

References

Health

Boosting the digital maturity of a healthcare organization



We helped PHHYKY, a public provider of social and primary healthcare services in Finland's Päijät- Häme region co-create a customer and employee-centric operating model and services for digital mentors accelerating the digital maturity of the organisation.

"We are renewing our culture by building an digitalization operating model that open-mindedly scales to the specifics of both health and social care. The process has proven that agile development models are suitable also for the healthcare sector. As the change happens through our employees, they need an active mindset and desire to grow professionally. In achieving these things, Futurice has been an excellent partner. We gave them a lot of freedom and responsibility, and the impact has been successful."

– Rami Autio, CDO, PHHYKY

The collaborative mentoring process plays an important role in implementing PHHYKY's three-year digital strategy roadmap. As a result, PHHYKY can streamline its operations and improve its customer and employee experience, and increase cost efficiency.

What we did

We began by interviewing the mentors about their needs and expectations. Concurrently, we crystallized the common project-level goals and created a roadmap for how to proceed. We also structured PHHYKY's software usage/utilization by reviewing their most important software and software providers.

After the first month, we started designing and experimenting with new mentoring models. Later, we added customer segments, value promises and service design to the mix to create a portfolio of services for the mentors to use and develop in speeding up the usage of digital tools in the units.

We also provided recommendations for future development.

Why it matters

The organization's digital maturity increased by an average of 20.6%. As core work becomes more efficient, PHHYKY will be in a better position to meet its resource challenges. For example, chatbot automation reduces the number of customer contacts, and customers spend significantly more time seeing a doctor remotely than traditionally in an office.

The program has also clearly showed the importance of self-directed working skills, peer support, continuous learning, and self-development. Agility also makes adaptation to a continuously changing environment possible.

As a result, residents receive more and better health services. The mentoring process has also succeeded in engaging people by creating a natural continuum for their career paths.

Improved customer experience through service design



The Hospital District of Helsinki and Uusimaa wanted to improve the user experience of both the public and PRO sections of Health Village, and offer users more value.

About Terveyskylä/Health Village The service consists of two sides: the public and open side accessible to the general public; and the PRO side aimed at healthcare professionals and requiring registration. The idea behind the public side is to offer free access to easy to understand, health-related information produced by professionals. The PRO side offers a communication channel from primary to specialized healthcare as well as guides and other training aimed at both sectors. The contents of both sides are maintained and developed by Finland's hospital districts.

HOSPITAL DISTRICT OF HELSINKI AND UUSIMAA (HUS): Every year, about 670,000 patients are treated at the HUS Helsinki University Hospital. HUS employs 27,000 professionals to serve all patients' best interests. HUS is responsible for specialist medical care for the residents of 24 member municipalities.

Service design was used to explore ways to improve the user experience as well as opportunities for developing Health Village from an information source towards offering services. The fundamental purpose of the project was to find out how modularity and personalization might work in the renewed Health Village and help meet the needs of Finland's wellbeing services counties even better. There was also a need to define the productization of the service's public side, especially when it came to self-care.

What we did

We started by finding out how the general public as well as healthcare professionals currently use Health Village: what worked and what could be better – both on the public and the PRO side.

Based on the customer insights, we collaborated with Health Village's experts on outlining the productization of the public service – for the first time.

The project delivered an outline of Health Village's user groups, concept visions for both the public and PRO services and a product category division complete with defined and preliminary user interface sketches.

Why it matters

At a time when unfounded beliefs and disinformation spread like wildfire, guaranteeing access to trustworthy health information is more important than ever. The public side of Health Village offers researched information to all who seek it. It also offers health care professionals a place they can steer their customers to look for high quality information.

Health Village PRO enables the dissemination of both professional expertise and best practices among people working in health care.

In Finland, the emphasis in developing the dissemination of open information is on prevention. The aim is to offer people access to information they can find and use to have an impact on their own health – safely and securely.

More customer-centric procurement via process design



HUS wanted to develop its procurement in a more customer-centric direction and offer procurement as an internal service.

"In our highly specialized and demanding operational environment, tendering is done in close cooperation with our experts. We want to ensure that participating in the tendering process is as easy as possible for the experts. A good service experience helps people commit to cooperation. "

- Leena Koponen, Director, HUS Procurement Services

HOSPITAL DISTRICT OF HELSINKI AND UUSIMAA (HUS): HUS is made up of five hospital areas: Helsinki University Hospital, Hyvinkää, Lohja, Porvoo, and Västra Nyland. HUS is the largest healthcare provider and the second-largest employer in Finland and manages the most demanding specialist medical care in the country. The district has nationwide responsibility to provide centralized care for many rare and severe diseases.

The goal of the project was to increase customer satisfaction, make tendering processes quicker and servitize procurement process and offering. Together with the client, we standardized HUS level procurement practices and clarified the service offering.

What we did

We started by building a picture of the current status of the customer experience and expert work related to tendering by conducting interviews and surveys.

Based on the resulting customer insights, we designed and clarified the tendering services and operational model in a series of workshops attended by representatives of HUS Procurement Services and their internal customers. The model was validated with the Procurement Services' clients and tendering experts.

We created the procurement service offering and tendering paths, complete with roles and procedures, which were packaged in playbooks. Close collaboration with HUS ensured the success of the project.

Why it matters

The end results of tendering processes have a major impact on the everyday work of both HUS employees and patients.

Experts can have an impact on their work and which tools, equipment and services they use in the future. By making the tendering process, we make it easier for experts to participate.

The services and operational model created in the project will be tested and developed further as a part of a pilot process we designed.

Implementing procurement as a service and streamlining the operational model results in organizational changes. During the project, we created a roadmap to support the change process.

A digital companion for building a healthy life



Buchinger Wilhelmi is the world's leading clinic for therapeutic fasting, integrative medicine and healthy inspiration. The clinic wanted to strengthen their relationship with guests beyond the clinic stay. Taking into account the users, business needs and therapeutic goals, Futurice & Buchinger Wilhelmi co-created a digital service that focuses on building healthy habits and supporting guests in leading a more fulfilling life.

BUCHINGER WILHELMI: Buchinger Wilhelmi are the world's leading clinics for therapeutic fasting, integrative medicine and inspiration. The clinics are located in Überlingen, Germany and Marbella, Spain. The basis of the Buchinger Wilhelmi program is fasting according to the founder of the clinic, Dr. Otto Buchinger (1878 - 1966). This method has been continuously developed over three generations and in partnership with university research centers.

BUCHINGER
WILHELMI

What we did

We started tackling the challenge via a Service Vision Sprint involving a team of people from Futurice and Buchinger Wilhelmi. The SVS allowed us to engage in foundational research that helped identify user needs, develop ideas and concepts and create a vision for the service. We also investigated and validated various aspects of the potential service (e.g. core functionality or intuitive usability) through usability testing. Each design was tested in iterative cycles with users and experts.

After concluding the usability testing and vision/concept design, we developed a technical minimum viable product (MVP). Relying on previous research combined with the iterative nature of our development cycle, the team was able to focus on actual primary user needs while minimizing financial risk through rapid prototyping and testing a variety of ideas in parallel.

From a conceptual point of view, the focus on habit-building was chosen to allow for a positive and sustainable long-term change in guest behavior.

Why it matters

Health is one of the most important pillars in our life. To give it the attention it deserves, the multi-faceted concept of "great health" must be defined on a highly individual basis. In this age of optimization, eating healthy and exercising are not the only elements to consider. Mental health, creative inspiration and wellness (e.g. fasting) are also essential elements of living a healthy, fulfilling life.

For years, Buchinger Wilhelmi Clinics has helped their guests reset and recharge, but the relationship has been limited to time spent at the clinic. Their ability to support guests in maintaining their healthy habits once they returned to their busy daily lives was practically nonexistent. With the implementation of the new Buchinger Wilhelmi app, guests now receive support from Buchinger Wilhelmi beyond their stay and build healthy habits in their daily lives, no matter where they live.

futurice

A corporate strategy for the Deaconess foundation



The Finnish Deaconess Foundation (HDL) wanted to co-create a future-proof corporate-level strategy with employees and stakeholders. We facilitated a collaborative and future facing strategy process with a lasting impact.



Collaborative strategy creation process for use now and in the future



Deep insight into what are the organisation's unique strengths

THE DEACONESS FOUNDATION (Helsingin Diakonissalaitos) is a non-profit organisation and bold champion of human dignity. The Finnish based foundation is an over 150-year-old institution and social enterprise. Together with the disability services operator Rinnekoti and the subsidiaries of Hoiva Ltd and Caritas Services Ltd, they provide effective social welfare and health services that improve the day-to-day lives of the clients. HDL employs 2 900 people nationwide with combined turnover in 2019 of €160 million.



A Futurice team with experts in strategy, design, futures thinking and social psychology worked closely with teams across the HDL organisation to build a corporate-wide strategy for the foundation.

What we did

Within the organisation we worked with end-users, employees, the business and non-profit organisation, and top management and the board of directors.

First, we built a 360 view and gathered insights from key stakeholders: employees, customers, partners like ministries and municipalities, board of directors and management. This gave our team a holistic understanding of the unique strengths, pain points and needs of the different groups.

We then looked at future trends emerging in society and potential scenarios to identify common macro-level drivers that will shape the Finnish welfare society and mapped the key strategic themes that build the corporate strategy of HDL using a gap analysis.

We also identified the common glue that holds the organisation together and what makes it unique today and tomorrow.

Why it matters

Strategy processes are changing from static to adaptive and from siloed to collaborative and co-creative. Increasing adaptability enables companies to respond to emerging needs quicker and more effectively.

Bringing a future facing approach into the strategy process helped the organisation identify the most important external drivers that have an impact on it.

One of the project goals was to create a corporate strategy that inspires the whole organisation and connects with the board of directors, customer needs and partners.

We created a collaborative way of working that helps bring these very different stakeholders into the strategy creation process - now and in the future.

Production management strategy for health authorities



The Päijät-Häme Joint Authority for Health and Wellbeing (PHHYKY) is a health and social services region facing an aging population with decreasing tax revenues. To adapt, PHHYKY embarked on a transformation journey.



A participatory process to co-create a strategy through close collaboration



Clear vision, mission, goals, metrics and roadmap

PÄIJÄT-HÄME JOINT AUTHORITY FOR HEALTH AND WELLBEING (PHHYKY is a health and social services joint authority operating in the Päijät-Häme region that produces high-quality health and social services for 212 000 people PHHYKY is the largest employer in the region with over 7000 experts on its payroll.

Using product management to increase the efficiency of service production is one of the spearheads. Futurice supported the joint authority in creating a production management strategy.

What we did

Our approach to the strategy creation in a participatory manner, mapping out both management and employee perspectives. We started out by interviewing nine PHHYKY managers in charge of service production. The goal of the semi-structured interviews was to understand how the management defines production management and how they see its current status.

To gain insight into the employee perspective, we modeled one care path from start to finish, with a focus on production management bottlenecks. An analysis of the care path allowed us to integrate the customer perspective, too.

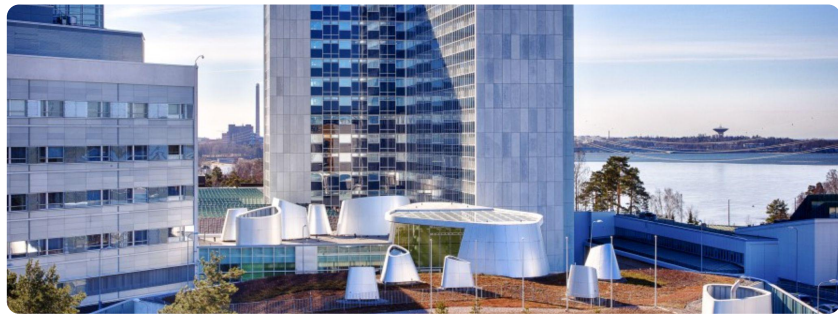
Based on the gained insights, we co-created a production management strategy that defines a mission and a vision, prioritised must-win battles and a preliminary roadmap towards victory.

Why it matters

Strategy creation is always a journey where inclusivity and co-creation play an important role. Working together sparks the birth of new ways of thinking and makes it easier for people to commit to the strategic imperatives.

Traditionally, production management has been defined from a resource perspective: the right resources in the right place at the right time. The customer perspective is often marginalised and it's hard to approach in the context of resource optimisation. We made sure the customer was a central concern in our participatory process and the resources followed their journey. The strategy will be implemented in phases via eight pilots. Bringing in a new customer-centric way of thinking is one of the most impactful aspects of the whole projects.

Customer journeys for adolescents and young adults diagnosed with cancer



As a patient group, adolescents and young adults (AYA) aged 18–35 diagnosed with cancer require special attention and are insufficiently understood. We helped FICAN South better understand and help meet the needs of adolescents and young adults diagnosed with cancer by co-designing a customer journey from the patient's point of view, as well as a practical guide for patients.

FICAN SOUTH: The Southern Finland National Cancer Center, FICAN South, coordinates cancer diagnostics and care, and promotes cancer research in Southern Finland as a part of the national FICAN organization. The development unit supports the care recommendation work and helps to guarantee first class cancer diagnostics and treatment, as well as promote transnational research for the patients best.

What we did

We started by collecting and examining a wide variety of background materials related to the field, followed by a workshop with patients. Our aim was to understand their post-diagnosis journeys. The second and third workshops were held with healthcare professionals: doctors, nurses, and therapists. The fourth workshop was held with representatives of the NGOs that support patients.

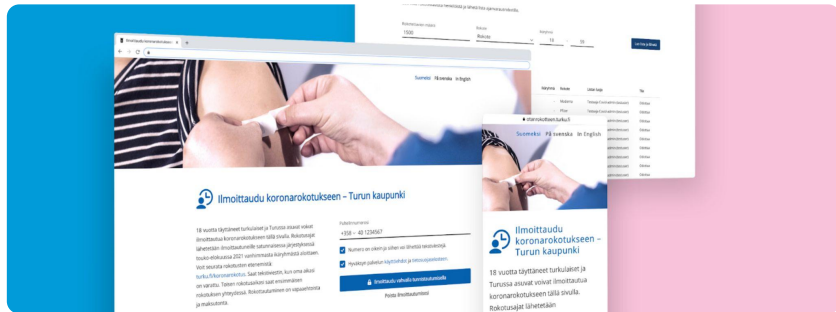
Next, using the extensive body of information gathered, we designed the service paths that were validated with FICAN South's AYA patient and advisory board. We also created a practical guide for the patients. Finally, we provided FICAN South with a detailed report on the insights, ideas for further development.

Why it matters

The material gives FICAN South a comprehensive, psychosocial, and practical view on a complex subject. The service paths and tangible suggestions help them focus, communicate, and prioritize future development projects based on the real needs of patients. The solutions for the identified challenges, such as training and educating the professionals of different areas in healthcare are already under construction.

The process has brought the stakeholders together to work towards a common goal, especially on developing the support provided for patients after cancer treatments. The new know-how is also shared with other FICAN organizations around Finland. Most importantly, the cancer patients now get more effective help for surviving the difficult journey and rebuilding their lives.

Automating a COVID-19 vaccination queue



The City of Turku organized its COVID-19 vaccination queue of over 100,000 residents aged 18 to 59 by randomizing turns, booking appointments automatically and sending personalized invitations via SMS.

"The service has been extremely well received among the end-users. An excellent initiative we managed to make work on a tight schedule. Our cooperation with Futurice was seamless and the end result is exactly what we expected."

– Tapio Järvenpää, Program Director, City of Turku



Almost 15,000 appointments booked on the first day



Minimizing distribution delays by assigning entire vaccine shipments at a time

TURKU: Finland's oldest city with a population of 193,000 people. Officially bilingual: 83% of the population speak Finnish, 5.5% Swedish.

Turku's vaccination helpline and appointment booking services were under considerable stress when vaccinating the city's risk groups. As the vaccination of the city's largest single population group (residents aged 18-59) approached, Turku wanted to ensure equal treatment of all, while securing the capacity of its healthcare services – accessibly, securely and in three languages.

What we did

We designed and implemented an accessible (WCAG 2.1) registration web page residents use to register for a vaccination using strong authentication. Calling the vaccination helpline was, of course, retained as an option.

In addition to the registration page, we designed and developed Maini, a vaccine & registry inventory management tool. With Maini, the people in charge of managing the vaccinations were able to assign received vaccine shipments directly to a randomized groups of people in the registry pool, book personal vaccination appointments for and send out an SMS invitations – all with a single click.

Why it matters

With the system in place, Turku was able to distribute all received COVID-19 vaccine shipments quickly and efficiently, mitigating both "cherry-picking" and cutting in line, while adhering to the national COVID-19 vaccination guidelines.

The service got very good feedback from the end users. The changes also facilitated a smarter use of the city's resources.

As the booking system's capacity was reserved for transferring and cancelling appointments already booked, the service suffered much less downtime, and vaccination helpline capacity was freed for those in need of assistance over the phone.

Communication tool for rheumatologists and rheumatoid arthritis patients



A pharmaceutical company wanted to explore new ways of creating value for rheumatologists and rheumatoid arthritis patients. The result was an app concept for joint therapy decisions, to improve the quality of patient-physician interaction.

What we did

The project started with an ideation workshop where we explored the daily work rheumatologists do and collaborated with them to develop rough concepts. During the next phase, we refined our Patient-Doctor tool concept through co-creation sessions, user interviews and concept feedback sessions. The goal was to validate the concept and gauge its product/market fit. Viability was established through a technical and data assessment.

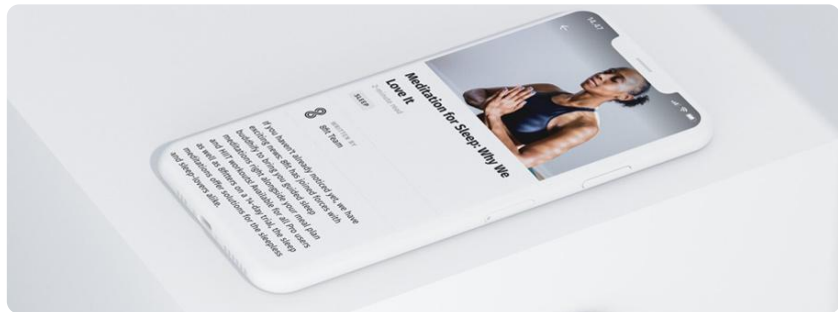
The result is a prototype tool that supports the patient between the visits, improves the interaction with their physicians and provides data to HCPs.

Why it matters

The time physicians have to spend with a single patient is limited. For patients, doctor's appointments can sometimes be overwhelming due to the amount of information discussed in a short time. Lack of relevant information often prevents effective treatment of the patient.

We created an MVP that improves workflow, communication and treatment quality. By working closely with end-users (rheumatologists and RA patients) during the development process, we were able to accurately identify real pain points.

Future-proofing a Berlin-based fitness startup



After several very successful years in the hyper-competitive field of fitness and wellness apps, 8fit was looking for deeper user insights.

Futurice provided 8fit with a team of experts in UX design, service design and product management. Our team worked closely across all departments to ensure the product maintained its high standards during a turbulent time, while also supporting the organisation to meet the demands of future growth. In practice, we worked on three parallel streams: user research, product design and product management as well as QA.

8FIT: 8fit is a health and fitness app that provides efficient workouts, customized meal plans, and self-care guidance to users united by the wish to feel better inside and out. The Berlin-based app is available worldwide in six languages, with 30 million downloads and counting.



What we did

User research: In order to help 8fit better understand their users, we developed and implemented an integrated user research process and conducted a wide range of contextual and in-depth interviews and surveys covering all segments of 8fit's user base. The research helped define detailed user personas with distinct needs in fitness and nutrition.

Product management: Together with the client's product and engineering team, we co-created comprehensive processes for product discovery, design and delivery. As a result, cross-team transparency and production speed improved significantly.

Product design: We designed new features and redesigned many existing parts of the app, including on-boarding, paywall, home screen, workouts and meals. In addition to the hands-on design work, the team helped foster a culture of consistent and effective user testing that is now an important part of how 8fit designs and implements new features.

Why it matters

The global fitness app market is projected to grow to almost \$15 billion by 2026, so the growth potential for a high-quality fitness platform that meets users' individual needs is massive. With its unique product, newly sharpened processes and strategy, 8fit is ready to tap into that growth.

During a time that had seen stagnating numbers in many key performance indicators, from user engagement to customer lifetime value, we helped 8fit work towards a reorientation of both its product and its organisation. By co-creating a clear product strategy, we helped the client overcome the downward trend and create a more user-centric product with a steady flow of new features. Working together to break nascent silos in the organisation improved collaboration between different areas and competencies, like marketing, product, engineering and design.

Discovering attitudes on medicine using data



Medicine Radar, an open web service, analyzes data from 19 million health-related posts made on the Suomi24 discussion platform.



New opportunities for further research on many other topics.



A neural network model that can use words and their contexts, including slang.



A big-data scale perspective for understanding the attitudes that people have about medicines.

CITIZEN MINDSCAPES: Citizen Mindscapes is a Finnish research collective and consortium for advanced social media analysis, bringing together top scholars from social sciences, digital culture, welfare, sociology, language technology and social data science. The consortium was launched in 2015 with funding from the Academy of Finland.

Researchers at Citizen Mindscapes wanted to find out how Finns really talk about drugs - their personal experiences, what kind of advice they give each other, how they relate to medicines when the doctor is not present, etc. A comprehensive look at drug discussions is of great social importance, as there is a lot of drug-related misinformation available and Finnish patients might not use medications as directed. The source for the data already existed: Suomi24, Finland's biggest online discussion forum. But how could knowledge be extracted from data that was essentially scattered in thousands of discussions? To find out, Citizen Mindscapes decided to work with Chilicorn Fund, Futurice's social responsibility program.

What we did

We created an open web service that is based on the use of algorithms to analyze data from 19 million health-related posts made on Suomi24. The service allows anyone to discover connections between drugs, symptoms, and dosages, as they appear in the discussion data.

In order to recognize which words represent drugs and symptoms, including the inflected forms and slang words, we developed novel methods for collecting vocabularies with minimal amount of manual labor.

Why it matters

Medicine Radar is a valuable tool for qualitative research on social media on a big data scale. The discussion material provides a new kind of unfiltered view of the perceptions, concerns, and attitudes that people have about medicines and thus provides a more complete view of patient mindscapes. A discussion about the use of medicines can reveal a different perspective on a loved one's everyday life or help compare their medicine experiences with that of others'.

Open Civil Registration and Vital Statistics



Plan is looking for a way to deliver universal birth and death registration with 100% coverage in countries that have struggled with it due to patchy infrastructure.

"Futurice helped us to embrace a human-centred approach to product development. This will be essential if we are to realise the vision for OpenCRVS; to ensure that all individuals on the planet are recognised, protected and provided for from birth."

- **Edward Duffus, Head of Innovation, Plan International**

PLAN INTERNATIONAL: Plan International is an independent development and humanitarian organisation, active in over 70 countries. Its mission is to advance children's rights and equality for girls, with a 5-year ambition to transform the lives of 100 million girls. They work with vulnerable children, especially girls, to help them learn, lead, decide and thrive.

290 million children under the age of 5 have no birth certificate and are thus denied access to basic services and put at greater risk from trafficking and abuse. Paper records are easily damaged or lost, and prevent a more sophisticated use of data. Digitisation efforts are often hampered by outdated legacy software.

What we did

Combining Futurice's capabilities in design, development and strategy, we created a solution that can be rolled out and used anywhere in the world. Bangladesh was chosen for the pilot.

We immersed ourselves in the work of community health workers and registration clerks. We travelled to remote rural areas to engage with people struggling to provide services through power cuts, transport issues, server downtime, and slow or no internet connectivity. Focus groups and prototype testing sessions took place to ensure the system worked for its end users, taking into reading ability and the relevance of features for different types of user.

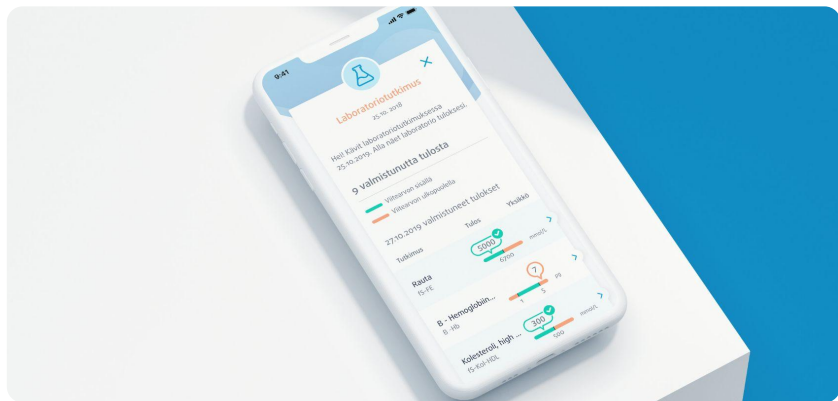
The open source platform allows developers to build an app-like experience online. The web apps use less data and are constantly updated. They can be used offline as well as on low quality networks and don't require health workers to have state of the art mobile devices.

Why it matters

The ability to register the births and deaths in a country allows civil institutions to reduce corruption and combat human trafficking, slavery, underage marriage and many other forms of abuse. It's vital for the equitable provision of healthcare, and a foundational element of property law and many other legal rights.

It's fantastic to be able to tackle so many problems at their root. We've come to understand just how huge the positive impact that registering births and deaths can have, and we're proud to have helped deliver a system that will do just that.

Mobility reshaping healthcare digitalization



Terveystalo's previous mobile service was outdated, both in terms of technology and user experience. It had to be completely redesigned and modernized.



Remote video consultation or chat with doctors **24/7**.



The customers reach the doctor approximately in **eight seconds** around the clock.

TERVEYSTALO is the largest healthcare service company in Finland, a country known as a leader in digital transformation and well-being. The company offers versatile healthcare, occupational healthcare, medical and examination services in approximately 260 clinics and through nearly 10,000 professionals. Their customers include private individuals, companies and associations, insurers and the public sector.

We started the project by interviewing the customers and specifying their business goals. After that we kick-started the mobile application design with two design sprints. During these design sprints we created prototypes, tested them with the customers and made the improvements based on the feedback. Few weeks in the project, we were already implementing the validated designs in agile manner and involving customers in test sessions on bi-weekly basis. The first version was implemented and tested in-house on a chosen group of people at Futurice and Terveystalo. With our tailored Scrum methods, in which implementation and design go hand in hand, the new features can be created in as little as a month, thus being the complete opposite of traditional, expensive and time-consuming healthcare ICT projects.

What we did

We built React Native application for iOS and Android, that are available on the App Store and Google Play. Both are continually updated in a close cooperation with the users and based on feedback, making the project truly customer oriented. The official product launch and transformation took place in fall 2019, when the new features, including the personal health planning and appointment functions, became available.

Why it matters

Terveystalo customers can get immediate help anytime and anywhere in online chat or remote meetings with doctors and nurses. This makes services equally available everywhere in sparsely populated Finland and lowers the threshold for seeking help, for example for families, disabled people and busy employees. Terveystalo can in turn take care of more patients, the patients can be treated from anywhere, peak hours are easier to deal with and less manual work is needed overall. The transparency of personal medical information activates customers before they become patients, making preventive healthcare a reality.