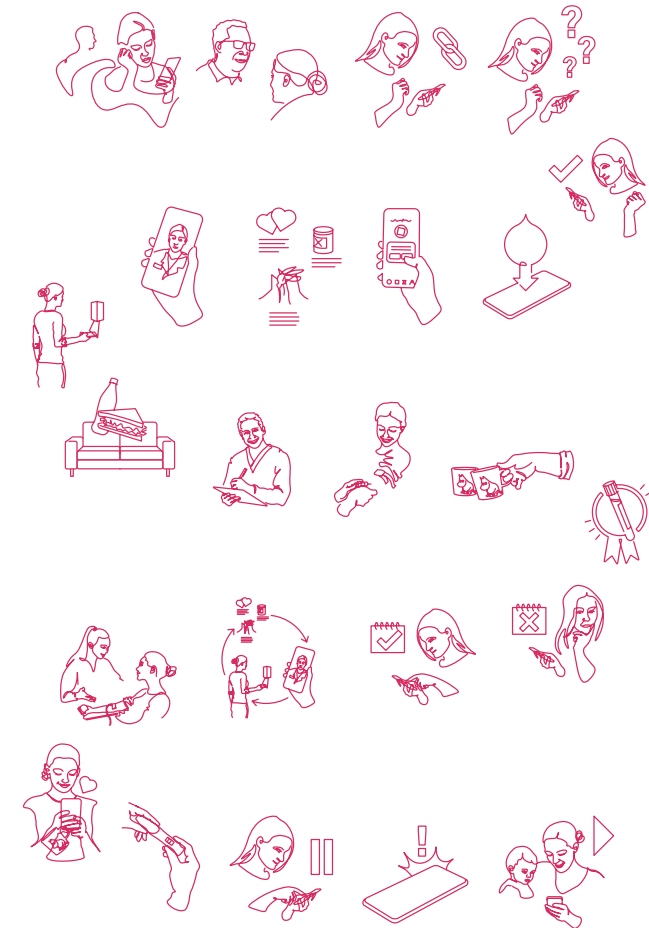
She clicks a button below this information which lets her activate a two-year quarantine.



Two years later, Emilie receives a notification, asking her if she wants to activate her donor status again.



Having received blood herself while giving birth, Emilie is even more motivated than ever. She activates her status and looks forward to her next appointment at the blood bank.

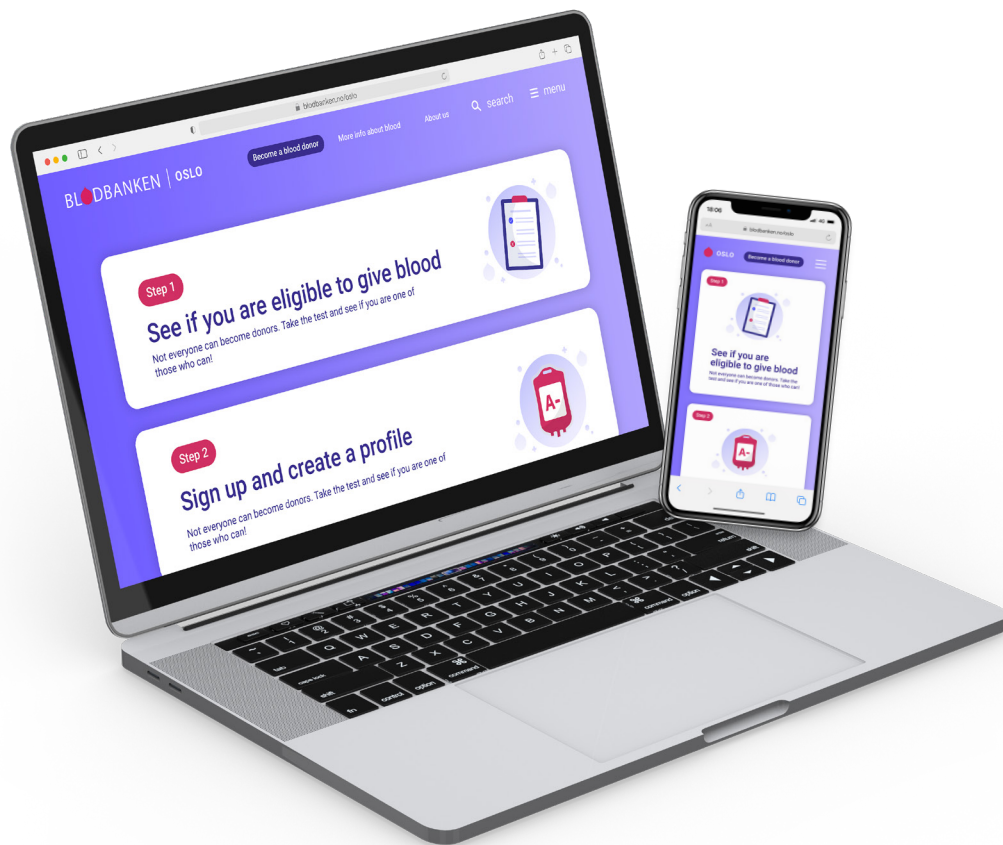


This user journey shows the intended effect on the level of experience, but illustrates only one experience of the service. Other situations, like being rejected on a permanent basis, have also been designed for. The next section presents the digital solutions in detail, and illustrates how each provides value to different stakeholders.

Digital solutions

Having shown the intended experience through the user journey, this chapter presents the digital solutions that support it in more detail. We show how each one provides value to various stakeholders and conclude with feedback from donors and staff members at the Oslo Blood Bank.





Registration

This concept involves letting people register and verify their identity directly on the blood bank's own website. This simplifies the onboarding process significantly, creating for a clear way in and making it less confusing who actually provides the service.

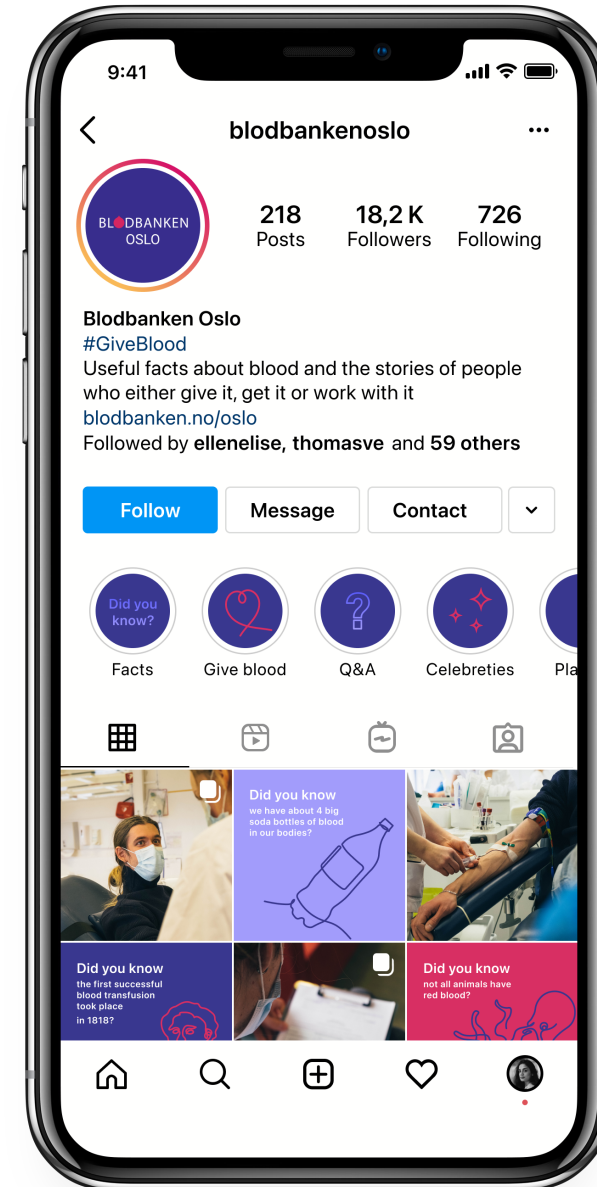
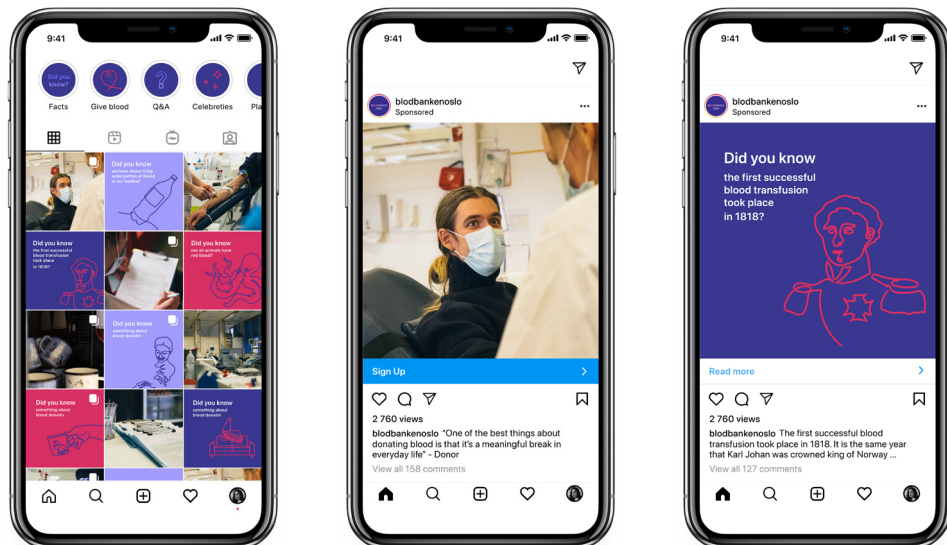
Prospective donors are taken through the registration process step-by-step, where the information is presented in an engaging way. Because not everyone can donate, the goal is not just simplifying the registration process, but also about filtering out ineligible candidates as early and as tactfully as possible. This involves managing expectations through careful wording and tone of voice, and conveying the importance of blood security while still being understanding towards those who are rejected.

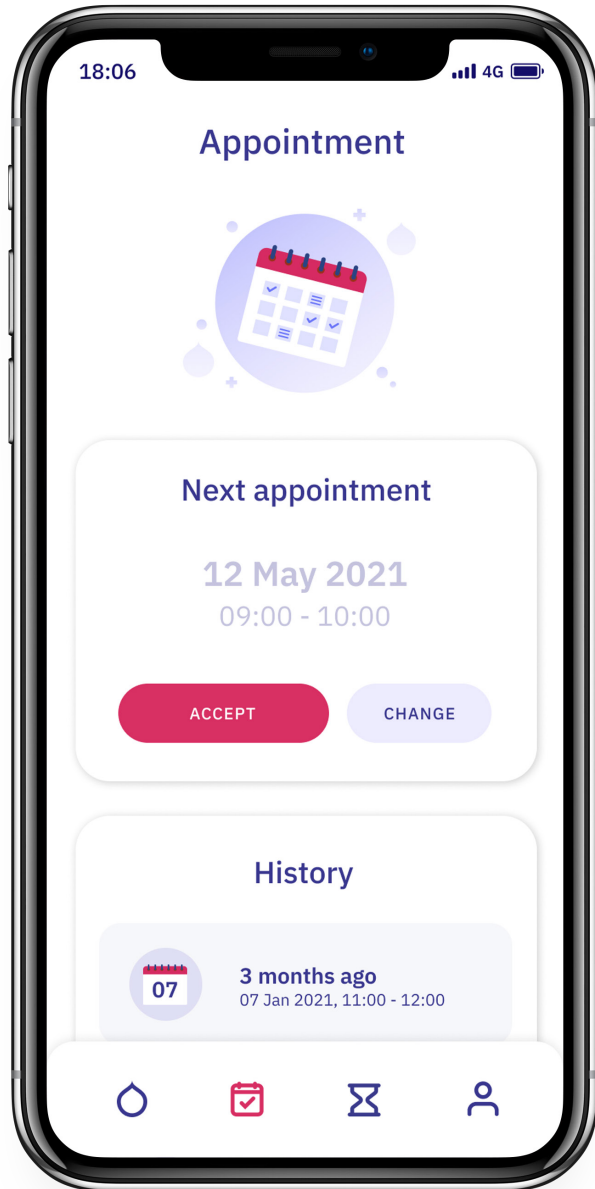
Direct donor registration by the blood bank would lead to more successful registrations as there would be fewer opportunities to fall off the journey. This would also save resources by streamlining the process and eliminating tedious manual labour.

Spreading the word

This suggestion for how a more engaging Instagram concept for the Oslo Blood Bank could look, aims to set the bar much higher for their content. The main difference from the current situation is a clear concept in which each post has a purpose and maintains familiarity with the other posts.

An engaging social media presence could make the topic more visible and bring it into people's everyday lives. This can have a positive effect on recruitment, as the mere act of reflecting on the topic tends to increase registrations (Stutzer, Goette, & Zehnder, 2011). Details like consistent use of fonts, image style and colors support the concept to convey and develop the brand of the service.

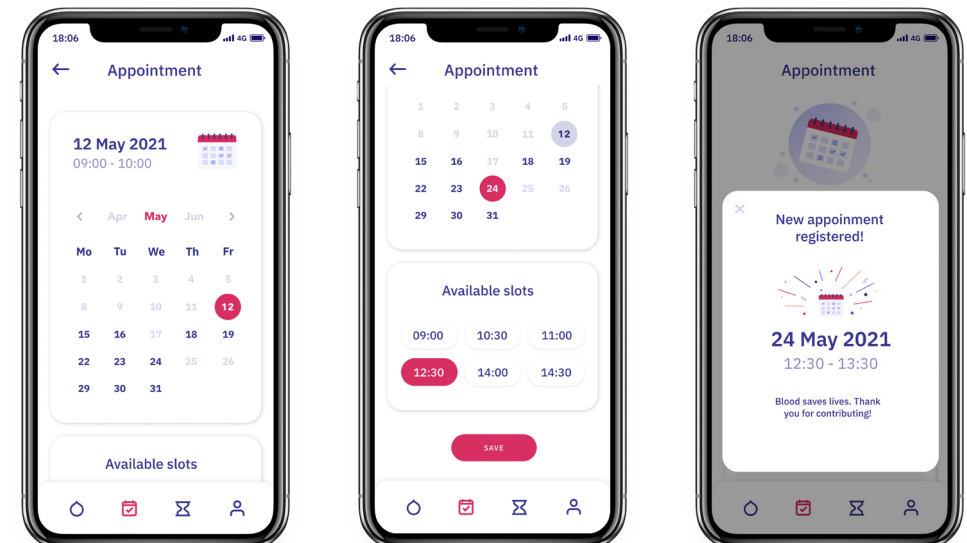




Appointment management

This concept streamlines the process of rebooking appointments for donation as an integrated part of the app, rather than linking to an external website. This makes the process more accessible and seamless for the donor.

An important feature is that donors are prompted to press the “accept” button for each appointment. This nudges the donor to follow through because they have actively agreed, potentially improving attendance, which is a daily struggle for the staff to balance.

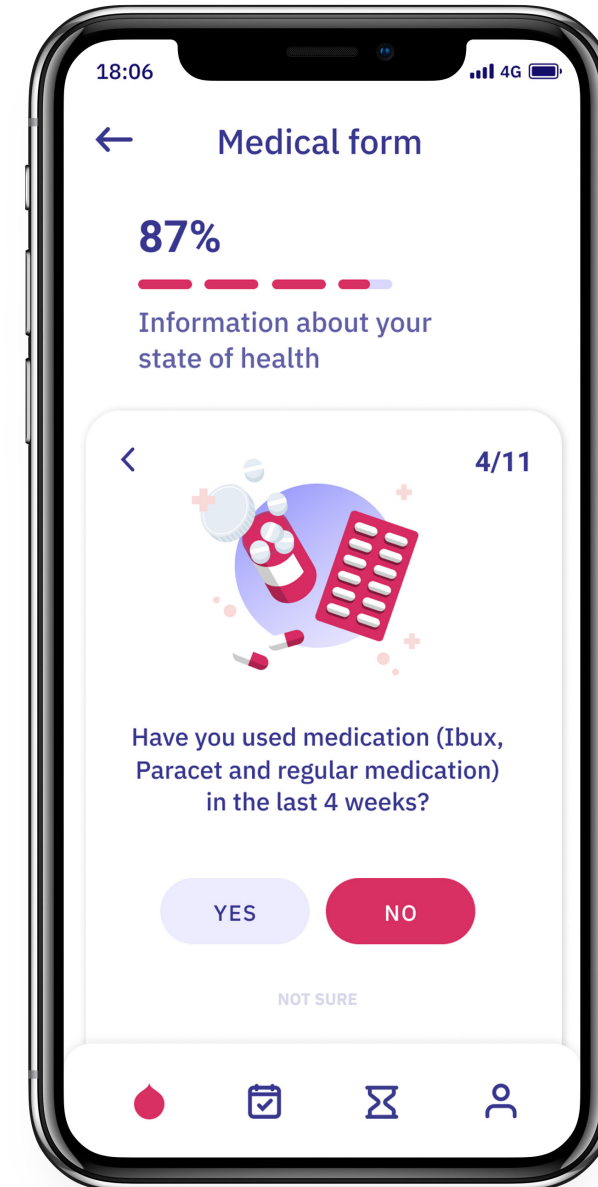
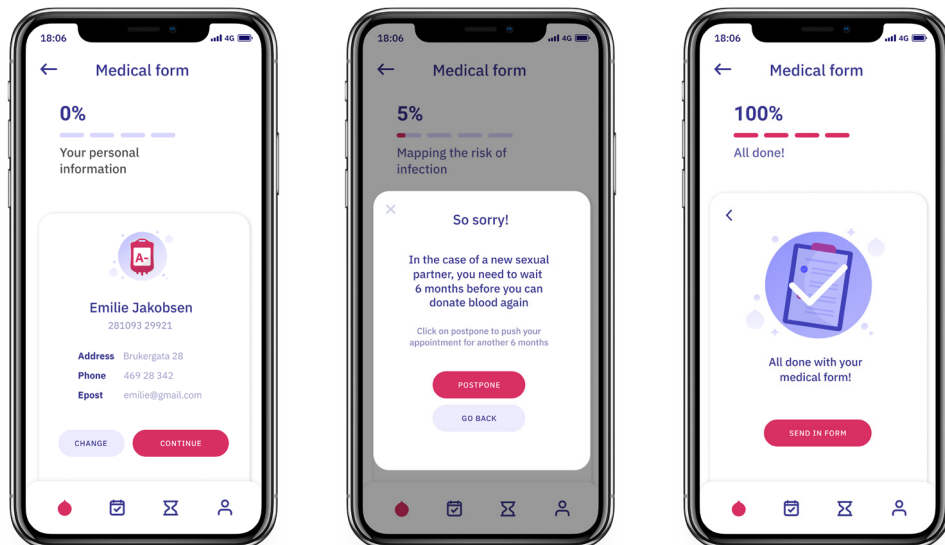


Medical form

Utilizing the potential of a digital medical form, this concept lets donors decide for themselves where and when to fill it out. The only restriction is that it be filled out the same day as the appointment, but before actually donating.

Categorically disqualifying questions are presented first to spare unqualified donors from having to answer the whole form. Other questions might need clarification in the interview and therefore allow the donor to continue to the next step.

Some information cannot change from one appointment to the next, like place of birth. Other items are only relevant for some donors, like gender specific questions. The more personalized digital form is quicker and more suited to each donor, and illustrations contribute to making the form more engaging to complete.



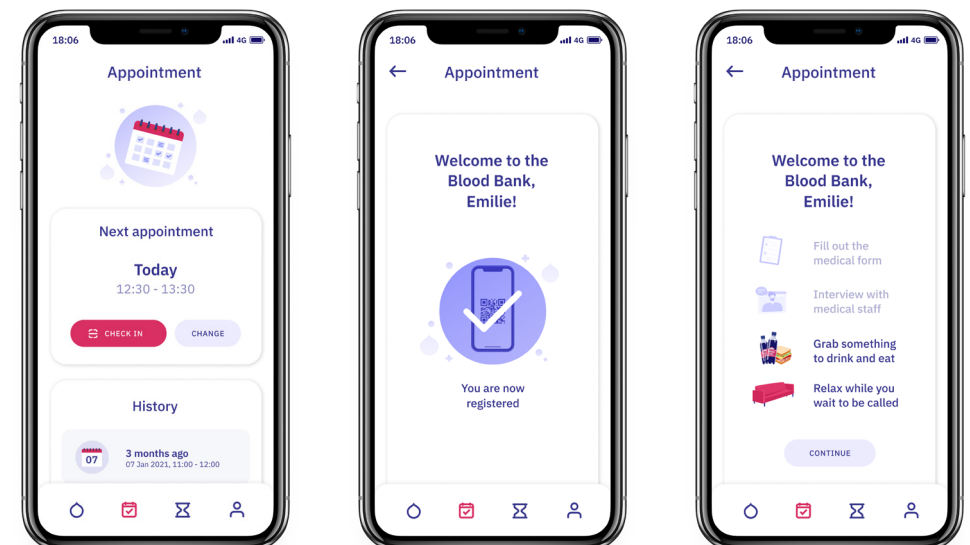


Checking in

This concept introduces the step of scanning a personal QR code at the entrance to register arrival. This prompts a step-by-step guide in the app of what to do next. This can be particularly valuable in providing a sense of direction for first-time donors who can feel uncertain of what to do.

If the donor has completed the medical form and interview before arriving, the app tells them that they are registered, that they can grab a snack and something in the fridge and have a seat to wait to be called up. If they haven't completed the form, they are prompted to do so before being called in for a physical interview.

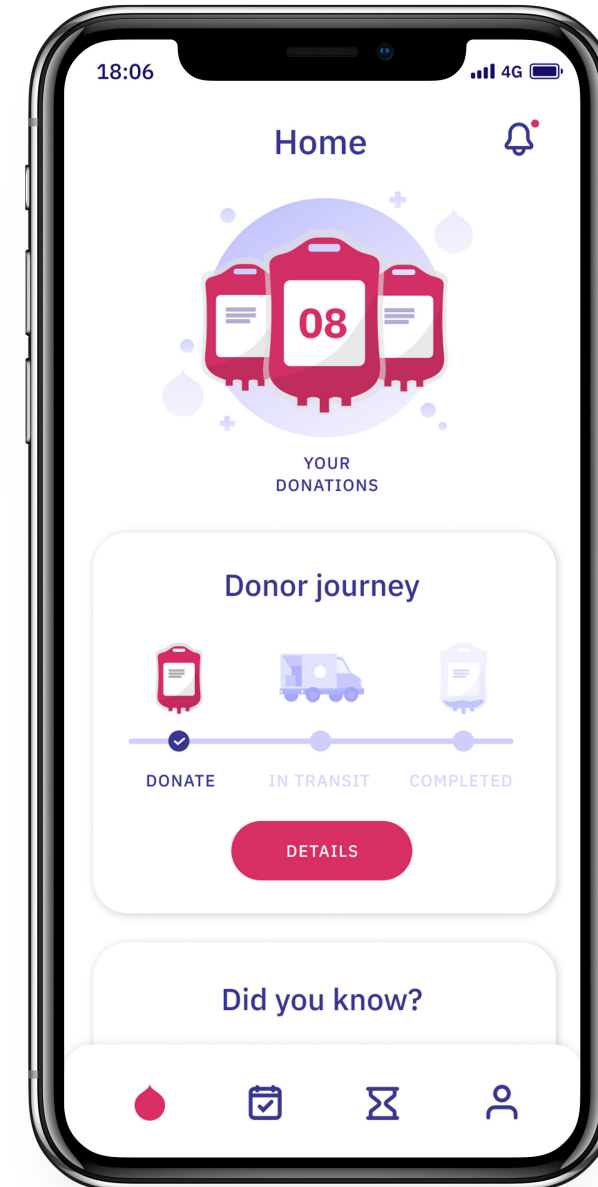
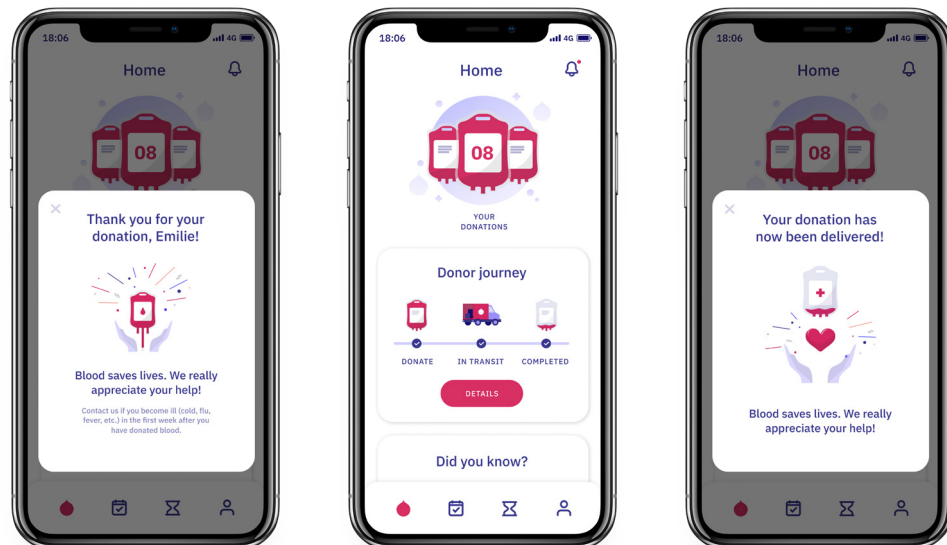
For the blood bank, this means a completely new data set that can be used to track attendance and potentially facilitate making adjustments to the day's often fluctuating schedule.

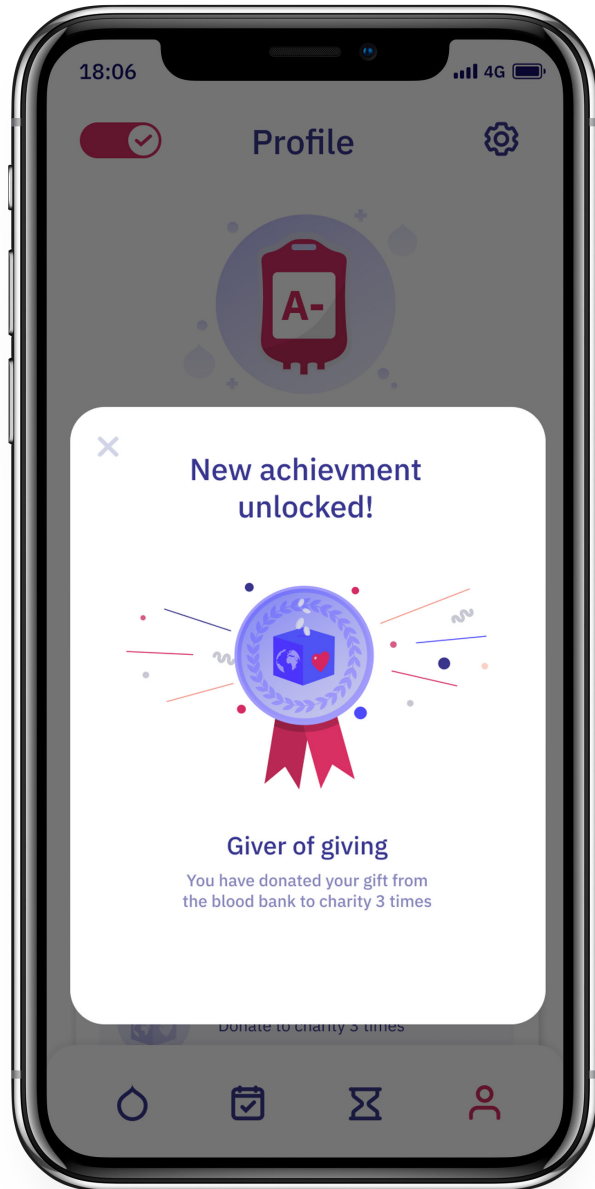


After the donation

This feature builds on the importance of expressing gratitude and reminding donors of the importance of their contribution. Not only do the donors hear this from the staff, but it is reinforced by the app after having left the donation center.

Providing an overview, like following a package online, shows donors that their blood is actually being used, without having to expose any sensitive details. This reconfirms for the donor the value of their contribution. The idea is to get the same kind of extra validation as one would get when a friend, after having been over for dinner, follows up with a text message again thanking you for a wonderful evening.

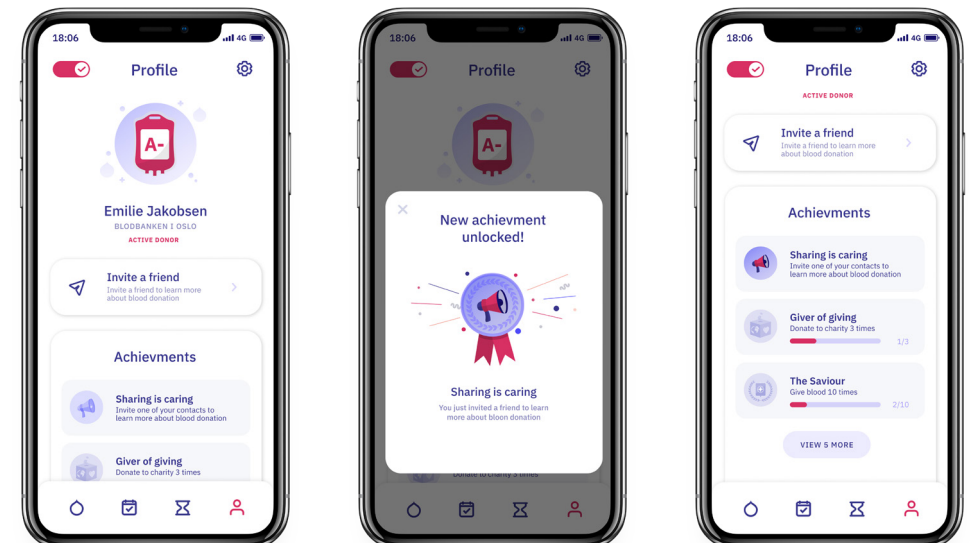




Digital achievements

Motivation happens on multiple levels and can be boosted by using simple gamification features like digital achievements. This gives donors recognition in a small but fun way that keeps them engaged.

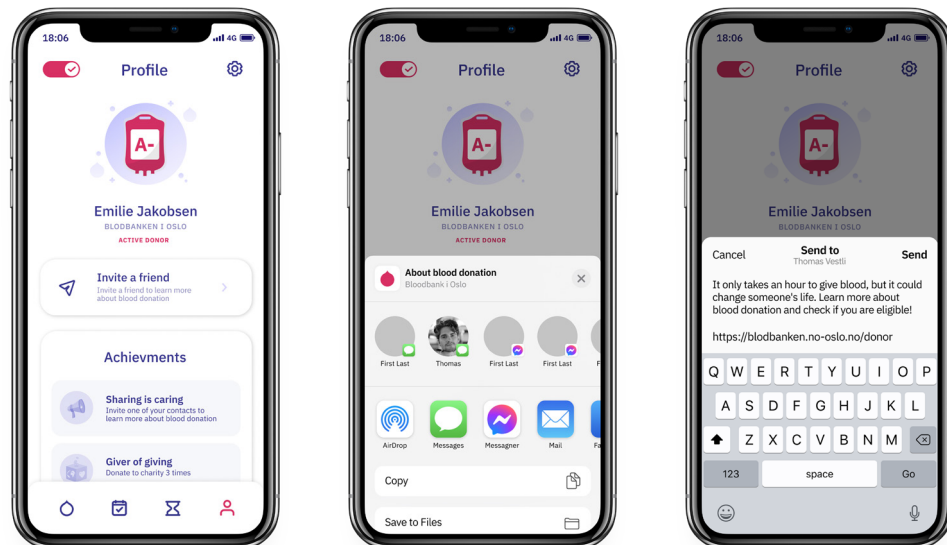
Importantly, these rewards motivate and engage without incentivising dishonesty, as they specifically don't put pressure on donating every time. Instead they reward things like "tell a friend", "read about the rules" and "donate your gift to charity" as well as more long-term goals like "donate 10 times".

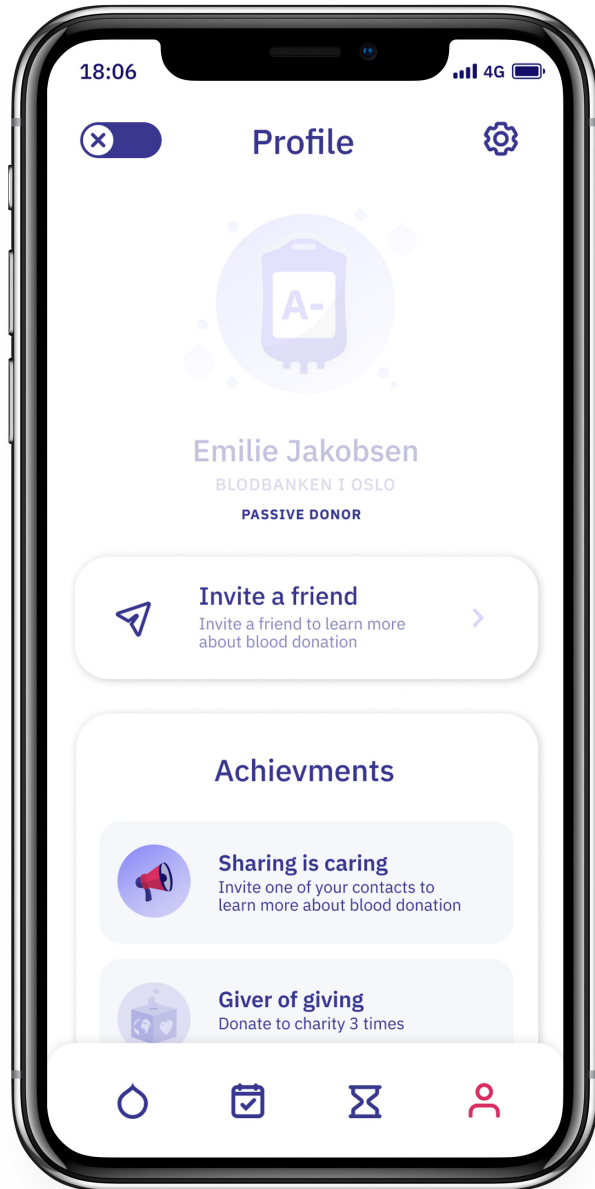


Inviting friends

The option to invite friends can lower the threshold both to recruit and to become a blood donor. Donors are nudged by the visually prominent feature in the app as well as badges that prompt them to invite. Those who are invited don't merely get an encouragement to donate, but are also helped past the important first step of remembering to search for information.

Most donors are recruited by acquaintances (Misje, 2001), and his feature provides a way for the blood bank to support this. It can also give them a completely new type of data on recruitment, making it possible for them to iterate based on use over time.

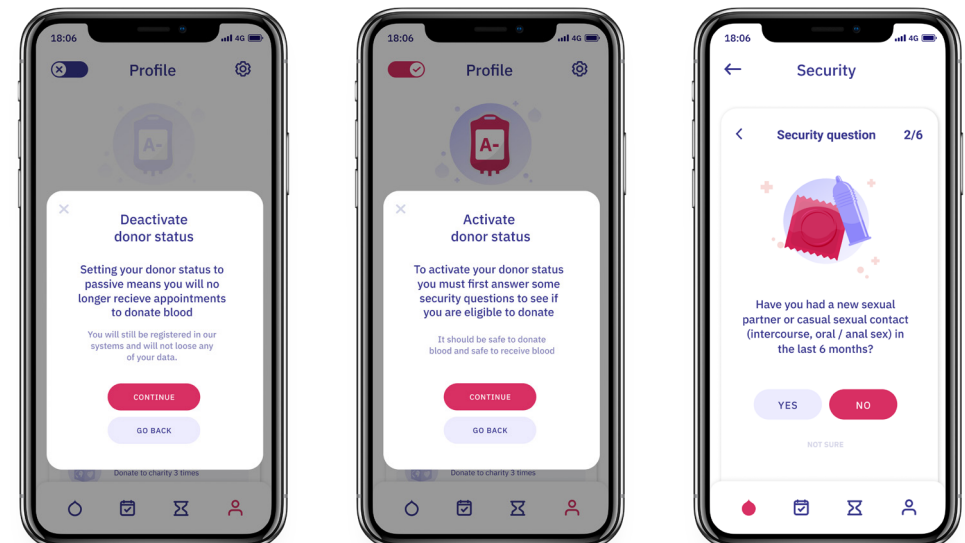




Passive donor status

Life situations can quickly change, making donors unable or unwilling to be a donor for a while. Instead of having to phone in and “break up with the blood bank”, this option of setting the donor status to passive lets donors take a break where they no longer receive new appointments.

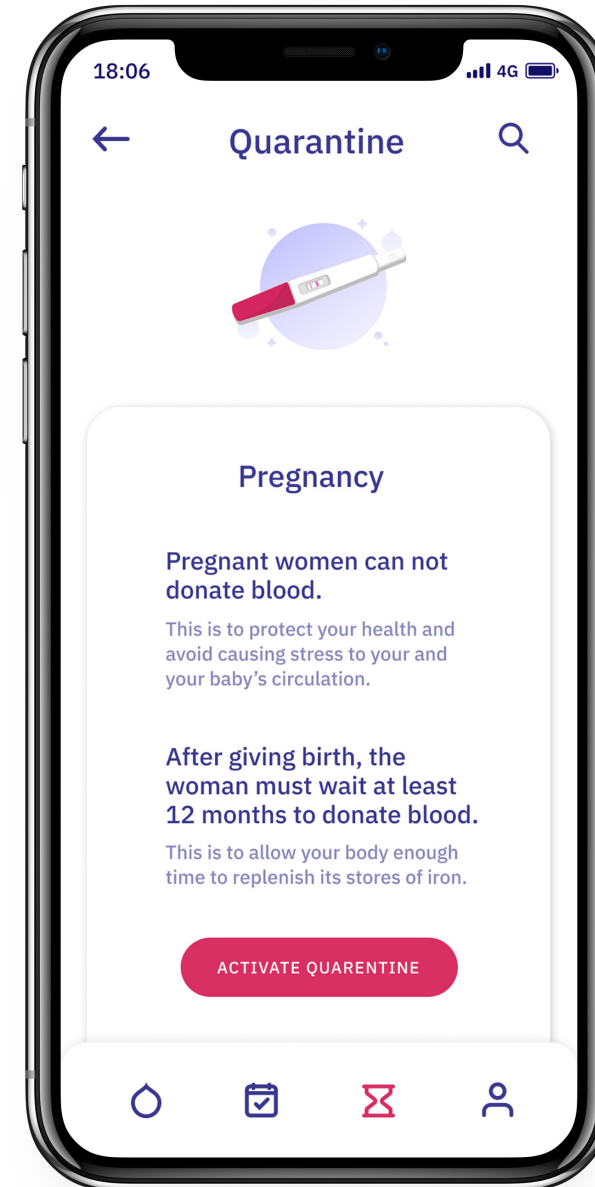
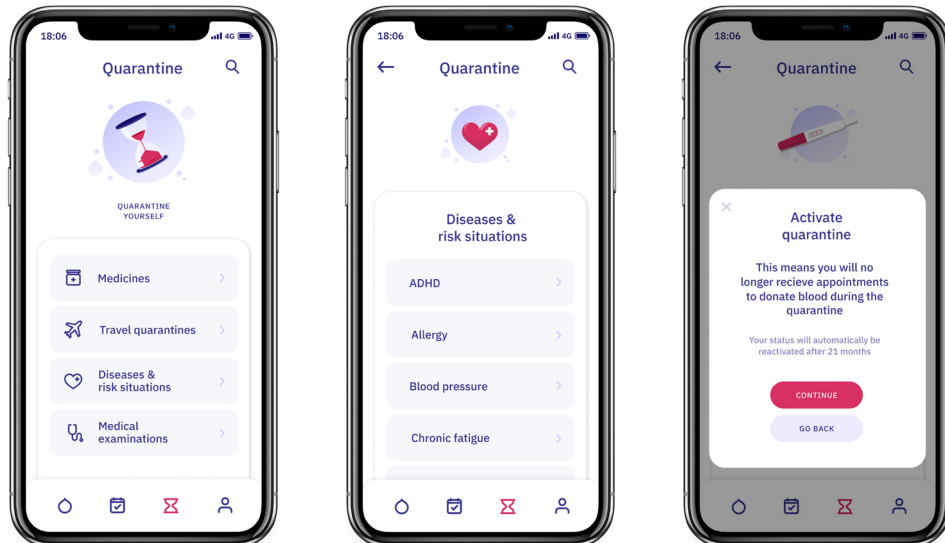
The option to deactivate is quite visible, because taking a break should be easy if that is what the donor wants. Reactivating the account feels more like picking up where you left off than starting all over again. The app notifies the passive donor once every year to reactivate their status. This gives the blood bank a way to reach those who might want to get back into it and introduces a new concept to the donor/non-donor dichotomy of today.

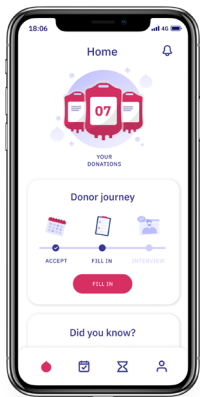


Quarantine rules

One of the most important features in the current app, both for donors and staff, is the large database of quarantine rules relating to travels, medical situations and much more. We have improved on this with the option to dynamically activate quarantines directly.

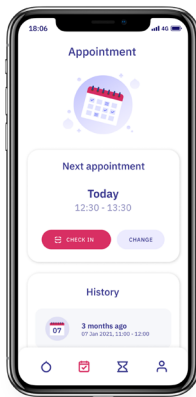
Instead of having to manually cancel appointments or phone the blood bank, donors get the option to put themselves in the relevant quarantine by the push of a button while reading about the restrictions. Added illustrations make the text-heavy rules more engaging.





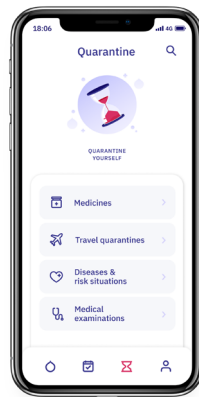
Home

- Number of donations
- Notifications
- Your donor journey
- Access medical form
- Fun facts about blood



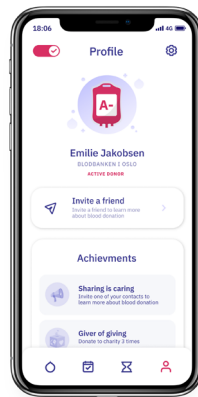
Appointment

- Accept appointments
- Change appointments
- Check in
- History of appointments



Quarantine

- Quarantine rules
- Search for quarantine rules
- Activate quarantine



Profile

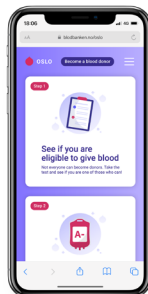
- Your blood type
- Profile information
- Invite a friend
- Achievements
- Settings
- Activate or deactivate status

Structure of the app

Improving the structure of the app lifts the user experience and adds a feeling of professionalism while reducing confusion. This shows how the proposed features come together in a cohesive whole and addresses navigation issues of the existing app.

We have reorganized the navigation within the app and added new sections like "Profile", containing information about blood type and features like badges and the invite button. In other places we have combined sections, putting for example "Quarantine rules" and "News" into a section called "Information". These changes to the architecture of the app aim to reduce confusion and improve accessibility.

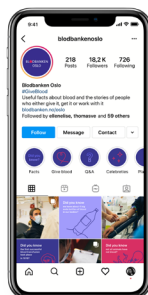
Feedback



"That is the biggest potential to improve the whole flow, if you can make a system that cuts the time from when you register to when you are contacted." - Donor

"This makes it seem as easy as it actually is" - Donor

"I like this. Today the blood bank has things in a slightly wrong order. Getting this first is a little less abrupt. Instead of "Donate! Become a donor!" the first thing is "Find out if you can donate." It's a good idea to figure this out first." - Donor



"This will without a doubt be of help. Perhaps the greatest potential for improvement I can see is if they could convey the stories and bring forth the people more." - Donor

"Instagram posts can't be just random, especially not from an organization. If you want to be on social media, you have to have a concept." - Donor

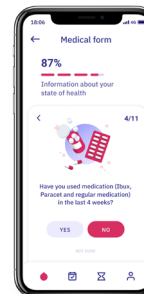
"I saw there was a Q&A, and this offers the possibility for two way communication. It's a pretty low threshold way for many young people to get info." - Donor



"Had it been like this, it would be very smooth." - Donor

"This gives a very professional impression. It seems very nice considering how other apps are structured." - Donor

"Everything that can simplify the process of rescheduling is gold. Having children in the kindergarten, I have a cold all the time." - Donor



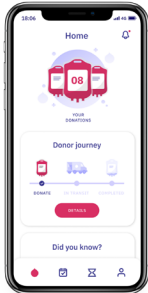
"It is great for both us and the donors to filter out those who don't need to come in just to get rejected" - Nurse

"This would be a dream: that the donors could send in the form through the app and then have a video consultation. Having it electronically accepted would mean we wouldn't have to physically process it." - Nurse



"That step-by-step part is really good. The first time I came to the blood bank I thought: There is some kind of system here, everyone knows what to do. What do I do?" - Donor

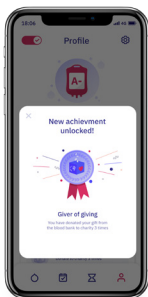
"I think this is a good way to streamline check-in. Still I think it would be wise to have a person in the reception, so you feel welcome." - Donor



"This feels like getting the message from higher up, not only from one person but from the whole blood bank itself". - Donor

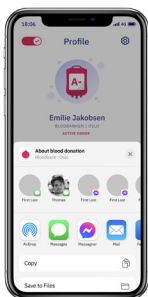
"Without this it's kind of like giving your money to a charity, but then not knowing where your money has gone" - Donor

"I have missed something like this. In other countries you get an SMS when the blood gets used. We really should already have implemented this." - Donor



This is really fun! In the old days donors would get silver and gold pins. Perhaps they could get a badge when they donate a gift or two to charity" - Nurse

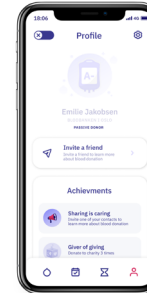
"I am really for this reward stuff! You get it for registering, every time you donate, every ten times, for recruiting others, everything!" - Donor



"Using the "invite a friend" option would be much much easier than for me to go to giblod.no and then copy the address and then send it to someone. The threshold is a lot lower" - Donor

"I like the invite feature. It's a good step further in assisting donors to share" - Donor

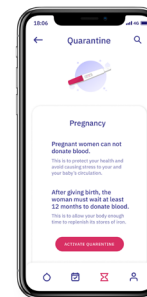
"If I tell someone "hey, donate blood" og they say "yeah, I'll check it out when I get home" they just forget. You've made something in between there: "Ok, then I'll send you a link". This is a good idea." - Donor



"After speaking to you I actually wanted to sign up again, but it was such a hassle to have to phone in and go through all that stuff again. What you show here however is much easier and very nice." - Donor

"I can imagine a system like this would enable them to handle crises much better. Preparedness in the public sector should be an important part of the discussion these days." - Donor

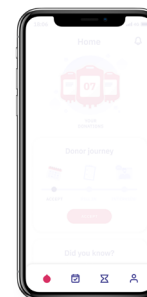
"If your relationship ends, or you go on an exchange semester, it would be really nice to be able to set yourself as passive. This is especially useful for youths because they have a bigger chance of not being able to donate for an extended period longer than just a regular quarantine." - Donor



"I like this because you are giving the donor more feeling of ownership" - Donor

"I can imagine if you're in a situation with new sexual partners it would be better to be able to push a button instead of explaining it to someone." - Donor

"I'm a fan of this, that it's easy for me to just put myself in quarantine, instead of having to figure it out, and then try to find the phone number and then call them. The quarantine rules don't have that next step today." - Donor



"I think it looks really, really good." - Donor

"The navigation makes sense. I didn't for a second think that anything was in the wrong place. This is what I want in the app." - Donor



08



Taking it further

To really contribute to the conversation about the digitalization of the Norwegian blood donation system, we wanted to take the project further and consider the larger picture. To get a handle on this systemic aspect, we spoke to Adrian Paulsen, Studio Leader for Policy Design at Halogen, and Hanne-Cecilie Bjørka, Study Coordinator at the Ministry of Local Government and Modernisation. Conversations with them were highly informative and helped us mature how we framed the project in a larger context of public sector digitalization.

This chapter goes into detail around what some of our concepts entail or require, and is meant more as a starting point for discussion than as final answers.

Moving registration closer to the blood bank

One of our concepts involves moving the registration process from the Red Cross website giblod.no to the proposed new blood bank websites.

90% of recruitments in Norway come through giblod.no. Although the site is well designed and engaging, problems arise when the information is sent to the different blood banks, where the data must be entered manually into their systems, and the donors must be contacted by phone for confirmation. Besides requiring extra manual work, this results in a massive loss of registrations. Speaking with the Red Cross, we learned that about 40-50% of those who start the process fall off before completing it with the blood bank. Out of 36,000 who were recruited in 2018, only 19,000 finally registered as donors. (Norwegian Red Cross, personal communication, August 28, 2020).

Today most blood bank websites send prospective donors back to giblod.no for registration, which is confusing from the user's perspective. From their perspective, it makes more sense for the Red Cross to send donors to the relevant blood bank for registration, provided that the website is also well designed and engaging.

Building digital competency in-house

"As a rule, creating digital products and services will create the need for new capabilities and processes inside the organizations that deliver them. Digital user experiences are living systems, and they require organizational investment and structures ready to support near-constant change." (Henkel, 2019)

The current model of procurement of digital solutions means there is little in-house competency to continue improving them. This lack of relevant competency is an important barrier for the development of digital services in the public sector (The Research Council of Norway, 2019). To address this, several public services have built internal cross-disciplinary product teams to design, develop and operate new digital solutions, and one such service is NAV.

We spoke to Fredrik Scheide, who leads the design team at NAV to get input on how something similar could best be organized in the context of the Oslo Blood Bank. We learned that it would be costly, challenging and potentially risky. Therefore, an alternative approach could be to hire a project leader and a team of external consultants as a pilot over a set timeframe. Though consultants are more expensive, this option is more flexible because the blood bank is not committed if the pilot does not work out. If successful, however, it can be scaled up by hiring people on a permanent basis.



Prioritizing digital marketing

Another competency that needs to be built is social media marketing. To get a handle on what is required for a public service to produce high-quality social media content, we spoke to Klaus Sandvik, who manages the excellent Instagram account @kildesorteringioslo. He highlighted the need to find a solid concept instead of posting at random without a clear message. Two years ago their Instagram account was on the same level as @blodbankenoslo. With the help of a marketing company, and by putting in the resources, they were able to boost their following and reach considerably. Today there are two full-time staff working with the account and other communication activities.

For the Oslo Blood Bank to improve their online presence, it will need to be prioritized. This can improve recruitment, particularly in terms of reaching a younger generation. It can also contribute to making the topic more relevant and part of everyday conversations.

Getting past data security concerns

One big elephant in the room is of course the data security concerns which, though important, continuously delay digital progress for the blood bank. We decided early in the process to presume these to be resolved to a much greater extent than today. We did not want to be held back by technical issues that could realistically be solved. However, this issue still remains an important barrier for many of our concepts to be implemented.

Increased data sharing is also one of the main points in the strategy for digitalization of the public sector, which states that *“the public sector shall share data when it can and protect data when it must.”* (Ministry of Local Government and Modernisation, 2019)

We spoke to Nicklas Svendsrud, tech lead at Eggs and long time blood donor, to get his reaction on our concepts with regards to data security. He was positive and thought the data security issues should be resolvable to a much higher degree.

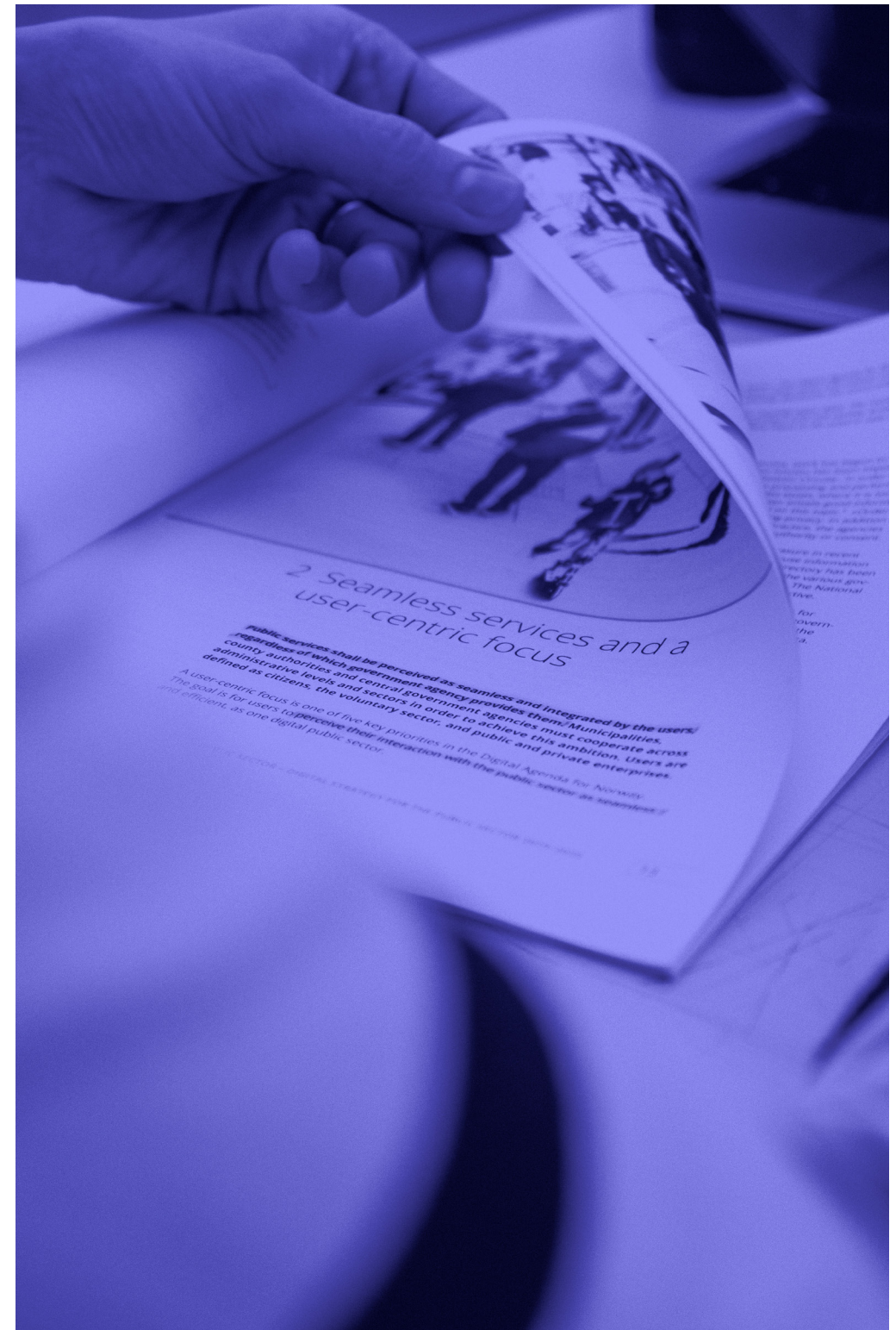
“I think data security might be something they kind of hide behind. Of course, it costs money, but they really can’t afford to fall much further behind in terms of how they are experienced with regards to technology.” - Nicklas Svendsrud

Developing a strategy for digitalization

Not having a digitalization strategy is more common than one would think and is lacking in one out of three public enterprises (The Research Council of Norway, 2019).

At OUS, the executive-level strategy (Oslo University Hospital, 2019) and hospital-wide innovation strategy (Oslo University Hospital, 2018) outline some goals and guidelines for digitalization. However, the strategy for the department where the blood bank is situated is quite thin on this topic (Ørvim, 2017). The Oslo Blood Bank itself has a semi-internal document which outlines IT goals (Haug Nissen-Meyer, 2019), but these relate to very specific solutions and don't address an overall direction. From an outside perspective, it therefore seems like a digitalization strategy is lacking on this level.

We believe creating such a strategy is an important step in supporting further development of the service. Our project aims to contribute to this work by providing specific examples for developments and the possible effects of these.





09



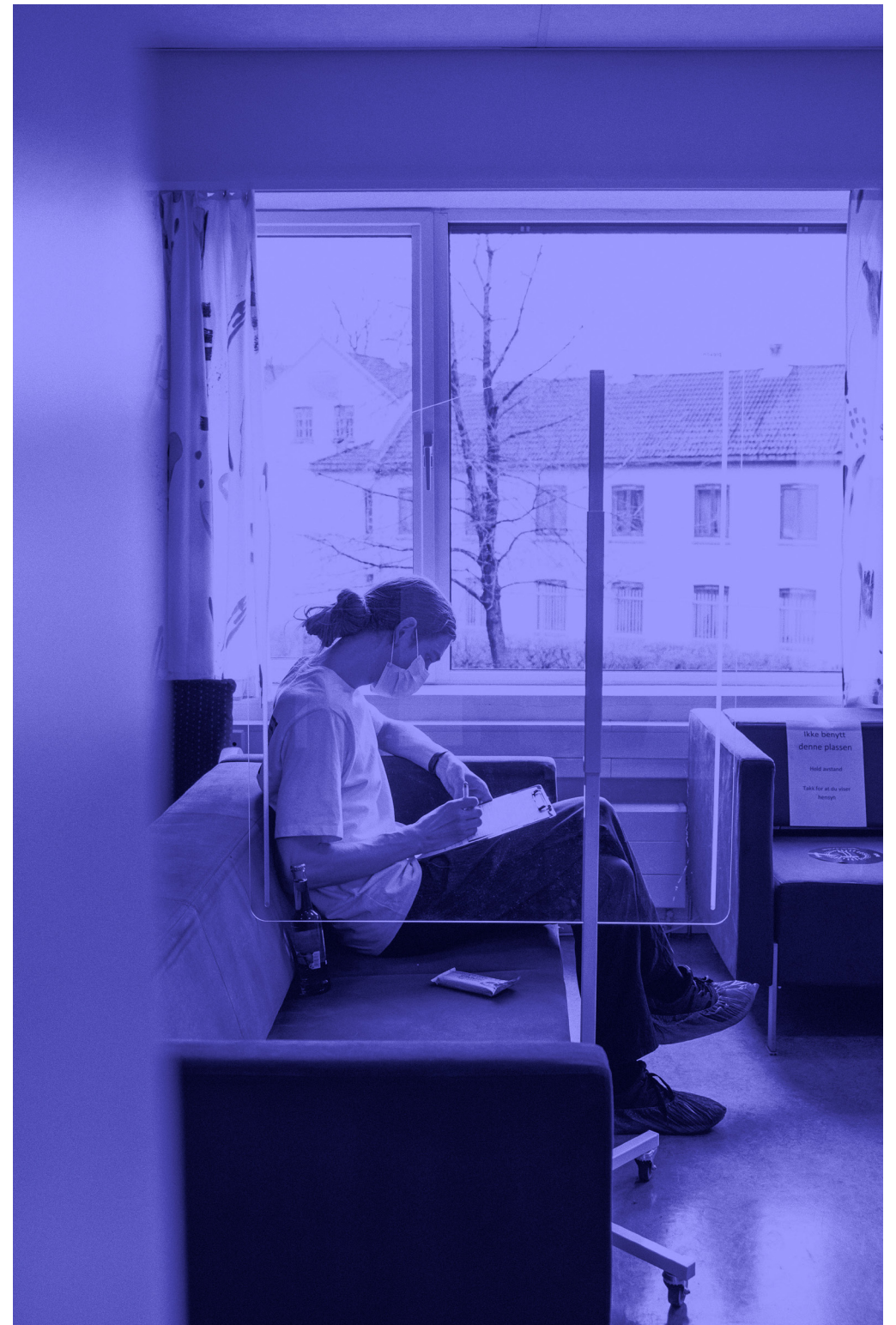
Conclusion

This chapter concludes by summing up the process and the result, the main goal of the project and the way in which we hope it can contribute.

Conclusion

In conclusion, we have explored the topic of blood donation in Norway, with a particular focus on user experience and digitalization. We have produced eight key findings based on extensive insight work and have developed a series of prototypes across a future user journey. These designs illustrate how we might facilitate seamless and meaningful blood donation experiences. Finally, we have offered our considerations on what systemic and organizational changes might be required for these or similar solutions to be realized.

The goal of our project is to advance the discussion of digitalization of the Norwegian blood donation system in a user centric direction. In the long term we believe this can provide the blood banks with more donors while preserving blood security and providing the donors themselves with better experiences. Our hope is that we can contribute to shifting the focus from the problems, limitations and technicalities of today towards the possibilities and potential of where the service could be headed.





100



Reflections

In the final chapter of this report we reflect on how it has been to collaborate with each other, the Oslo Blood Bank and the Red Cross. We reflect on how the Covid-19 pandemic has affected the project and offer suggestions for future diploma projects. We conclude the report by thanking those who have contributed and helped us along the way.

Collaboration with each other

Our collaboration on this project has been very satisfactory, both personally and professionally. We have worked well together and learned a lot from one another. At the outset of the project we started by clarifying expectations and goals. We have had a very good feedback culture, challenging each other while also being open. Our respective competencies gave us different ways of approaching the process, but we did not experience significant collisions in understanding. As the project progressed, it moved gradually from being more service design led, to being more interaction design oriented towards the end, but with both fields contributing at every stage. Perhaps it goes without saying, but our process has in reality been much more back and forwards than the simplified linear process presented in this report.

Collaboration with the Oslo Blood Bank and the Red Cross

The Red Cross and the Oslo Blood Bank have been very rewarding to work with. It is apparent that the people in both organizations really care about the topic and have therefore gone the extra mile for us. With the Oslo Blood Bank in particular it was vital to get many different perspectives, and the staff we have been in contact with have been exceptionally helpful. The pandemic meant we could not physically spend time at the various donation centers to observe donors and staff interact. Therefore our project was much more dependent on active help and participation from the blood bank, and we would not have been able to learn so much about the system had it not been for their invaluable contributions.

Remote work

Although the pandemic has affected our work, we feel we have handled the situation well. We realized early the importance of preserving structure. When restrictions and lockdowns broke down routines and the external things that support them, we kept our work hours unchanged despite working from home. This contributed to preserving some normality in our days.

We used Miro throughout the project, for ideation, conducting interviews, synthesizing our insights and as an interactive calendar to keep each other updated regarding tasks, deadlines and other practicalities.

Our co-creation workshop was also heavily influenced by having to be held remotely. Our own experience taught us that many aspects of directing an open conversation productively are much harder online. However, we had had good experience with more rigidly structured online facilitation.

We also actively used our classmates and engaged them in weekly Monday standups as an informal arena to present our progress and to exchange advice and resources. Preserving some sense of normality, this helped us feel like an actual class with classmates to bounce ideas off of despite many of us sitting alone in different places.

Suggestions for future diploma projects

During the pre-diploma, we could not find any previous AHO diploma projects dealing with charity or volunteer work. Whether about giving money, blood, time or other resources, design for voluntary contribution is as important as it is interesting. After all, why do people give away things for free? And what is the role of design for this? Could a system oriented design project delve into the complexity of different NGOs collaborating? Could a speculative design project probe into a future where volunteer work fills the void left by automation and universal basic income? How might an industrial design project explore the physicality of altruism? We would love to see more diploma projects explore the areas of volunteer work, charity and donation, not only because these topics are very important, but also because they are very rewarding and interesting to work with.



Thank you!

In addition to our inspiring and talented classmates there are many people who have provided guidance and feedback on our project that we would like to thank.

Firstly, the wonderful people at the Oslo Blood Bank and the Red Cross Blood Program who have contributed to this project without whom we would not have been able to deliver on this level.

Our supervisors, Kaja Misvær Kistorp & Lars Marcus Vedeler, for offering guidance through the semester, helping us shape and sharpen the project and for challenging and supporting us.

Our external supervisor, Caterina Forno, senior designer at Eggs, for helping us through providing valuable feedback on several occasions.

Adrian Paulsen, studio leader for policy design at Halogen, for feedback that helped us lift the view from a local solution to how this could connect to a larger system and to the conversation around digitalization.

Elias Olderbakk og Erlend Grimeland, recent alumni and teachers at AHO, for feedback on our process that helped us frame the project in a larger context.

Hanne-Cecilie Bjørka, Study Coordinator at the Ministry of Local Government and Modernisation, for valuable insights around the many questions we had relating to political aspects of realizing innovation and digitalization.

Fredrik Scheide, Manager for the Design Section at NAV, for providing insight into their organization of in-house design development and for providing feedback and advice on our project.

Stephen Ehrenberg, Kevin's father, for proofreading and feedback on language and structure.

References

- Hoang, T., & Østgård, T. (2020). *Blodtransfusjonstjenesten i Norge, Statistikk for 2019*. Bærum: Blodbanken, Bærum sykehus, Vestre Viken HF.
- Olaussen, R. (2012). *Blodbankorganisering i Oslo-området : En komparativ studie av blodbankorganisering i Skåne, København-regionen og Oslo-området med vurdering av organisasjonsmodeller for Oslo-området*. Oslo: The University of Oslo.
- The Oslo Blood Bank. (n.d.). *Om Blodbanken i Oslo*. Retrieved April 2021, from Blodbanken Oslo: <https://www.blodbanken-oslo.no/index.php?action=showtopic&topic=eDNFwruA>
- Waksvik, G. (2017, February 8). *Venstre vil ha nasjonalt blodgiverregister*. Retrieved from Bioingeniøren: <https://www.bioingenioren.no/aktuelt/2017/venstre-vil-ha-nasjonalt-blodgiverregister/>
- The Red Cross. (n.d.). *Blodbankene*. Retrieved April 2021, from Gi-blod: <https://www.rodekors.no/gi-blod/blodbankene/>
- Fredriksen, H. (2017). *Insight about Norwegian Millennials and Blood Donation - A qualitative Study on Experiences, Expectations and Perceptions that identify potential Areas of Improvement and Innovation*. Trondheim: Norwegian University of Science and Technology.
- Qutub, A. (n.d.). *What is App Fatigue?* Retrieved May 2021, from Enterprise Monkey: <https://enterprisemonkey.com.au/blog/what-is-app-fatigue/>
- Thaler, R., & Sunstein, C. (2009). *Nudge - Improving Decisions About Health, Wealth and Happiness*. Penguin Books.
- Stutzer, A., Goette, L., & Zehnder, M. (2011). Active Decisions And Prosocial Behaviour: A Field Experiment On Blood Donation. *The Economic Journal*.
- Misje, A. H. (2001). *Altruisme bak hver dråpe ? -En spørreundersøkelse blant blodgivere ved Blodbanken i Oslo*. The University of Bergen.
- Henkel, E. (2019, November 8). *5 Principles for Making Digital Healthcare More Human-Centered*. Retrieved from The Octopus, A designer's view of the universe. : https://www.ideo.com/blog/5-principles-for-making-digital-healthcare-more-human-centered?utm_campaign=consglobal-campaign-blog-5principles-for-making-digitalhealth-more-human-centered-2021-03-23&utm_source=linkedin&utm_medium=social
- Ørvim, N. (2017). *Strategiplan 2017-2020 for Avdeling immunologi og transfusjonsmedisin*. Oslo: Oslo Universitetssykehus HF.
- Haug Nissen-Meyer, L. (2019). *Mål og mening 2019/2020 - Seksjon for Blodgivning*. Oslo: Oslo Universitetssykehus HF.
- Comte Bureau. (2020). *Hvordan Bruke Nudging*. Retrieved February 2021, from Comte: <https://comte.no/hvordan-bruke-nudging>
- Ministry of Local Government and Modernisation. (2014, December 6). *Digitalisering i offentlig sektor*. Retrieved from Regjeringen: <https://www.regjeringen.no/no/tema/statlig-forvaltning/ikt-politikk/digitaliseringen-i-offentlig-sektor/id2340245/>
- Ministry of Local Government and Modernisation. (2019, June 11). *Én digital offentlig sektor. Digitaliseringsstrategi for offentlig sektor 2019–2025*. Oslo.
- The Research Council of Norway. (2019, November 1). *Indikatorer for digitalisering i offentlig sektor*. Retrieved from Indikatorrapporten: <https://www.forskningsradet.no/indikatorrapporten/les-mer/digitaliseringsindikatorer/>
- Oslo University Hospital. (2019, May 6). *Strategi 2019 - 2022*. Oslo: Oslo Universitetssykehus HF.
- Oslo University Hospital. (2018). *Innovasjonsstrategi 2018-2022*. Oslo: Oslo universitetssykehus HF.
- Norwegian Red Cross. (n.d.-a). *Om blod*. Retrieved March 2021, from Gi blod: <https://www.rodekors.no/gi-blod/informasjon/om-blod/>
- Norwegian Red Cross. (n.d.-b). *Hvorfor bli blodgiver*. Retrieved February 2021, from Gi blod: <https://www.rodekors.no/gi-blod/informasjon/hvorfor-bli-blodgiver/>
- Norwegian Red Cross. (2019, May 23). *Hvor Mange Gir blod? [Video]*. YouTube. https://www.youtube.com/watch?v=0FDFtnN_QZ4
- Norwegian Red Cross. (n.d.-c). *Informasjon*. Retrieved February 2021, from Gi blod: <https://www.rodekors.no/gi-blod/informasjon/>



