

Gabriela Viana

Selected projects

Hello. Welcome to my portfolio.

On the next pages, I will walk you through some of the projects I'm most proud of.

I hope you enjoy the journey!

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About me

- Over 20 years of experience leading teams and acting as an individual contributor
- Current position: Senior Manager, Product Designer at HashiCorp
- Previous position: Director of Product Designer at Pomelo Health
- 3 Publications
- 2 Awards
- Master's Degree in Industrial Engineering at Polytechnique Montreal (Software Ergonomics)
- Bachelor's Degree in Social Communication (Marketing and Advertising) at Salvador University
- Partial Diploma in Management (E-business) at McGill University
- Certificate in Design of Visual Communication at Salvador University
- Certificate in Web Accessibility (WCAG) at Montreal University

My approach

I believe building the best user experience is not the responsibility of one team, but of **all teams** involved in the process.

From the moment the user knows a service or a product exists, buys and/or uses - all teams need to be part of the discussion of “what is the experience we want to deliver?”,

It's important to understand the motivations, challenges users can face during their journey.

Understand users (and customers)

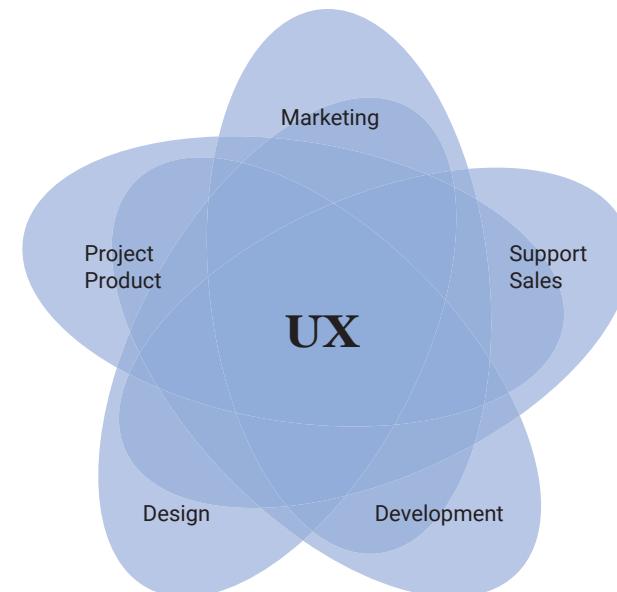
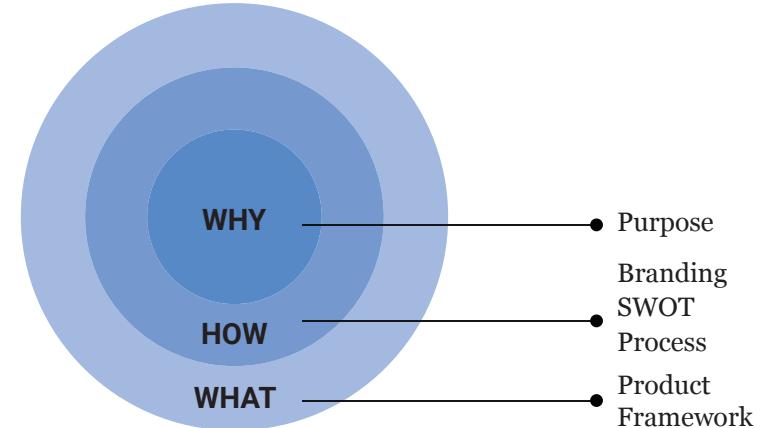
Who are they? (Verticals, Personas)

Why are they interested? (Motivations)

What do they want to achieve? (Goals)

Where/When do they use? (Context)

What are their pain points? (Challenges)



Management

It has been 7+ years, that I've been responsible for not only working as an Individual Contributor, but also:

Establish cadence for regular check-ins and empower the team to manage the day to day tasks, checking in often enough to ensure they are on track to deliver value against the business objectives without micro-managing

Provide career, leadership development, coaching and guidance through recurring team and one-on-one check-ins.

Manage, mentor, motivate, lead and inspire the team to constantly deliver excellence in performance.

Build the capability of designers across the design team by providing open and candid feedback, direction, and coaching

Aid in the sourcing, recruiting, hiring and retaining of high performing talent

The screenshot shows a tablet displaying a Confluence page for the 'UX Team' space. The left sidebar lists various pages and sections such as 'Pages', 'Blog', 'SPACE SHORTCUTS', 'File lists', 'PAGE TREE', 'UX ≠ UI - Know the difference', 'UX Process', 'UX Personas', 'OneSpan Design System - V1', 'Workshops and Activities', 'Books', 'Projects', '1:1', 'File lists', and 'Space tools'. The main content area features a 'Welcome' section with a message from Gabriela Viana, a 'The team' section showing four team members with their roles: Global UX Lead, Senior UX Designer Security, Global UX Researcher, and Senior UX Designer OSS and Agreement Automation, along with their profile pictures; the Global UX Lead is Gabriela Viana, Senior UX Designer Security is Morgane Neto, Global UX Researcher is Maira Santos, and Senior UX Designer OSS and Agreement Automation is Isabel Quintela Rodriguez; a 'Process' section with a note about UX relating to the department; and a 'Resources' section with links to 'Design System', 'UX Personas', and 'Users Database'. A calendar titled 'UX Calendar' is also visible on the right side of the screen.

Project
—
Workforce Management



About



1000 fortune companies

35+M of users

100+ countries

UKG is a workforce management company, powered by AI and the world's largest collection of people, workforce, and culture data for 80,000+ organizations across all sizes, industries, and geographies.

Who

Nancy (Nurse manager)

Why

Nancy is a nurse who needs to schedule her team for at least 4 weeks at a time - which is a common scenario in Hospitals. The current solution would only take in account 1 week at a time. In addition, the look and feel was deprecated and not accessible.

How

In partnership with the Product Owner, Developers, Accessibility Expert, we went through many iterations on how the new Schedule could look like.

I started by creating a brief and making sure to gather as much information as possible about the problem space, then I did a competitive analysis.

I drove brainstorm sessions and paired design with the Accessibility Expert to make sure we were leading toward the right direction. I made several presentations to many stakeholders, making sure to address their concerns.

With the support of the Product Owner, we identified key customers and we did 40 interviews to make sure we addressed the main users' pain points.

Team

Product Onwer

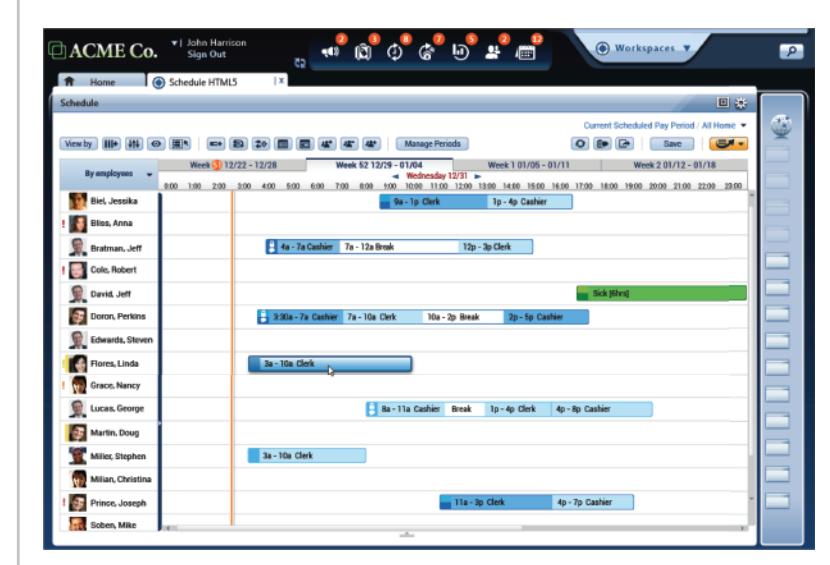
Lead Interaction Designer (me)

Archctect

Accessibility Expert

Front-End Developers

Back-End Developers



Original Schedule

Solution and results

The KRONOS Schedule software interface on a computer monitor. The main area displays a weekly schedule grid from April 6 to May 3, 2012. The grid shows various shifts, some of which are grouped and numbered (1, 2, 3, 4). The sidebar on the left shows 'Open Shifts [25]' and a group named 'Group 1 [5]' containing employees Doron, Perkins, Flores, Linda, and Grace, Nancy. The top right corner of the screen shows a notification bell with 48 alerts.

We needed to make sure a complex system is intuitive, respects accessibility rules and follows responsive design guidelines.

For the new Schedule, more than 40 customers worldwide were interviewed during sessions of 1 hour each. 98% of the customers really appreciated the new design and they were glad to see it was easier to create schedules for 4-6 weeks period.

Other projects: Staffing exploration

KRONOS® Hello, Joe. This is Today at Store 1. Check who is now ▾

< ● 19 March > Our Day

Kitchen Hot Bar Wine Health + Beauty Info Cashiers Produce Seasonal Floral Produce

Cafe Entry/Vestibule

Shift transfer Shift template Comment Paycodes Copy/paste Delete Lock/unlock Swap

Department 1-10 CN (3)

Open Shift Shift 1 Shift 2

Paula Nova

Department 1-10 CN (3)

Open Shift Shift 1 Shift 2

Paula Nova

19 March My Day

Alerts: 0

Paula Nova

Who can replace:

- Fiona Nova
- Jessica Nova
- James Daniels
- Paul Phillips

To-do: 2

On-call eggs are arriving at 7pm today. Each assistant is going to be responsible to place the eggs.

What will be working with:

- Fiona Nova
- Jessica Nova
- James Daniels
- Paul Phillips

Performance: Almost a star!

Vacation: 20 20

Sick: 10 0

Personal: 8 0

Planned:

On this page, an example of a design exploration for the Schedule with the focus on the Staffing workflow - Retail, in which managers can visualize the employees in real-time and better allocate them in a store.

And an exploration for the employee experience, in which they can see their week schedule, timecard, accruals, colleagues' schedule's, performance, and activities to be performed in a day.

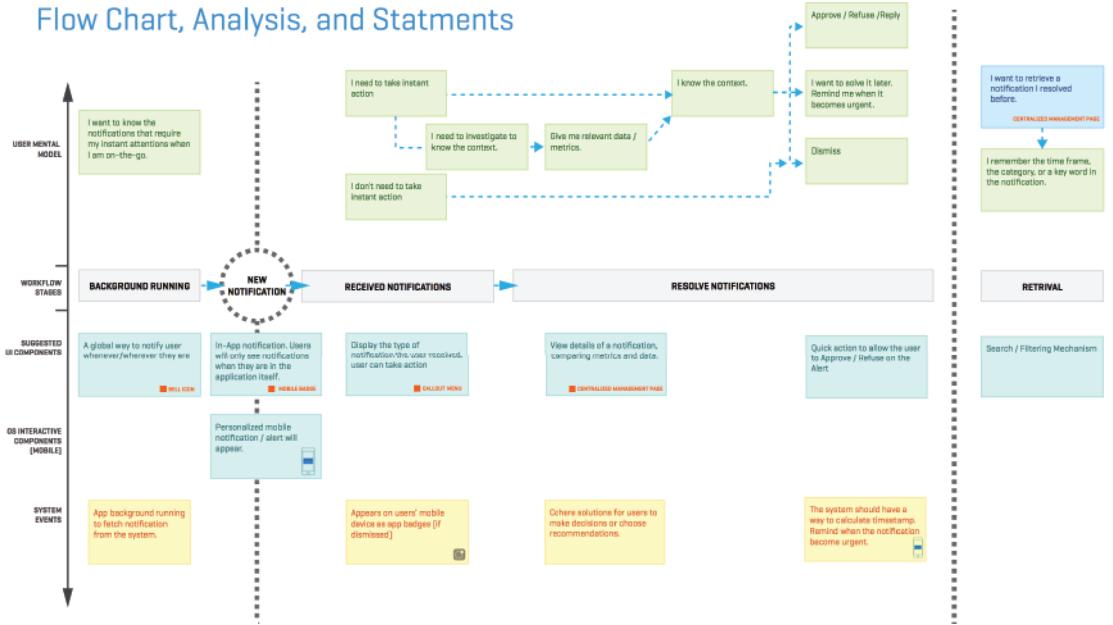
Other projects: Control Center

Here, an example of the design of the Control Center.

The Control Center is a place where employees and managers receive notifications, and decide what to do next - if action is required.

We identified six areas that we should be aware when working on the concepts: Real time, Metrics, Related Data, Educate the System (Machine learning), Personalization and Archive

Flow Chart, Analysis, and Statements



Meeting with Product Owners: Outcome

The 6 Statements

Real-time Solution
Metrics for Investigation
Related Data Catenation

Dismiss - Potential to Remind
Reply - Communication
Resolve - Accept / Refuse

Flexibility - Remind me again.
Ease of communication - Through Interaction Design.
Context

Educate System Behavior

Urgent / Important Actionable items

IMPLICIT - System Memorization
System recommends, but does not take over human decisions.
EXPLICIT - System Learn Rules [could be configured with human effort]
System decides, but there are ways to revert system efforts.

Personalize

Categorization of Notifications

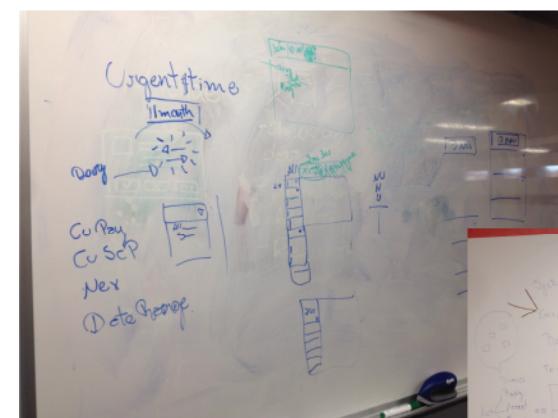
System vs. User-defined reminding methods [Sms, email...etc.]

Archive

Search / filtering mechanism

Audit Trail

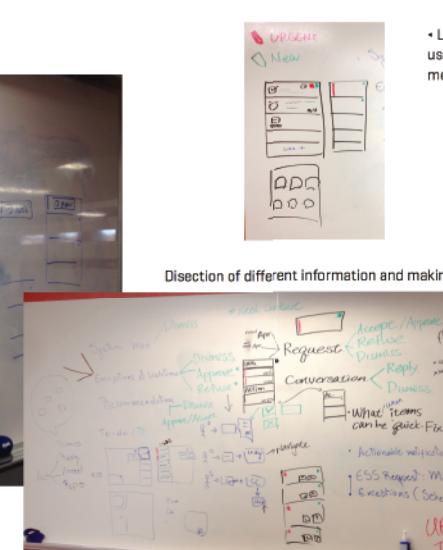
Brainstorming



Centralized Management Page & necessary info *



Dissection of different information and making

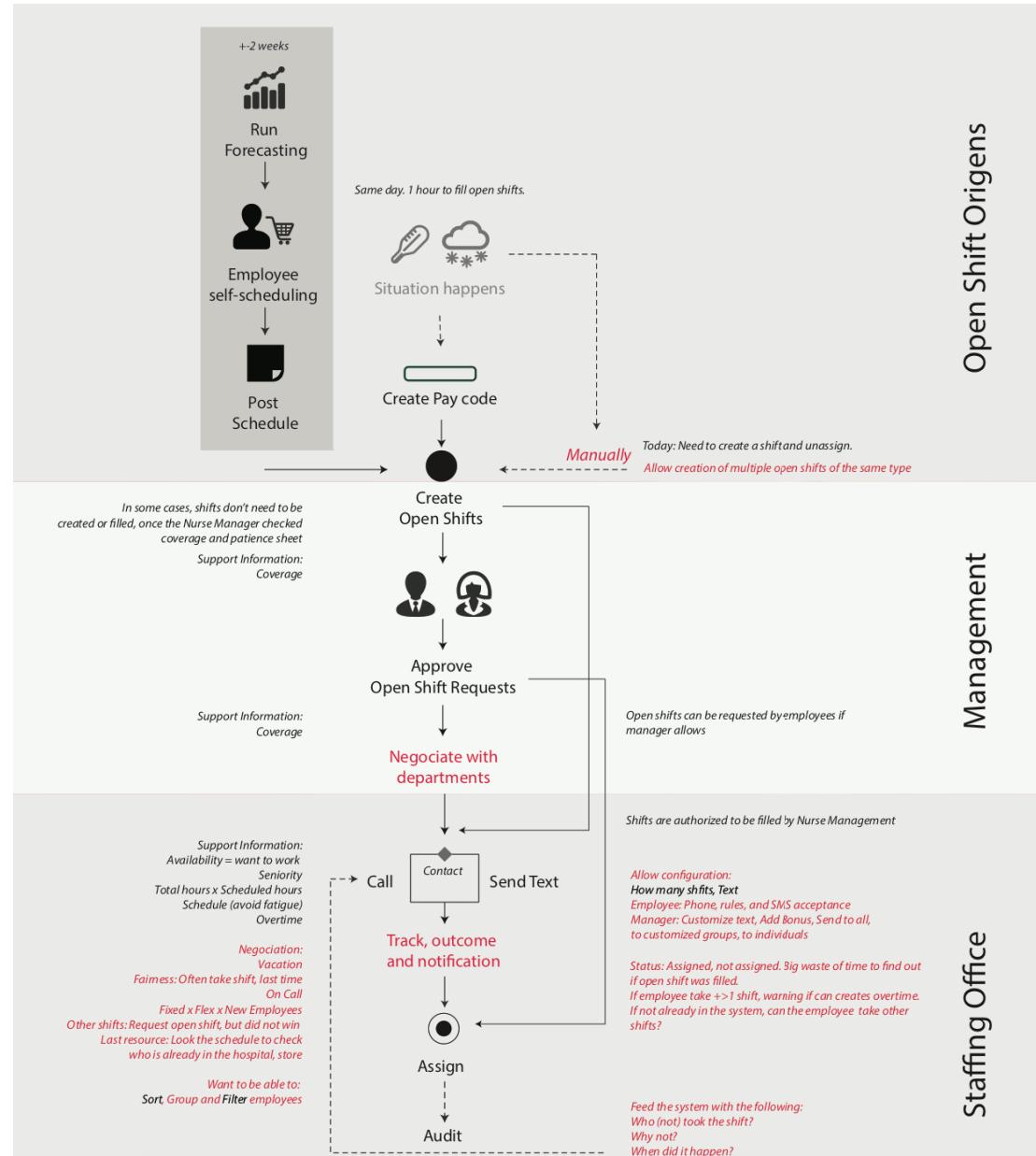


Other projects: Open Shift Cycle

On this page, an example of the “Open Shift Life Cycle”. This cycle happens when an employee misses a day of work. This situation can be critical for an organization, especially for hospitals.

The advantage of drawing a process like this are:

- Give the designer and other stakeholders an overall view of the process and help to scope the project
- Highlight the areas of improvement - innovation
- Focus on the process not only on the design (The flow can contribute to many designs and help to see dependencies)
- Help new stakeholders to get up to speed in understanding the process



Other projects: Open shift

Below, the flow of the Open Shift and how it is connected to other areas in the System.

OTHER HEADLINES

ESS

- Action Bar (New Request)
- ESS Events list (Request Shift)
- My Schedule Home Page Tile (request Open shift)

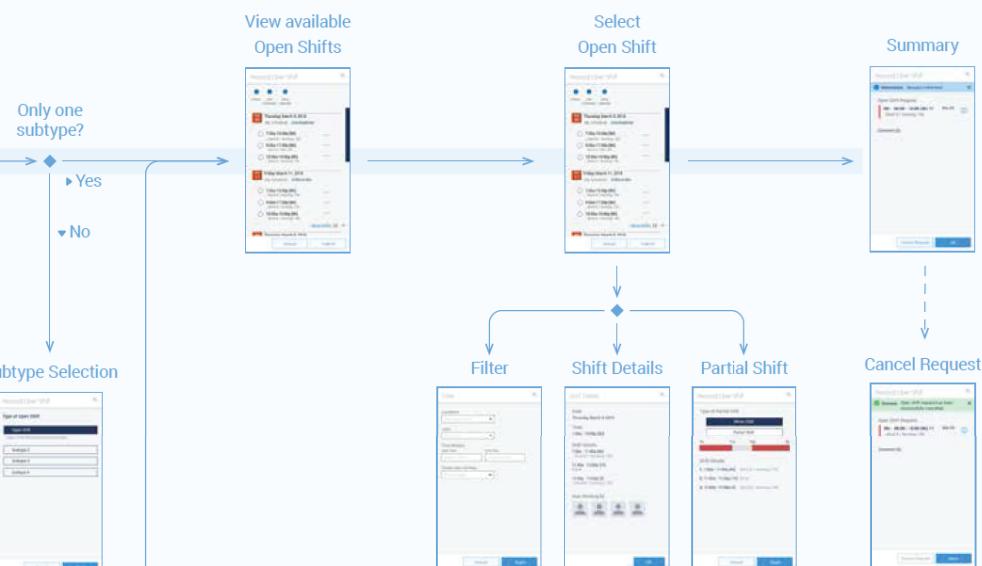


Manager Control Center

Open Shift request notification
(if not configured for auto-approval)

Employee Control Center

Refusal or Approval notification



REQUEST OPEN SHIFT (RIGHT PANEL)

REQUEST LIFECYCLE

Project

Cybersecurity



About



60% World's largest 100 banks **100+countries**

A digital agreements security company with a heritage in cybersecurity and business workflows. OneSpan processes millions of digital agreements and billions of transactions annually.

Who

Abram Fields (Fraud Analyst)

Why

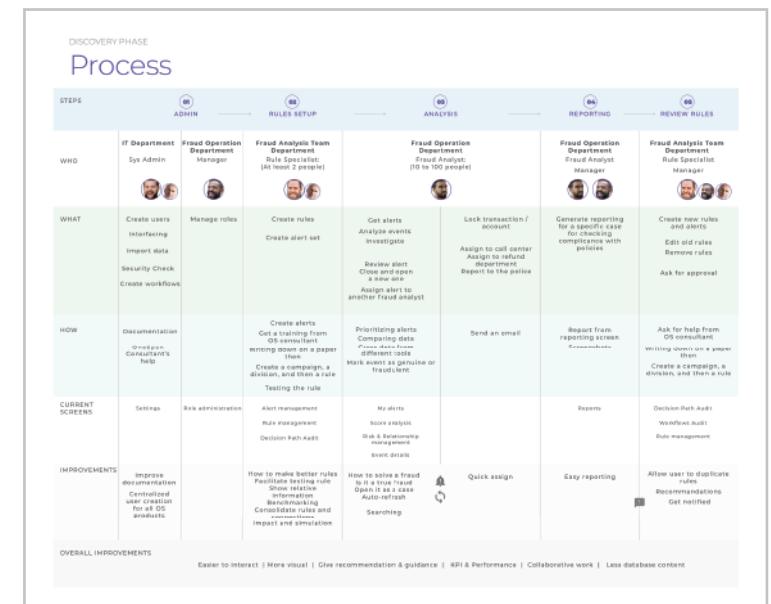
Every day, Abram needs to investigate thousands of suspicious transactions at the bank he works for. Abram would appreciate having a way to quickly identify the most critical cases and connect with other colleagues who may be working on the same case.

How

The Fraud Analysis domain was a new area for some of the team working on this project, including myself. The first step for this project was to interview domain experts in the company who could give us a better idea on how a department of Fraud Analysis works. After meeting with them, the Product Designer and I created a diagram on how the Fraud Analysis department looked like. We understood that one of the pain points of the Fraud Analysts was how the current Forensic Analysis solution was displaying data and the lack of a dashboard for them to have an idea of cases that were severe and/or treated by their colleagues.

Team

Product Owner
 Scrum Master
 Head of Design (me)
 Product Designer
 Accessibility Expert
 Developers



Fraud Analysis Department

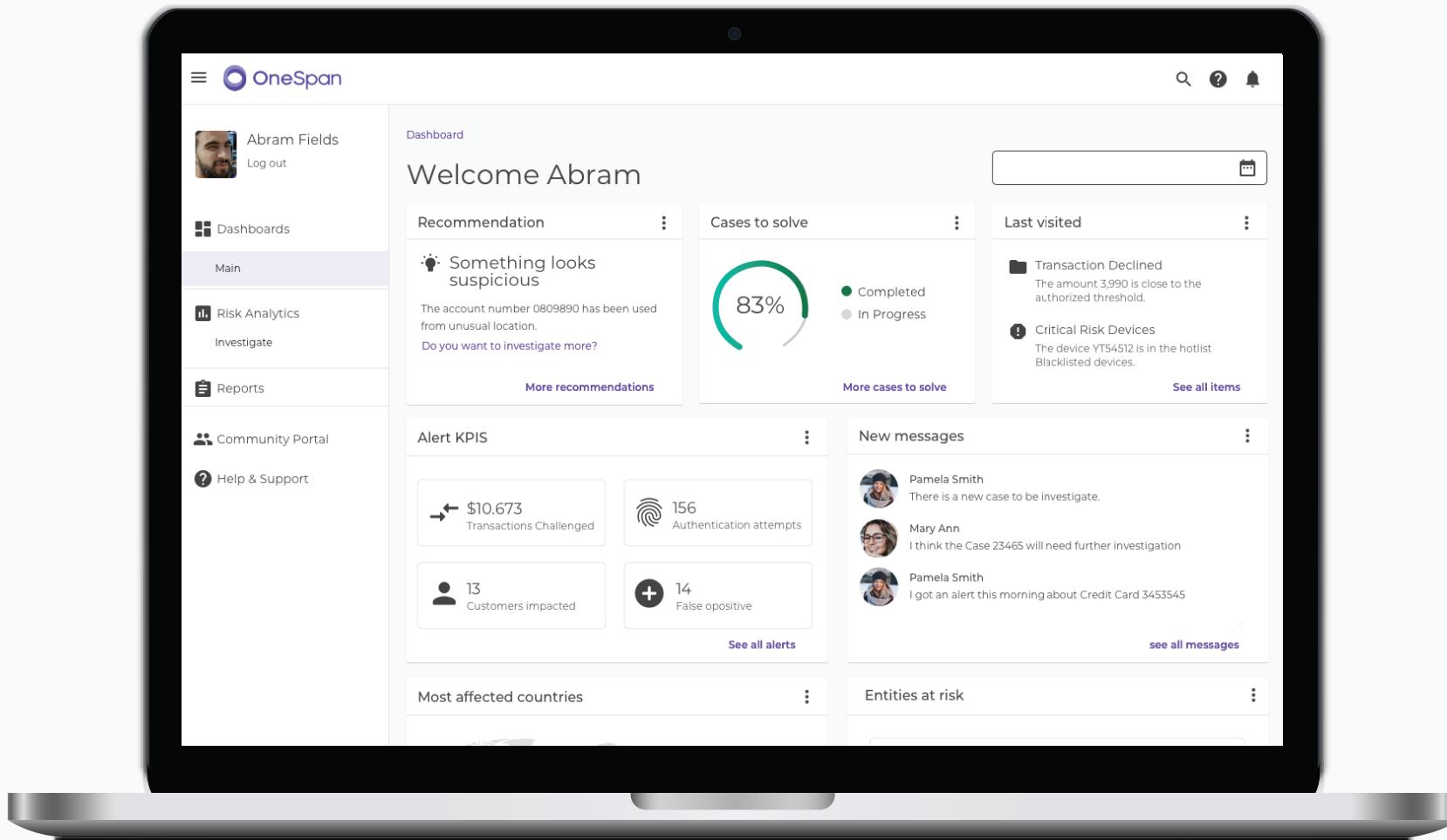
Solution

Based on what we learned, we created a new example of Forensic Analysis. With the new version, users could have a better visualization of the problem, save different scenarios by creating snapshots, leverage a powerful filter and share their findings with other colleagues. We shared the new design with 12 Fraud Analysts and they all found the proposed solution was better.

The image shows a tablet displaying the OneSpan Forensic Analysis interface. The top half of the screen shows a detailed timeline of events for December 2nd, 2019, including a Login Attempt, Login Success, and Check Balance. To the right of the timeline is a complex network graph where various activities like Login, Transactions, and Account Modification are connected to locations such as Chicago, USA; Milwaukee, USA; and Panama City, PA, and devices like Samsung S9 and Lenovo Laptop. Below the timeline is a "Forensic Analysis" section featuring a "TRANSACTIONS MAP" polar chart. This chart has four quadrants labeled "Beneficiaries" (top), "Locations" (right), "IP Addressess" (bottom), and "Devices" (left). A central circular node is connected to several colored dots representing different data points. A modal window is open over the chart, providing specific details about a transaction, including its reference number (1001), type (Transfer), date (17/04/2019 10:53:16), amount (450.00), and pivot factor (Relationship, user_VUTS1_1). The bottom of the screen shows a navigation bar with tabs for "Polar Chart" and "Transactions Map".

Solution

We also created what the Dashboard experience could like. Key information was displayed on it, such as Last visited cases, for easy access to work in progress, new messages of colleagues about the cases they were working on, and most important, recommendations of the most severe cases Abram should be looking for.



Other projects: E-signature

Who

Rose Smith (The signer)

Why

Rose is an ER nurse in a large hospital. She is very busy and complex technology is not her strength. She recently bought a house and needs to sign several documents. E-signature really helps her make the process easier, as much as the interface is intuitive and guides her through the process.

How

When I joined OneSpan as Head of Design, this was one of the first projects the team was working on. The current solution was quite outdated and the actions the user needed to perform on the screen were quite spreaded out. We received a Usability Study from one of the banks that adopted this solution, and we the experience was critically bad. With the Development Team, we discussed a couple of solutions to rethink the experience. Considering the pain points, the first approach was to identify all the actions the user could do in the system and re-organize them. Another consideration was to make the interface with less colors as possible, because this is a solution that will be used by several banks, so it needed to be white-label. With a couple interactions and brainstorm sessions, we came with a solution that scored really high when validating the designs.

Team

Product Owner

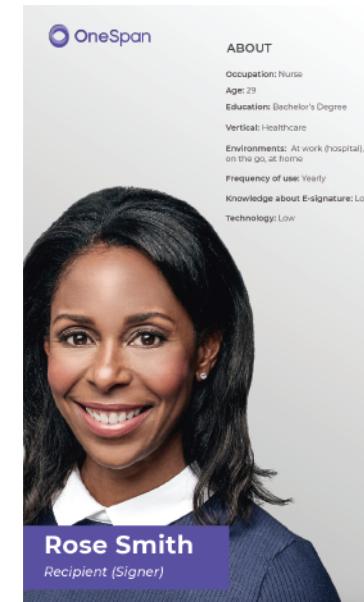
Scrum Master

Head of Design (me)

Product Designer

Accessibility Expert

Developers



UX PRIMARY PERSONAS

ROSE SMITH

ABOUT

- Occupation: Nurse
- Age: 29
- Education: Bachelor's Degree
- Vertical: Healthcare
- Environment: At work (hospital), on the go, at home
- Frequency of use: Yearly
- Knowledge about E-signature: Low
- Technology: Low

GOAL

Sign a mortgage/loan credit check authorization

SOME TASKS W/ ONESPAN

- Receive notice of contract requiring signature
- Download contract for signing on paper and for archival purposes
- Request have the signer information changed
- Read disclosure document
- Sign on a mobile device
- Sign a contract on behalf of a group
- Sign an accessibility enabled document
- Providing an attachment on a transaction
- Decline a request to sign a contract

SOME PAIN POINTS

- Lack of familiarity with electronic signature concept and process
- Lack of documentation

ONESPAN SIGN FLOW

```

graph TD
    A[Integration] --> B[Configuration]
    B --> C[Preparation]
    C --> D[Signing<br/>(Receive/Sign/Approve/Fill-in data)]
    D --> E[Monitoring]
    E --> F[Report / Audit]
  
```

INTERACT WITH



Amy Fields
Agent

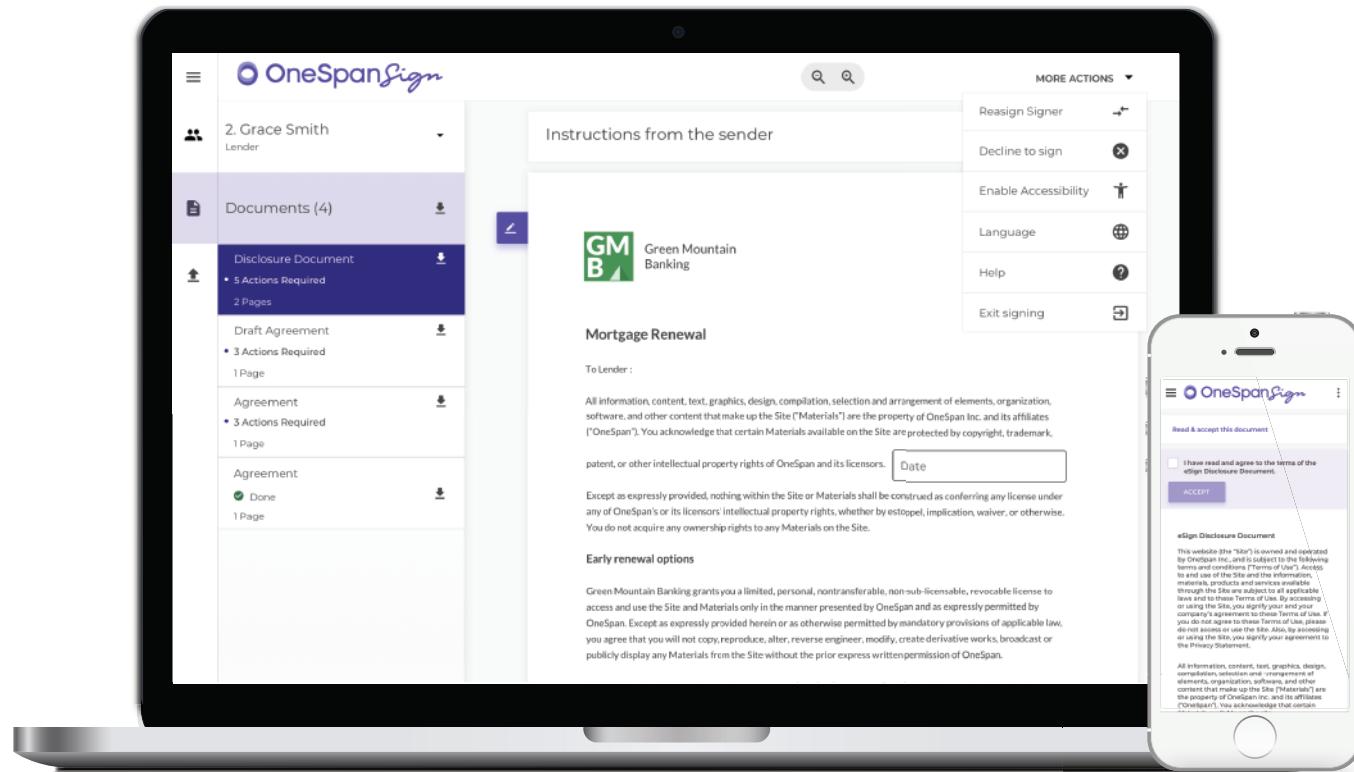
Questions, concerns, email us at: ux-global@onespan.com

Original Schedule

Solution

The new interface is responsive, accessible and clean.

The simplified version really helped to facilitate the signature process to banks, but most important, to millions of users.



P7: I think it is way better than the currently implementation.

P8: Going in the right direction and I like the look and feel.

P8: It is condensed, cleaned document in the middle, it is much better.

P11: Cleaner interface, less confusion, more consistent experience between mobile and desktop

P12: There are improvements, there are struggles today to find where to sign, so I like the jumper and the document panel.

Other projects: Design System

At OneSpan, I was also responsible for developing the Design System. The goal was to make sure all the products have not only the same look and feel, but also the same structure, navigation, patterns and components.

The image displays a composite view of a design tool interface and a digital product page. On the left, the Sketch application window is shown, featuring a toolbar at the top, a layers panel on the left, and a main canvas area. The canvas contains a grid of small, semi-transparent UI components labeled with names like 'But...bled', 'But...over', 'But...sed', etc. On the right side of the Sketch window, there's a extensive list of UI component styles under categories such as 'Form/Checkbox/Indeterminate', 'Form/Radio/Unselected/Rest', 'Form/Radio/Unselected/Hover', 'Form/Radio/Selected/Focus', 'Form/Radio/Selected/Disabled', 'Form/Radio/Selected/Rest', 'Form/Radio/Selected/Hover', 'Form/Radio/Selected/Focus', and 'Form/Radio/Selected/Disabled'. Below the Sketch window, a tablet device is displayed, showing the 'OneSpan Design System - V1' website. The website has a dark header with the OneSpan logo and 'Design System v1.0'. The main content area features a large, abstract purple network graph. Below the graph, a section titled 'Who is it for?' contains two tables. The first table has two rows: 'Designers' (Guidelines to learn the OneSpan product design patterns and principles) and 'Product Managers/ Product Owners' (Save time and ship faster by knowing all OneSpan product design and development patterns and principles). The second table has two rows: 'Developers, QAs' (Accessibility, internationalization, and platform engineering guidelines) and 'Technical Writers' (Guidelines to learn the OneSpan brand and content style). At the bottom of the website page, there are sections for 'Principles' (Responsive, Contextual) and 'Foundation' (Internationalization, Accessibility, Layout, Grid, Spacing, Navigation).

Other projects: Personas

I also ran workshops to create OneSpan Personas.

And speaking of personas...Personas are the subject of my Master's Thesis: **Practitioners' Points of View on the Creation and Use of Personas for User Interface Design.**





Anderson Fields
Account Admin

UX PRIMARY PERSONAS

GOAL

Manage the team in order to integrate in line with business requirements. He is the main contact with OneSpan. Manage accounts, create e-mail templates, give support for their clients/users.

SOME TASKS W/ ONESPAN

- ④ Manage and Configure accounts
- ④ Create and define templates
- ④ Troubleshoot support issue for their customers
- ④ Provide OSS Training
- ④ See architectural diagram of the information flow
- ④ Know when the system is down with detailed report of root cause

SOME PAIN POINTS

- ④ Have to call OSS support for actions
- ④ Lack of online documentation

ONESPAN SIGN FLOW

```

graph TD
    Integration --> Configuration
    Configuration --> Preparation
    Preparation --> Signing["Signing  
(Receive/Sign/  
Approve/Fill-in data)"]
    Signing --> Monitoring
    Monitoring --> ReportAudit["Report / Audit"]
  
```

INTERACT WITH

 Amy Fields Agent	 Steve Fields Sys Admin	 Tina Fields Transaction Preparation
 Igor Fields Integrator	 Sean Span OSS Support	 Patrick Span Professional Services

Questions, concerns, email us at: ux-global@onespan.com

Project

HealthCare

PomeloHealth

About

PomeloHealth

6.000 clinics

1.2 M of users

25 most innovative company

PomeloHealth was a Quebec based start-up and developer of a leading end-to-end online healthcare productivity solution in Canada to provide to patients with the ability to book and manage appointments online.

Who

Patricia (Patient)

Why

Patricia is a busy employee and mother of two. When she is sick or someone in her family, she needs to quickly find a solution. She would really appreciate having a solution where she can book an online appointment for an online or in person consultation.

How

As a Director, I was tasked to rethink the ecosystem of products at PomeloHealth and make sure they were aligned to our user's expectations.

In partnership with the VP and Directors of Product Management, Director of Development and VP of Marketing, I created a plan to come up with a vision of integrating the current products of the company while providing an end-to-end experience for both patients and practitioners. On the next pages, let's see some steps of this process.

Team

Product Owner

Scrum Master

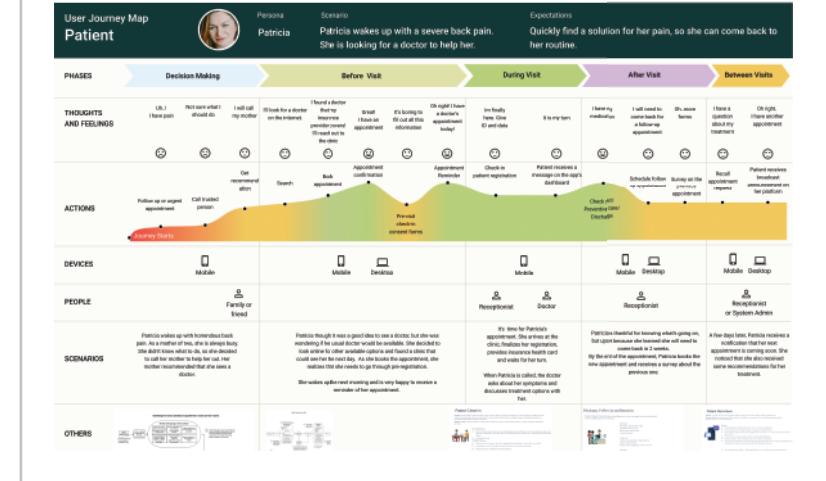
Head of Design (me)

Product Designer

Accessibility Expert

Developers

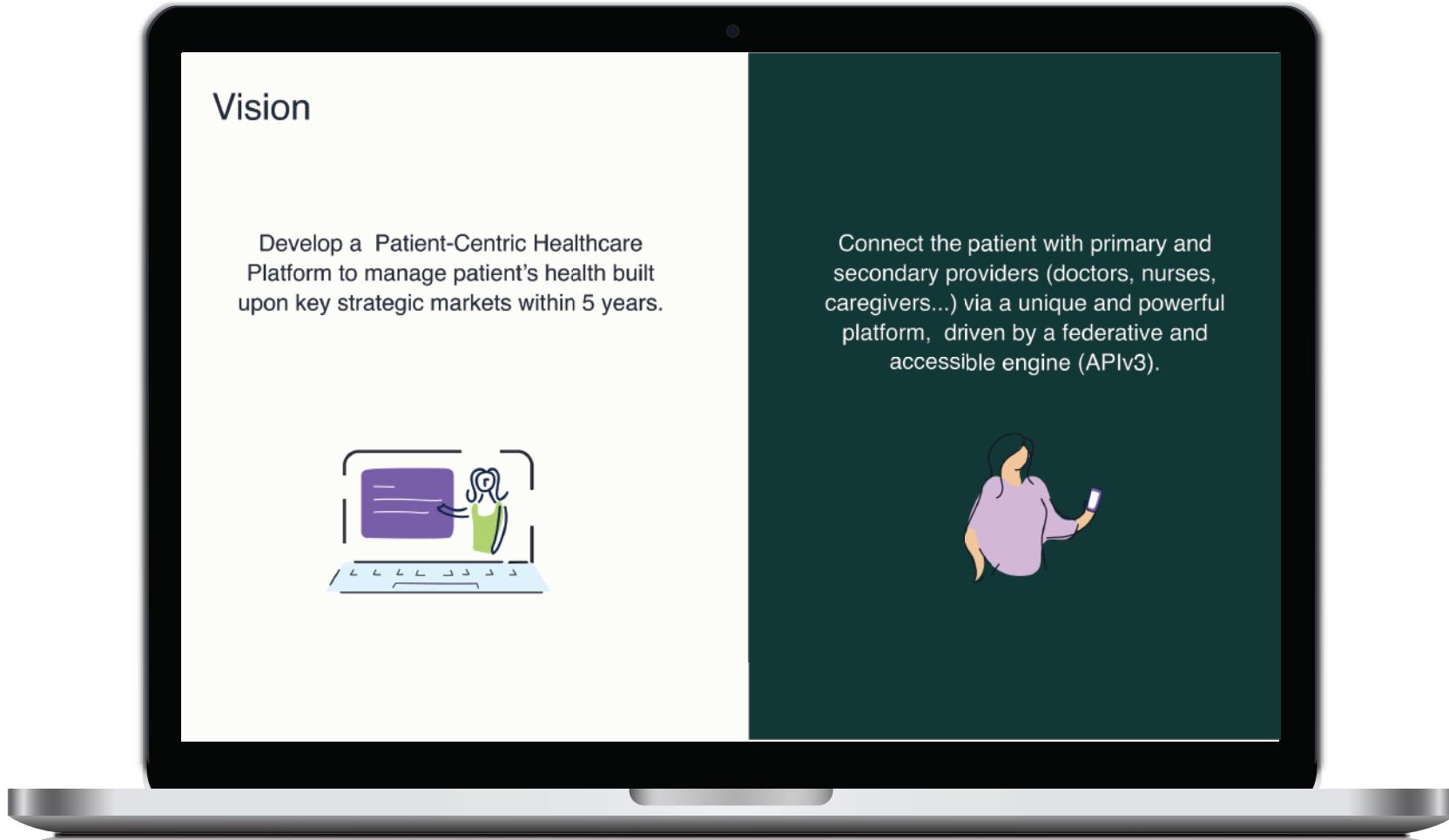
Persona Journey



Patient Journey

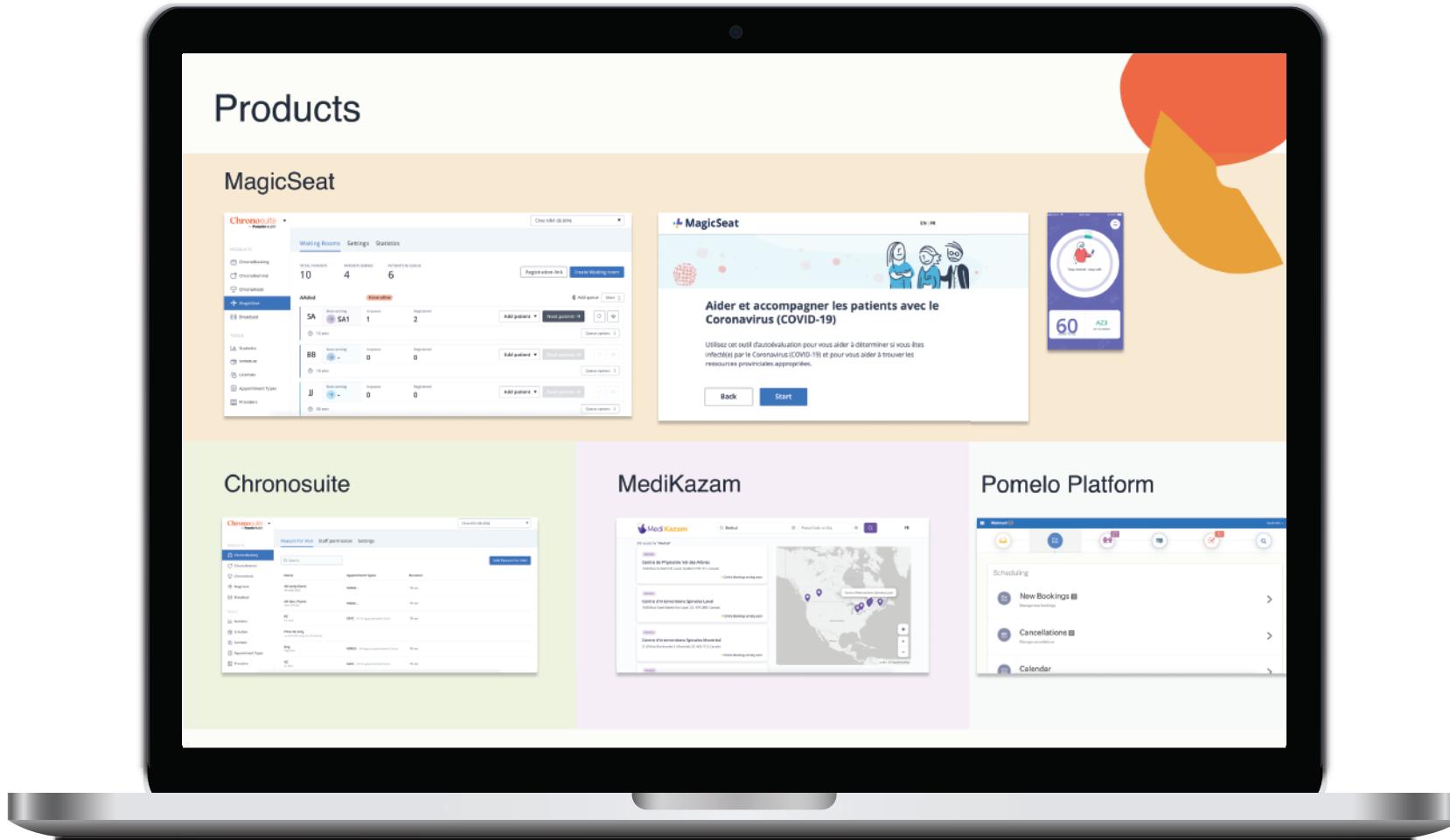
How

One of the first steps was to understand the vision of the business.



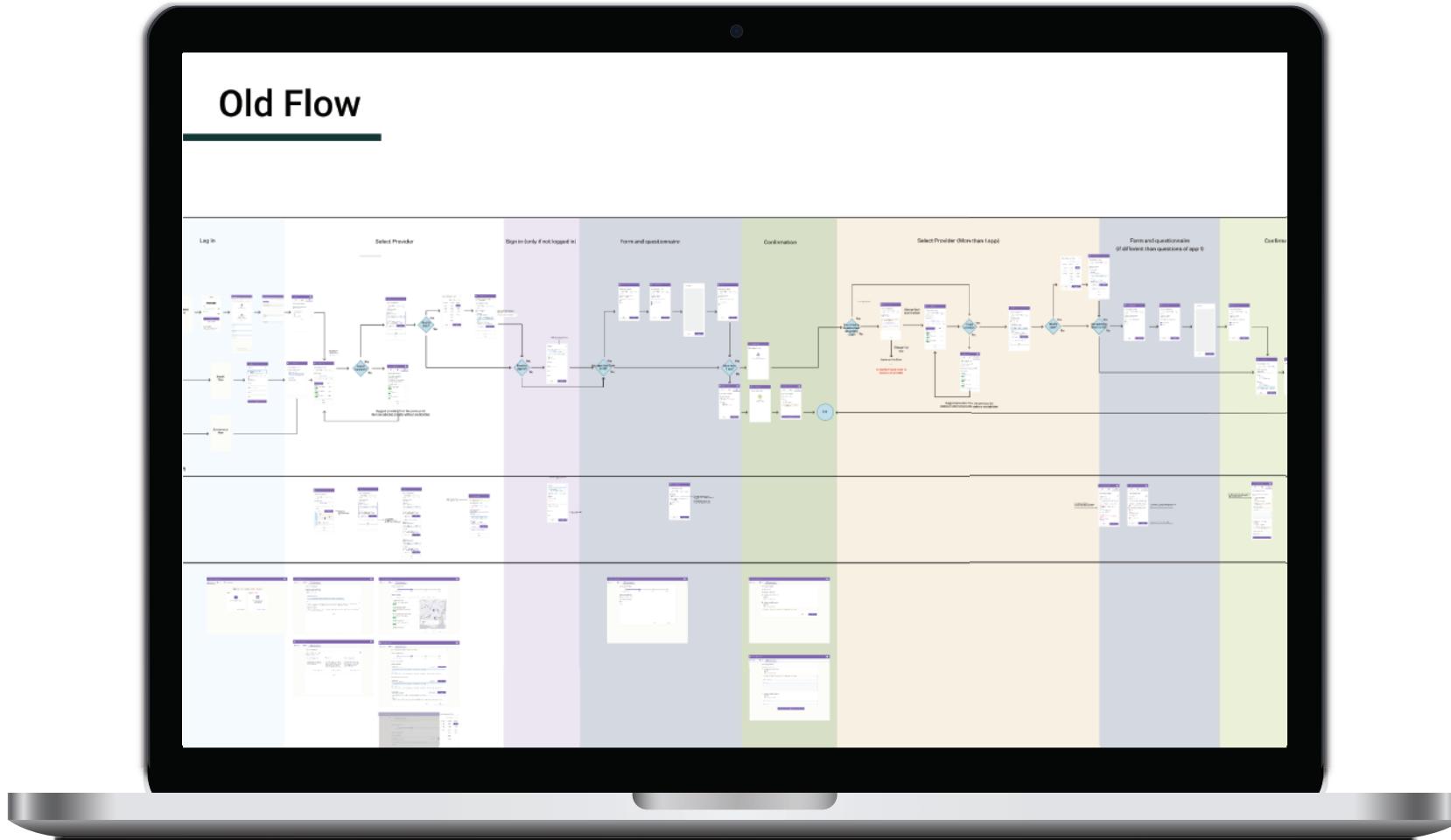
How

Then, understand how the experience of the products looks like today. The company had different products with different experiences, even though they shared the same users and customers.



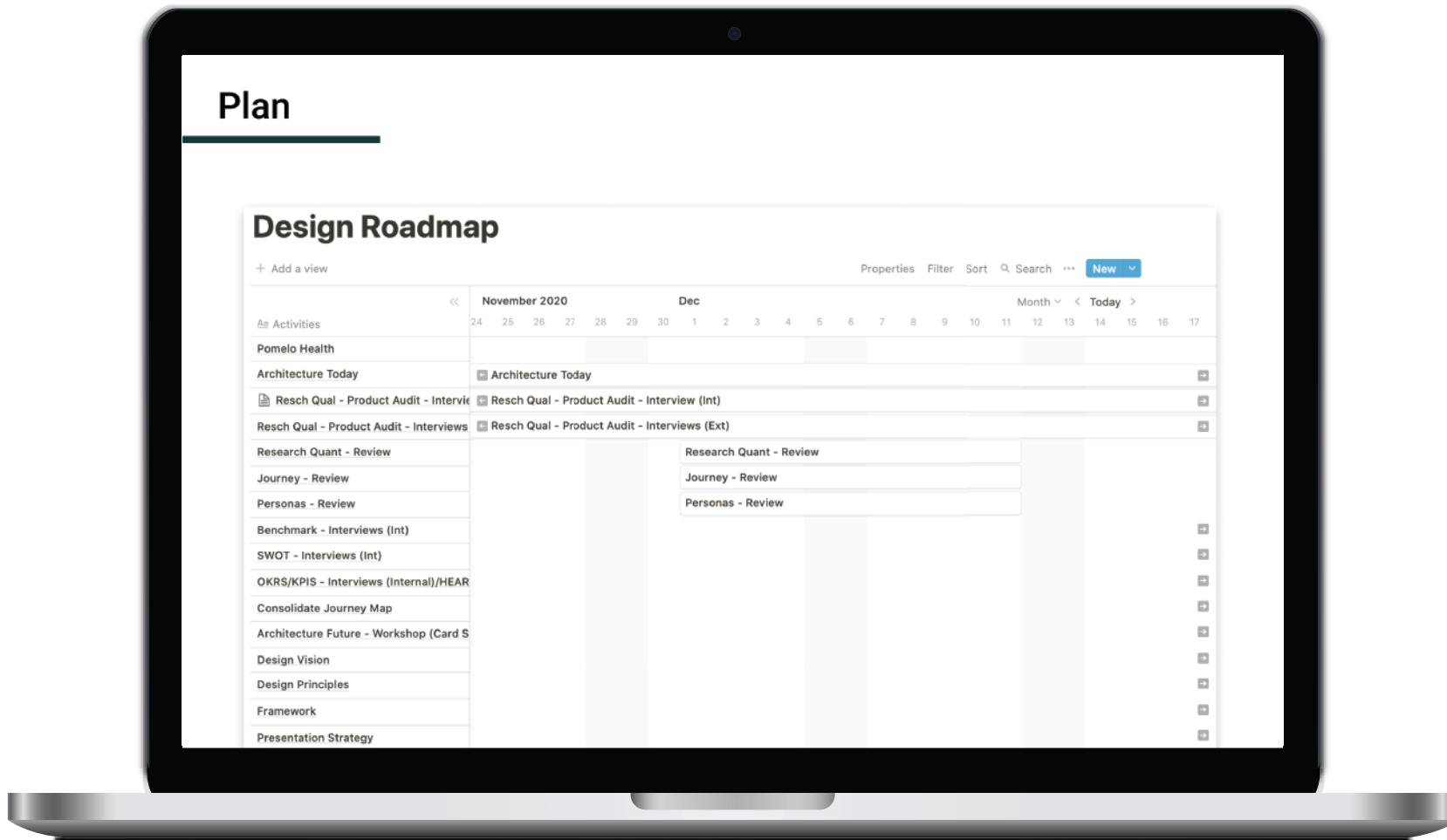
How

It was important to understand how the process looked like of each product, identify duplicates, understand technical limitations.



How

Once the audit of the experience was done inside the company, I came with a roadmap on how we should move forward to create a vision for PomeloHealth.



How

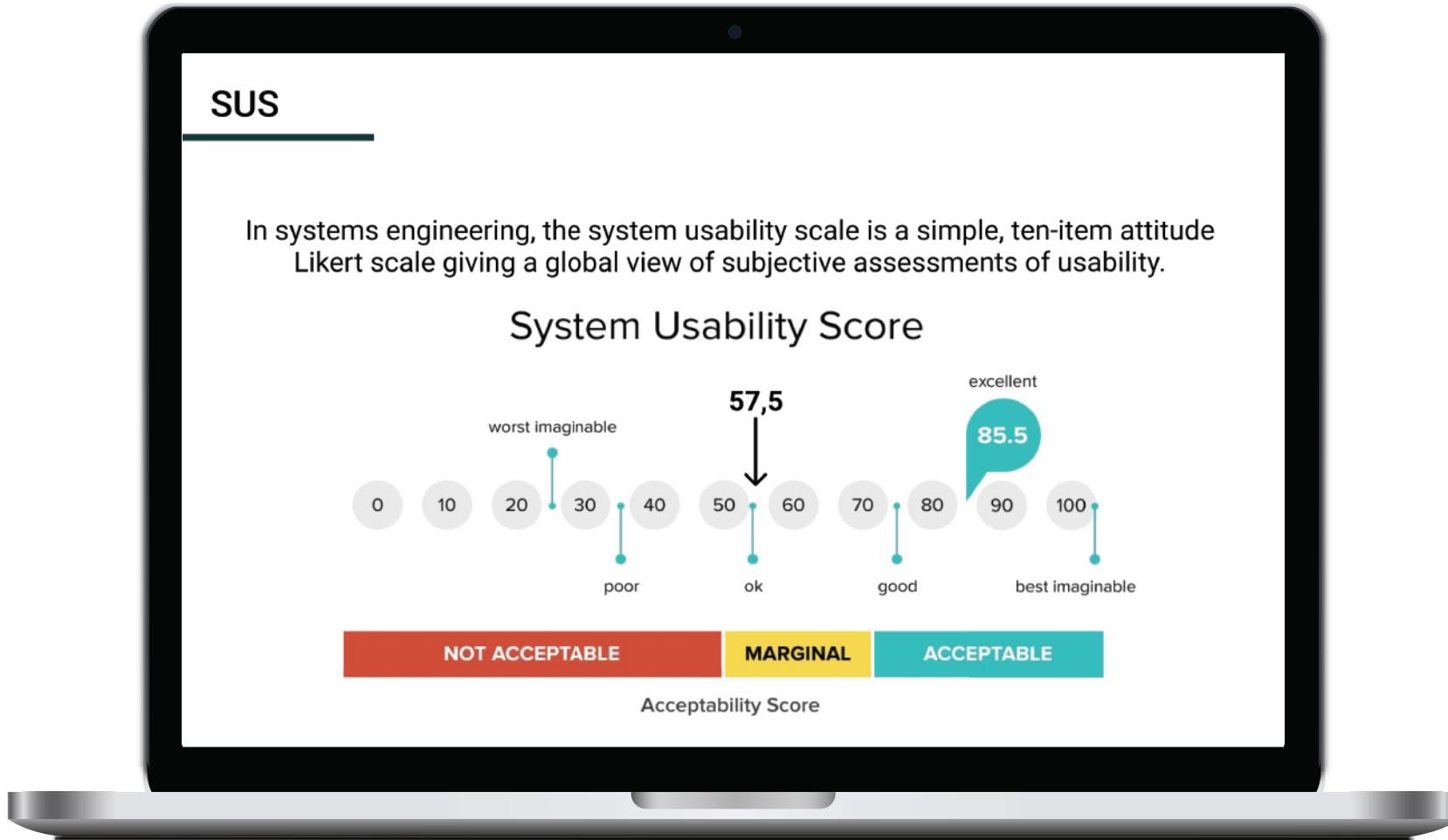
After the plan was created, I booked some time with practitioners to understand their pain points and from their patients. I learned that the current experience was very complicated, and some steps like creating an account were quite difficult.

The image shows a tablet device with a white screen displaying research findings. The top section is titled "Research Result". Below this, there are two main quotes: one on the left and one on the right. The left quote reads, "If it's designed for the average patient, it's way too complicated." The right quote reads, "3 out of 10 patients cannot make it right." Below these quotes, there is a larger text block that says, "A lot of going back and retracing steps. A lot of clicks and boxes and things to duplicate in some areas." At the bottom of the screen, there is a table with three columns: "Summary", "Severity", and "Suggestion". The table has four rows, each corresponding to a different area of concern: "Registration", "Appointments and reminders", and "Forms". Each row includes a severity rating ("• High") and a detailed suggestion. The tablet is shown from a slightly elevated angle, with its physical frame and a portion of the keyboard visible at the bottom.

Summary	Severity	Suggestion
Registration	• High	Improve the way patients register. Several issues with create an account (same email, etc) and remembering password.
Appointments and reminders	• High	Revisit the flow configuration of appointments type and reminders
Forms	• High	Offer more options of forms in the database

How

During the interviews, I also asked the practitioners to fill out the SUS questionnaire. It was not a surprise that the experience was considered as “marginal”.



How

During this time, I could hire a UX Researcher, and then, he was responsible for running a survey. We surveyed 100 participants considering a population of 70.3 million people, with a confidence level of 95% and margin error of 10%, which gave us the confidence that the results would be quite representative.

The tablet screen shows the following content:

Research - Survey

100 participants

The method used for this research was **survey**.

Since those are the two segments of the population that we are interested in, that would mean that the target population is **70.3 million people**.

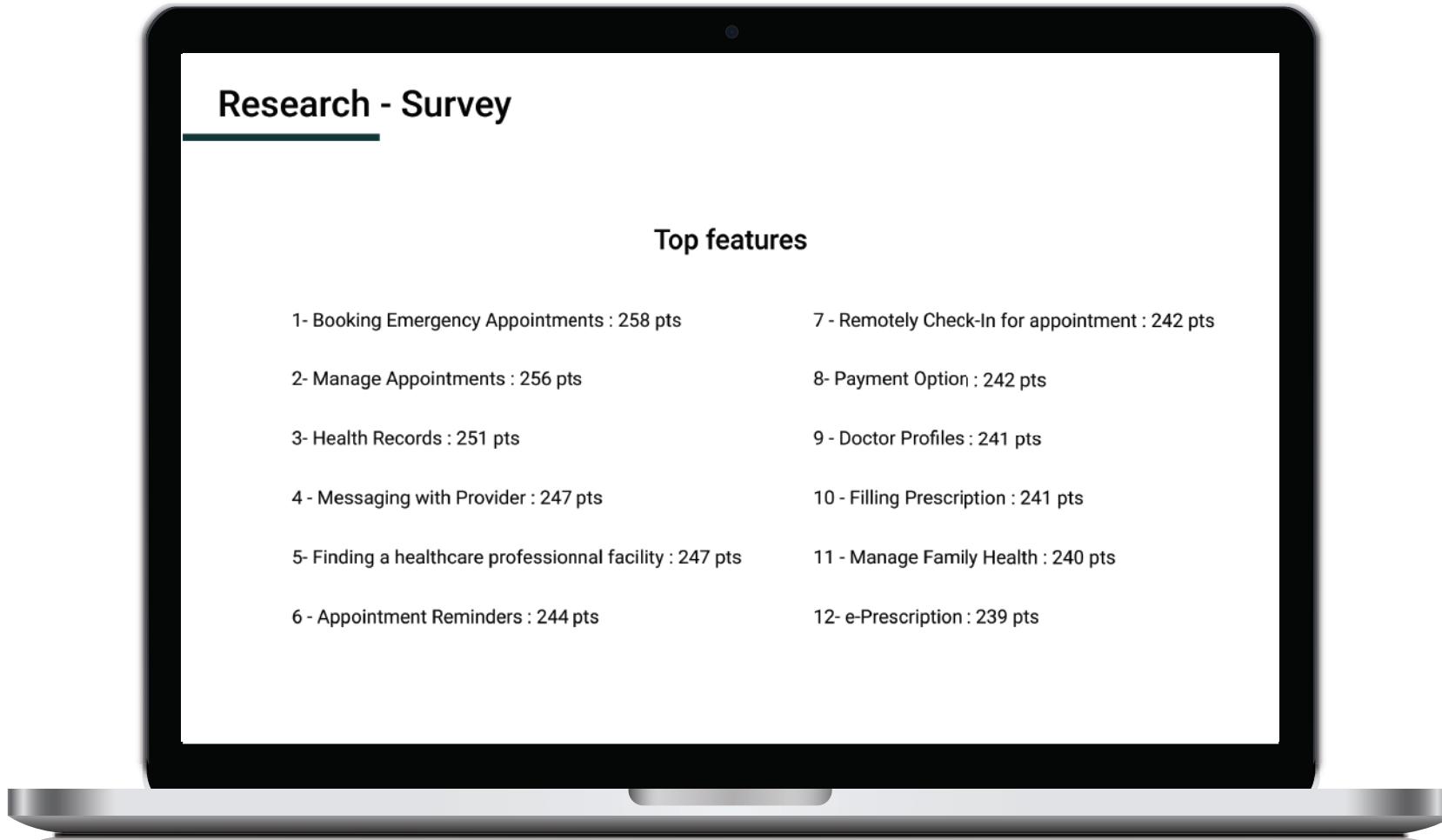
To achieve a **Confidence level of 95%** with a **margin of error to 10%**, the needed sample size for this research was **97 people**.

Confidence level	Margin of error	Sample
95%	5 %	385 people
95%	10%	97 people
90 %	10 %	68 people

Qualtrics's sample size calculator

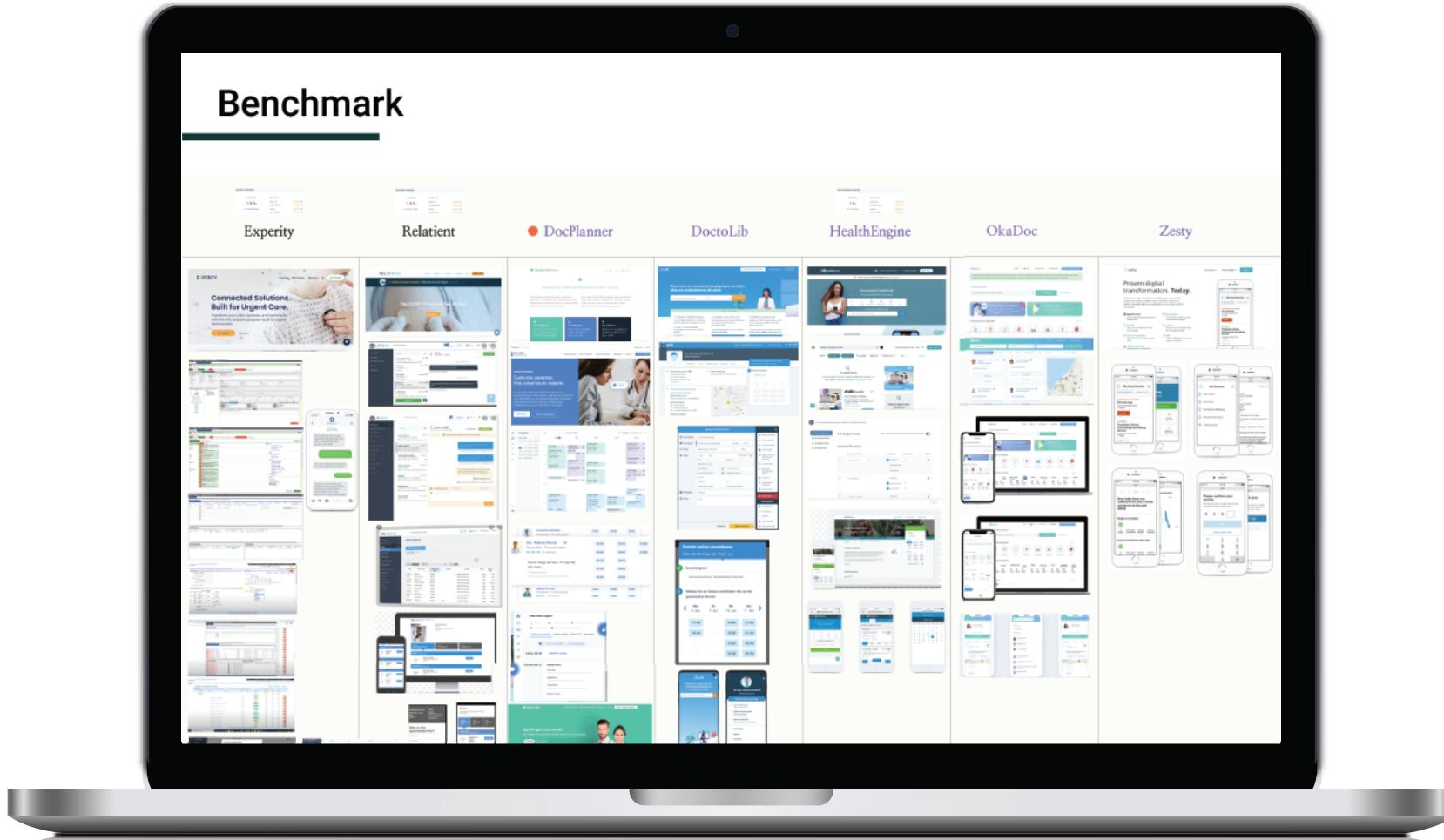
How

Through this study, we learned that users were expecting to have some features already available, but we discovered several opportunities, such as: Filling prescriptions and access to health records.



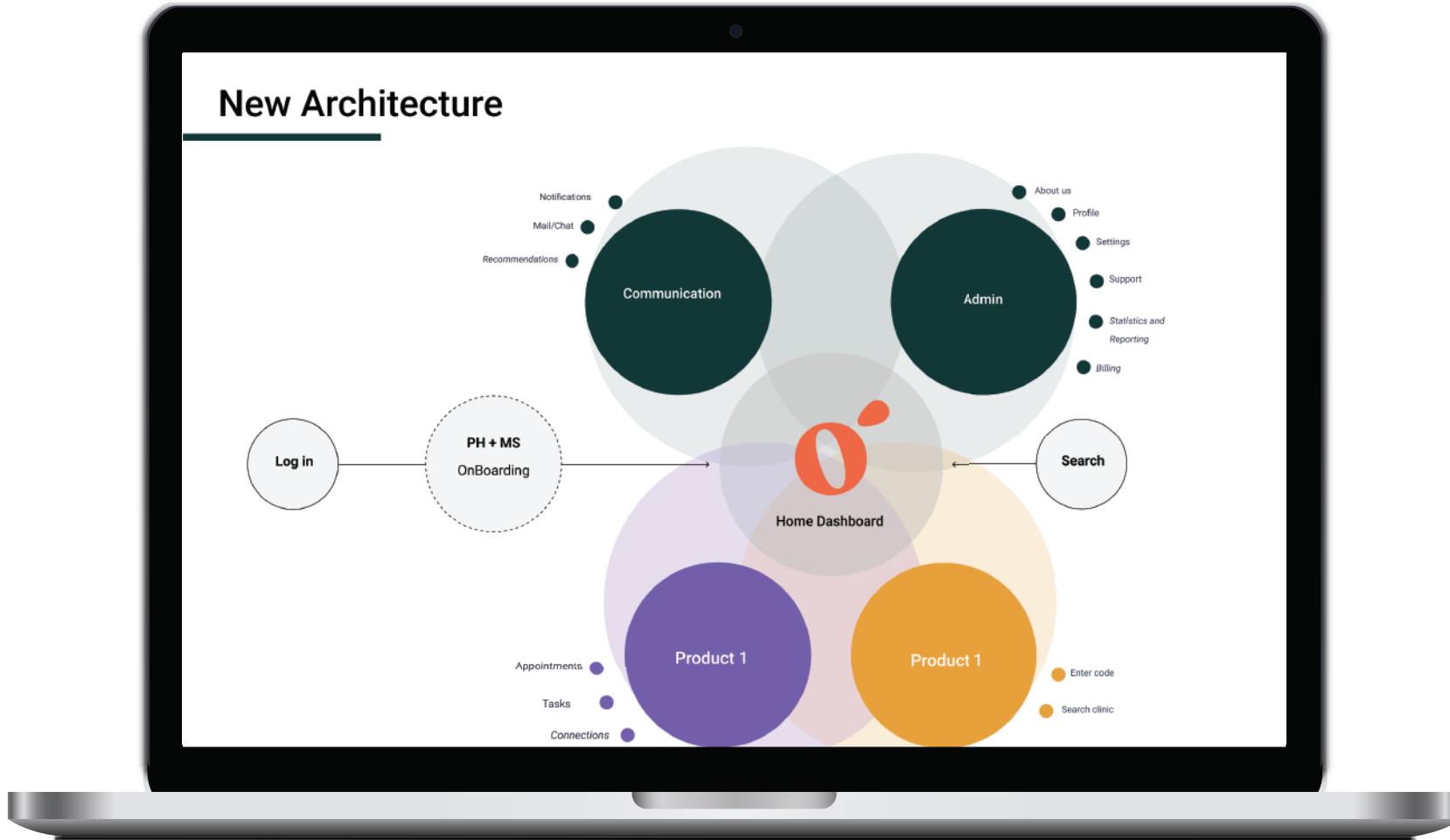
How

I also did a benchmark to understand who the key competitor's or close applications that were on the same domain and had a great experience.



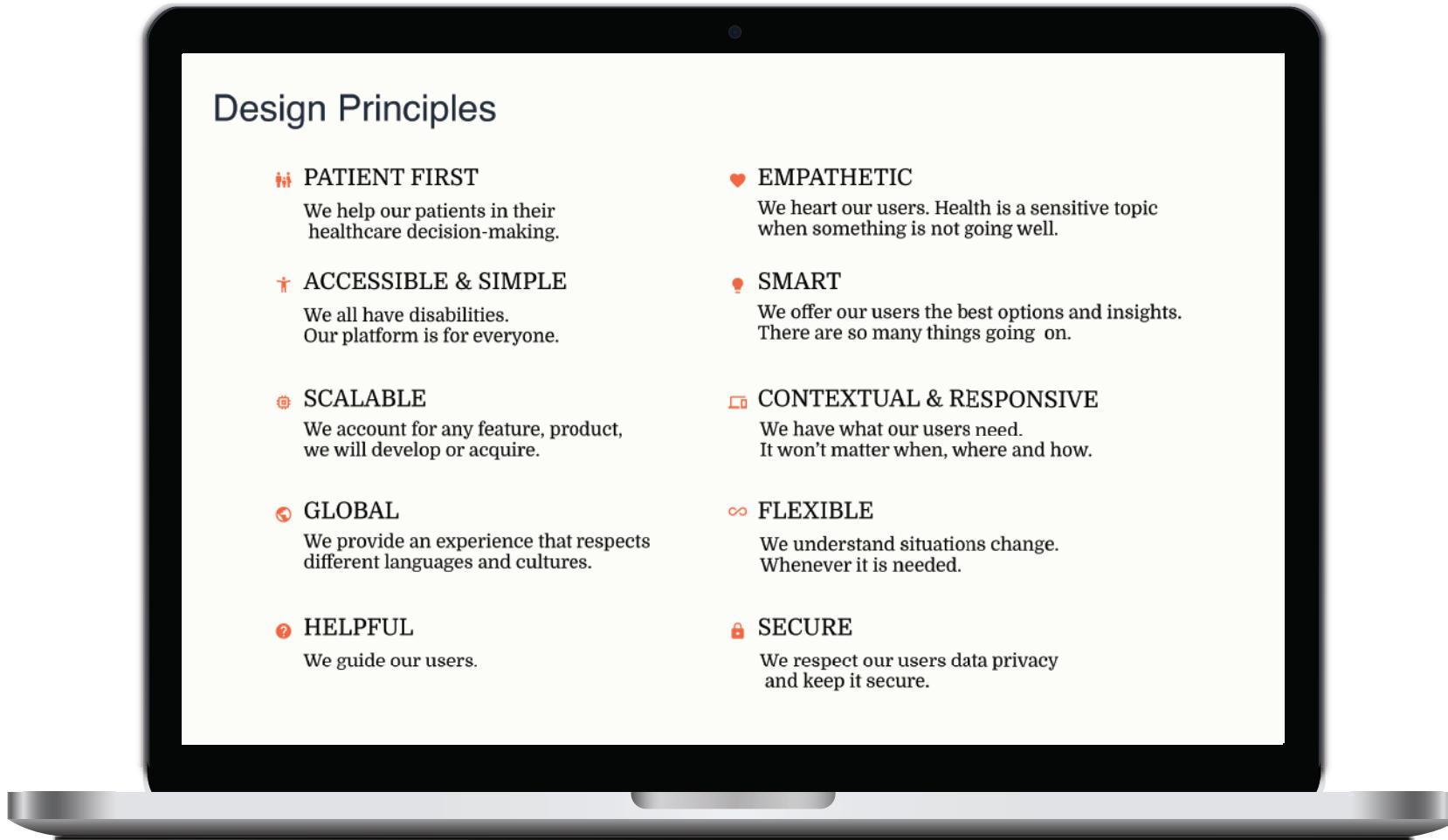
How

Based on all the learning, I put together a new structure on how the PomeloHealth Platform should look like.



How

And in order to start thinking about the experience, it was important to define the key design principles that should be part of provider and patient experiences.



The image shows a tablet device with a white screen displaying the PomeloHealth Design Principles. The title "Design Principles" is at the top. Below it are eight principles, each with an icon and a brief description:

- PATIENT FIRST** (doctor icon): We help our patients in their healthcare decision-making.
- ACCESSIBLE & SIMPLE** (person icon): We all have disabilities. Our platform is for everyone.
- SCALABLE** (globe icon): We account for any feature, product, we will develop or acquire.
- GLOBAL** (globe icon): We provide an experience that respects different languages and cultures.
- HELPFUL** (question mark icon): We guide our users.
- EMPATHETIC** (heart icon): We heart our users. Health is a sensitive topic when something is not going well.
- SMART** (lightbulb icon): We offer our users the best options and insights. There are so many things going on.
- CONTEXTUAL & RESPONSIVE** (document icon): We have what our users need. It won't matter when, where and how.
- FLEXIBLE** (infinity icon): We understand situations change. Whenever it is needed.
- SECURE** (lock icon): We respect our users data privacy and keep it secure.

How

Together with the Leadership team, we defined some key metrics we should take in account once the first iteration would be available online.

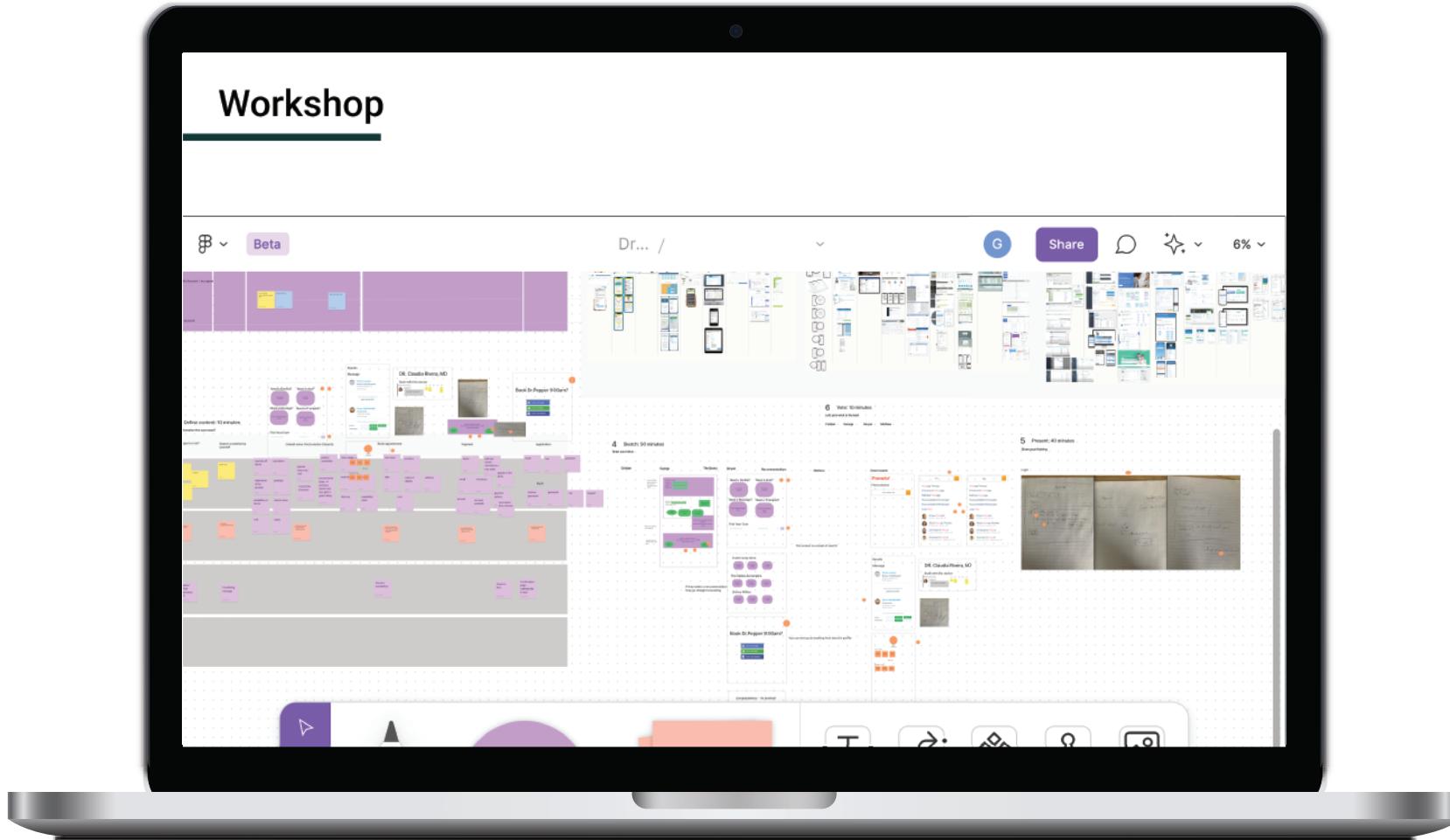
The image shows a tablet displaying two tables related to product metrics. The top table is titled "KPIs & Measurements" and lists five categories: Happiness, Engagement, Adoption, Retention, and Task Success, each with a description and the source of data collection (User surveys, Analytics, or User tests). The bottom table is a more detailed "Metrics" table with columns for Metrics, What, Why, KPI, and Notes, listing specific metrics for Acquisition, such as Button promotion, Download App, and Clinic Selection, along with their descriptions and target values.

KPIs & Measurements		
HAPPINESS	Satisfaction, likelihood of recommendation	User surveys
ENGAGEMENT	How much a user is using your product	Analytics
ADOPTION	The % of users that adopt your product after signing up/onboarding	Analytics
RETENTION	How many users stick around	Analytics
TASK SUCCESS	Time to task completion, error rates	User tests

Metrics	What	Why	KPI	Notes
Acquisition	Button promotion	We want to understand how many people are engaging with the button	More than 50 clicks a day	
Acquisition	Download App	Understand how the user discovers the Pomelo App Via Pomelo Link (Direct) Via other sources: Search: (what keywords) Other websites	At least 30 downloads per day on Phase 1	
Acquisition	Clinic Selection	Understand which clinics are getting selected	High traffic clinics should have at least 10 selections per day	(People that click on a dot/ People visiting the homepage) - people using the search bar

How

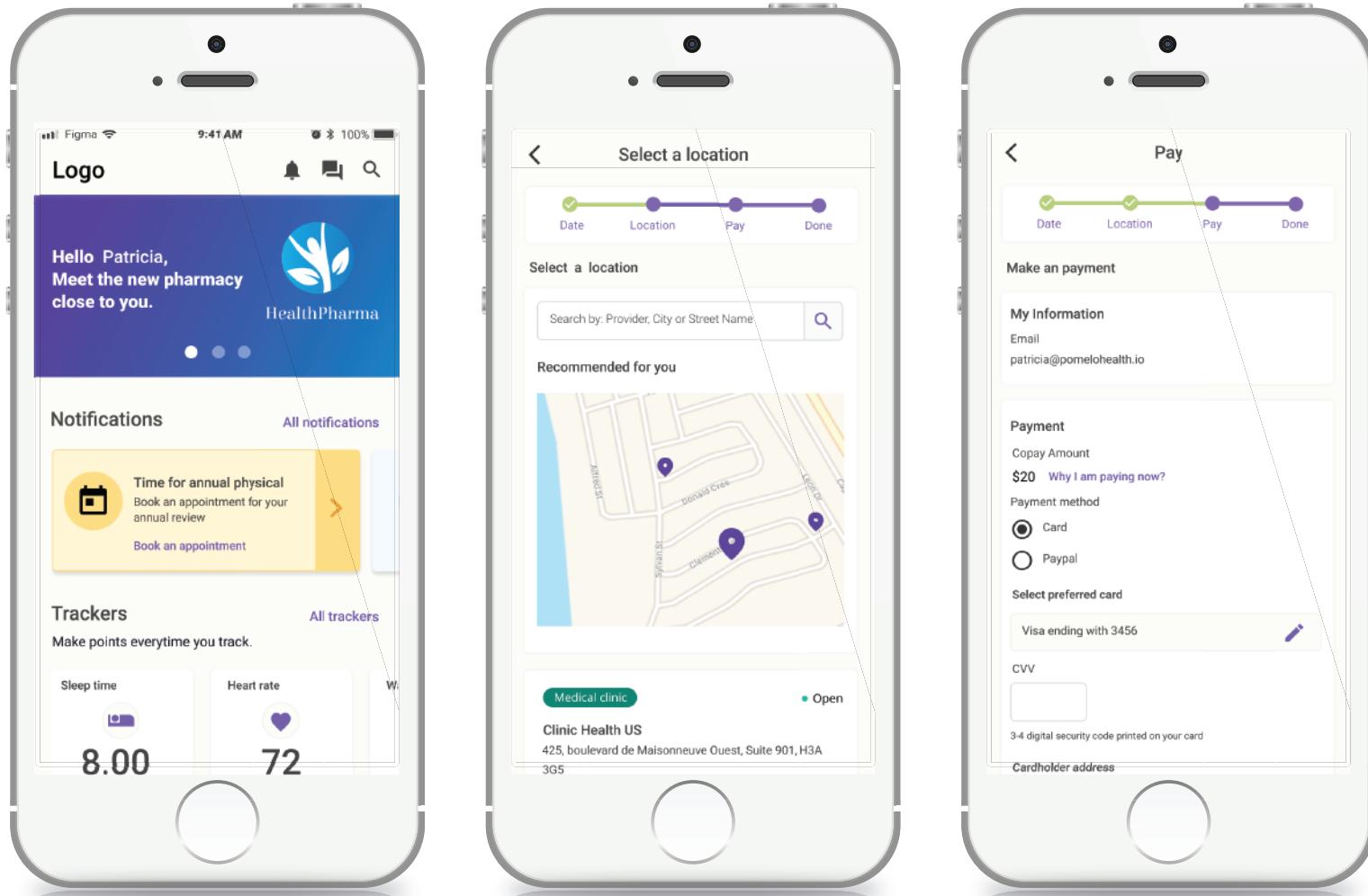
With the leadership team, we had some brainstorm sessions to understand what we expected as the first version.



Solution

I created the first prototype of how the experience could look like. This solution was part of the pitch deck for investors. The company was acquired by TelusHealth shortly after, so we didn't finish implementing this proposal.

You can visit the prototype here: <https://tinyurl.com/pomelohealth>



Project

DevSecOps



About



200 fortune 500

HashiCorp helps organizations automate multi-cloud and hybrid environments with Infrastructure Lifecycle Management and Security Lifecycle Management.

4,300+ Customers

Worldwide

Who

Pearson (Platform Admin)

Why

Pearson works with clients as a consultant to architect, implement, and run multi-cloud/region solutions for their clients. Pearson constantly examines the entire software development lifecycle from source to production. From this introspective process, he builds a workflow that enables application developers to rapidly code and ship software.

How

Once the personas were ready, we wanted to think what the experience of HCP (HashiCorp Cloud Platform) would look like. For that, we did a couple of meetings and workshops with the goal to understand where we were coming from, the company strategy and align on an ideal experience for HCP users.

Once the ideation was done, we shared with the Leadership team, who provided us with very insightful feedback. Based on that feedback, we updated the flow and created a deck with the key ideas to share with the different departments in the company and make sure we were all aligned.

During these meetings, we appreciated how the audience was engaged and excited. We received positive feedback and ideas on how we could continue iterating.

Team

Product Manager

Senior Manager, Product Design (me)

Product Designers

Service Designers

Developers

HCP User's flow, process



CI/CD Process

How

For this project, we leverage the information we had about the personas using the HashiCorp stack.

Pearson Platform Engineer (Contractor)

Infra Engineer / DevOps Engineer

About

Pearson works with clients as a consultant or contractor to architect, implement, and run multi-cloud/region solutions for their clients. Pearson will work with the client to architect their approach, build a POC and then partner with their Developers, DevOps, Security and Network teams to enact it. They will need to teach those teams about microservices. And, they'll need particular help managing security key values and secrets storage. They constantly examine the entire software development lifecycle from source to production. From this introspective process, they build a workflow that enables application developers to rapidly code and ship software. Key focus:

- Visibility and governance
- Delivering services quickly and reliably
- Operating consistently across clouds

Pearson needs a way to help the Networking and Security teams understand what a service mesh and design a service mesh solution that will help them put workloads anywhere, across regions, cloud providers and with the private cloud used by their client. All their work and infrastructure usage needs to be coordinated, but some of the resources - like the secrets with customer financial information - should be stored separately in an Onprem environment. Pearson needs to map out a solution for Key Values and Secrets storage for her clients. Pearson will start with managing them and will then hand that over before they leave the client. Their client will not have a lot of SREs to support their infrastructure once she leaves.

Pain points

For Pearson, monitoring phase is really important for them, because they need to make sure the systems are operating properly. If they customers aren't having like latencies that are affecting their workflow. Having an outage of one of major components would be a terrible day, because those components are what hosts the application. If one or two components such as get out of memory or high CPU usage, then that would affect the entire platform and they have to have it fixed as soon as possible. Being able to monitor, so the components don't get into that state where they have to be like firefighting and solving these issues when the worst case scenario is happening. Other challenges:

- Building trust w/ internal teams
- Explaining workflow changes as improvements
- Building expertise
- Creating an approach that doesn't require a lot of client roles
- Lacks permanent access to client tools
- Needs to balance needs of client teams and/or clients

Accessibility

As a user who oversees lots of data, Pearson wants media presented in small chunks of understandable content, so that they can understand the main points and not lose focus.

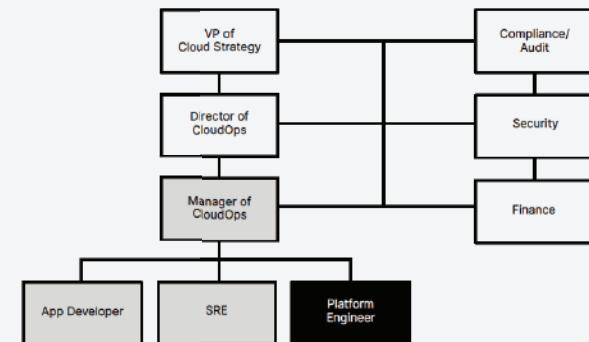
HashiCorp tools



Other tools

Google Drive	Ansible
Jira	Test Kitchen
Confluence	Jenkins
Packer	Concourse
Git	AWS
Chef	DataDog

Interact with



How

For this project, we leverage the information we had about the personas using the HashiCorp stack.

Pearson Platform Engineer

Main Tasks and HashiCorp

Plan

Pearson will start by writing down what they plan to actually do for our work and kind of hypothesize what is going to be the challenges they have, etc. They have a lot of input from other people on the team to make sure that plan actually seems feasible. It will work within the guidelines of what they need to do.

Build

Tool: Packer

Test

After compilation, Automated Unit and UI testing are performed. Once testing is performed and after approval, the software is sent to production.

Release

Pearson release the images into their environments. And then there's that deploy phase where they are actually releasing the application into the environments, so those images would go into a cloud provider.

Deploy

The software is deployed and monitored for further enhancements. The step to deploy has been written by the depth productivity team, and it builds on top of the work the infrastructure team has done to bring up.

Tool: Terraform

Operate

That's where Pearson gets service discovery, and they are able to do a lot of Nomad also would be at the operation level. So that's where, the application code is running.

Tool: Consul, Vault, Nomad

Monitor

Once Pearson releases the images, then from there they use Datadog to monitor.

Pay

Based of the platform, databases cost a lot of money, infrastructure costs a lot of money, so Pearson team does work with finance, a lot to solve a lot of the issues that we have with overrun costs.

CI/CD Flow

Adoption



Plan



Code



Build



Test



Release



Deploy



Operate



Monitor



Pay

How

We also interviewed participants to understand their pain points and identify opportunities.

Methodology

Interviews

The interviews happened between December 2021 and February 2022. The interviews were recorded via Zoom during 1 hour session.

The participants were recruited based on their experience with HCP. The participants also replied to a short questionnaire and the consent form.

Questions:

- Where are you located?
- Which products from HashiCorp do you use?
- For how long have you been using the HashiCorp Platform?



9 Participants

In total, 9 participants joined the interview. The roles of respondents were as follow:

- Senior Developer
- Sr DevOps and Cloud Infra Lead
- DevOps Engineer
- Cloud Architect
- Sr Platforms Engineer
- Software Engineer and Infra Architect
- Cloud Solution Architect
- Executive Director / Lead DevOps engineer
- Solution Architect

How

Based on research and business goals, we identified that enabling the platform to support “better together experiences” was key in this process.

FY25 Company Annual Plan

We will shift our products into an integrated platform that provides a seamless experience across products, focused on the user workflows and the outcomes that users are trying to achieve.

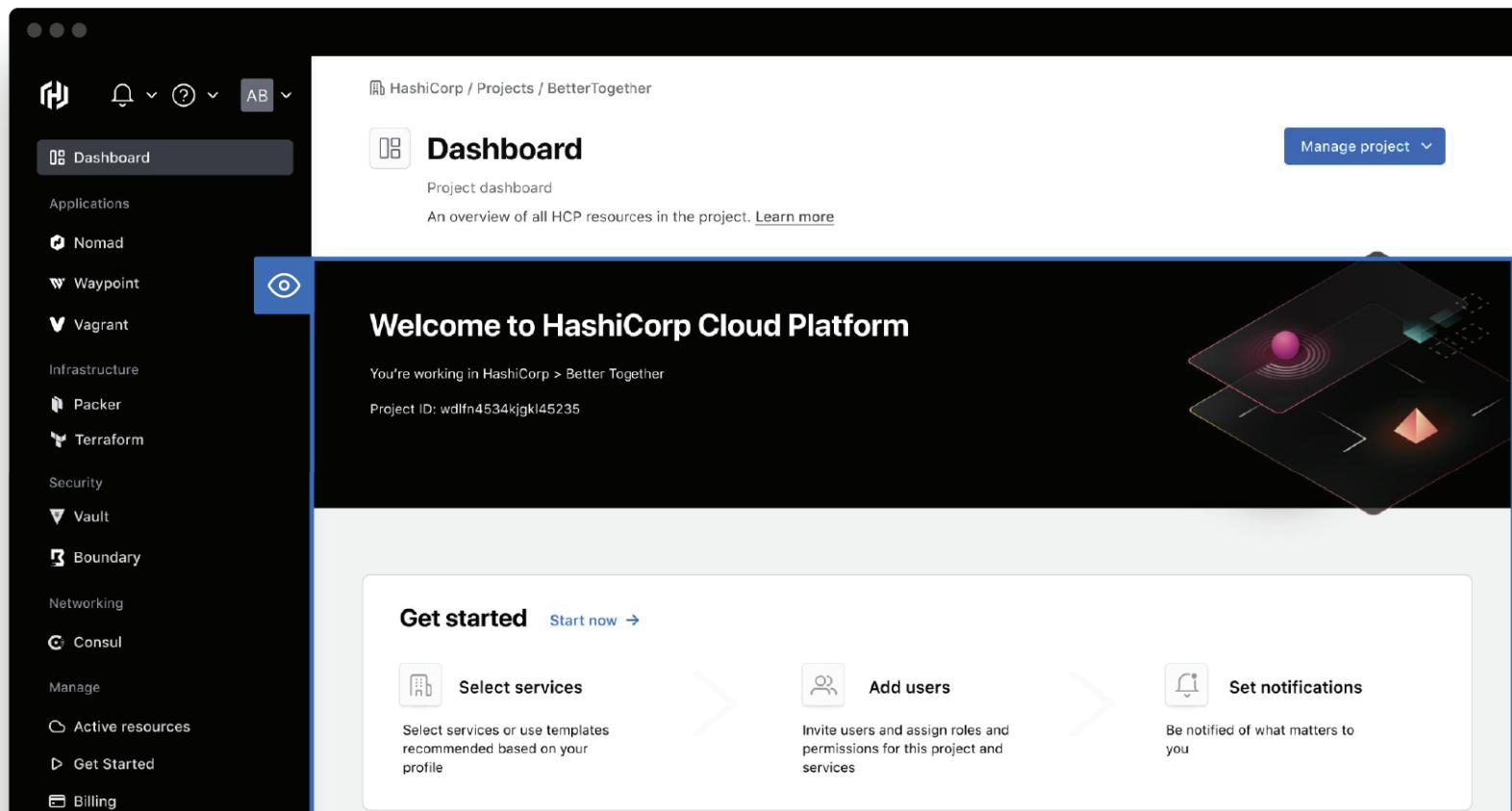
We want to deliver a multi-product experience that feels tightly integrated, without burdening the user with the integration work.

Solution

One of the main changes should be to support the onboarding experience better, by understanding the user needs and guiding them through the “get started” guide.

Once onboard is finished

Pearson lands on the Dashboard. As a first time experience, Pearson can see how to get started

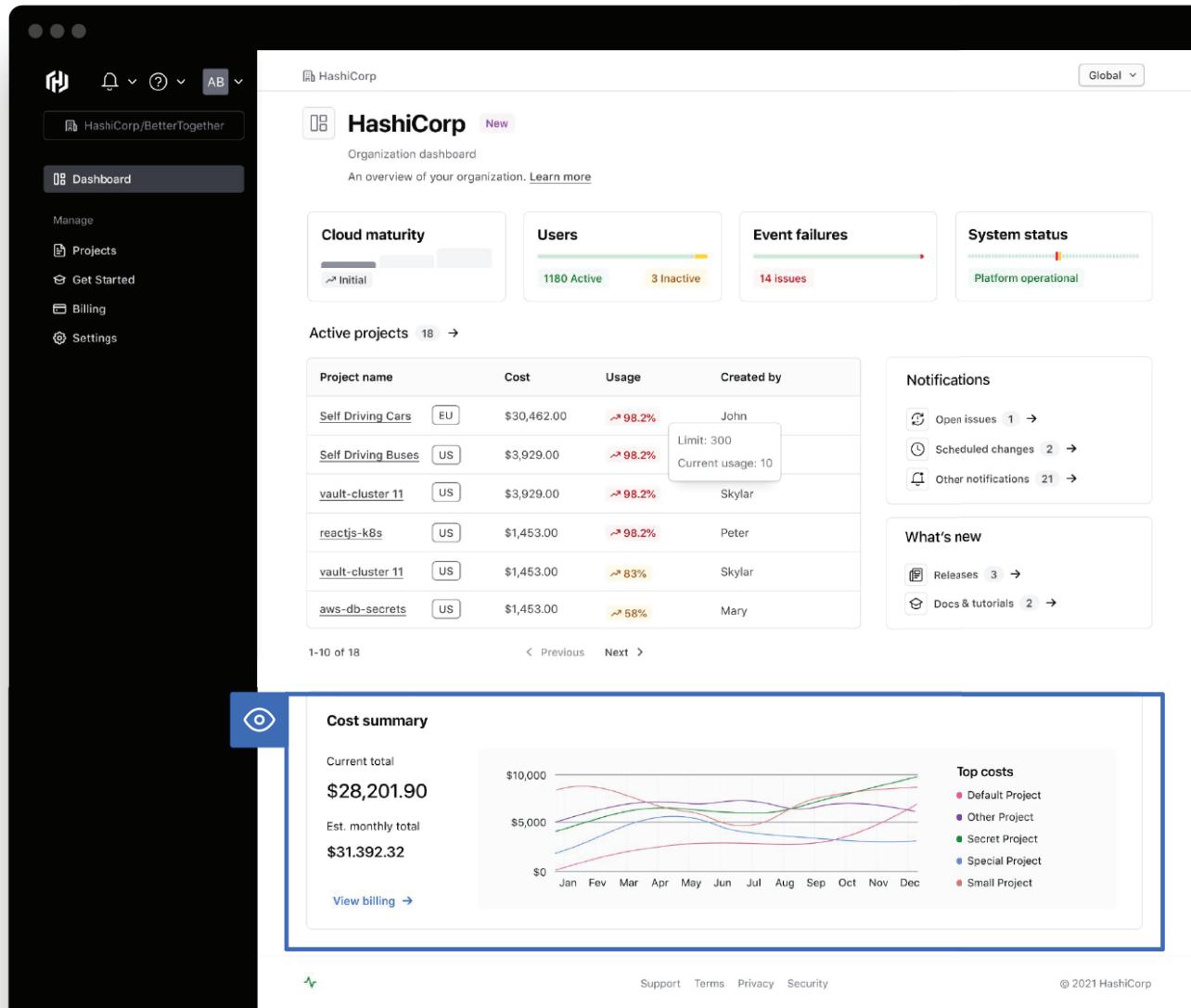


Solution

Another area of improvement should be displaying key information to the user when looking at the Dashboard, specially related to Cost and Usage.

Organization level view

Person can also see the cost summary and understand the projects that are costing most



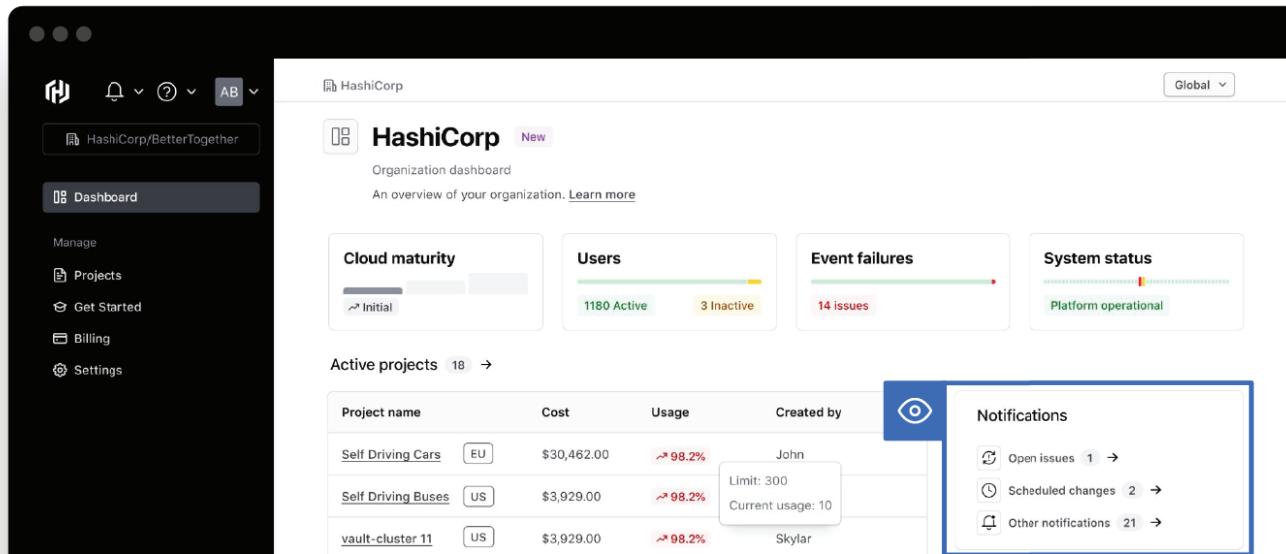
The screenshot displays the HashiCorp BetterTogether dashboard. On the left, a dark sidebar shows navigation links: HashiCorp/BetterTogether, Dashboard, Manage, Projects, Get Started, Billing, and Settings. The main dashboard area has a light background. At the top, it says "HashiCorp Organization dashboard" and "An overview of your organization. [Learn more](#)". Below this are four cards: "Cloud maturity" (Initial), "Users" (1180 Active, 3 Inactive), "Event failures" (14 issues), and "System status" (Platform operational). A section titled "Active projects" lists 18 projects with columns for Project name, Cost, Usage, and Created by. A callout box highlights a usage limit of 300 and current usage of 10 for a project named "Self Driving Buses". Below the project list are "Notifications" (Open issues 1, Scheduled changes 2, Other notifications 21) and "What's new" (Releases 3, Docs & tutorials 2). At the bottom, a "Cost summary" card shows a line graph of monthly costs from January to December for various projects, with a total current cost of \$28,201.90 and an estimated monthly total of \$31,392.32. A legend identifies the projects: Default Project (pink), Other Project (purple), Secret Project (green), Special Project (blue), and Small Project (red).

Solution

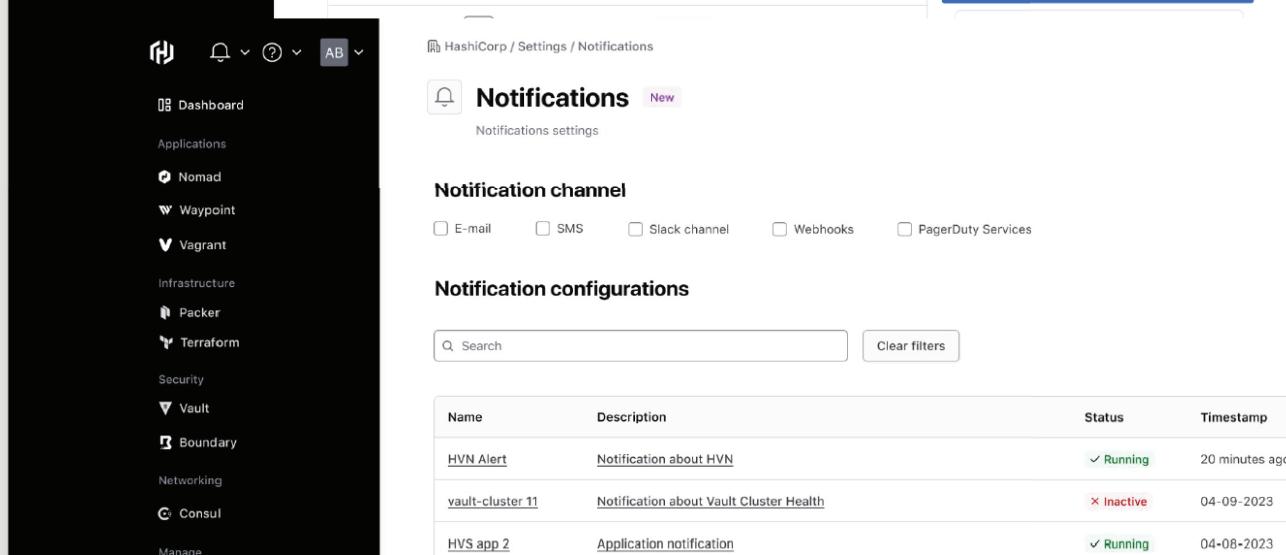
A critical area as well is to support Notifications. Users would like to be notified specially when something goes wrong. For them being able to configure their notification preferences is also key, so they can be very specific about what would trigger a notification to be sent.

Notifications

In the Notifications area and its settings, Pearson can manage their notification preferences



The screenshot shows the HashiCorp BetterTogether interface. On the left, there's a dark sidebar with navigation links: Dashboard, Manage (Projects, Get Started, Billing, Settings), Applications (Nomad, Waypoint, Vagrant), Infrastructure (Packer, Terraform), Security (Vault, Boundary), Networking (Consul, Manager), and a Global dropdown. The main dashboard has sections for Cloud maturity (Initial), Users (1180 Active, 3 Inactive), Event failures (14 issues), and System status (Platform operational). A blue box highlights the Notifications section, which contains links for Open issues (1), Scheduled changes (2), and Other notifications (21).



The screenshot shows the HashiCorp Settings / Notifications page. It includes a Notifications settings section with a bell icon, a Notification channel section with checkboxes for E-mail, SMS, Slack channel, Webhooks, and PagerDuty Services, and a Notification configurations section with a search bar and a table of notification entries. The table columns are Name, Description, Status, and Timestamp. Entries include HVN Alert (Notification about HVN, Running, 20 minutes ago), vault-cluster 11 (Notification about Vault Cluster Health, Inactive, 04-09-2023), and HVS app 2 (Application notification, Running, 04-08-2023).

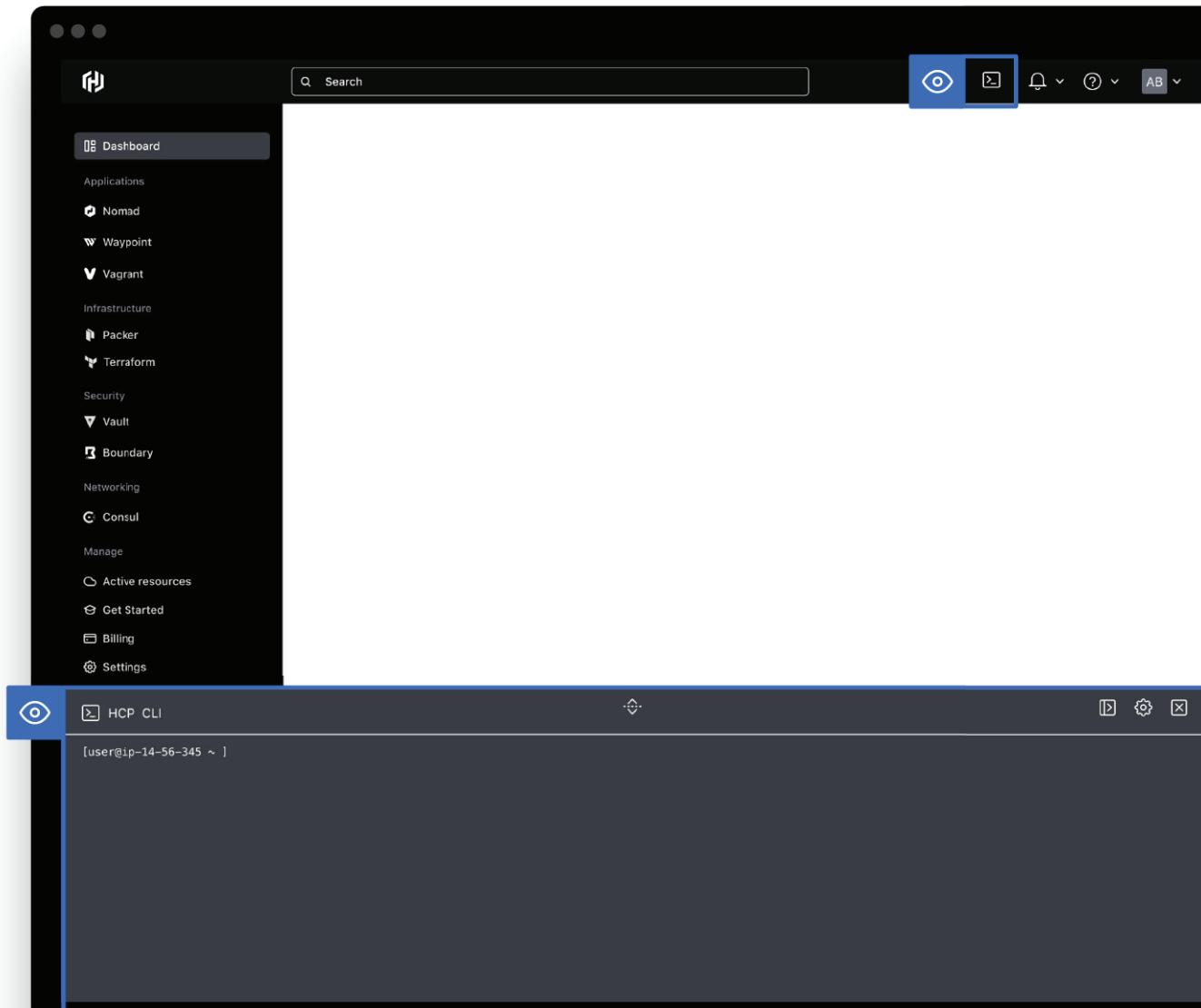
Solution

During research, we learned that even though users appreciate having an UI, many of them still prefer to leverage CLI, so the Platform should take into account those use cases.

HCP CLI

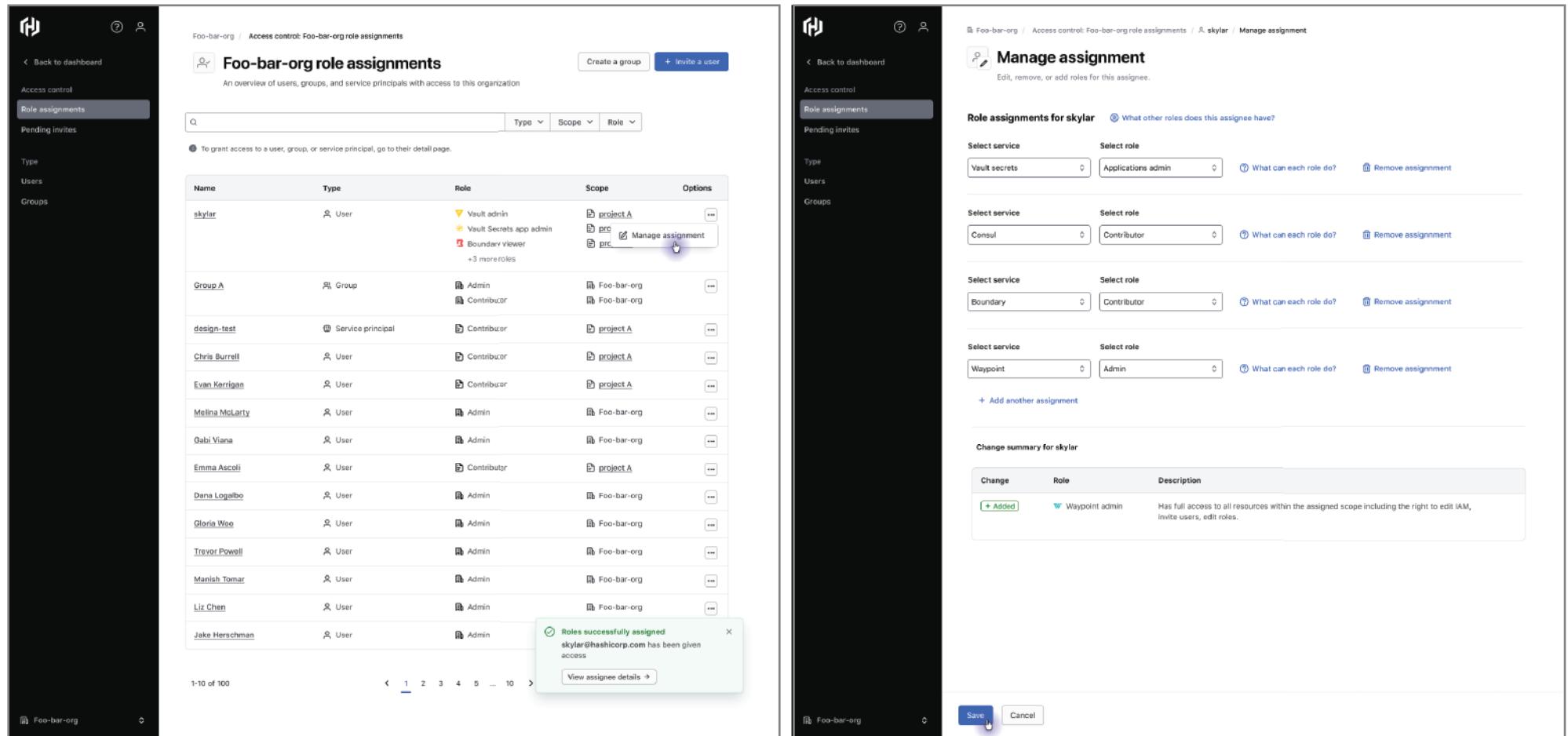
The HCP Command Line Interface (HCP CLI) is a unified tool to manage HCP services.

With just one tool to download and configure, Pearson can control multiple HCP Resources from the command line and automate them through scripts.



Other projects: RBAC (Fine Grained Roles)

HCP has the following roles: Owner/Admin, Contributor, and Viewer that exist at project and org levels. Viewers are allowed to view but not modify, Contributors can take all actions except user management such as inviting users and assigning them roles and modifying billing. This final capability is granted solely to Admins. The permissions granted by each of these roles is quite broad and is not service specific. This proposal allows platform and product line service teams to define their own roles outside of the platform's coarse-grained roles based on their own particular user personas. This helps limit a given user's permissions to least privilege.



The image displays two screenshots of the HashiCorp Cloud Platform (HCP) interface, illustrating the RBAC (Role-Based Access Control) feature.

Left Screenshot: Foo-bar-org role assignments

This screenshot shows the 'Role assignments' page for the 'Foo-bar-org' organization. It lists users, groups, and service principals with their assigned roles and scopes. A modal window is open for the user 'skylar', showing the assigned roles and scopes. The modal includes a success message: "Roles successfully assigned" and "skylar@hashicorp.com has been given access".

Name	Type	Role	Scope	Options
skylar	User	Vault admin Vault Secrets app admin Boundary Viewer +3 more roles	project A pre pre	Manage assignment
Group A	Group	Admin Contributor	Foo-bar-org Foo-bar-org	...
design-test	Service principal	Contributor	project A	...
Chris Burrell	User	Contributor	project A	...
Evan Kerrigan	User	Contributor	project A	...
Melina McLarty	User	Admin	Foo-bar-org	...
Gabi Viana	User	Admin	Foo-bar-org	...
Emma Ascoli	User	Contributor	project A	...
Dana Logicalbo	User	Admin	Foo-bar-org	...
Gloria_Wee	User	Admin	Foo-bar-org	...
Trevor Powell	User	Admin	Foo-bar-org	...
Manish Tomar	User	Admin	Foo-bar-org	...
Liz Chen	User	Admin	Foo-bar-org	...
Jake Herschman	User	Admin	Foo-bar-org	...

1-10 of 100

Right Screenshot: Manage assignment for skylar

This screenshot shows the 'Manage assignment' interface for the user 'skylar'. It lists multiple role assignments across different services. Each assignment includes a 'Select service' dropdown, a 'Select role' dropdown, a 'What can each role do?' link, and a 'Remove assignment' button. The interface also includes a 'Change summary for skylar' section and a 'Save' button.

Select service	Select role	What can each role do?	Remove assignment
Vault secrets	Applications admin	What can each role do?	Remove assignment
Consul	Contributor	What can each role do?	Remove assignment
Boundary	Contributor	What can each role do?	Remove assignment
Waypoint	Admin	What can each role do?	Remove assignment

+ Add another assignment

Change summary for skylar

Change	Role	Description
+ Added	Waypoint admin	Has full access to all resources within the assigned scope including the right to edit IAM, invite users, edit roles.

Save Cancel

Thank you. I'm looking forward to hearing from you.

If you would like to know more about my work, contact me at:

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<https://ca.linkedin.com/in/gabiviana>