Case studies

This portfolio includes four projects

Hologram (Page 2)

Senior Interaction Designer
Hologram
2020 - Present

Includes:

- Research
- Testing (and pivoting)
- User flows
- Interface design
- Product Strategy
- DesignOps
- Cross department alignment

IRM (Page 18)

Lead Interaction Designer
Google
2017 - 2019

Includes:

- Research
- Testing (and pivoting)
- User flows
- Interface design
- Product Strategy
- Persona identification
- DesignOps

SLO Repo (Page 50)

Lead Interaction Designer
Google
2019 - 2020

Includes:

- Research
- Testing
- User flows
- Interface design
- Product Strategy
- Persona identification

Cohese (Page 70)

Co-founder (side project)
2014 - 2020

Includes:

- Branding
- Interface design
- Front-end development

Hologram

The easiest to use cellular platform for IoT. Connecting anything to anywhere from a single SIM card

Senior Product Designer

2020 - Present

Background

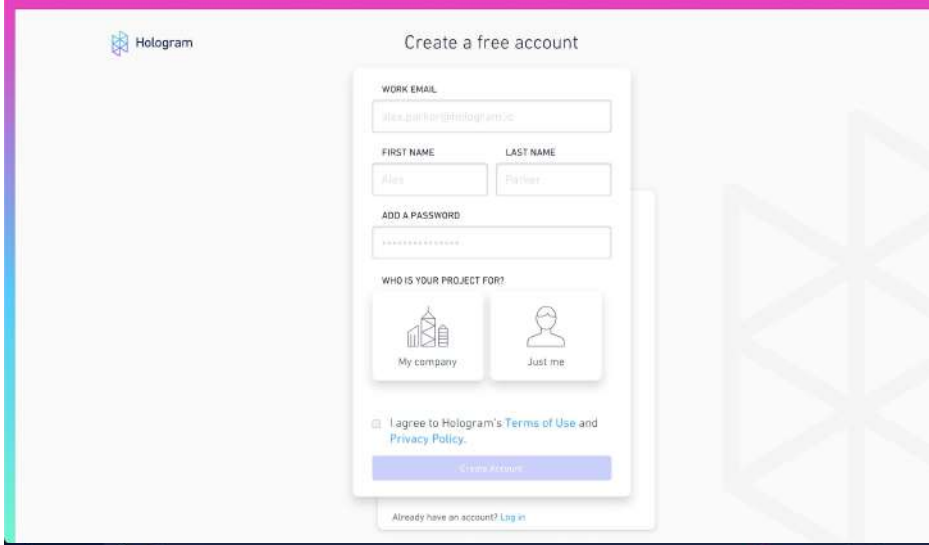
Context

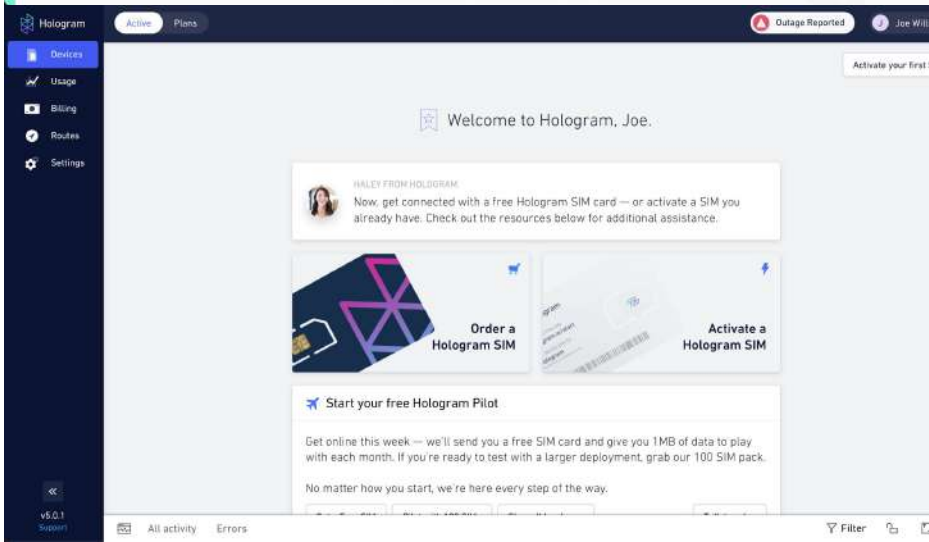
The path to sign up to Hologram was confusing for customers. The funnel has multiple routes and from watching Fullstory segments, caused a lot of drop off. The goal was to identify where in the process the toil is being created by talking to the five pillars in the business.

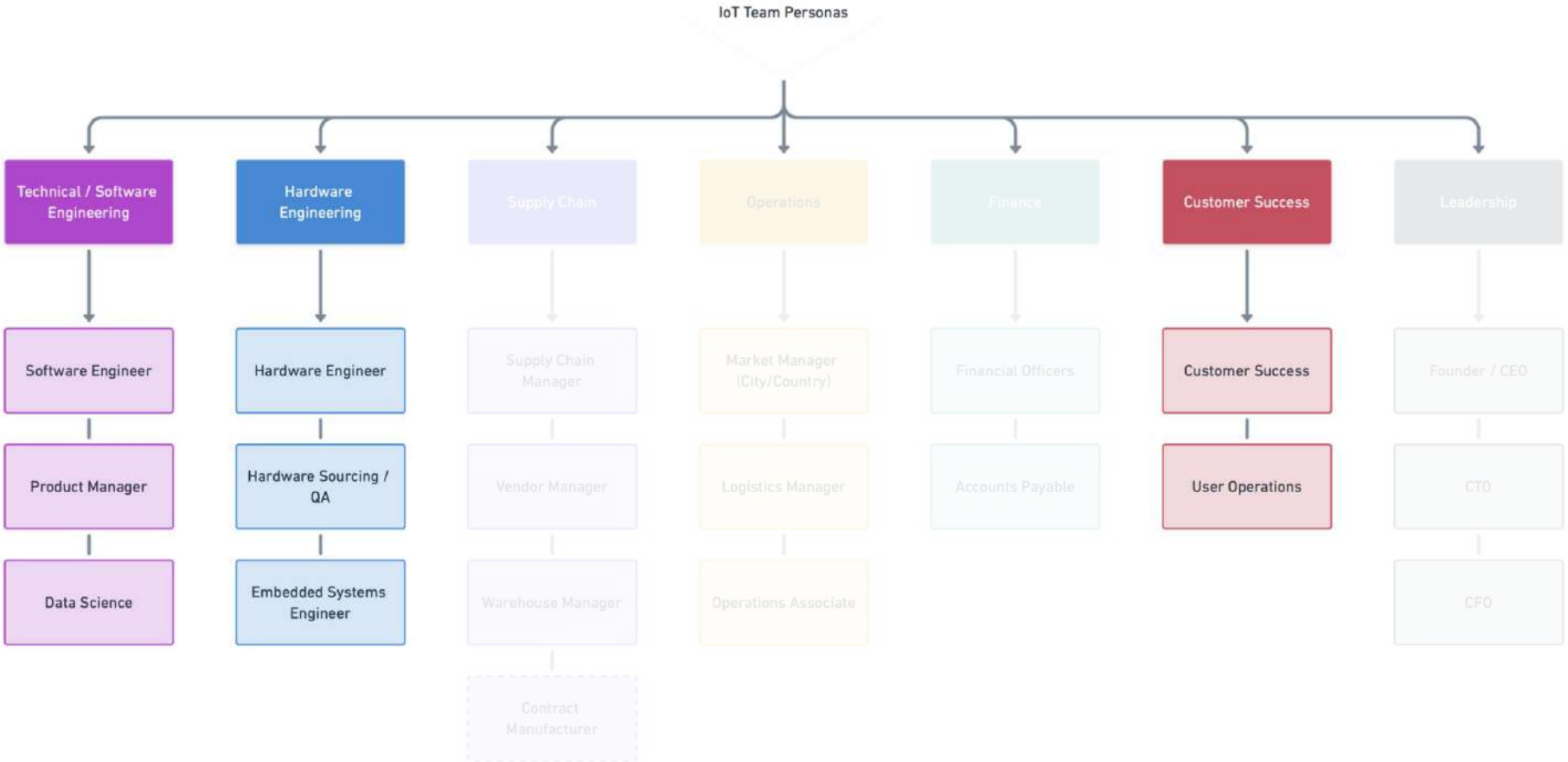
- Product
- Marketing
- Growth
- Sales
- Customers

The team and my role

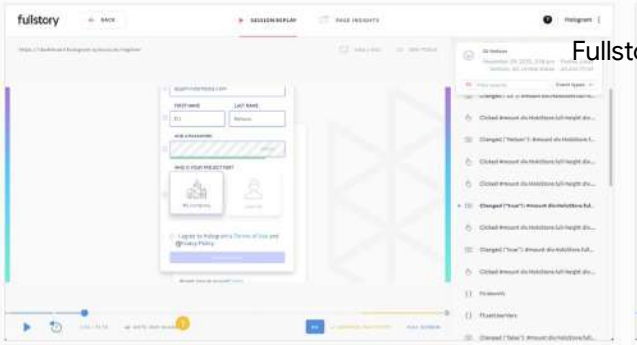
I lead this initiative and organized all workshops and touch points around it's progress. I did both the UI and UX and was accountable for its prioritization and highlighting its importance

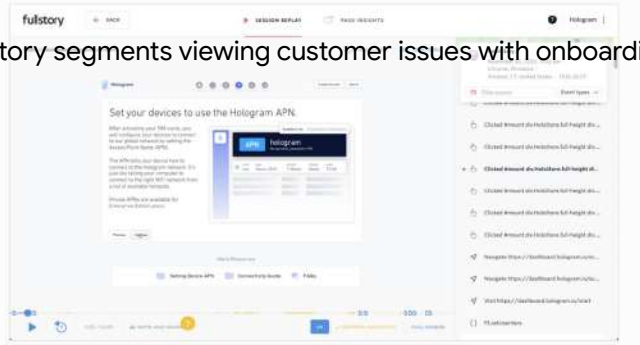


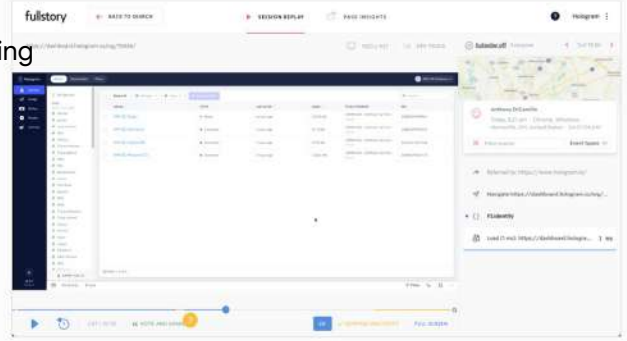


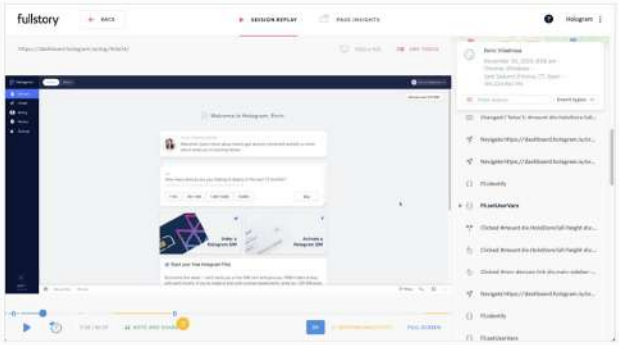

IoT Team Personas
Technical / Software Engineering
Hardware Engineering
Supply Chain
Operations
Finance
Customer Success
Leadership
Software Engineer
Product Manager
Data Science
Hardware Engineer
Hardware Sourcing / QA
Embedded Systems Engineer
Supply Chain Manager
Vendor Manager
Warehouse Manager
Contract Manufacturer
Market Manager (City/Country)
Logistics Manager
Operations Associate
Financial Officers
Accounts Payable
Customer Success
User Operations
Founder / CEO
CTO
CFO

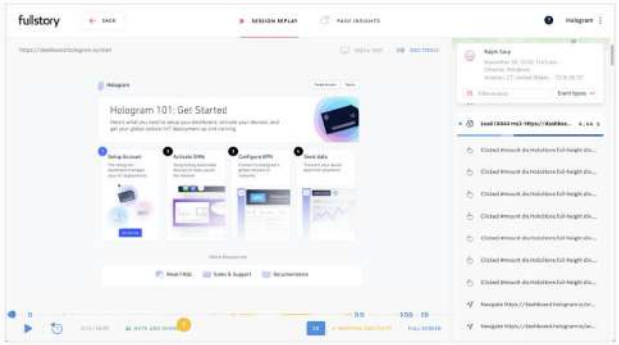
Fullstory segments viewing customer issues with onboarding

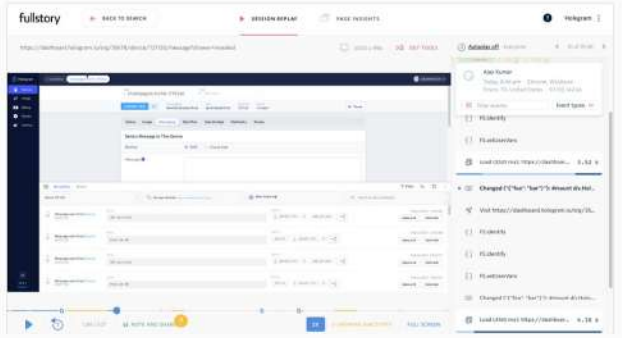


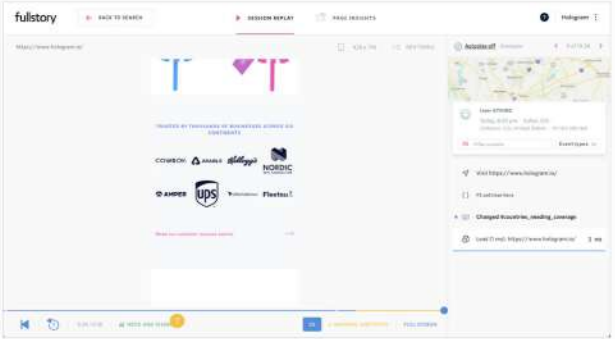


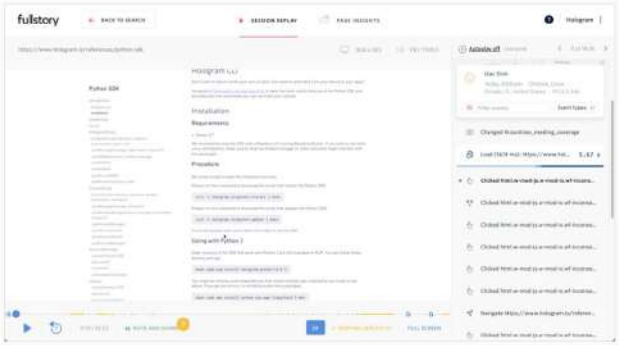


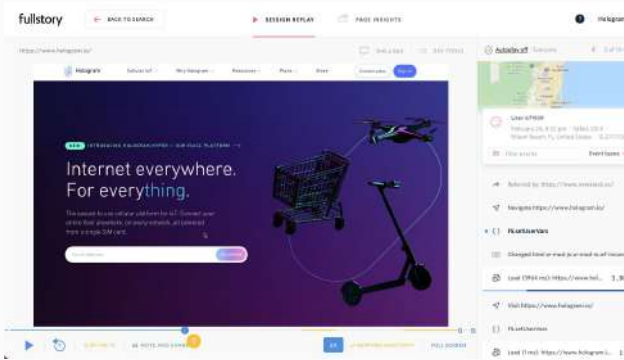


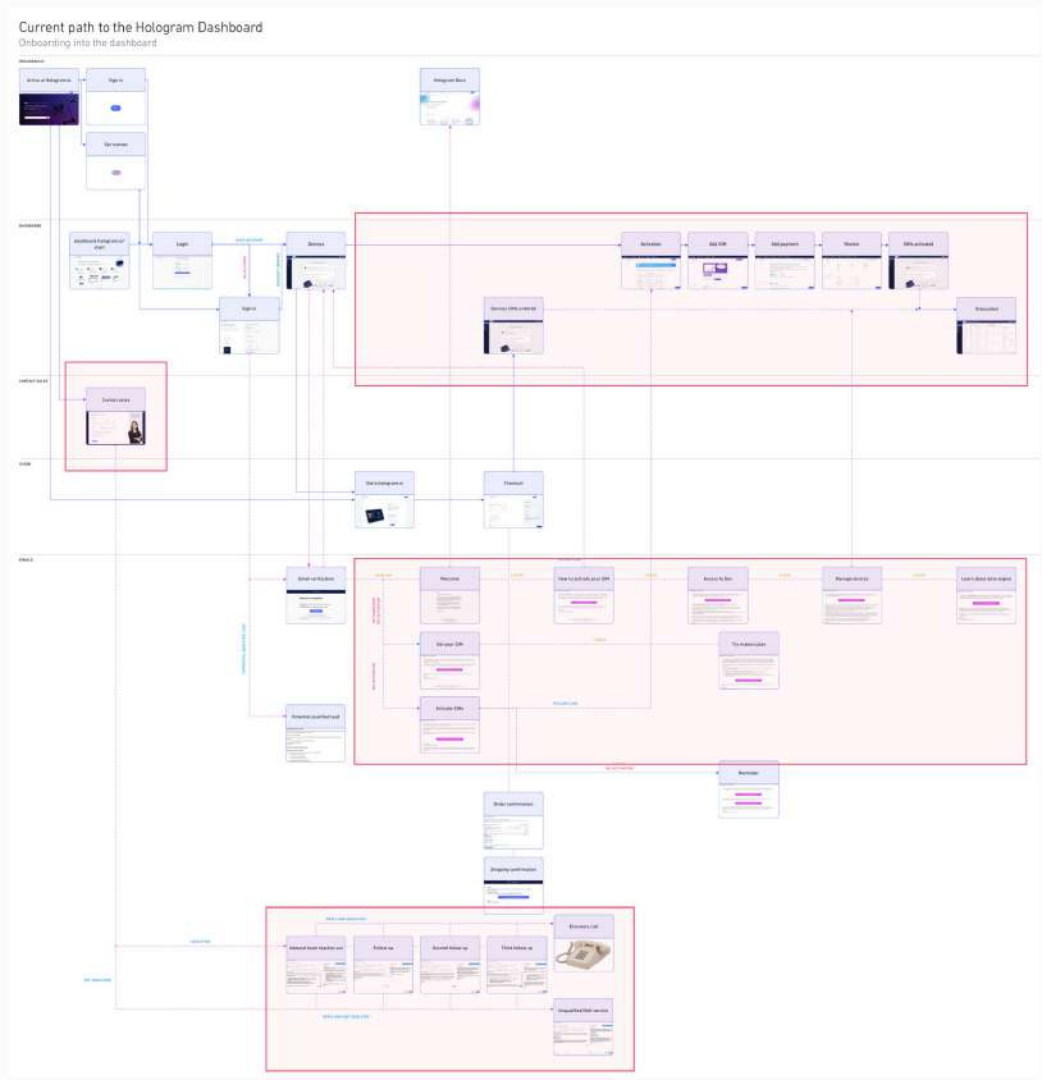












Identifying the problems

From mapping the existing process of onboarding and all of the touch points, it was clear where the the focus needed to be.

1️⃣ We don't ask the right questions before a customer is onboarded, leading to unnecessary follow up

2️⃣ Customers are not exposed to the value of Hologram when arriving on the Dashboard

3️⃣ Our communication with customers is fragmented and not tied to customer interaction

4️⃣ We don't help our customers do the two core things, order SIMs and activate them

Exploring

Exploring the problems

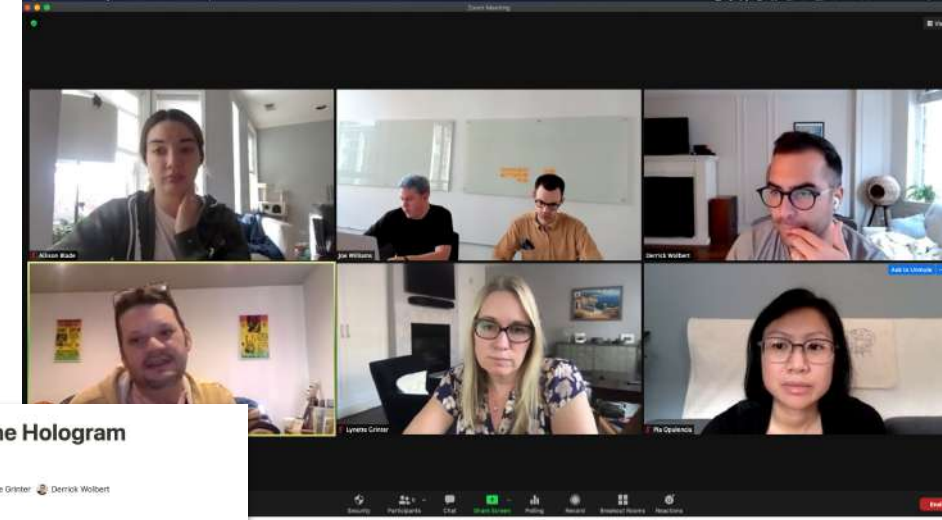
Getting Product, Marketing, Growth and Sales to give lightning talks and walk through how they work within the existing state of onboarding.

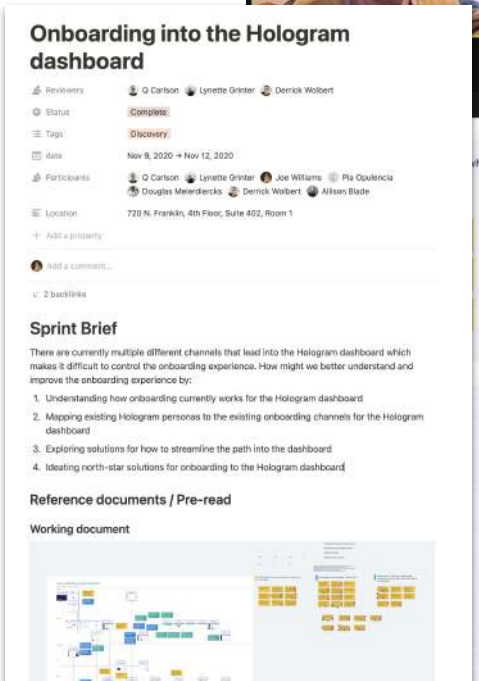
Deliverables of the sprint

1️⃣ Opportunity for the team to come together and meet (I'd just started)

2️⃣ Alignment between the departments on the toil that affects them

3️⃣ Clear direction for deliverables for Q4. Focus areas, and sense of priority





Onboarding into the Hologram dashboard

Reviewers: Q Carlson, Lynette Grinter, Derrick Wolbert
Status: Complete
Tags: Discovery
date: Nov 9, 2020 → Nov 12, 2020
Participants: Q Carlson, Lynette Grinter, Joe Williams, Pia Opulencia, Douglas Meierdierckx, Derrick Wolbert, Allison Blade
Location: 720 N. Franklin, 4th Floor, Suite 402, Room 1

2 backlinks

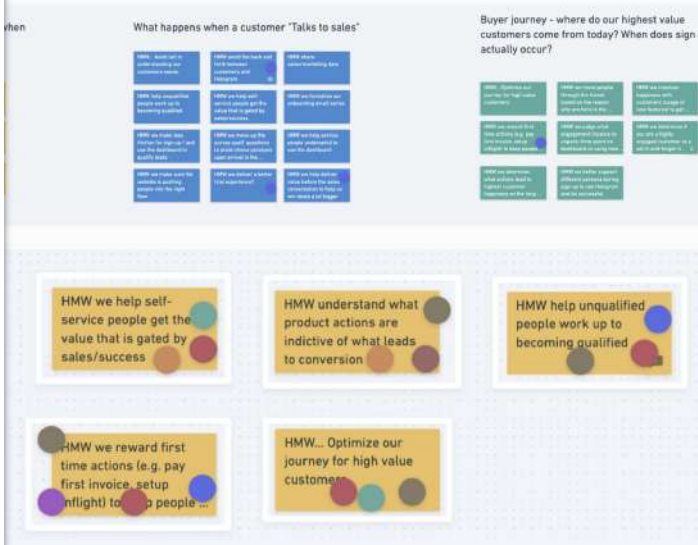
Sprint Brief

There are currently multiple different channels that lead into the Hologram dashboard which makes it difficult to control the onboarding experience. How might we better understand and improve the onboarding experience by:

1. Understanding how onboarding currently works for the Hologram dashboard
2. Mapping existing Hologram personas to the existing onboarding channels for the Hologram dashboard
3. Exploring solutions for how to streamline the path into the dashboard
4. Ideating north-star solutions for onboarding to the Hologram dashboard

Reference documents / Pre-read

Working document

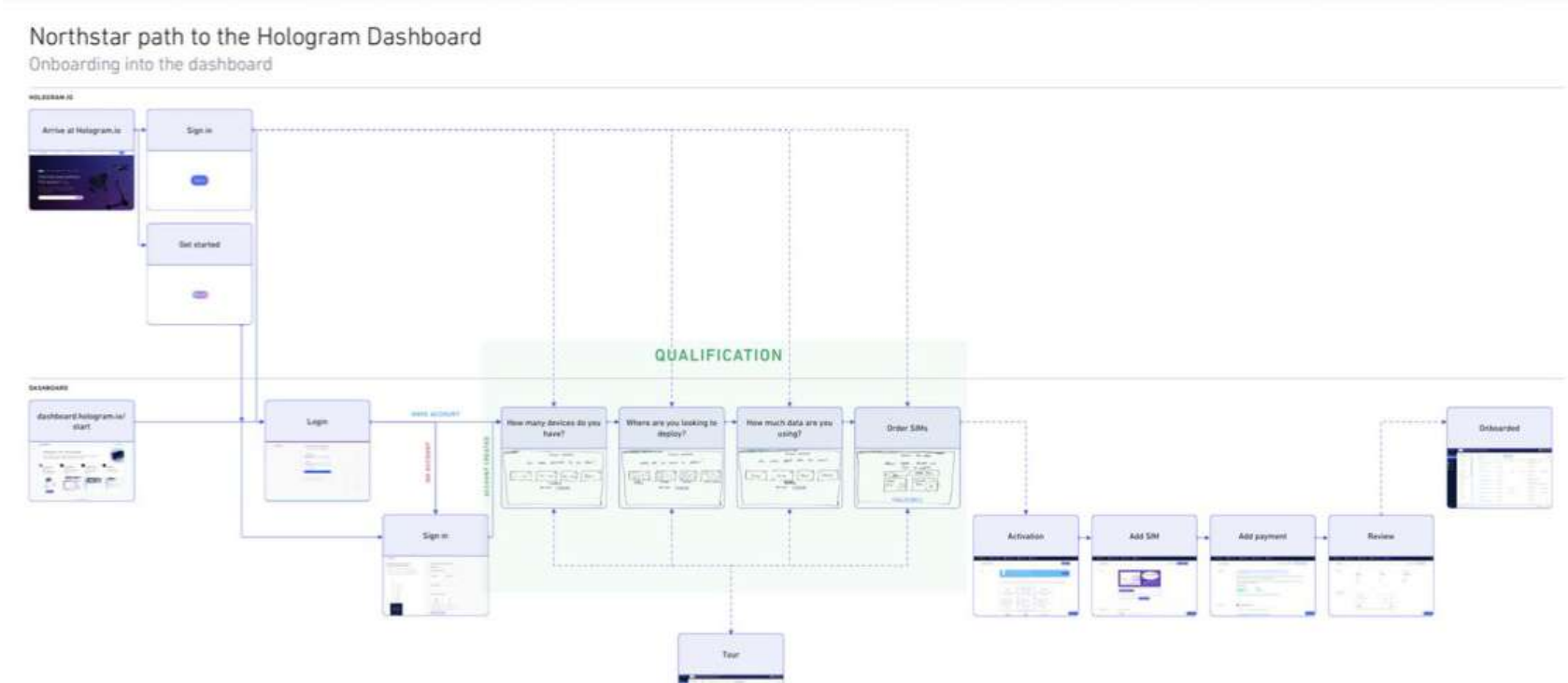


Areas to focus

👭 Helping customers become qualified and avoid follow up

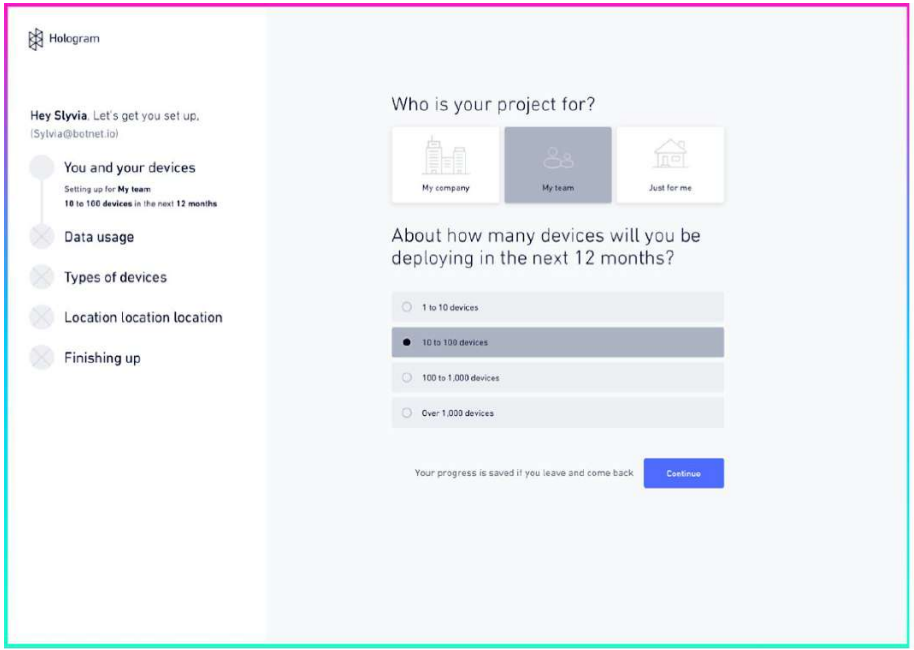
✨Help customers understand the value of Hologram

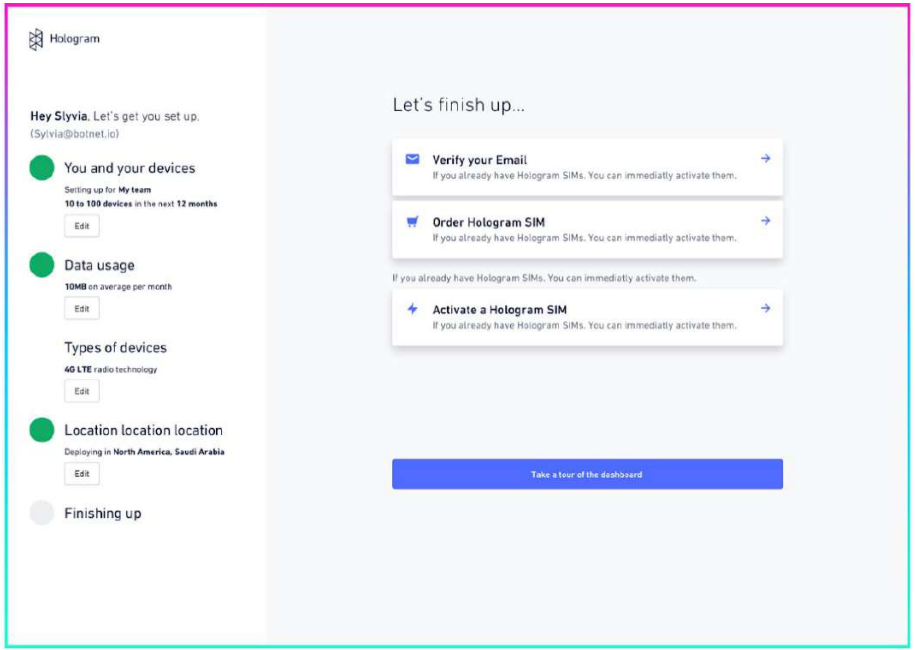
📲 Getting customers set up with SIMs



Design and interaction

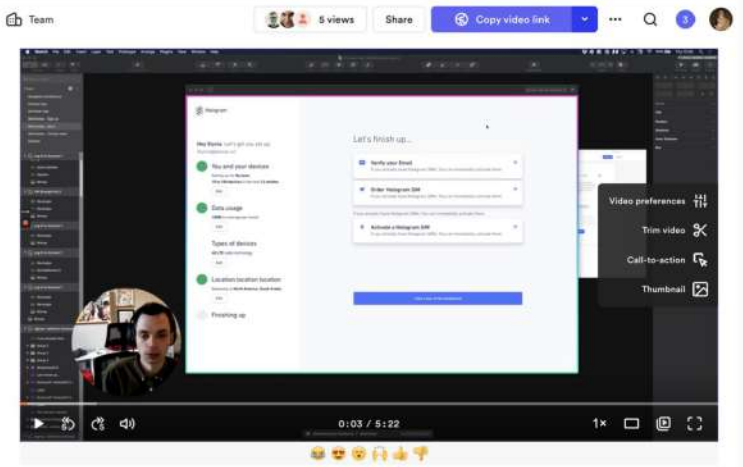
Early wireframes



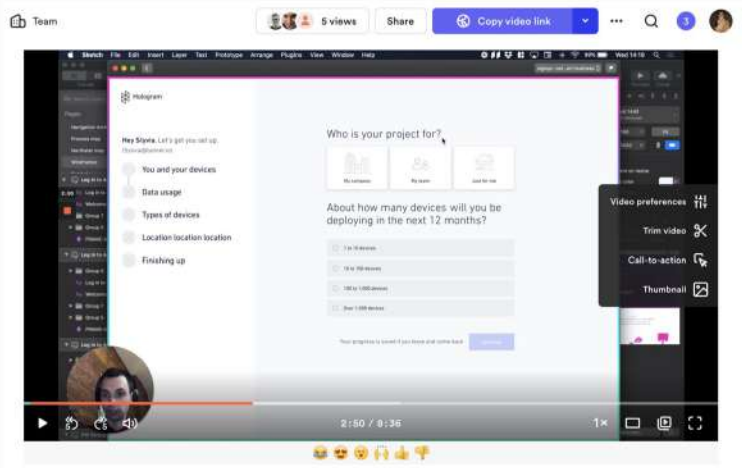


Designing in the open

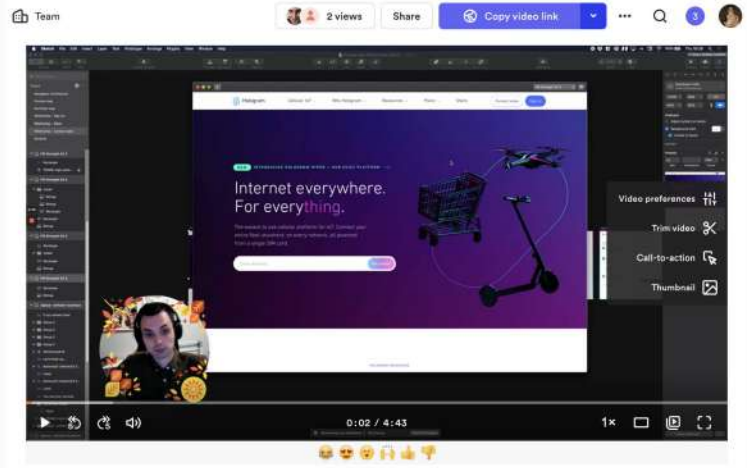
This work spanned across so many departments, so the regular syncs and updates were done via Loom. Walking through the thinking and updates that happened every week to keep lockstep.



Wireframes for onboarding- Store



Wireframes for onboarding - Sign up



Wireframes for onboarding- Contact sales

Testing solutions

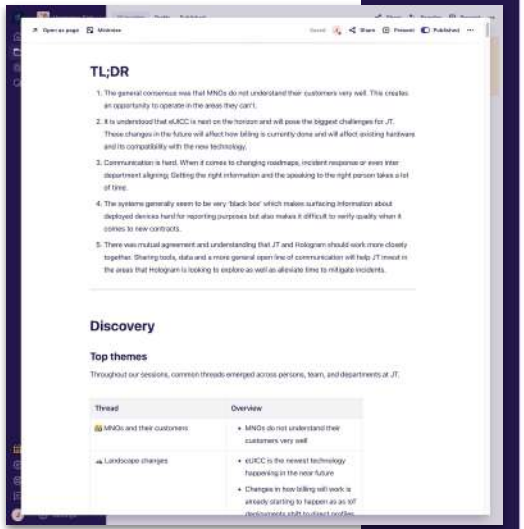
We knew our proposed designs could deliver for not only the customers, but our problems as well. We were focusing on our riskiest assumptions to get validation as soon as possible.

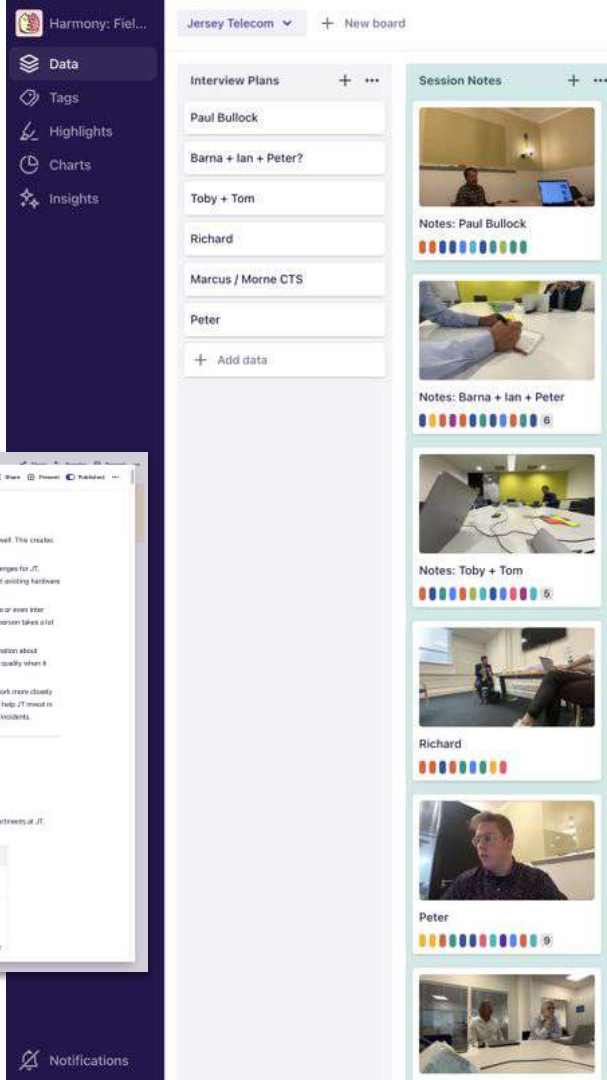
Riskiest assumptions

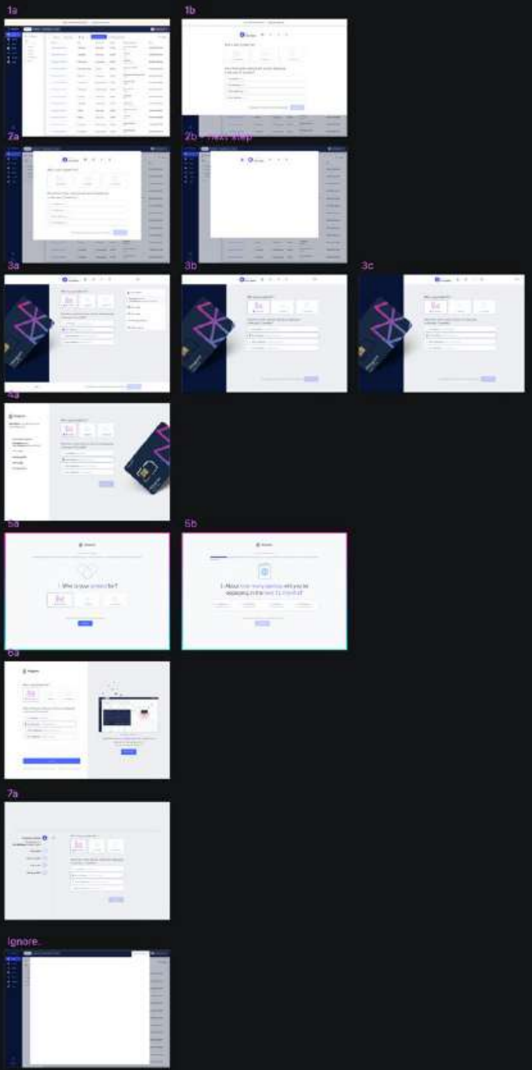
⏸️ Customers can wait to arrive at the dashboard if it meant a complete experience

🛣️ We could streamline all avenues into the dashboard

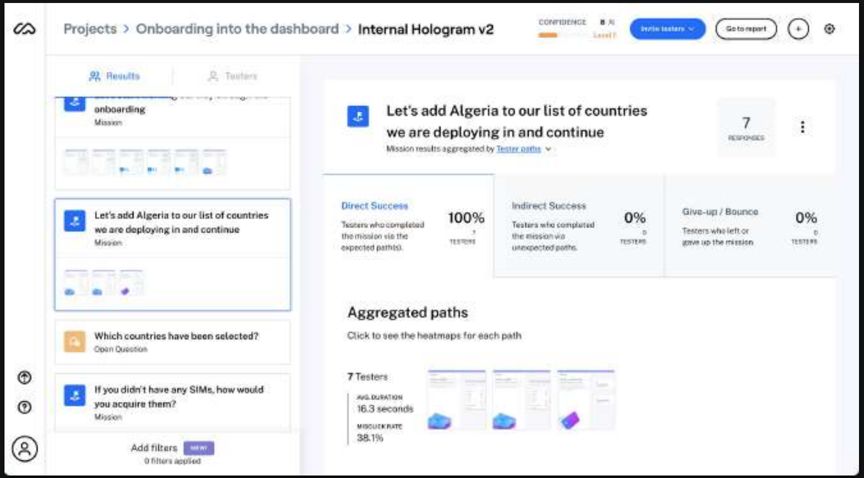
⚙️ Funneling customers to immediately purchase SIMs would reduce churn






1a
1b
2a
2b
3a
3b
3c
5b
Ignore


Active Devices
Active Devices
Active Devices
Active Devices
Active Devices
Active Devices
Active Devices
PW Strength Alt 3

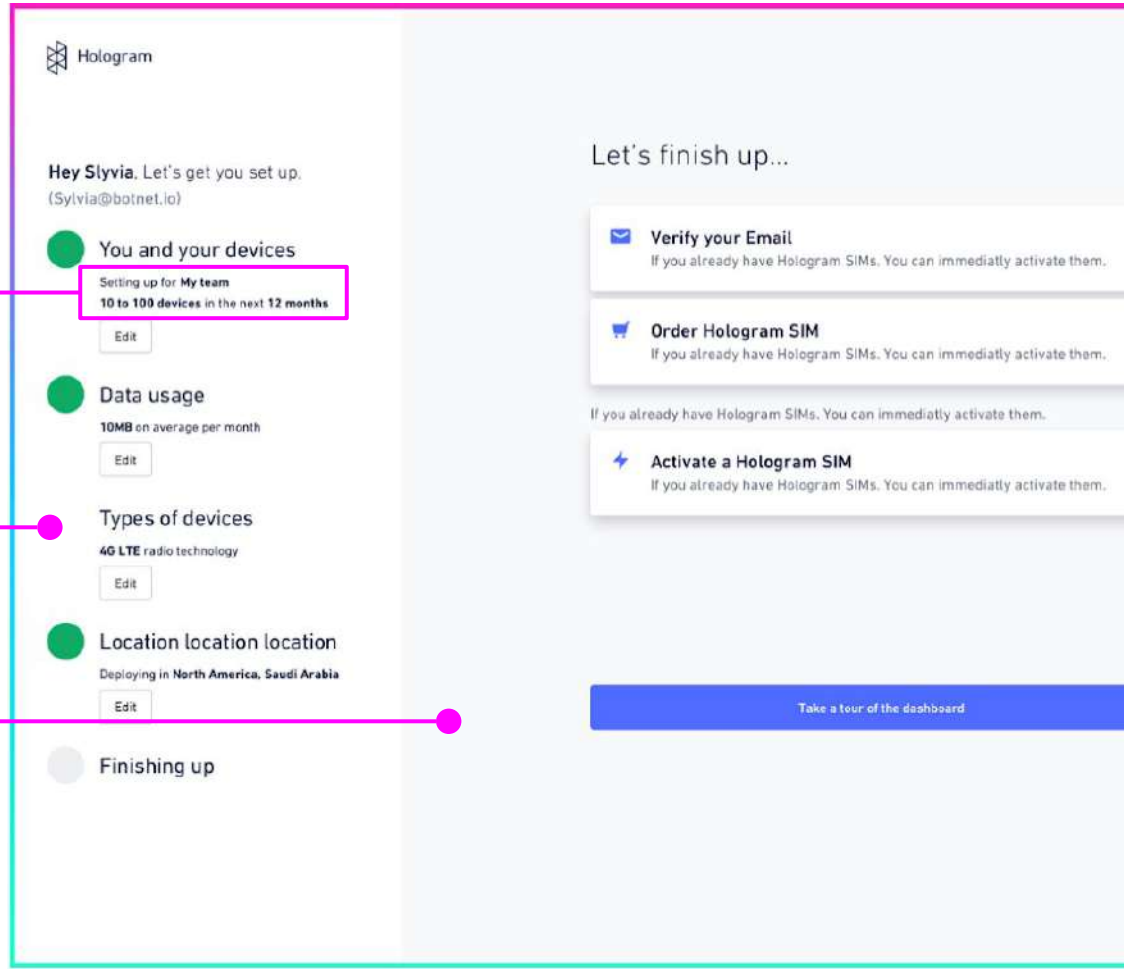

Projects > Onboarding into the dashboard > Internal Hologram v2
CONFIDENCE
Invite testers
Go to report
Results
Testers
onboarding
Mission
Let's add Algeria to our list of countries we are deploying in and continue
Mission
Which countries have been selected?
Open Question
If you didn't have any SIMs, how would you acquire them?
Mission
Add filters
NEW!
0 filters applied
Let's add Algeria to our list of countries we are deploying in and continue
Mission results aggregated by Tester paths
7
RESPONSES
Direct Success
Testers who completed the mission via the expected path(s).
100%
TESTERS
Indirect Success
Testers who completed the mission via unexpected paths.
0%
TESTERS
Give-up / Bounce
Testers who left or gave up the mission.
0%
TESTERS
Aggregated paths
Click to see the heatmaps for each path
7 Testers
AVG. DURATION
16.3 seconds
MISCLICK RATE
38.1%

Key findings

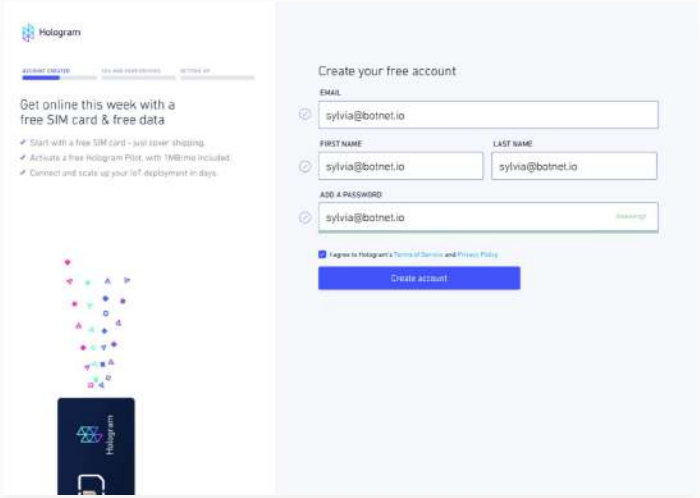
🤦‍♀️ Replying back information felt redundant

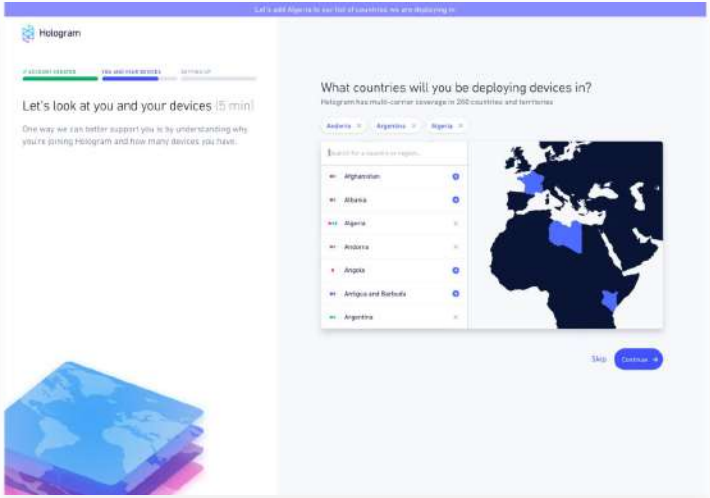
🏌️‍♀️There wasn't a strong sense of progression

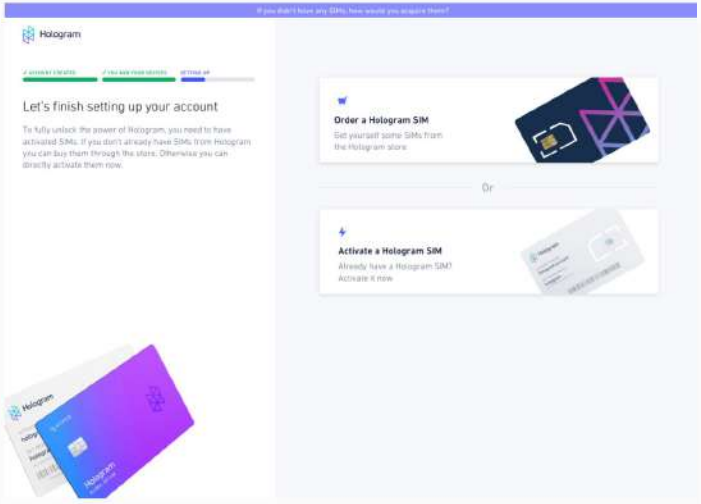
🤔More of an explanation as to why this information is required

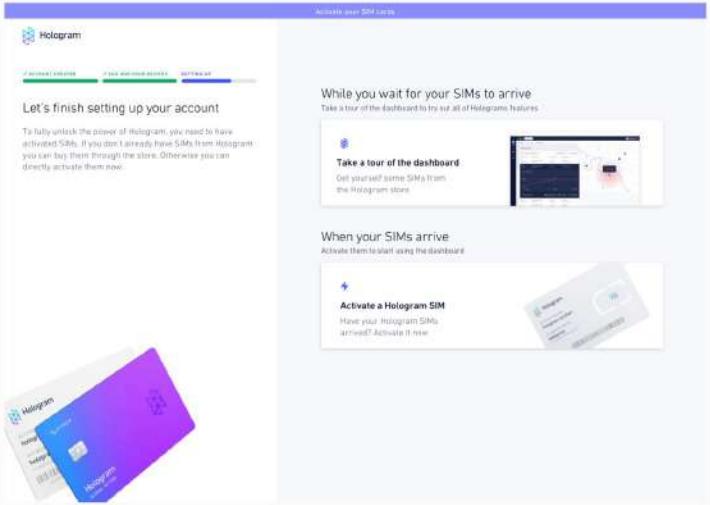


Interface design



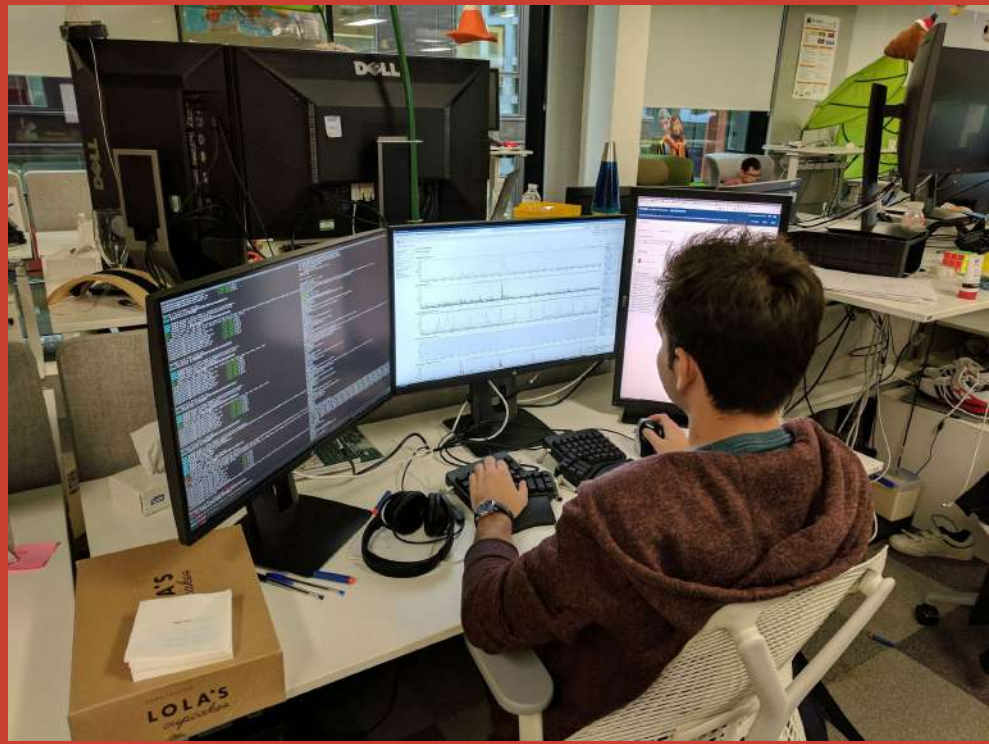






IRM

Create a cohesive incident response tool to be used across the entirety of Google

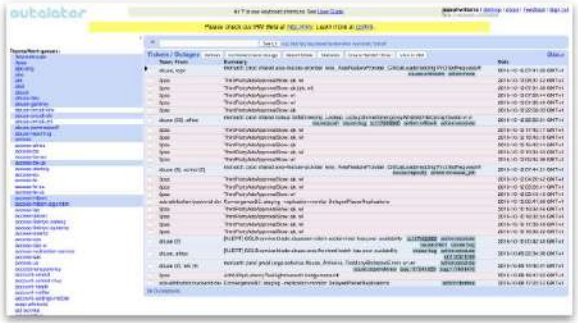


Lead Product Designer

2017 - 2019

Current landscape

Combining existing tools



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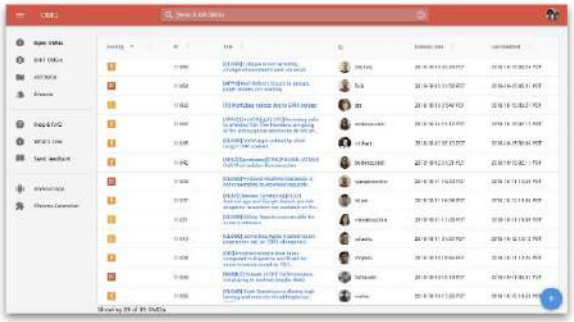

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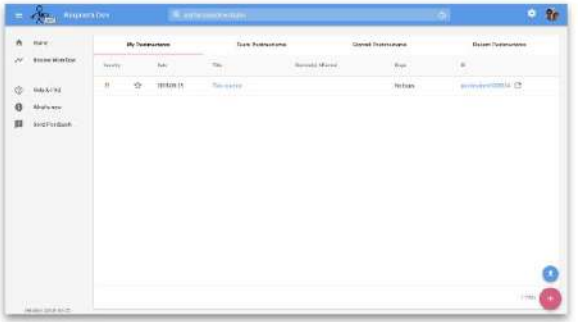


[Outalator]

A tool to track outages, based on alerts generated by Google monitoring systems (Borgmon, Prober, Monarch) and manual pages sent by humans.

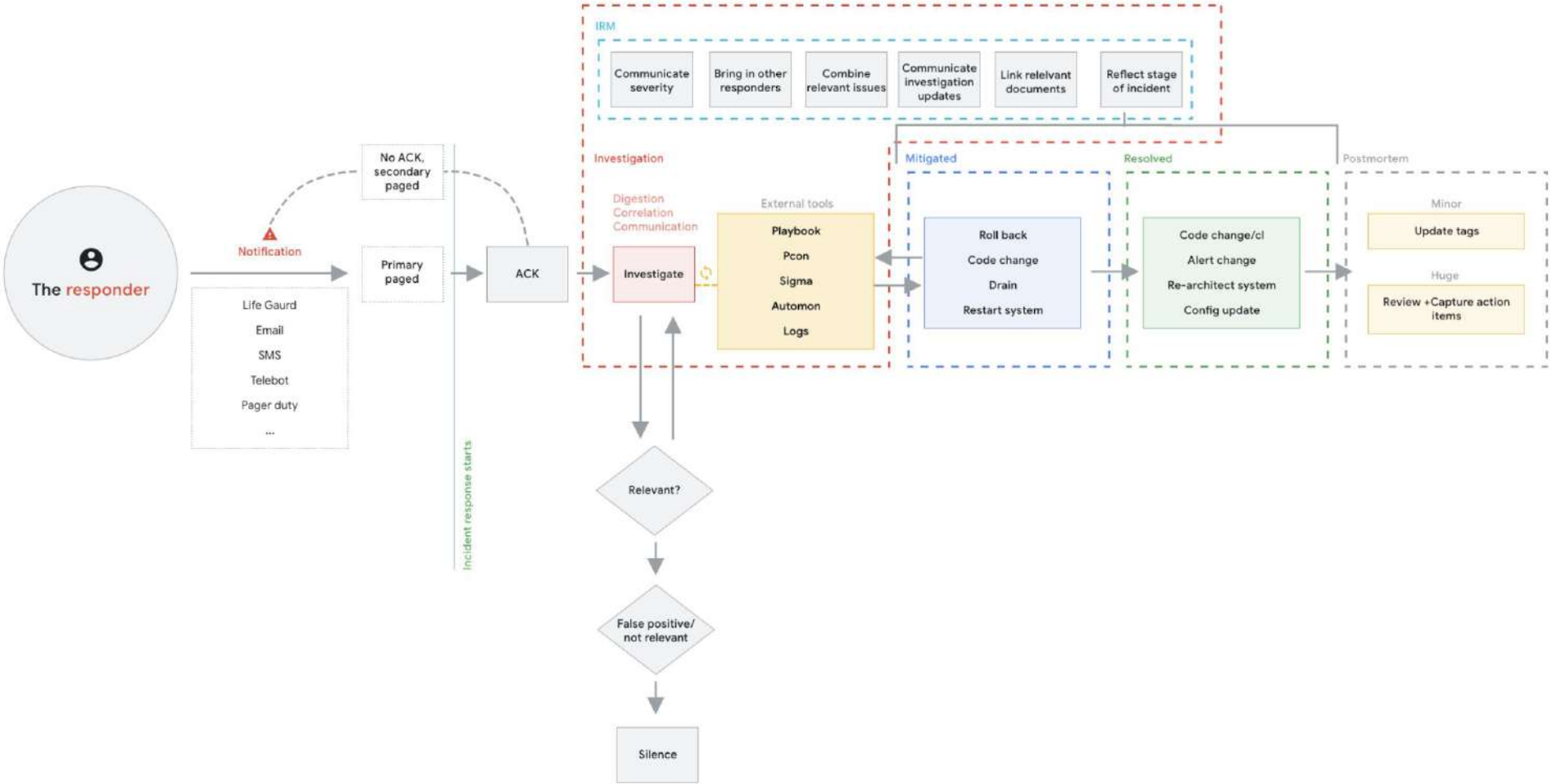
[OMG]

An incident management dashboard/tool that serves as the central place for tracking and managing all ongoing incidents at Google. It was developed as part of the IMAG (Incident Management at Google) effort.

[Requiem]

A tool for creating, indexing, searching, and analyzing postmortems.

Responder journey



Understanding the problem


POST IT NOTE COLOUR!
TASK (1) - CREATE NEW INCIDENT FROM ALERT FEED

Core user journey

Create an incident from a signal

Complete incident page. Add roles.

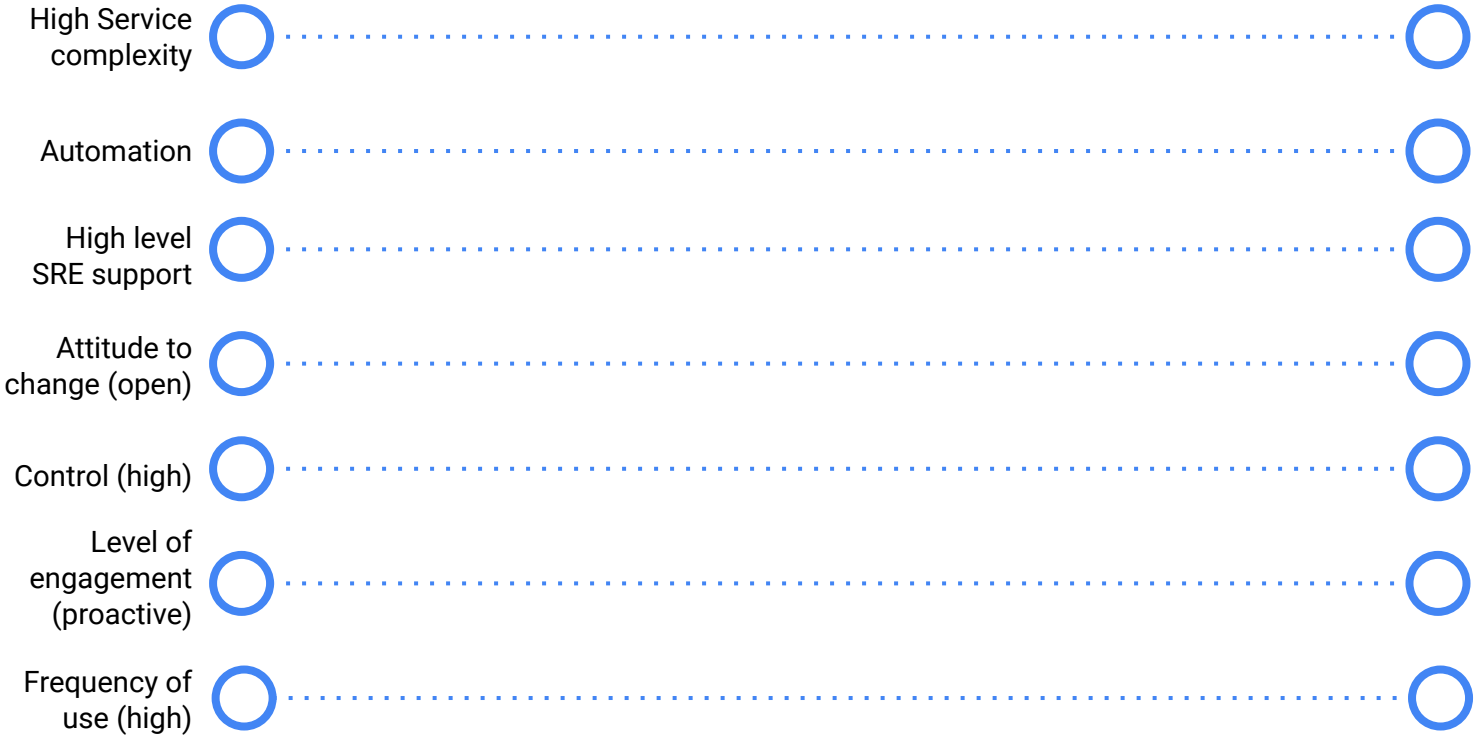
Escalate the incident to declare an OMG. View your OMG.

Return to the incident list to view another signal.

Handoff incident(s) to the next on-call shift.

Testing

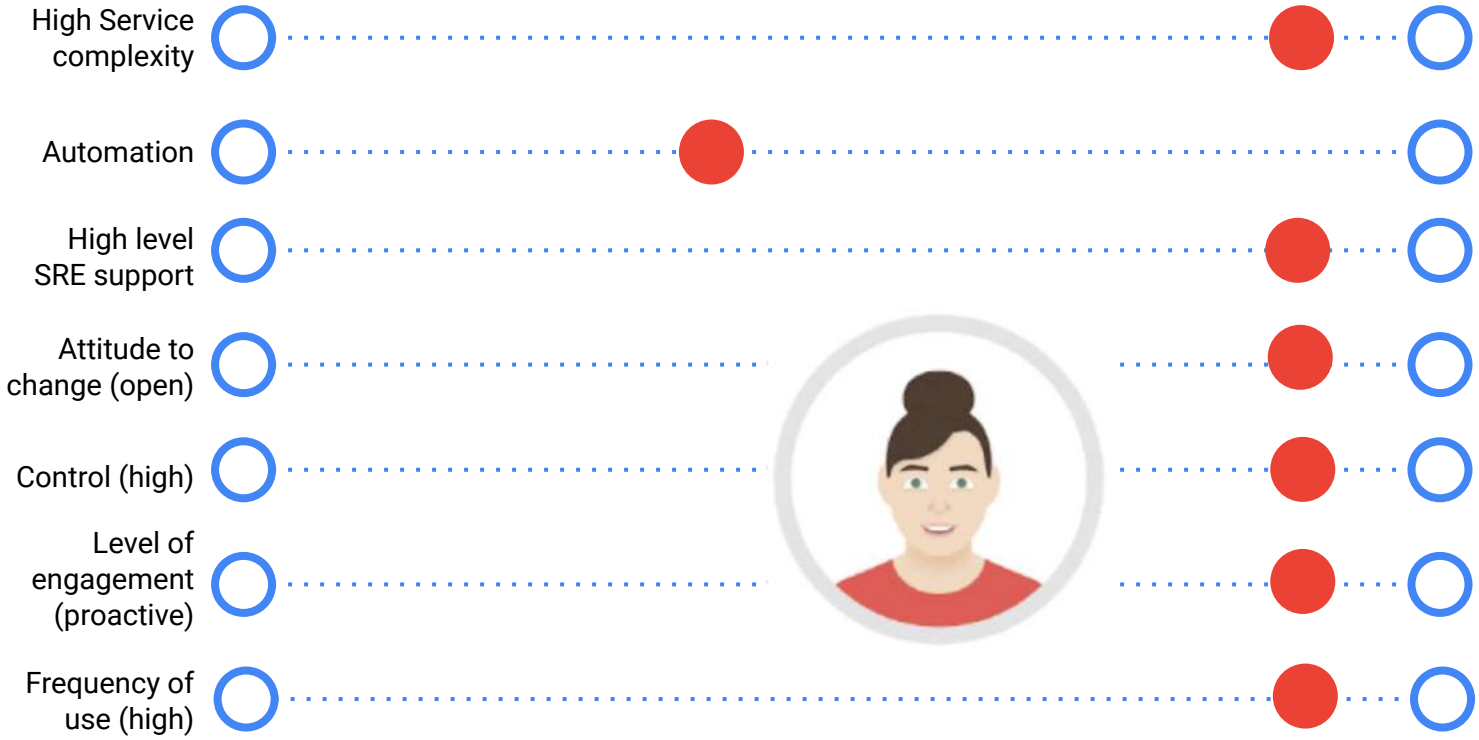
But it's not as simple as SRE vs. SWE ...



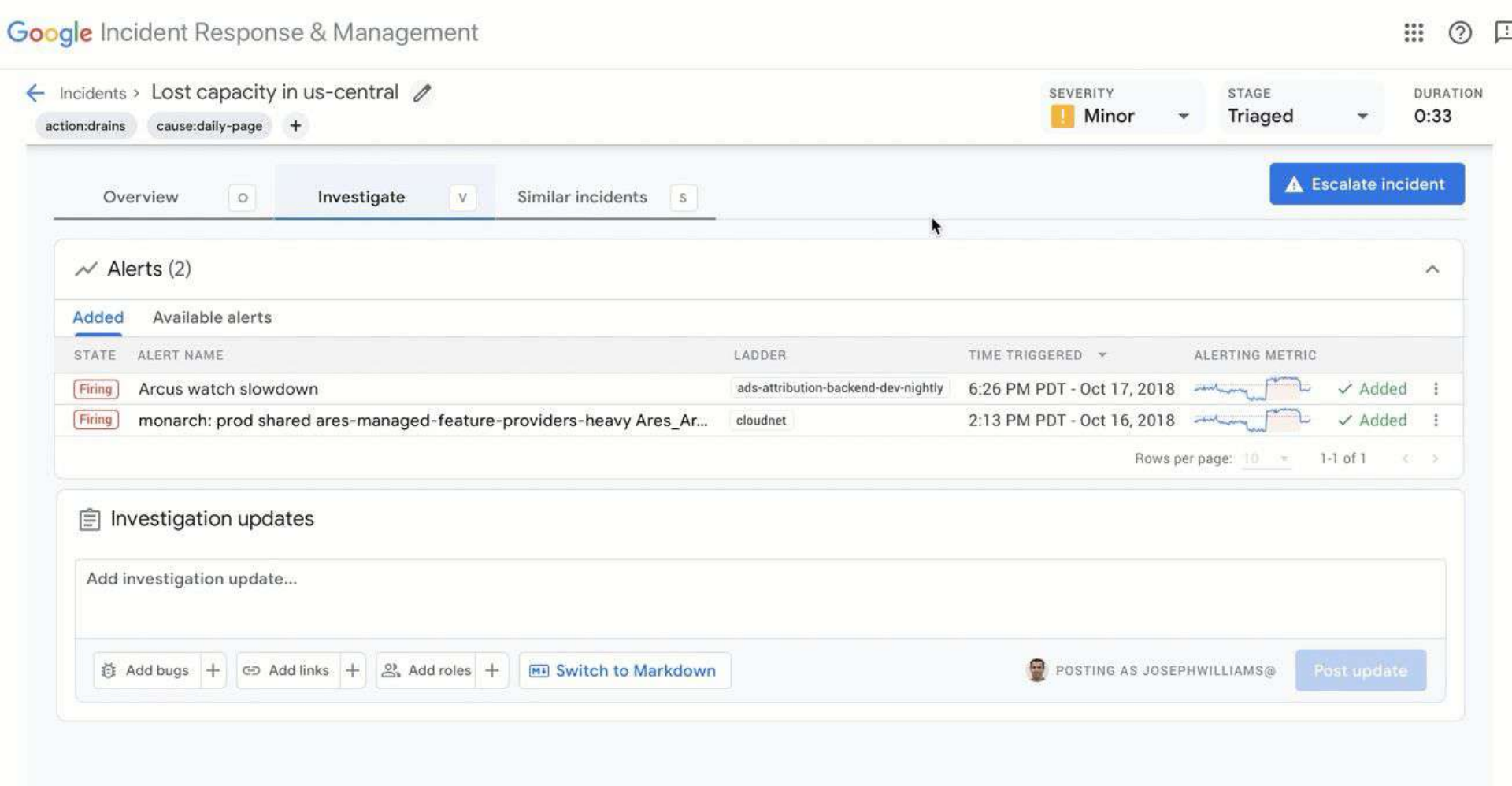
SRE in charge of multiple complex services

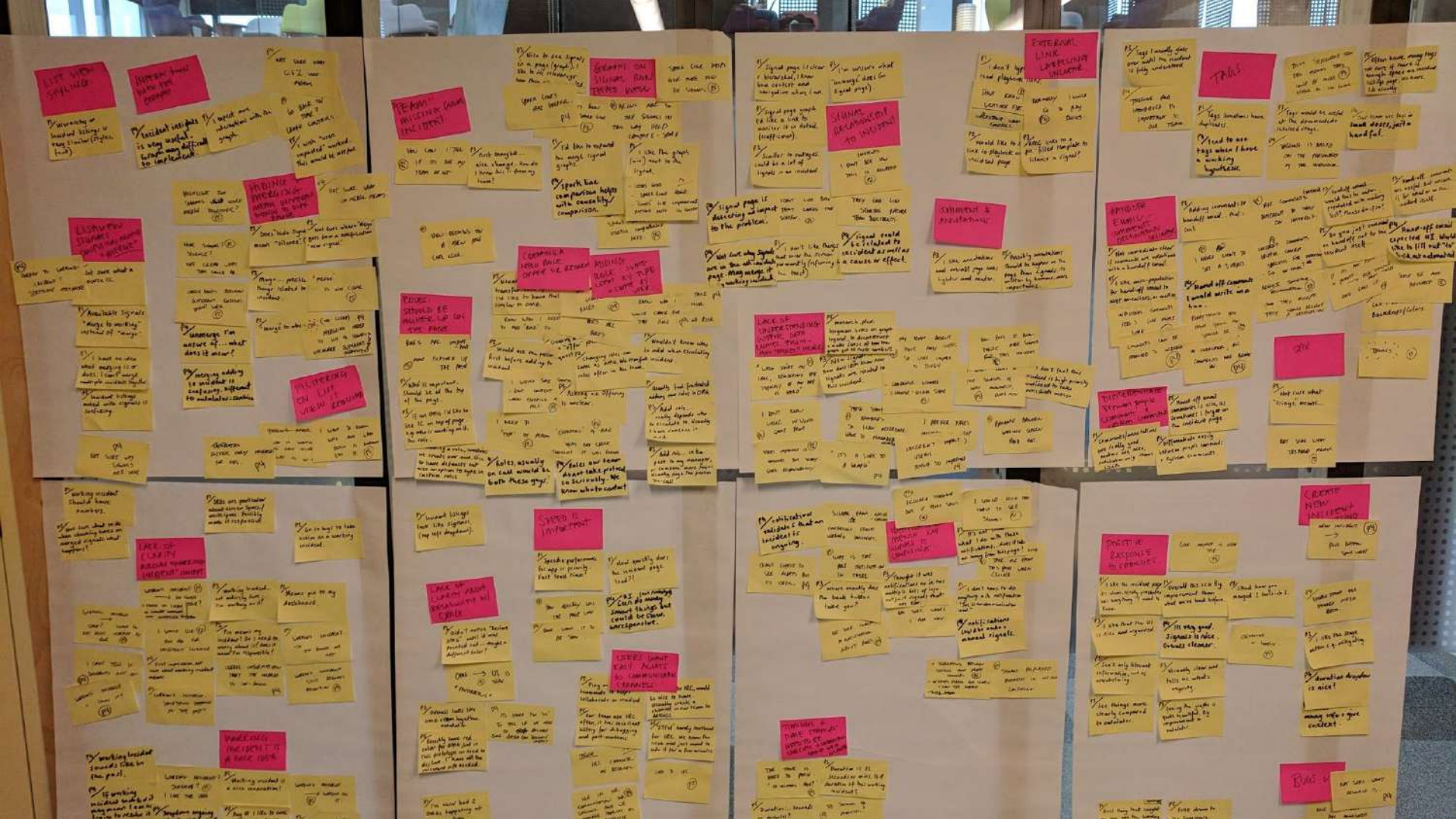
High Service complexity	Low Service complexity
Automation	Customisation
High level SRE support	Low level SRE support
Attitude to change (open)	Attitude to change (closed)
Control (high)	Control (low)
Level of engagement (proactive)	Level of engagement (reactive)
Frequency of use (high)	Frequency of use (low)

SWE with low complexity service & low SRE support

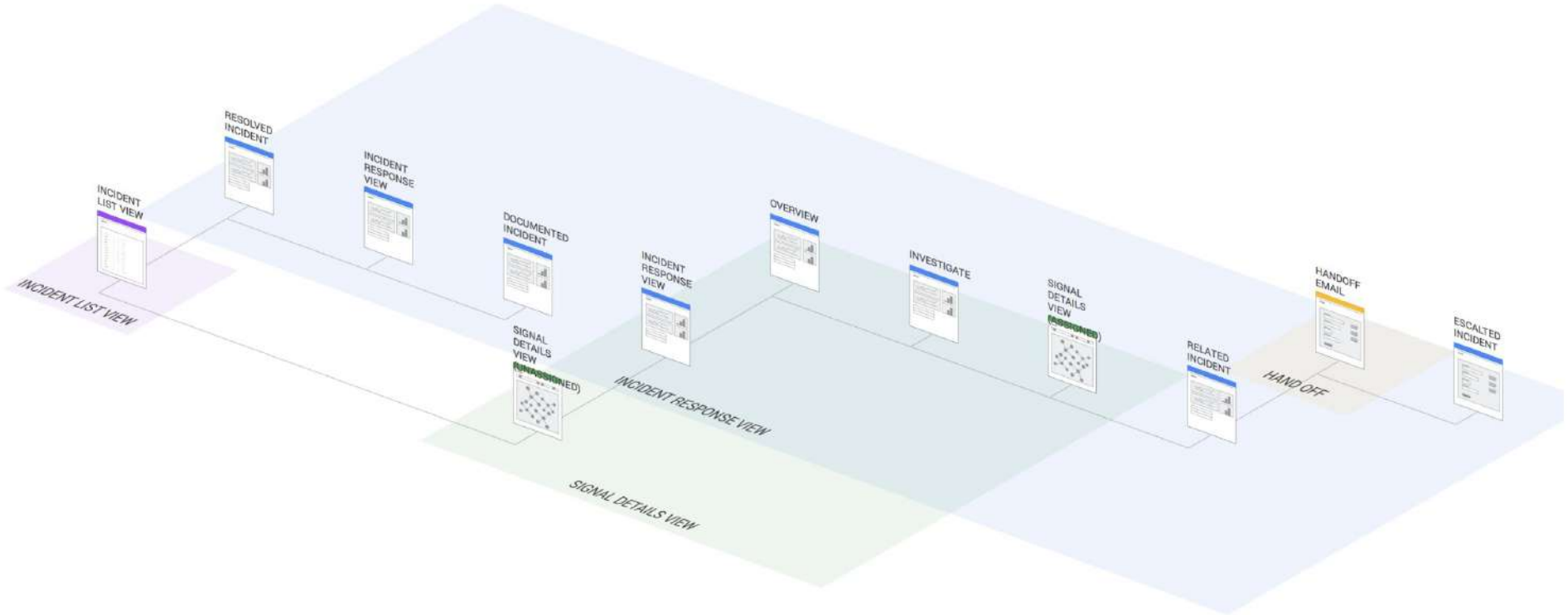


Interactive prototype





IRM topology



Working from GME

Communication

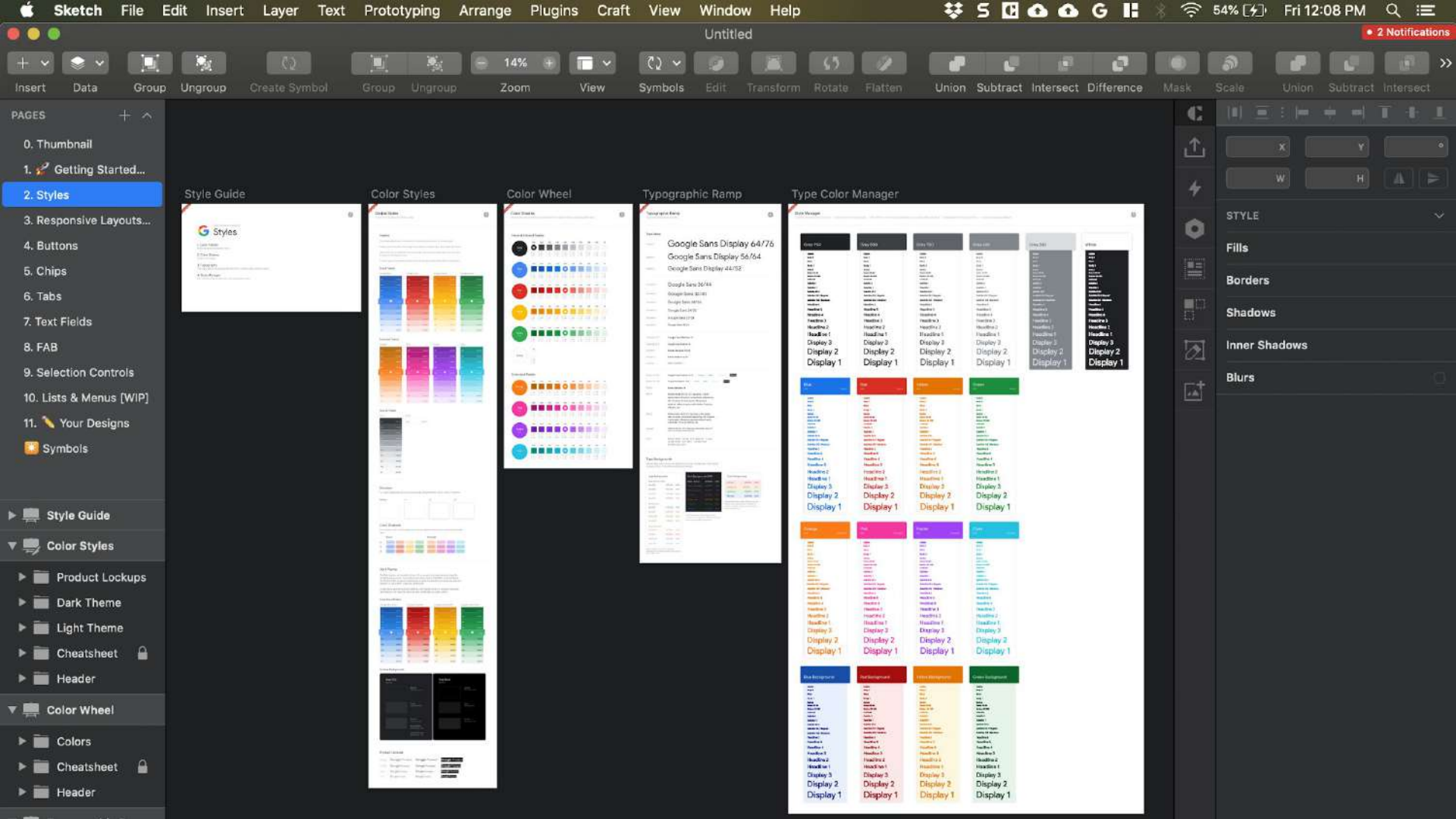
A shared Google Chat room is available for UXers across DevOps to propose changes or additions to components found in the GME Stickersheet. Two or more UXers need to agree on a component to begin Collaboration.

Collaboration

Upon agreement, these UXers collaborate to design a new component in Sketch using the below template. This is submitted to a Component Tracker which is reviewed by a committee to prioritize implementation.

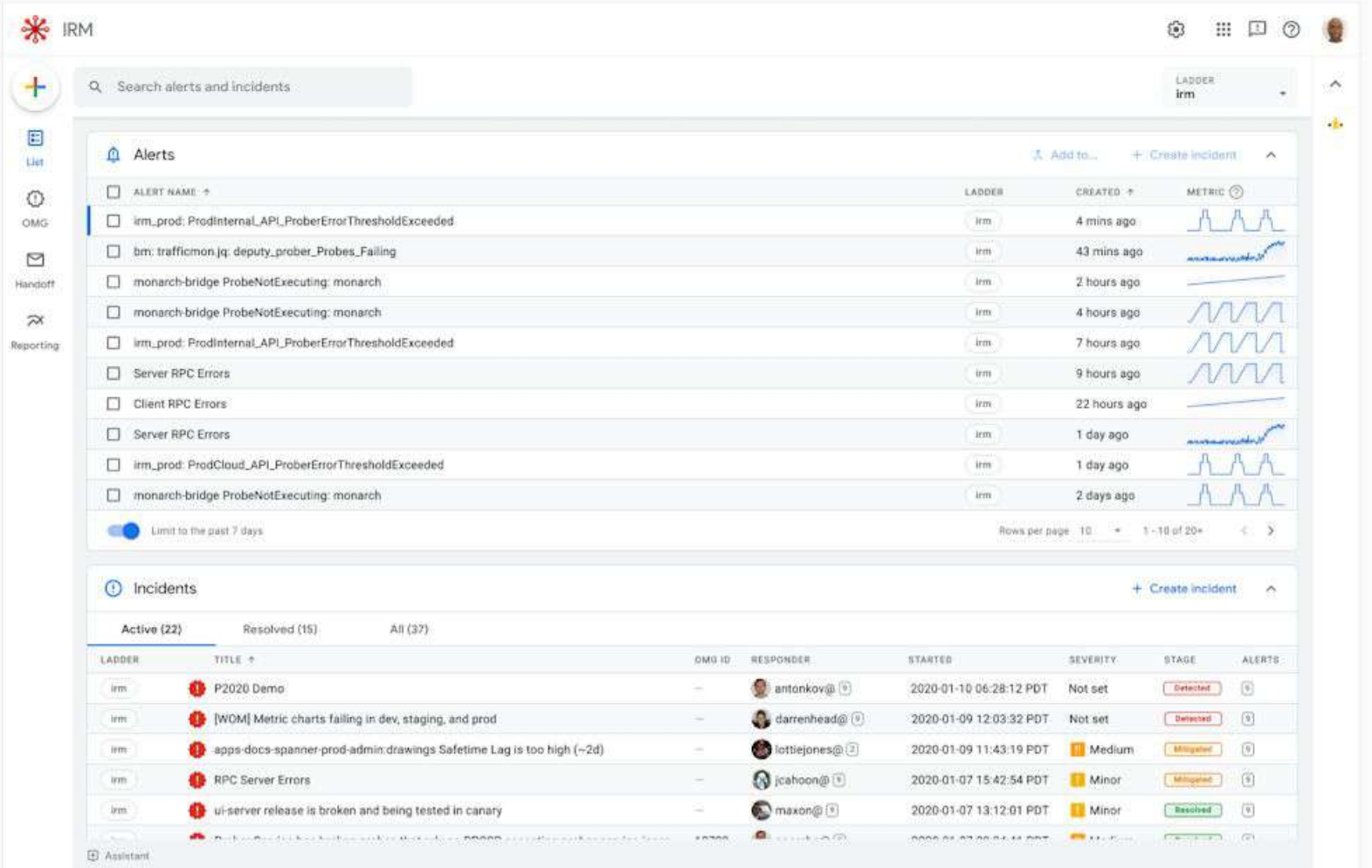
Implementation

Comprised of 3 UXers, they decide and prioritize what components are implemented in the master GME stickersheet. They symbolize the component in Sketch, syncing and auto-distributing to all DevOps UXers through Sketch Libraries.

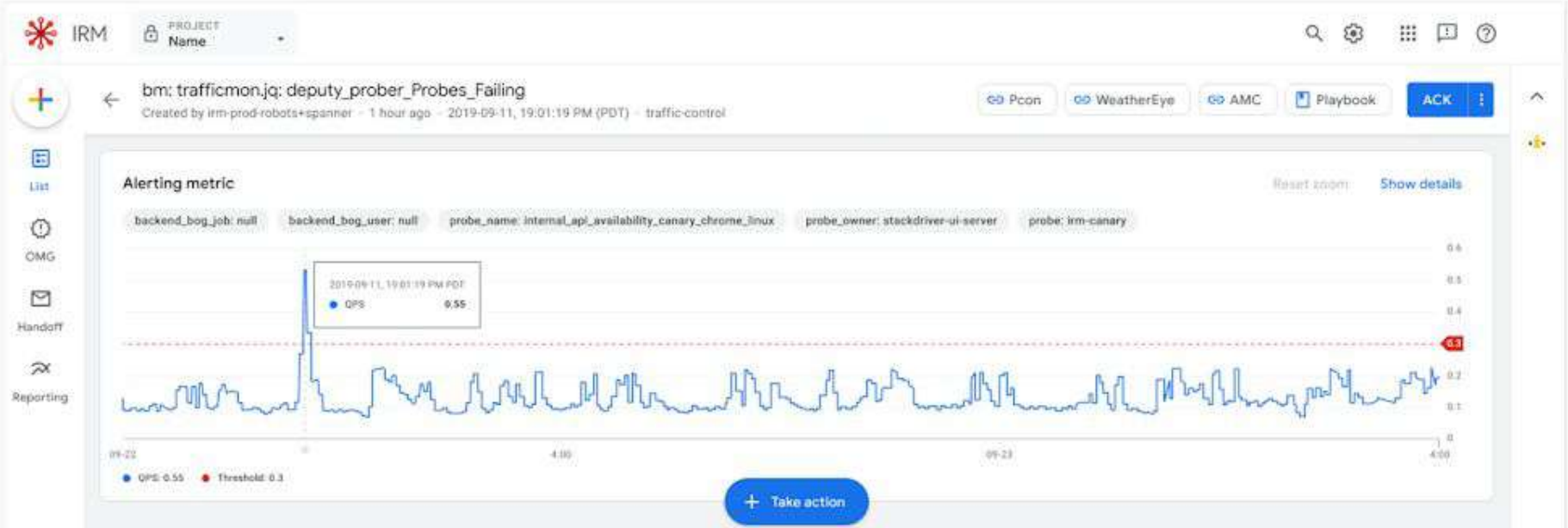

Sketch File Edit Insert Layer Text Prototyping Arrange Plugins Craft View Window Help
54% Fri 12:08 PM
Untitled
2 Notifications
Insert Data Group Ungroup Create Symbol Group Ungroup 14% Zoom View Symbols Edit Transform Rotate Flatten Union Subtract Intersect Difference Mask Scale Union Subtract Intersect
PAGES
0. Thumbnail
1. Getting Started...
2. Styles
3. Responsive Layouts...
4. Buttons
5. Chips
6. Tabs
7. Text Fields
8. FAB
9. Selection Controls
10. Lists & Menus [WIP]
11. Your Designs
Symbols
Style Guide
Color Styles
Product Lockups
Dark Theme
Light Theme
Cheatsheet
Header
Color Wheel
Colors
Cheatsheet
Header
Style Guide
Color Styles
Color Wheel
Typographic Ramp
Type Color Manager
Styles
Google Sans Display 64/76
Google Sans Display 56/64
Google Sans Display 44/52
STYLE
Fills
Borders
Shadows
Inner Shadows
Blurs

Features

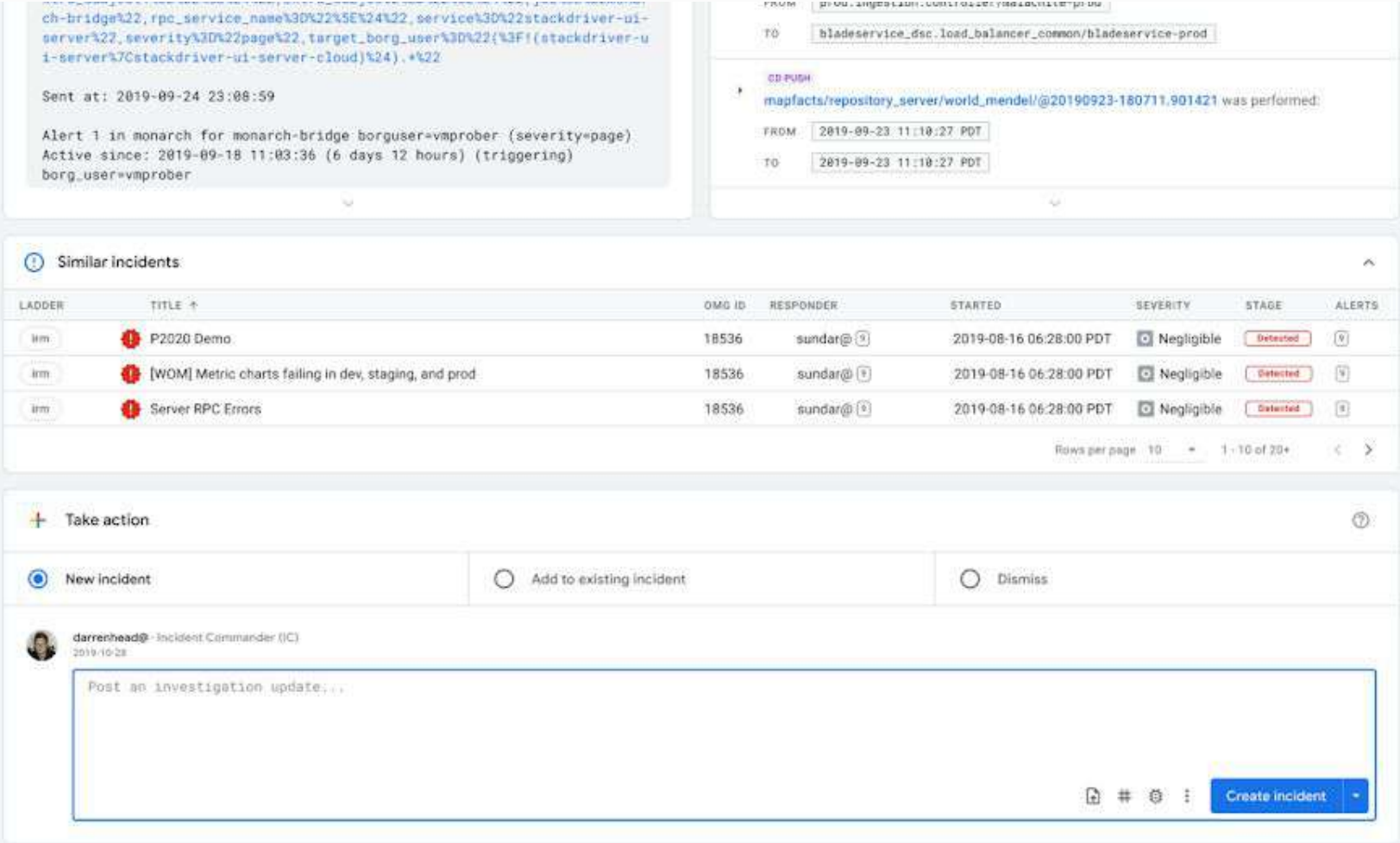
Incident list view



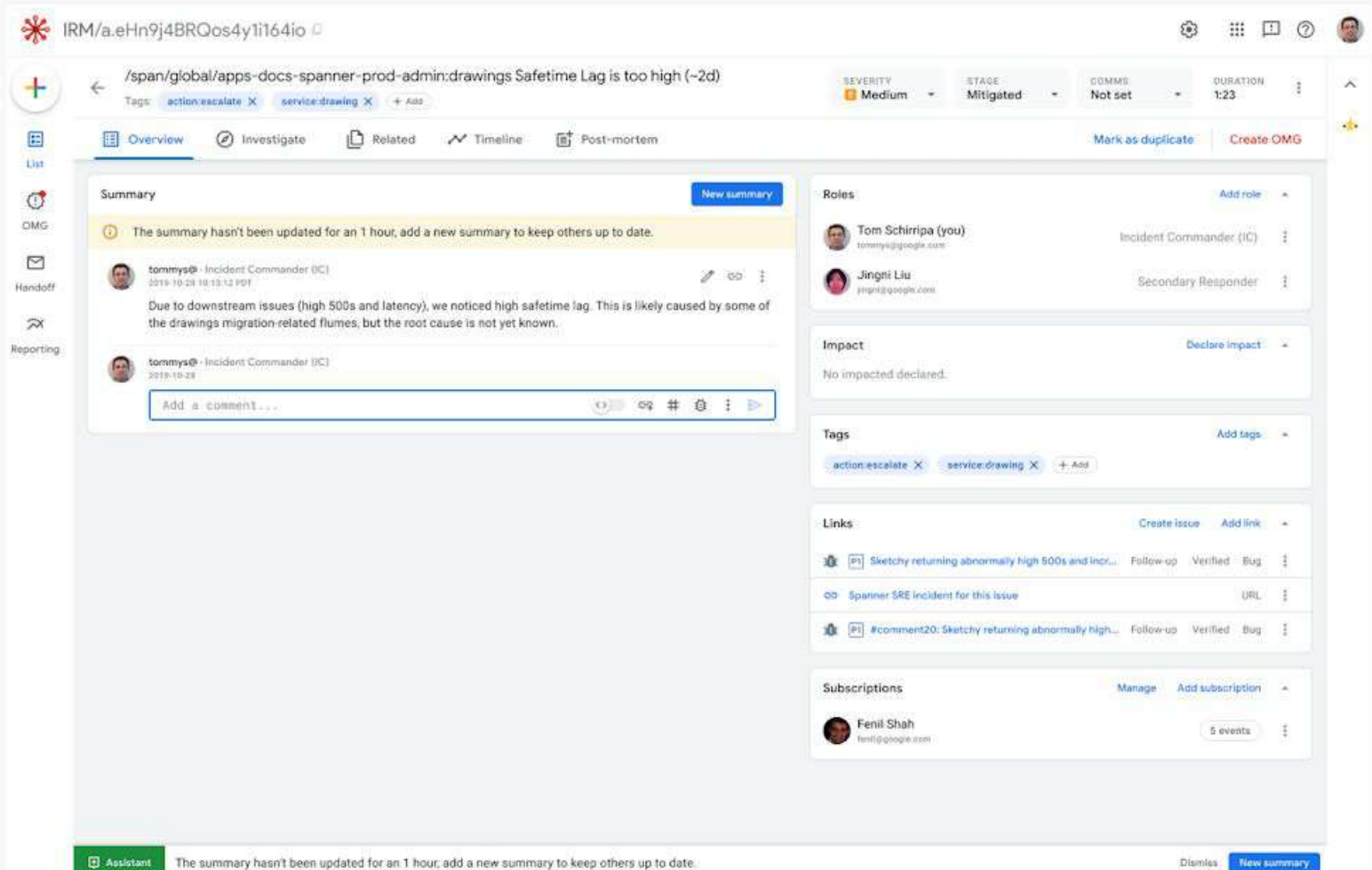
Incident list view



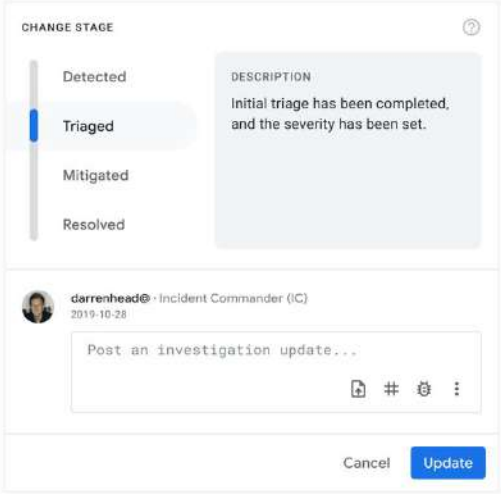
Incident list view

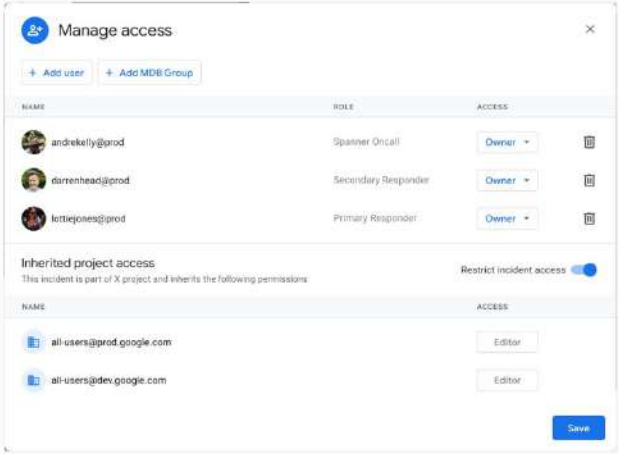


Incident response view



Individual components

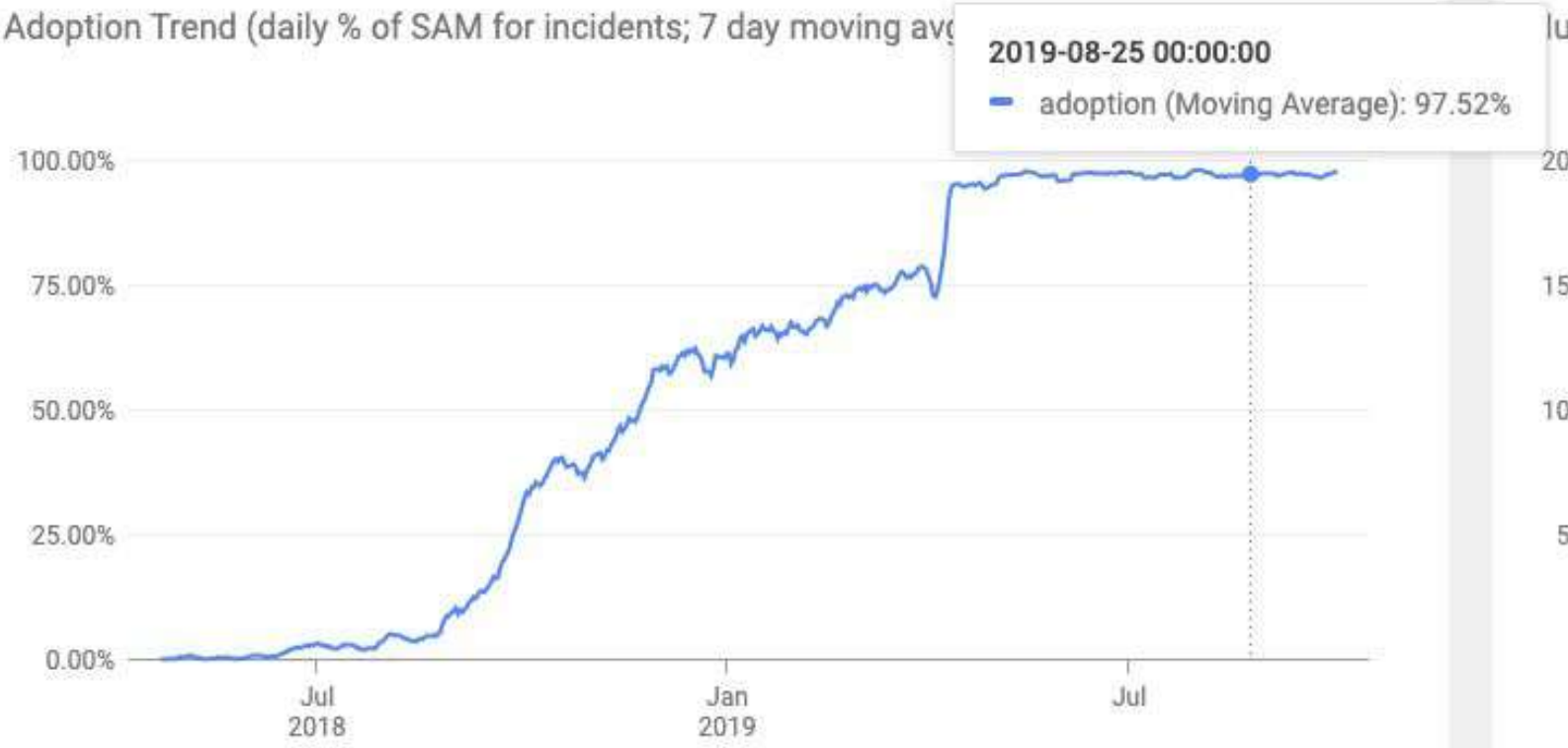




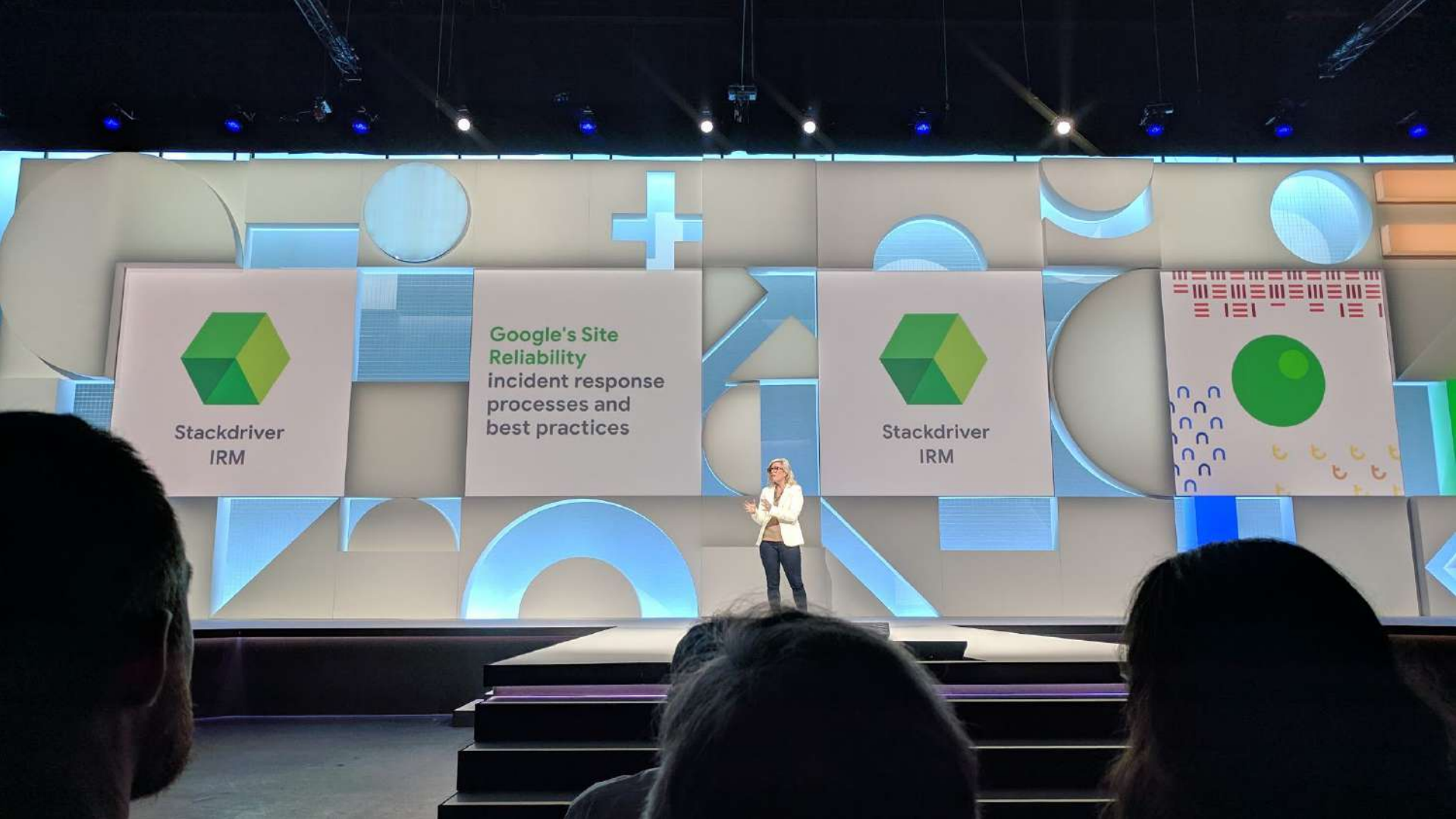
OMG-managed escalated incidents

IRM-managed escalated incidents

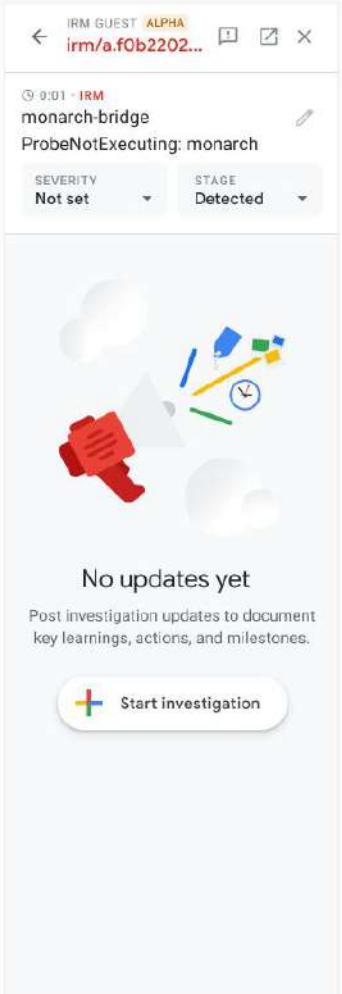
Adoption Trend (daily % of SAM for incidents; 7 day moving avg

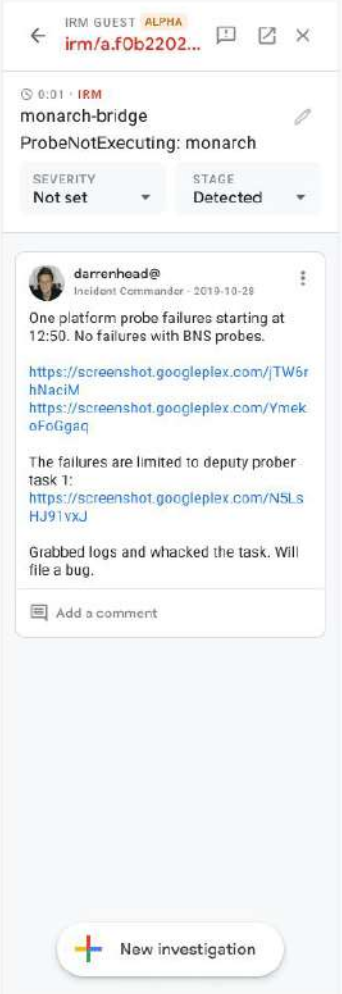


Number of incidents created daily (7 day moving avg)

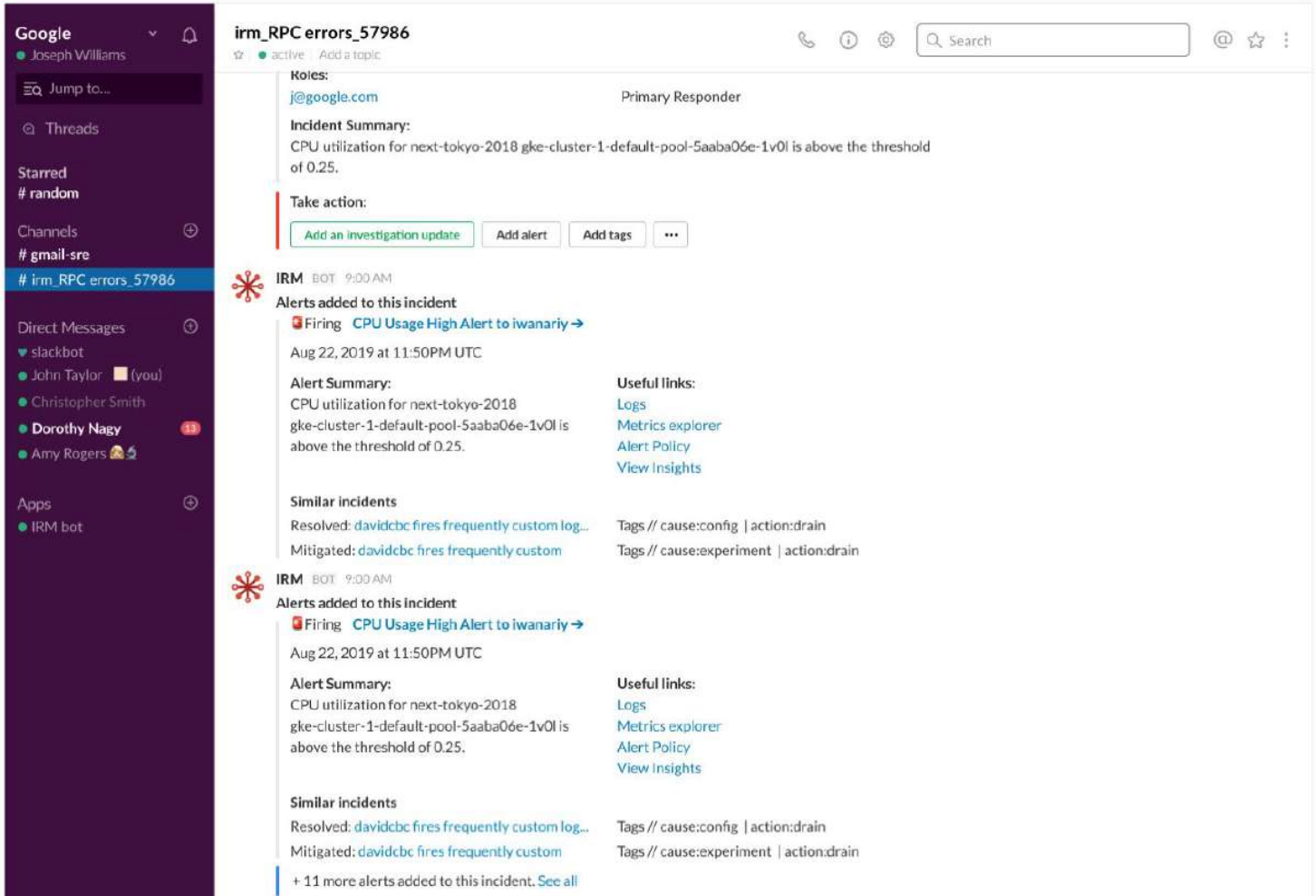

Stackdriver
IRM
Google's Site
Reliability
incident response
processes and
best practices
Stackdriver
IRM

Other platforms



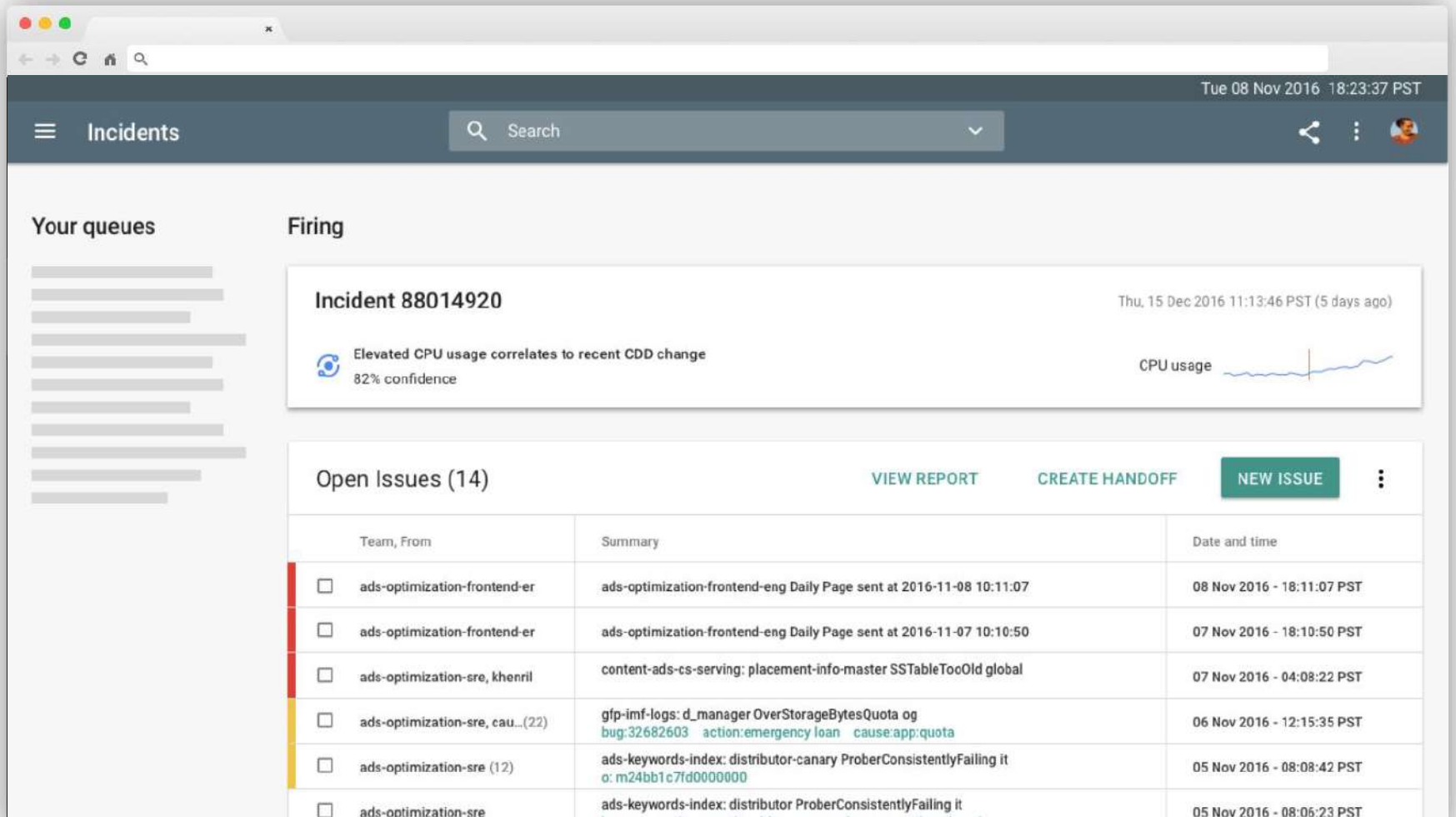


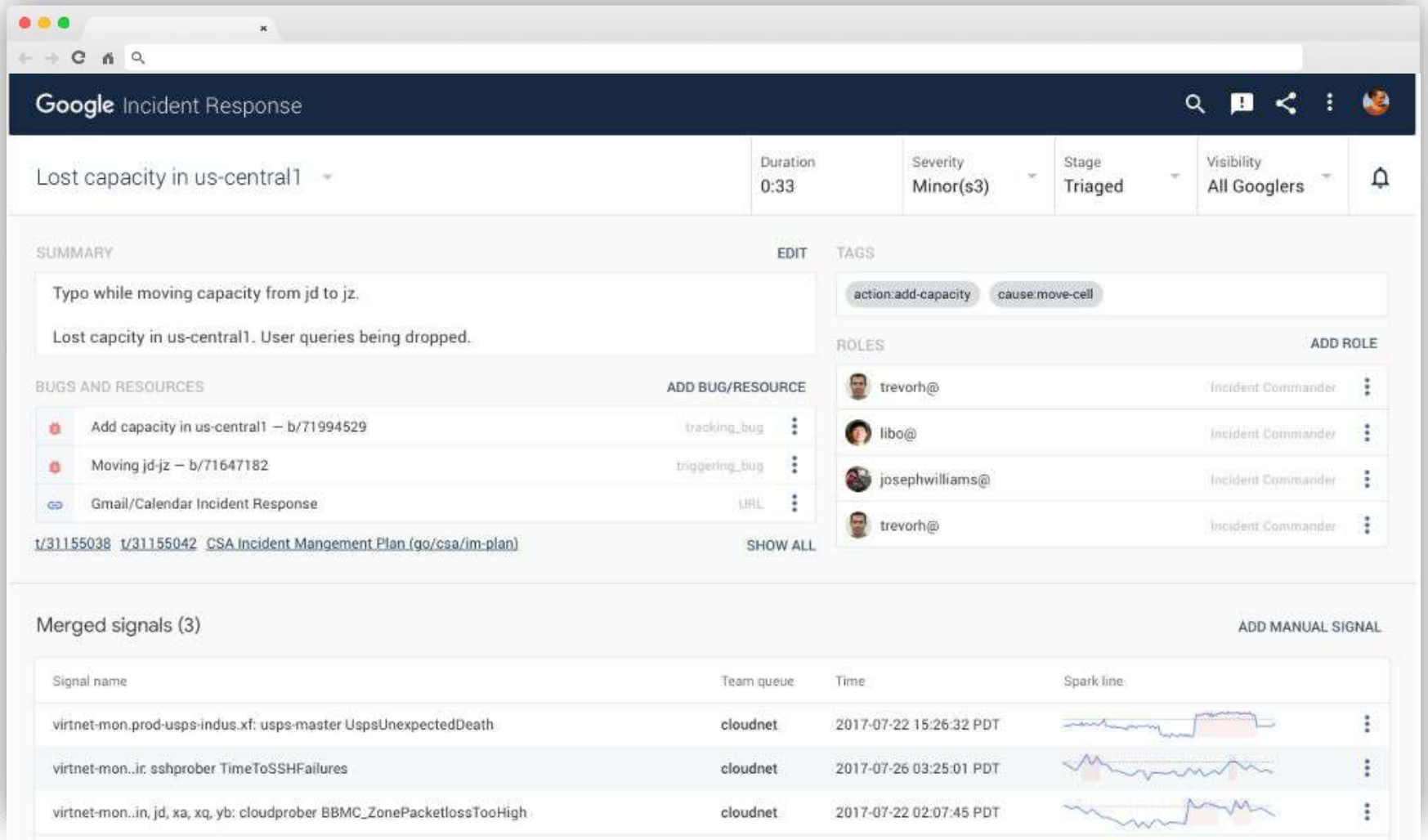
IRM living in Slack



Learnings

Examples of existing SLO tooling




Google Incident Response
Lost capacity in us-central1
Duration
0:33
Severity
Minor(s3)
Stage
Triaged
Visibility
All Googlers
SUMMARY
EDIT
Typo while moving capacity from jd to jz.
Lost capcity in us-central1. User queries being dropped.
BUGS AND RESOURCES
ADD BUG/RESOURCE
Add capacity in us-central1 — b/71994529
tracking_bug
Moving jd-jz — b/71647182
triggering_bug
Gmail/Calendar Incident Response
URL
t/31155038 t/31155042 CSA Incident Mangement Plan (go/csa/im-plan)
SHOW ALL
TAGS
action:add-capacity
cause:move-cell
ROLES
ADD ROLE
trevorh@
Incident Commander
libo@
Incident Commander
josephwilliams@
Incident Commander
trevorh@
Incident Commander
Merged signals (3)
ADD MANUAL SIGNAL
Signal name
Team queue
Time
Spark line
virtnet-mon.prod-usps-indus.xf: usps-master UspsUnexpectedDeath
cloudnet
2017-07-22 15:26:32 PDT
virtnet-mon..ir: sshprober TimeToSSHFailures
cloudnet
2017-07-26 03:25:01 PDT
virtnet-mon..in, jd, xa, xq, yb: cloudprober BBMC_ZonePacketlossTooHigh
cloudnet
2017-07-22 02:07:45 PDT

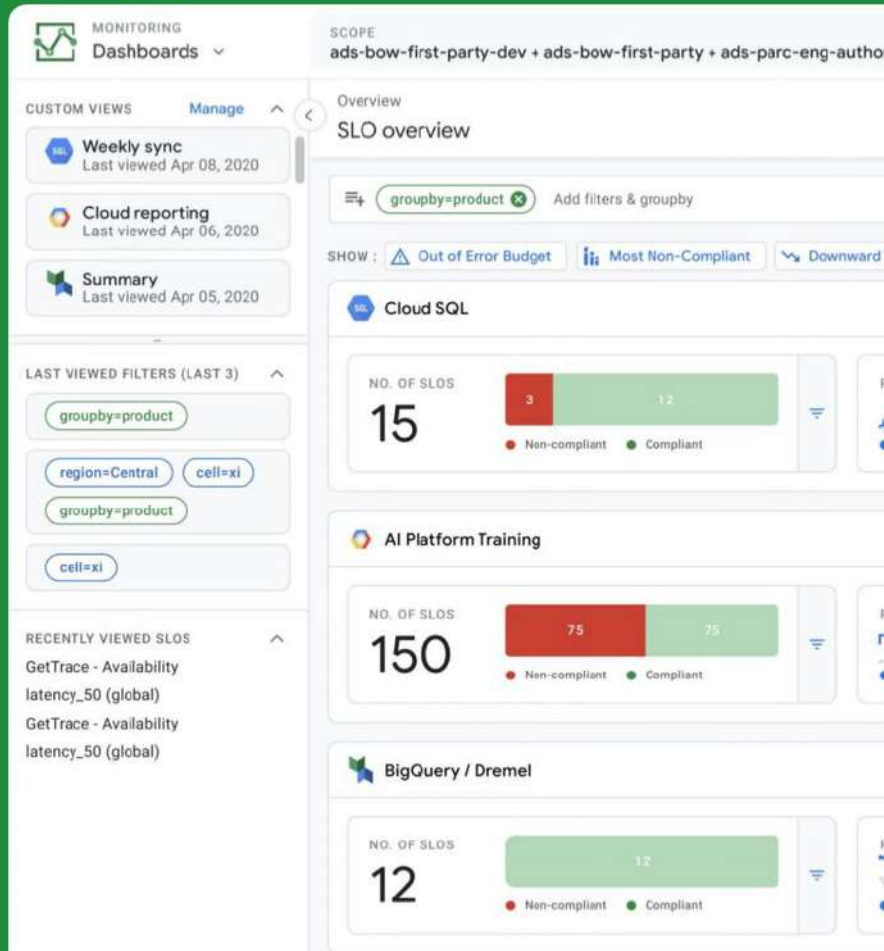
Premortem

GM SLO Reporting

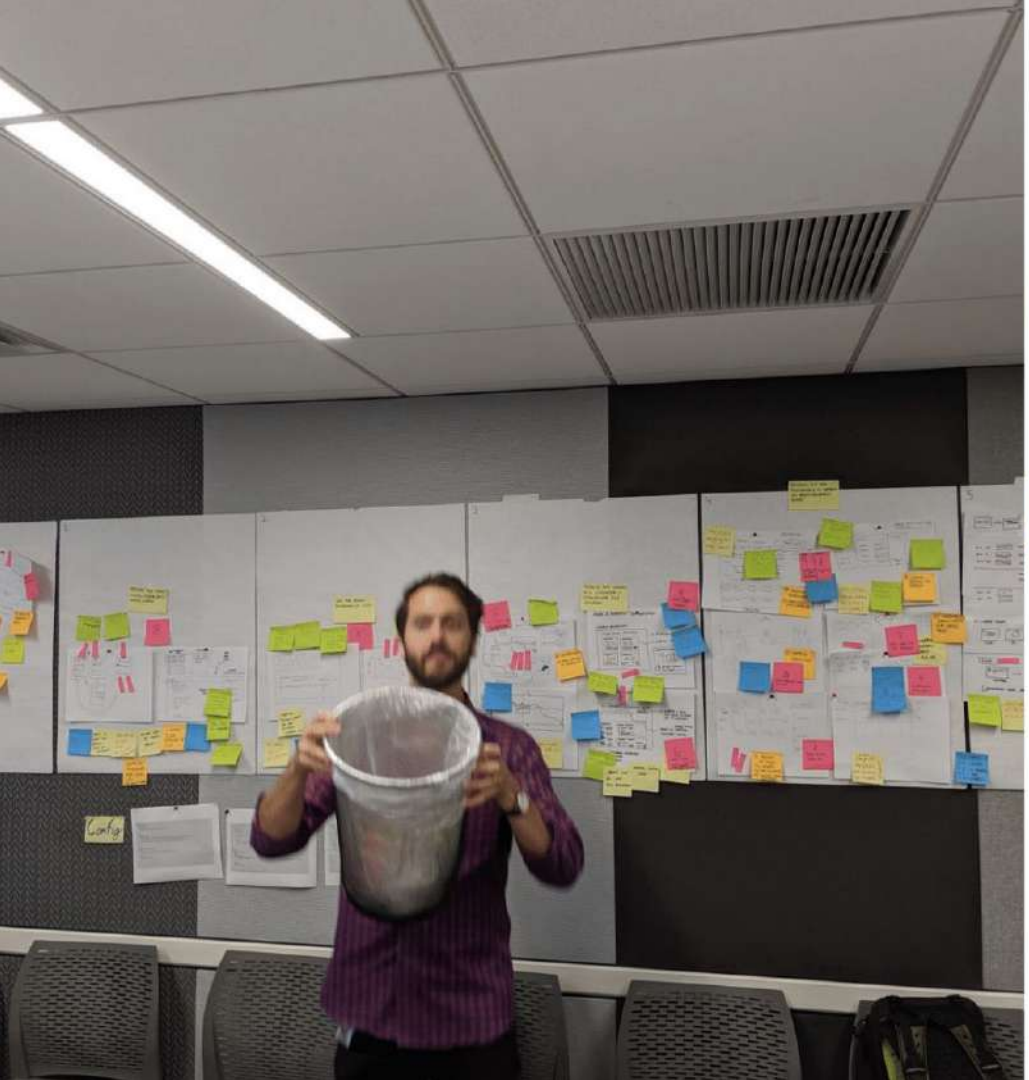
Improving the landscape of how SLOs were created, interrupted and measured at Google.

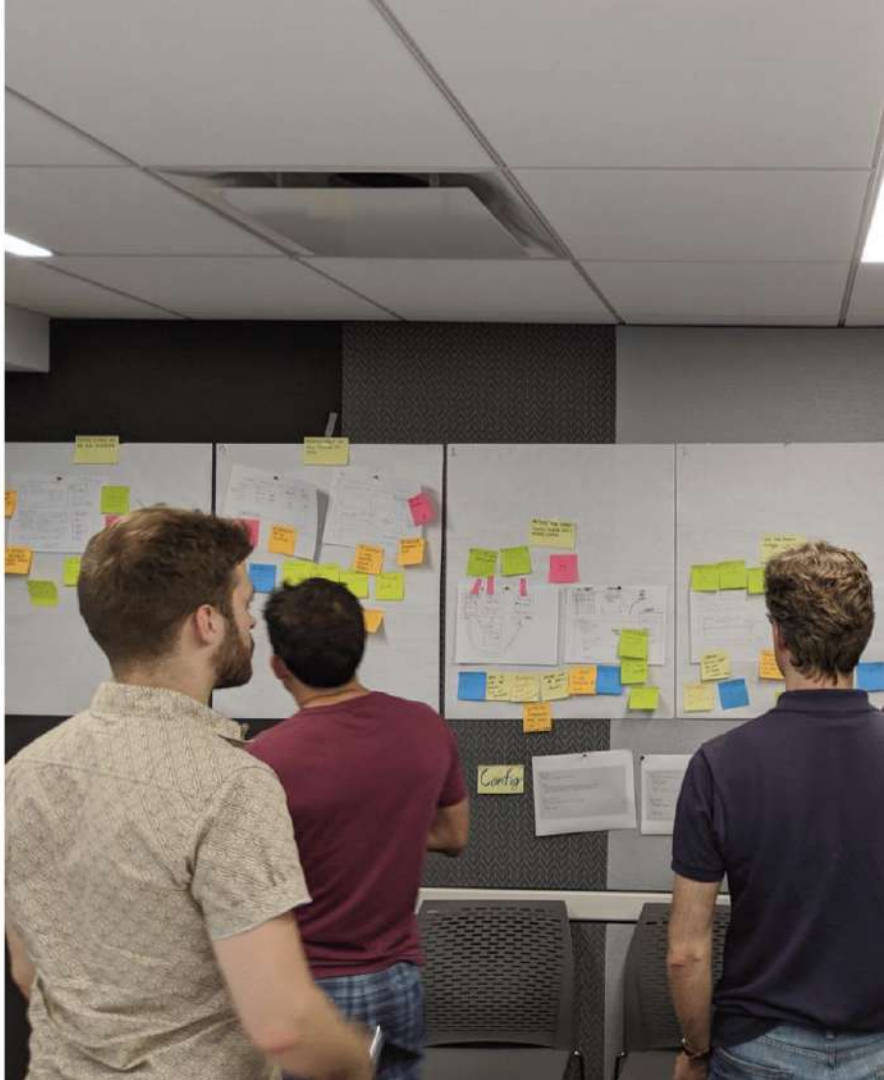
Lead Product Designer

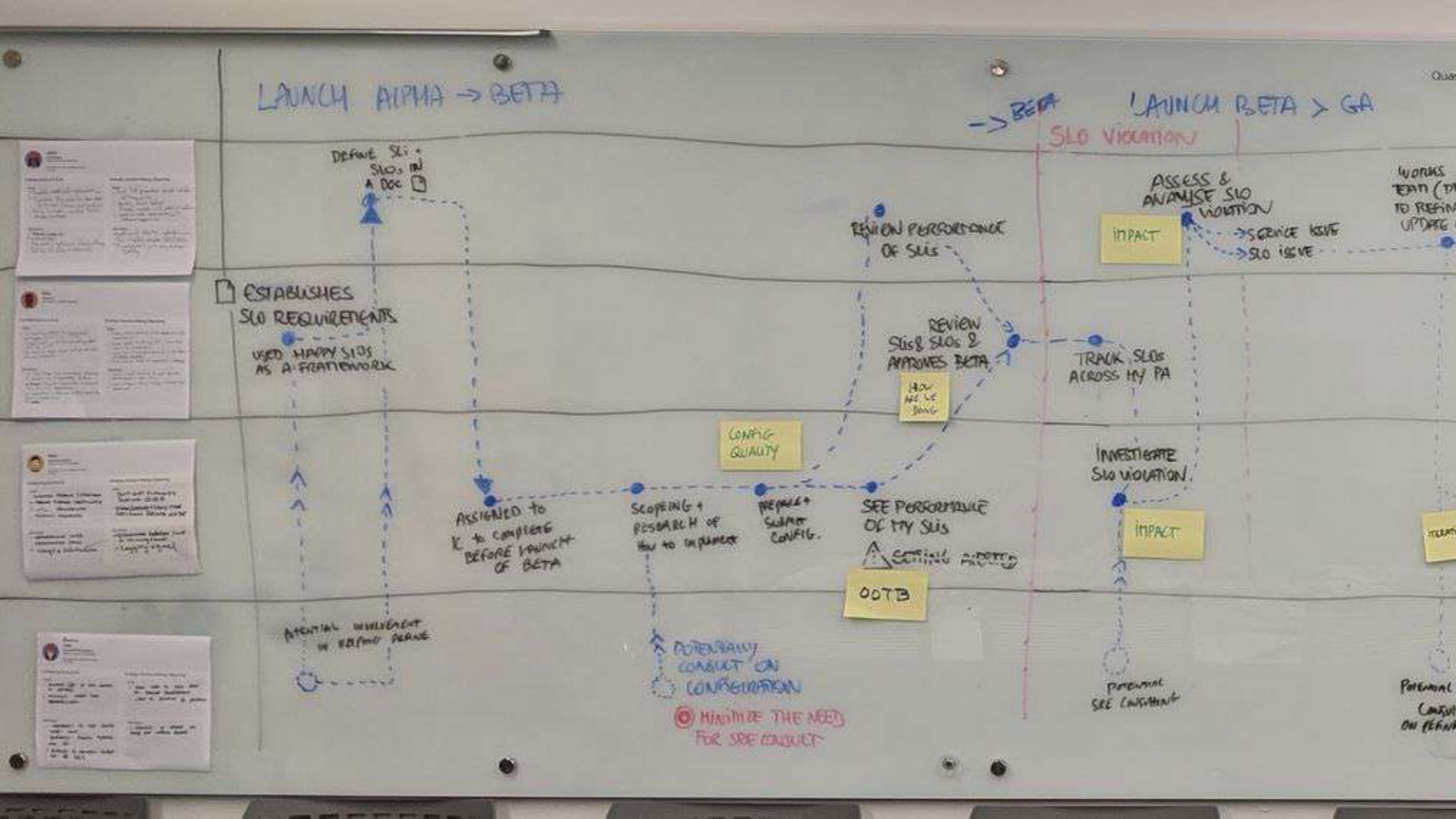
2019 - 2020



Background

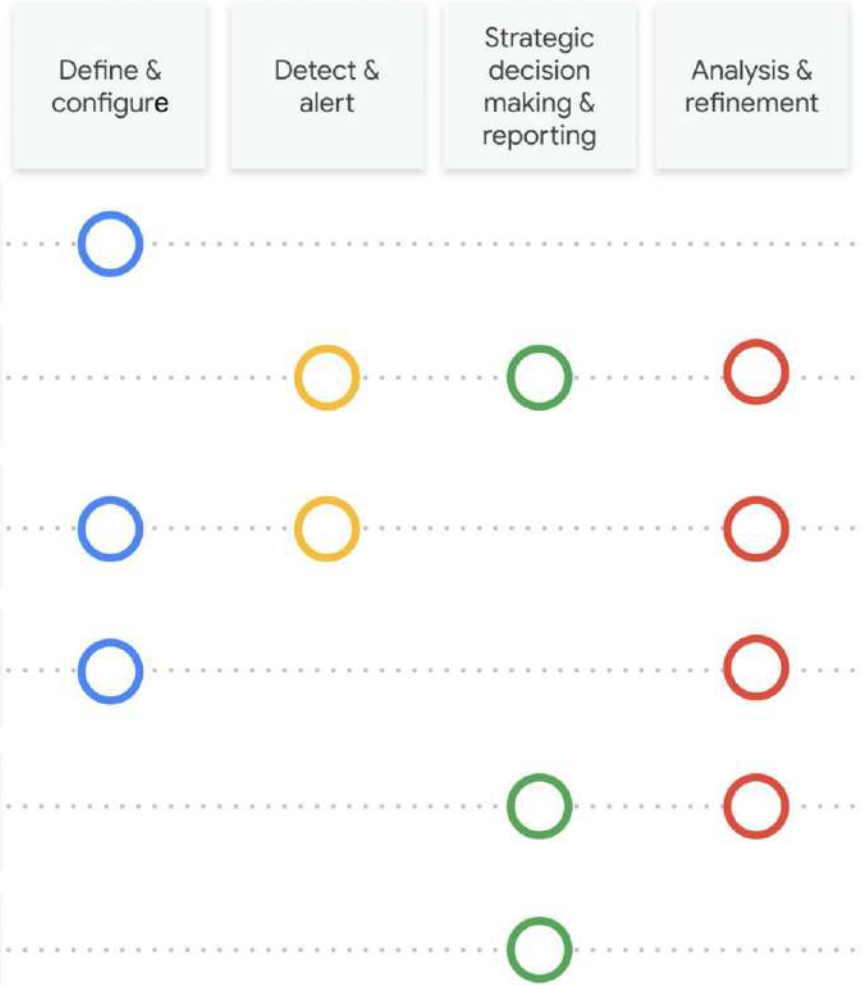

Config


Config


LAUNCH ALPHA -> BETA
-> BETA
LAUNCH BETA > GA
SLO VIOLATION
DEFINE SLI + SLOs IN A DOC
ESTABLISHES SLO REQUIREMENTS
USED HAPPY SLOS AS A FRAMEWORK
REVIEW PERFORMANCE OF SLIs
ASSESS & ANALYSE SLO VIOLATION
IMPACT
SERVICE ISSUE
SLO ISSUE
REVIEW SLIs & SLOs & APPROVES BETA
TRACK SLOs ACROSS MY PA
CONFIG QUALITY
ASSIGNED to K to COMPLETE BEFORE LAUNCH OF BETA
SCOPING + RESEARCH of how to implement
PEOPLE + SUBMIT CONFIG.
SEE PERFORMANCE OF MY SLIs
OOTB
INVESTIGATE SLO VIOLATION
IMPACT
POTENTIAL INVOLVEMENT IN DEFINING SLOs
POTENTIALLY CONSULT ON CONFIGURATION
MINIMIZE THE NEED FOR SRE CONSULT
POTENTIAL SRE ENGAGEMENT

Foundational research

Top line insights



#1 Despite strong SRE culture to use SLOs, we have inconsistent approaches across the org and teams struggle to define what to measure

#2 Current tooling is fragmented and inadequate to support the breadth of user needs.

#3 SLOs are incongruent across different levels of the stack (Client/Server side) and between dependencies.

#4 It is difficult to define SLIs and SLOs that are accurate measurements of end-user happiness or customer experience.

#5 Stakeholders (Director/VP) have a need for more aggregated big picture data and reporting of SLOs vs. operators (TL/SRE/SWE)

#6 SLIs are “just another metric” to view and report: regular reporting needs often require metrics across tools

Oncaller

This user interacts with SLOs largely in the context of an alert. They are most interested in an **individual SLO or set of SLOs that are underperforming** at a given time.

Key tasks:

1. Responding to an alert
2. Drilling down to individual noncompliant SLOs
3. Debugging via filtering and grouping
4. Correlating with data found in other tools, both within and outside P2020

Tech Lead

Tech Leads may be regularly involved in outage mitigation and evaluating individual SLOs, but are also responsible for **communicating SLO performance** for their service(s) to stakeholders.

Key tasks:

1. Reporting on aggregate performance for a service or group of services at regular intervals
2. Drilling down to individual noncompliant SLOs
3. Correlating with data in other areas of MP and P2020

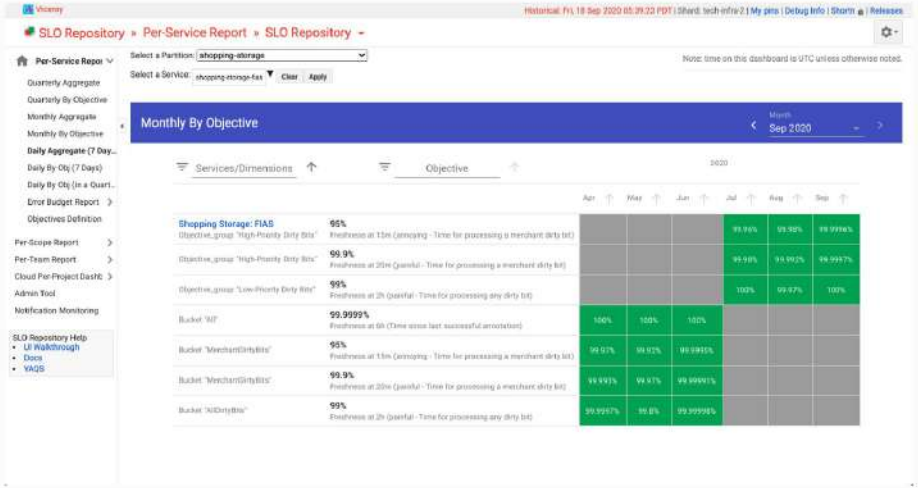
Director / Stakeholder

Stakeholders are most interested in viewing SLO performance for their **product(s) as a whole**, and are also interested in the **user impact of an ongoing or recent incident**.

Key tasks:

1. View product-level SLO summary
2. Deduce aggregate level of user impact from incident
3. Contact teams responsible for noncompliant SLOs
4. Review SLO quality

Examples of existing SLO tooling



Functionality to reach parity

Define & configure

- Simple and consolidated configuration model
- Configuration UI

Detect & alert

- Out of the box alerts
- Debugging dashboards
- Aggregate real time dashboard

Strategic decision making & reporting

Reporting views with different levels of aggregations:

- Historical performance
- Error budget and burn rate
- Metadata
- Contextual links
- Outage data

Analysis & Refinement

- SLO quality score
- Versioning
- Lifecycle Management
- Recommendations
- SLO Backtesting against historical data

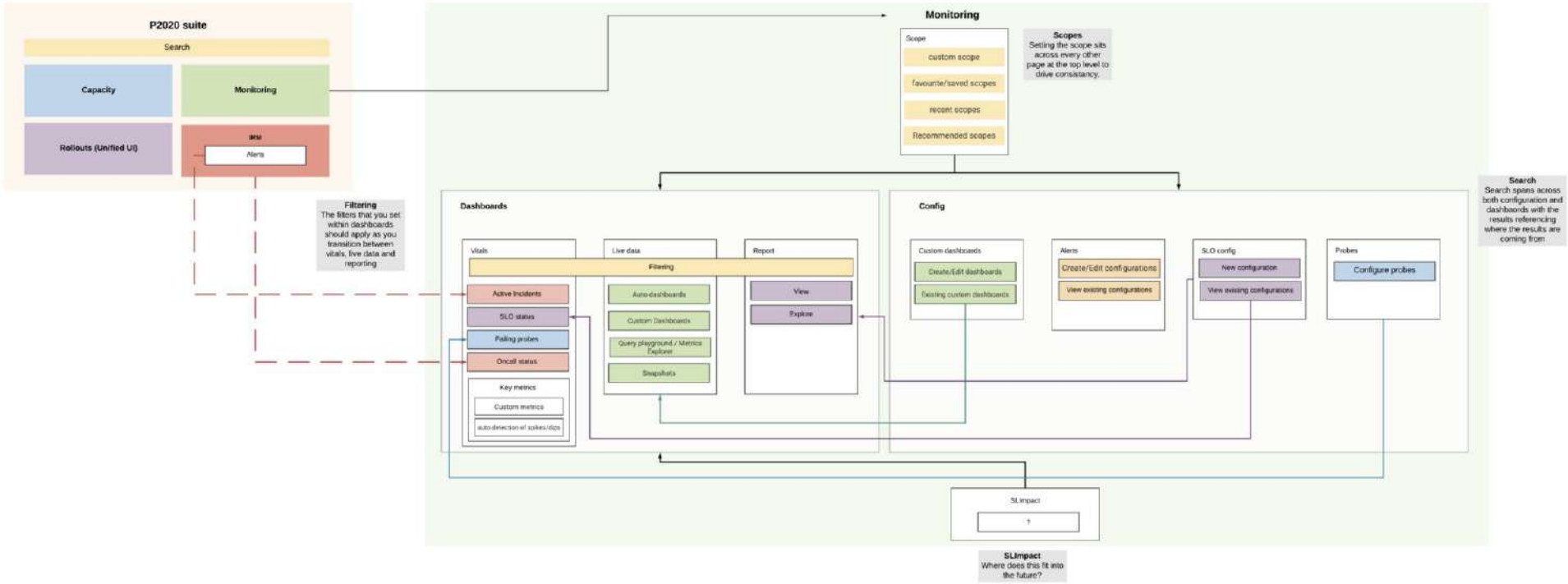
Key

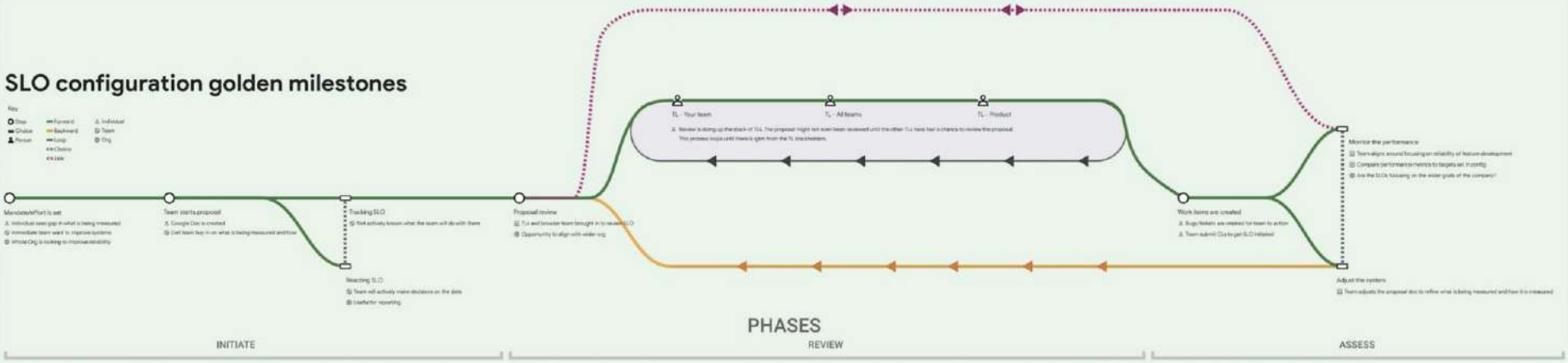
EAP

Beyond EAP

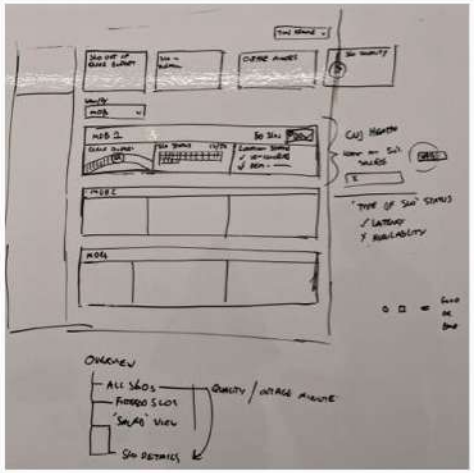
Journeys and interactions

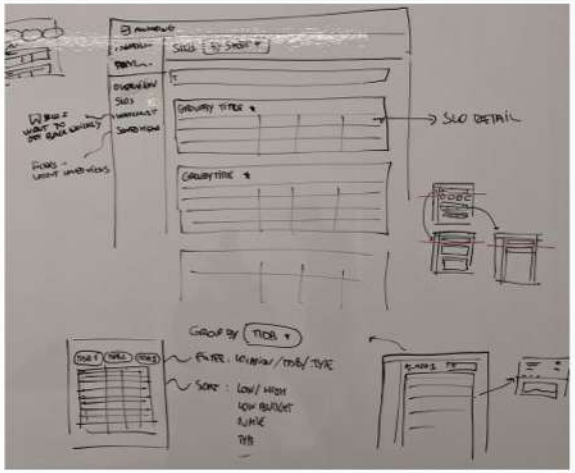
SLO Repos touch points

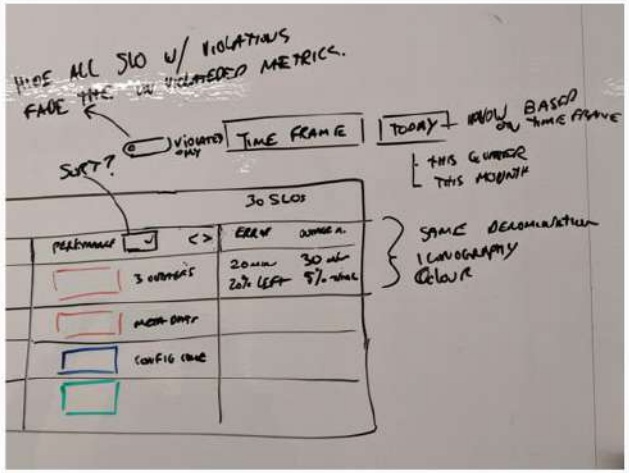


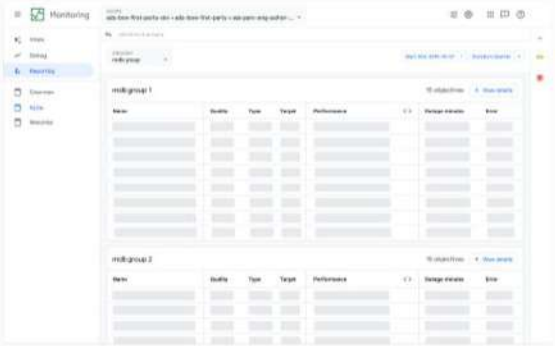

SLO configuration golden milestones
Key
Step
Choice
Person
Forward
Backward
Loop
Choice
Law
Individual
Team
Org
MandateMeffort is set
Team starts proposal
Tracking SLO
Reacting SLO
Proposal review
TL - Your team
TL - All teams
TL - Product
Work items are created
Monitor the performance
Adjust the system
PHASES
INITIATE
REVIEW
ASSESS

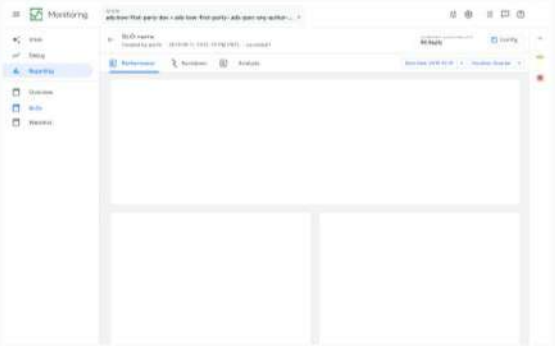
Wireframes





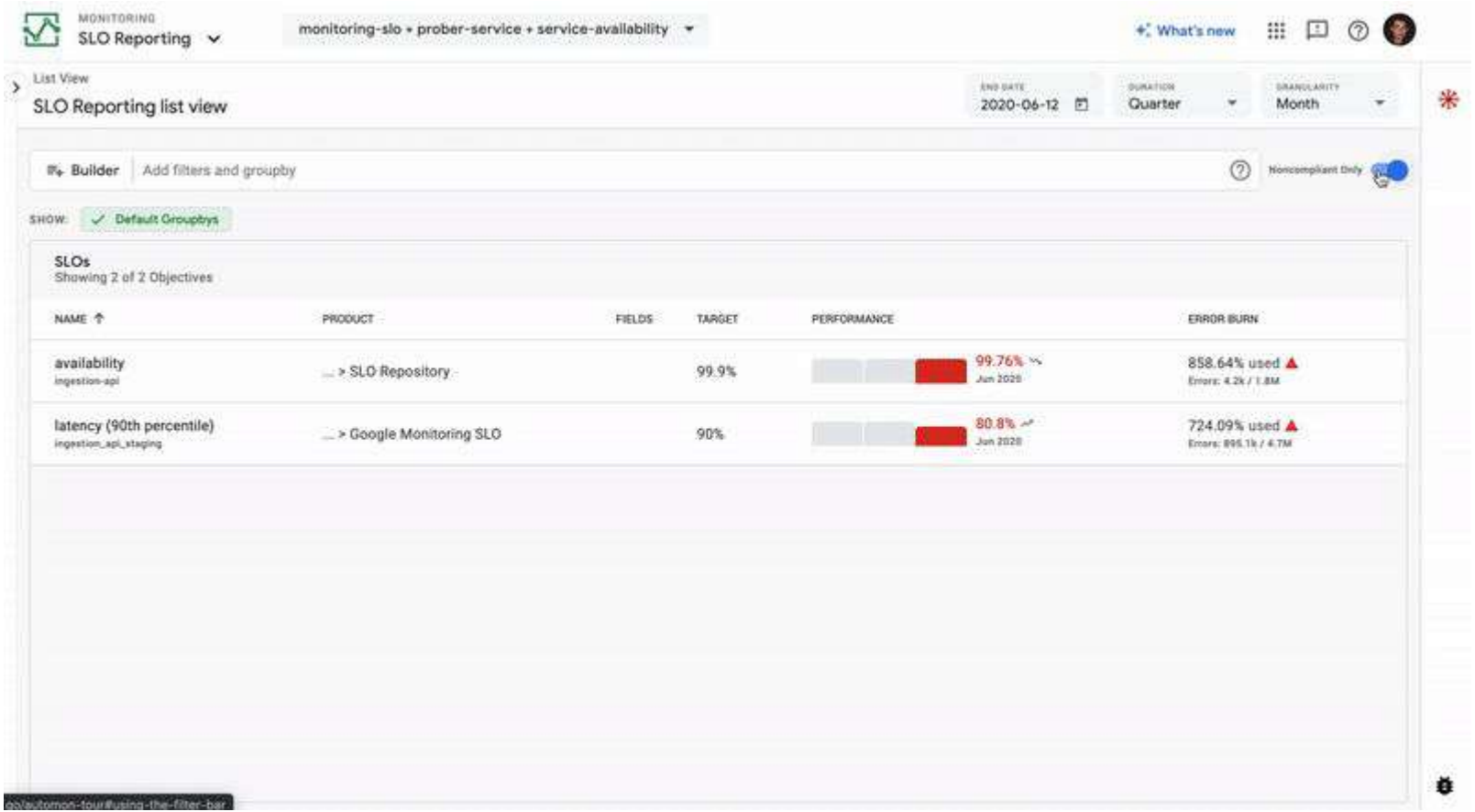






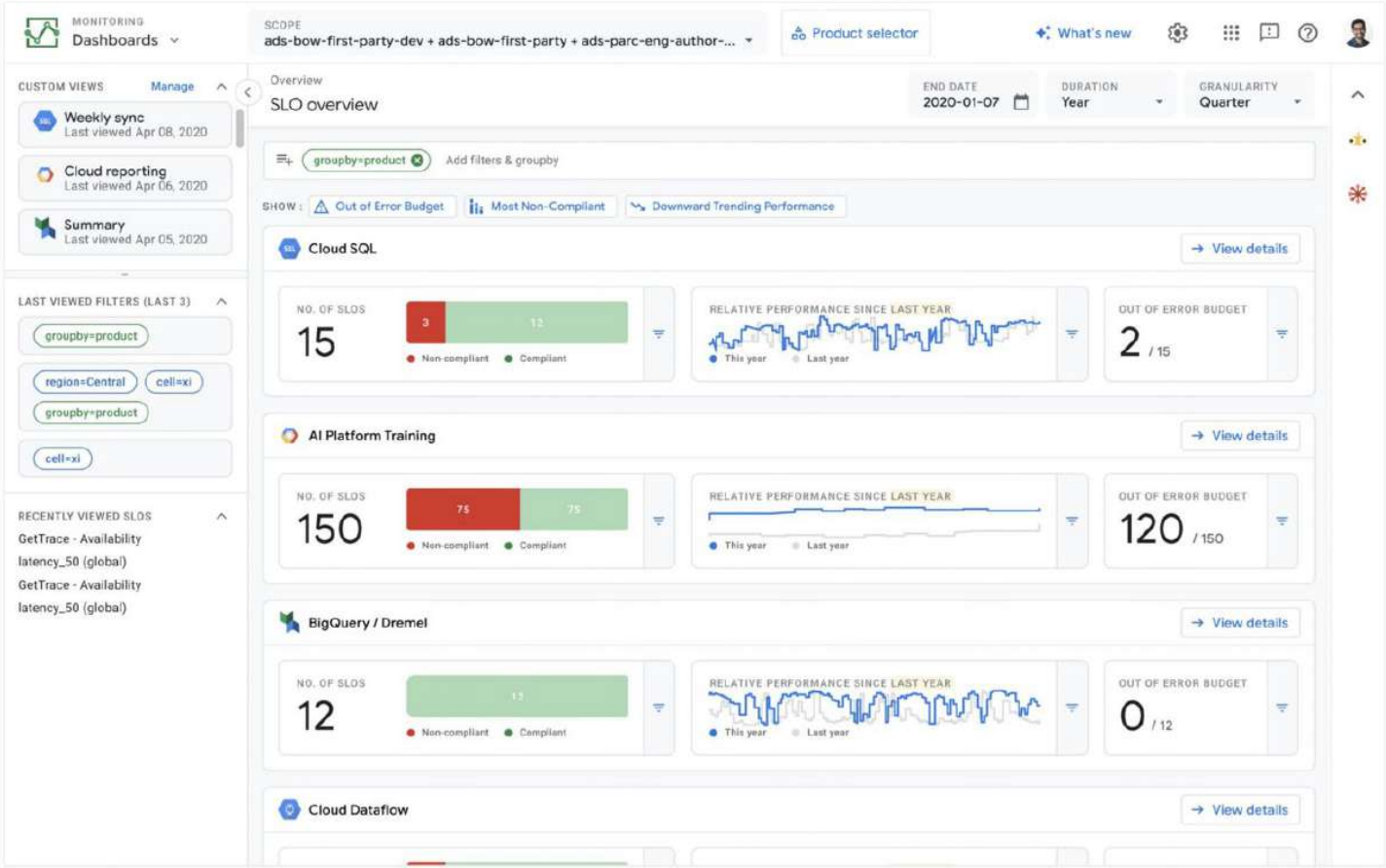

Meet 4:03 PM • Mon, Nov 4
4:00 PM Quick SLa Concept Demo

Interactive prototype

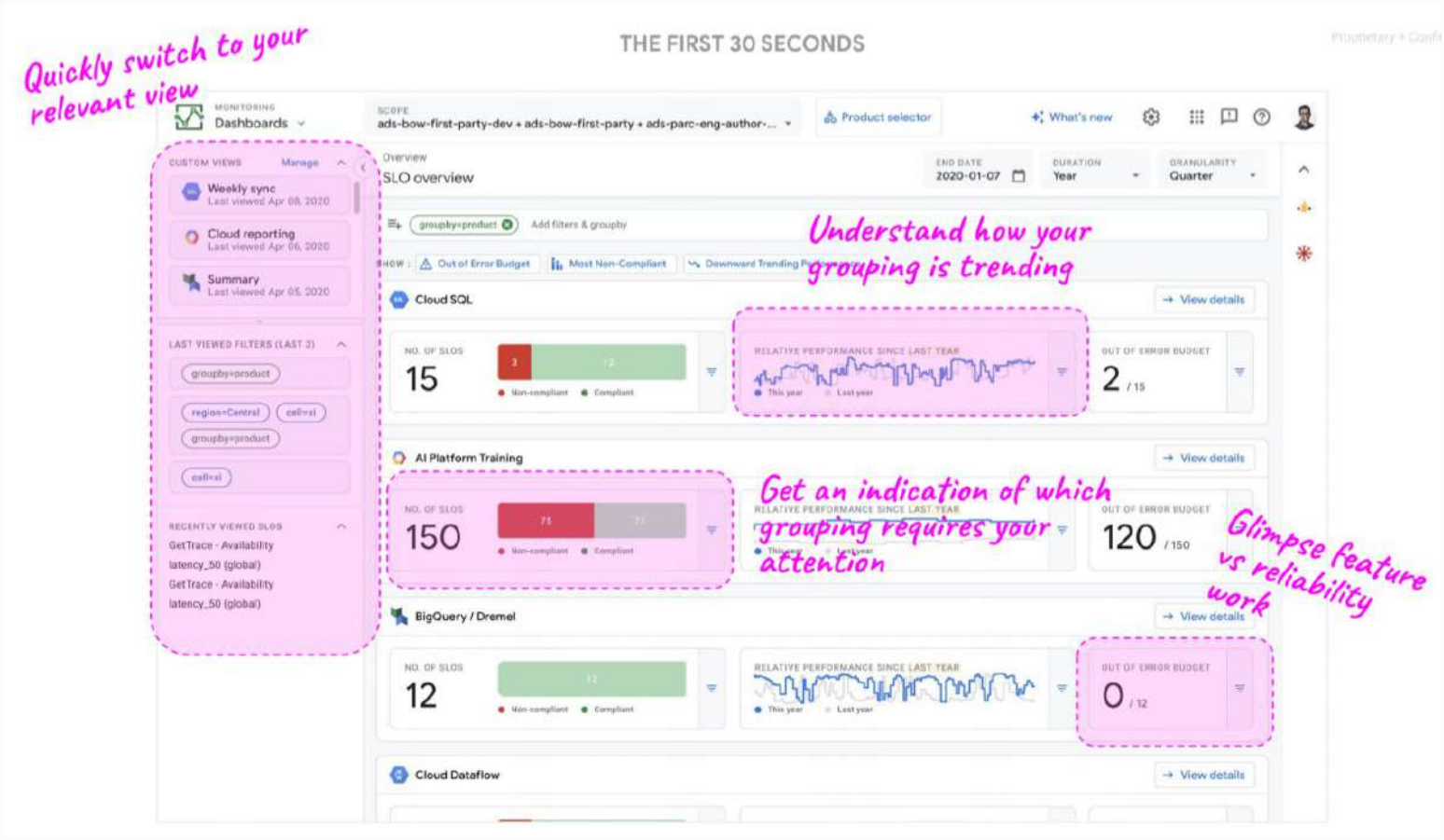


Interface design

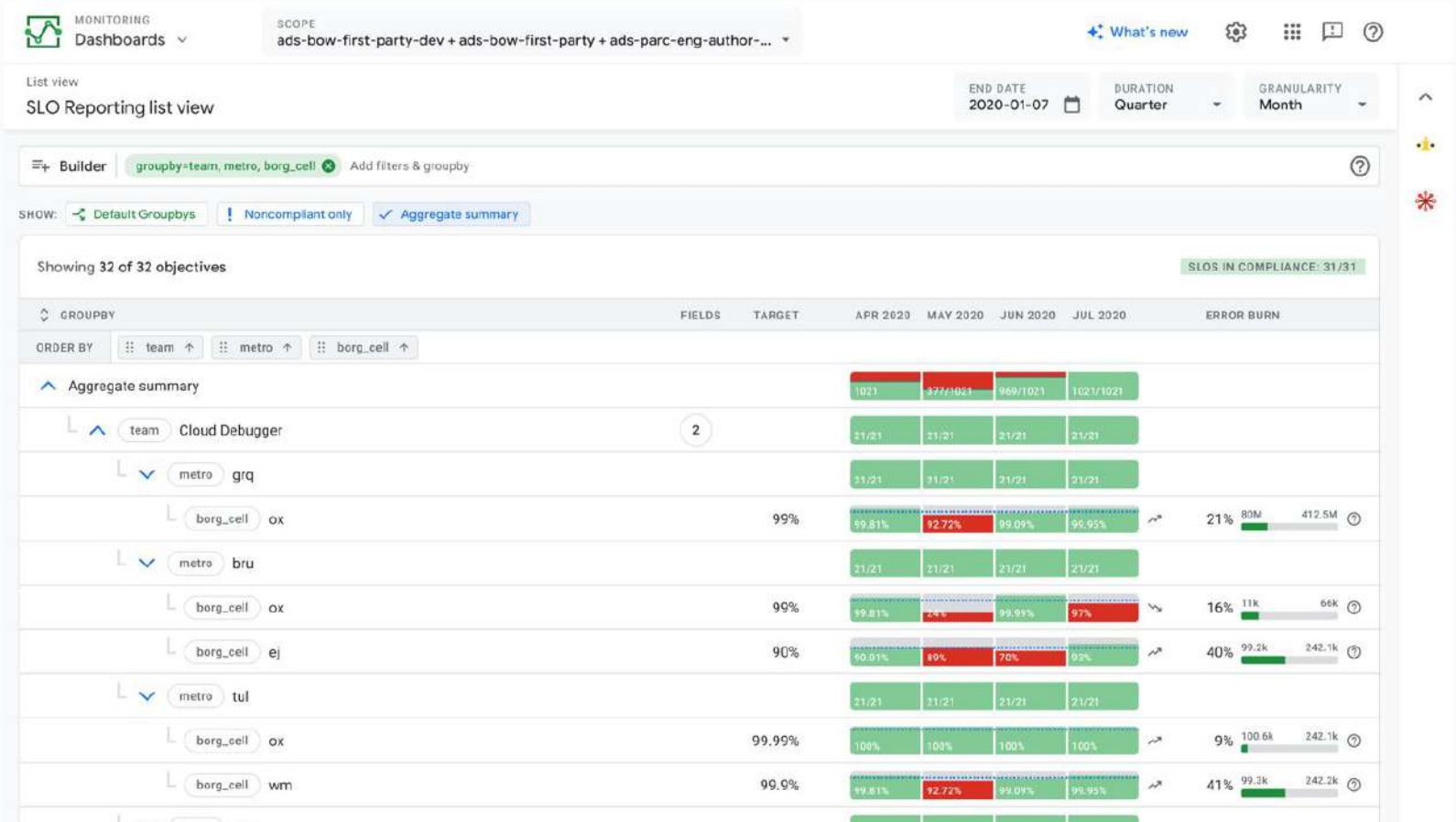
SLO aggregate view



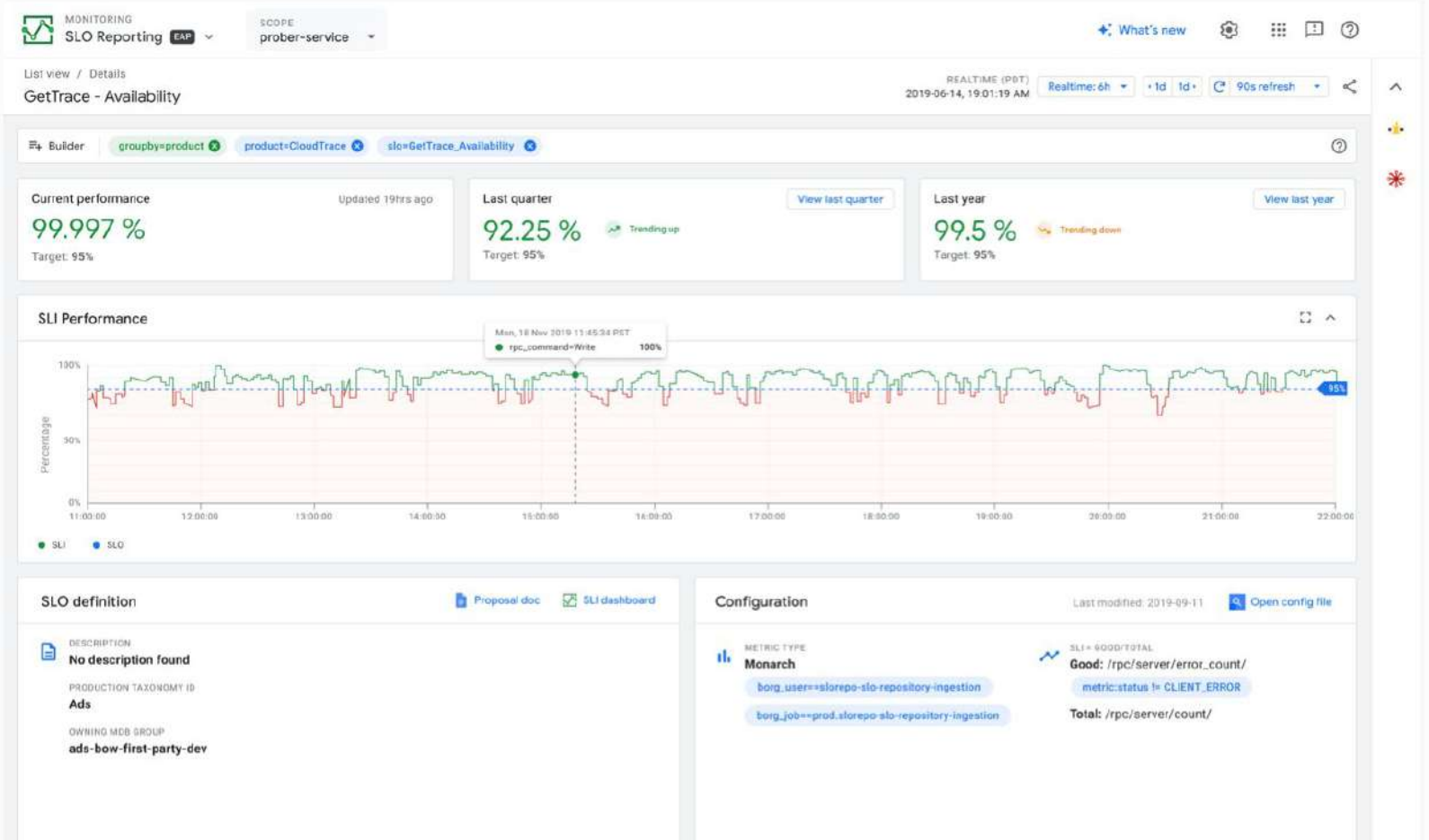
SLO aggregate view



SLO list view



SLO details view



Cohese

Supercharging links with one to many capabilities and analytics for better usage of sharing.

Co-founder

2014-2020

Context

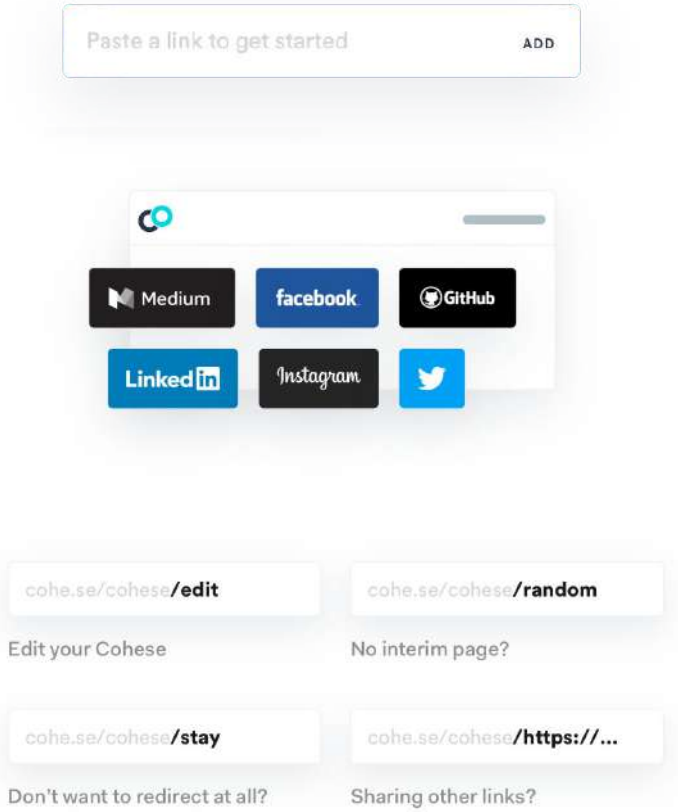
Cohese was a platform to create one to many links, but with the option of it defaulting just to a regular URL. In addition, Cohese offers rich analytics and easy editing right out of the box.

This project came to be by the options already on the market not quite fulfilling our needs when it came to link management.

The team and my role

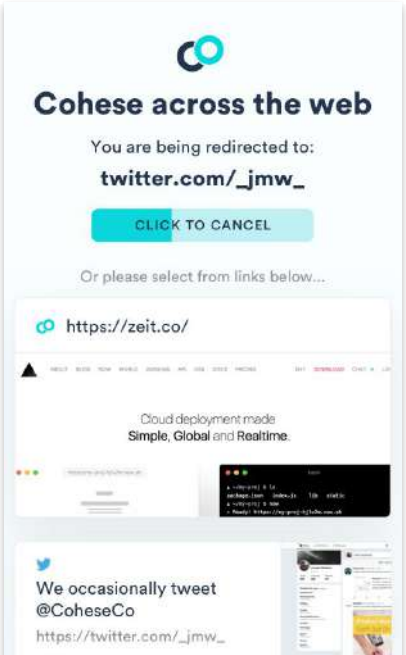
The team was, just myself and my co-founder. I was accountable for design, front-end development, and branding.

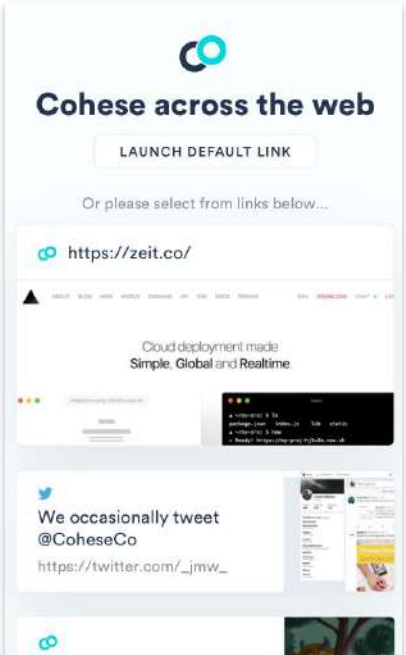
❗ Please note, this project includes almost no ‘process’. This was very much my co-founder and I working on instinct (and having some fun). We experience a problem first hand and explored how quickly we could solve it.

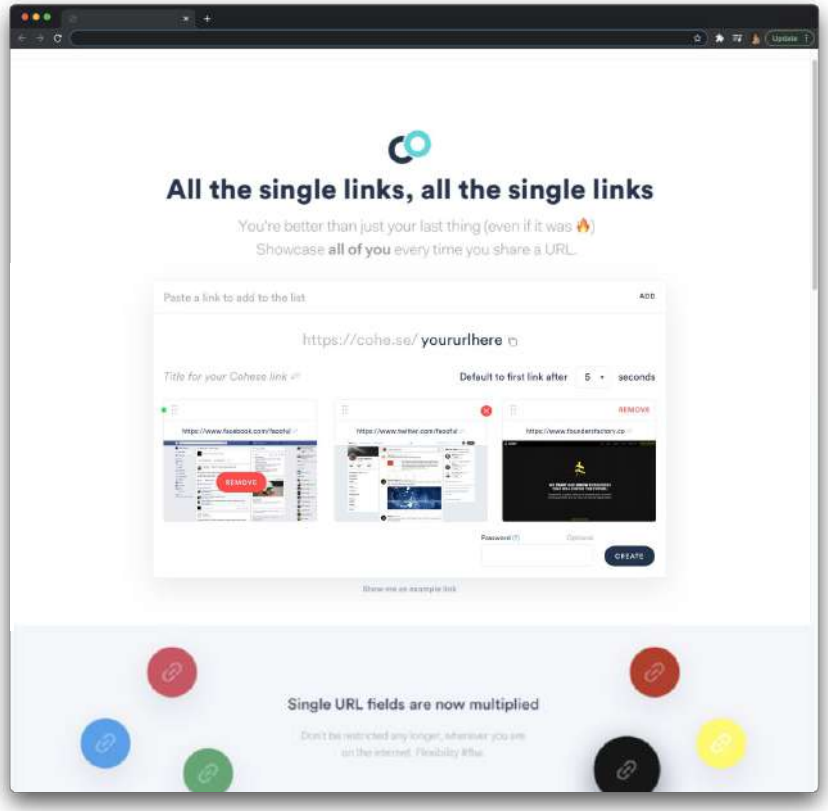


Interface design

Knowing how we wanted this service to work, we simply followed our intuition to design the product and brand. Below are a selection of screens from the product.





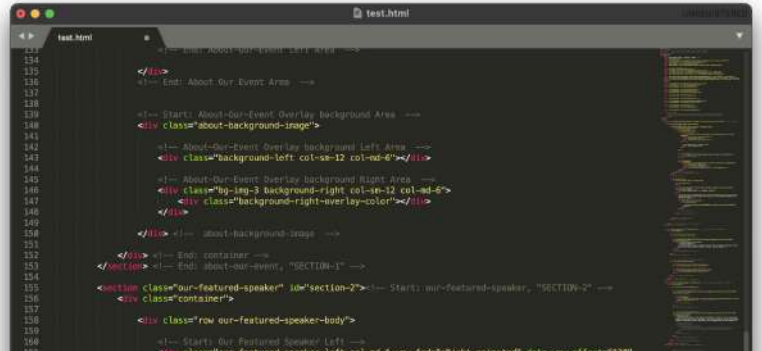


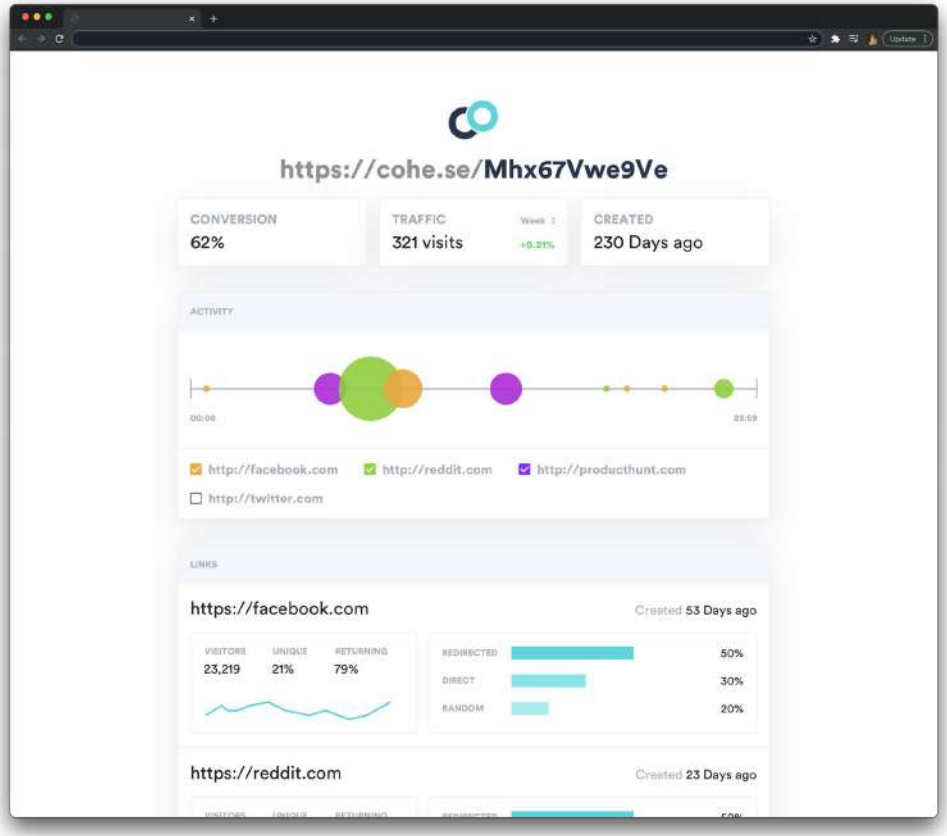
Front-end development

Once we had designs and understood how Cohese would work, we started front-end development. I did all the front-end development for Cohese.

Conclusion

Unfortunately due to time commitments, Cohese has been turned down for now as it was a free service. We are looking to start it back up again in the near future.





Thanks!

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Giving a presentation on designing for incident response

Leading a sprint in Zürich

Team outing