

Kevin Kell, M.A. SF Bay Area, CA

Product / UX Designer - CX Certified

- Traveled around the world (26 countries)
- Coaches soccer for AYSO
- Volunteers for school activities (creative director of haunted house)
- Designed own house / designs and constructs backyard projects by hand
- Teaches kids about investing
- Studies soil science and permaculture

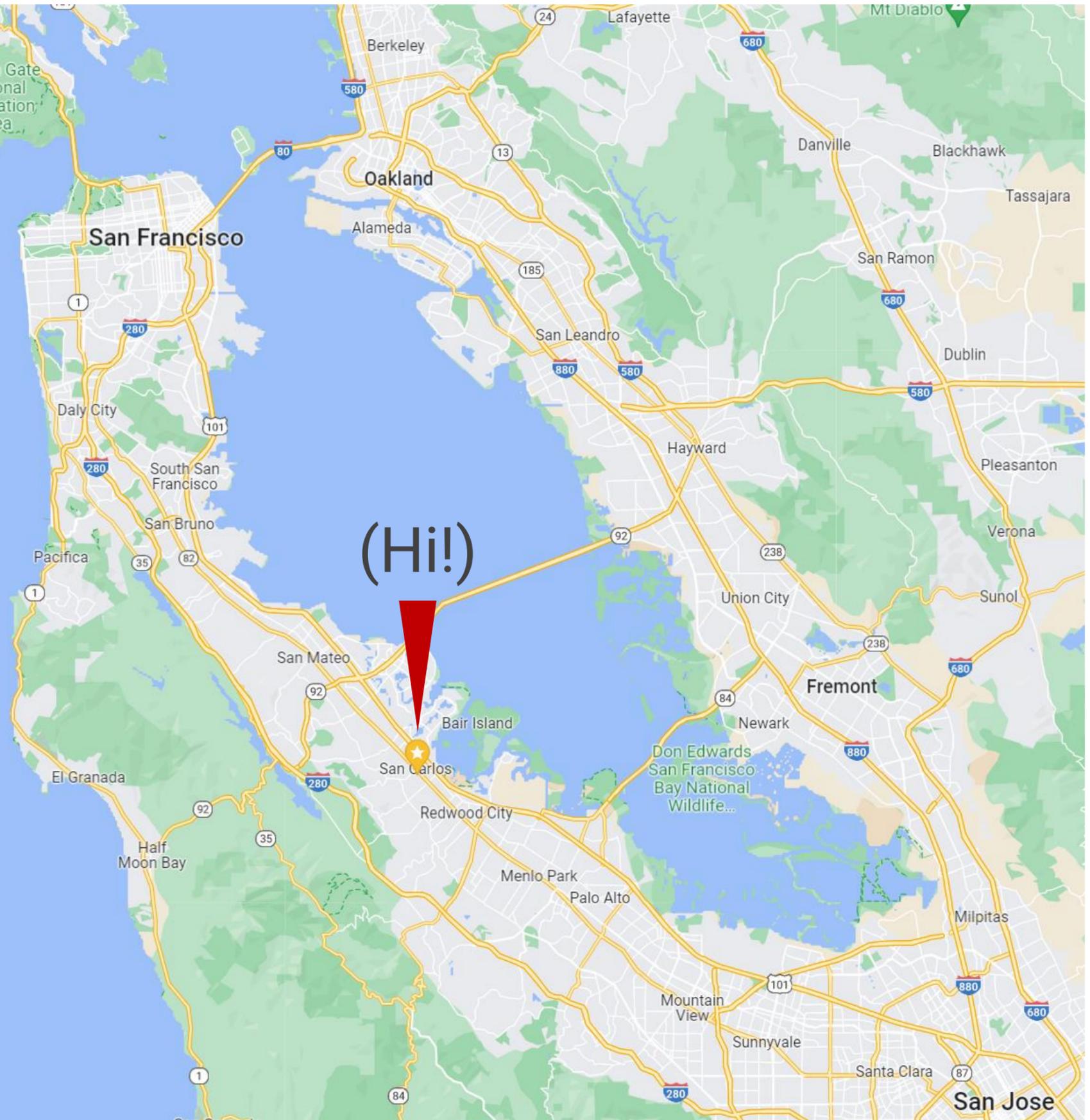


Shanshan County Turpan, Xinjiang, China
42.834284, 89.864778



San Carlos, CA

Gulf of the Farallones



About Me

- End-to-end, hands-on designer
- 20+ years experience as a UX Designer
- First job: User Researcher

Domains

- AI/ML
- B2B Enterprise
- SaaS/Cloud Apps
- B2C Applications



Journey Timeline



Masters of Psychology: Human Computer Interaction
Thesis published in Computers in Human Behavior

Founded a boutique design consultancy in San Francisco
(Clients: Intuit, Yahoo!, Intel Capital, DreamWorks)

Worked on large projects for Cisco and Apple

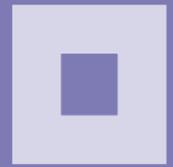
Started a UX practice at Badgeville

Redesigned legacy products and designed new
SaaS/cloud products at Oracle

Lead the cloud platform UX effort

Served as Staff Product Designer at ServiceNow
(AI Search / Virtual Assistant / Platform / Portal)

Created a vision for Virtana's hybrid cloud management
platform



Highlights & Achievements

Career achievements with impact.



Conducted over 40 user research studies as a user researcher



Lead designer for iPhone and iPad sales tool for VP of Global Sales



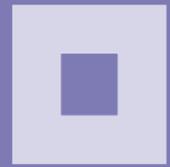
Redesigned the Learning site for Cisco.com, revenues grew from \$150m to \$400m post redesign



Redesigned Intuit.com's homepage and navigation architecture



Helped redesign My Oracle Support, the primary tool for a \$20 billion/yr. division



Recent Projects

2020

servicenow[®]

Workflow Management
Business Automation
Customer Service

Staff Product Designer

Platform UX

Portal

Virtual (AI) Agent

Landing Pages /
Dashboards

AI Search

2022

wirtana

AIOps
Performance Management
Cloud Cost Management

UX Architect

Core Design Team

AI Cloud Platform Vision

Context

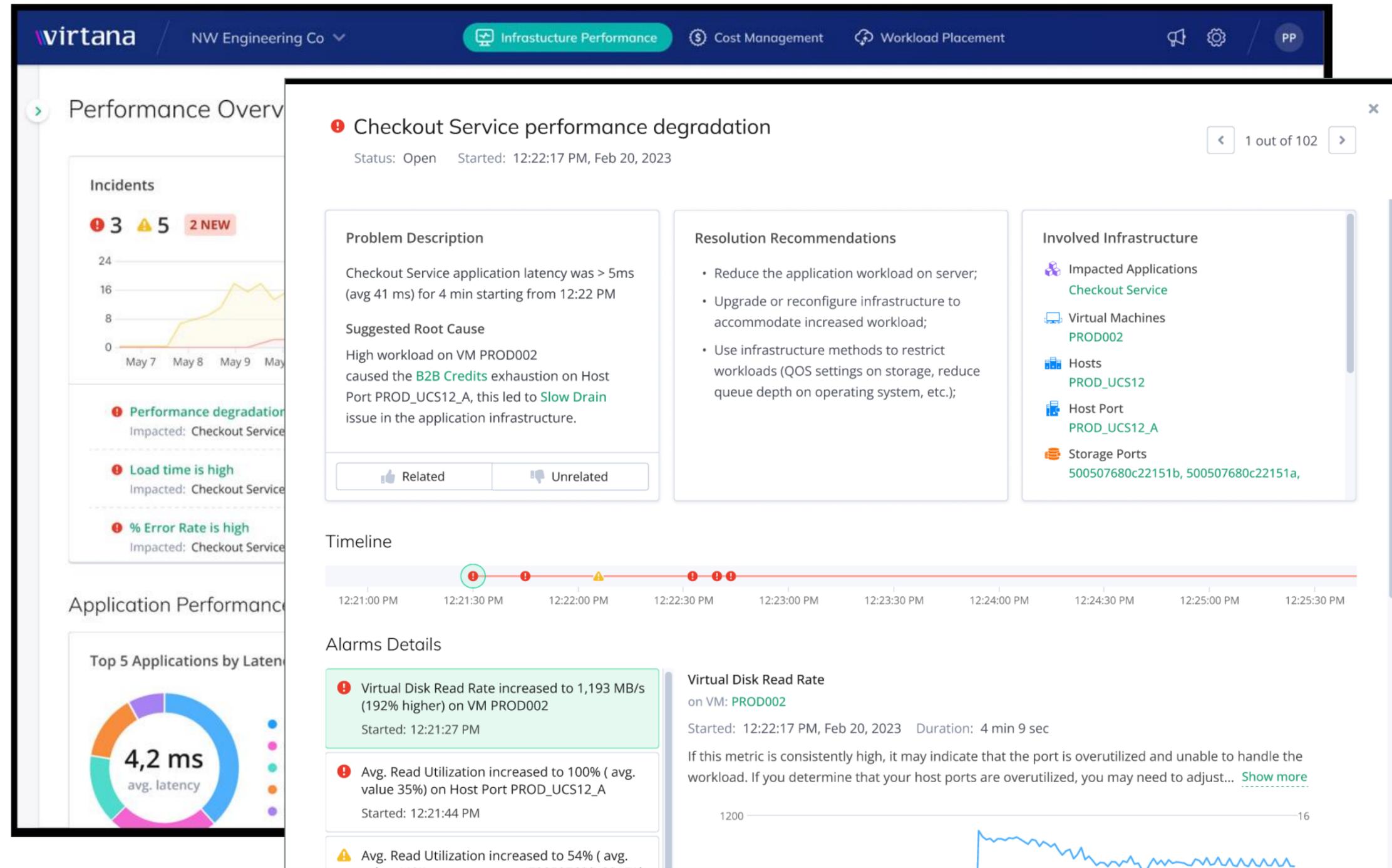
- I was hired as a UX architect to create a long-term vision for how the cloud platform would unify separate use cases around Infrastructure Performance management and Capacity Management

Problem

- There was massive design debt since most of the On-premise software was done without formal design and was shown to be too complicated for all but the highest-level IT folks
- With AI becoming a viable technology, the risk that other companies would beat us to automated troubleshooting became increasingly likely

Activities

- Conducted deep interviews with customers and industry users
- Created a vision that addressed the found pain points and a road map that detailed how we would get there
- Designed interactive Figma prototypes



Context

- ServiceNow needed a solution for an internal tool experience to monitor the outcomes of component performance testing in terms of page load performance times

Problem

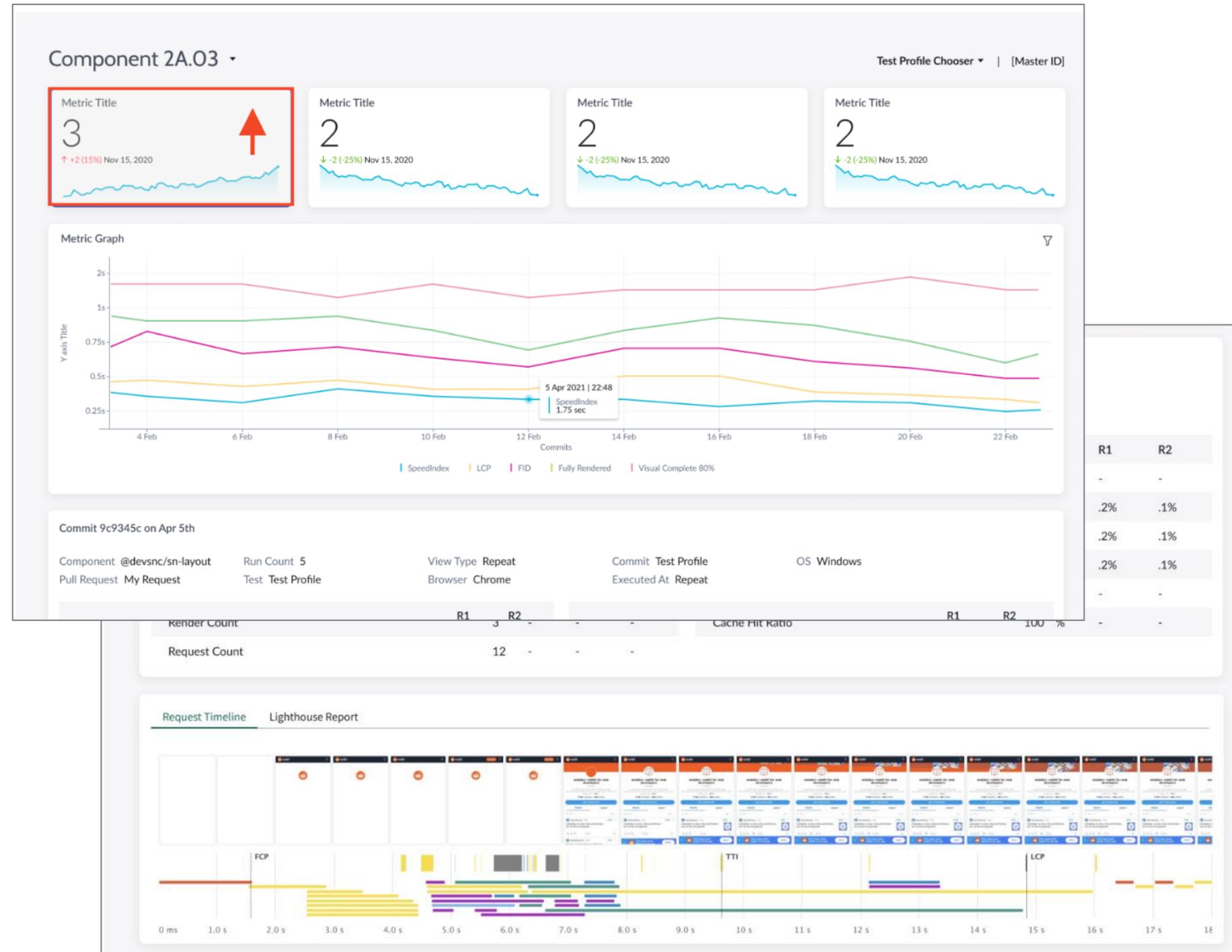
- There were many competing issues: how to onboard new users, show off the new features, and optimize and prioritize users' work

Activities

- Worked with PM, users, engineers, and visual designers
- User research, concepting, wireframing
- Conducted research with PM, designed the initial concepts, and collaborated with visual designers on the final look and feel.

Outcomes

- By innovating on the interaction model, I was able to create a tool that developers were far more productive with by centralizing all the information in one place, reducing page refreshes, and through the use a master-detail interaction model.



Context

- Oracle did not have a Field Sales solution and many salespeople weren't using the Sales Cloud platform to manage their sales deals

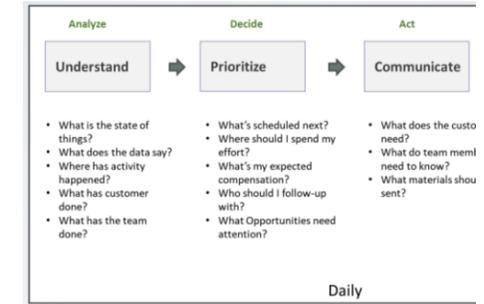
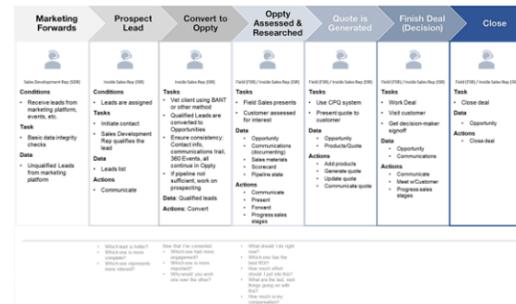
Problem

- Not enough was known about Field Sales' work to adequately build features and solutions that would make our sales force more productive
- The main competitors here was Outlook (email and calendaring) – it just did a competent job fulfilling users' needs

Activities

- Worked with and interviewed the Field Sales team
- Analyzed the sales lifecycle
- Updated the Sales persona to include Field Sales
- Created an architecture that represented users' problems and goals. Then I deepened the model to include the tasks and data that users wanted to use.
- Create a page level architecture
- Designed proofs of concept to represent different ideas and alternative design possibilities

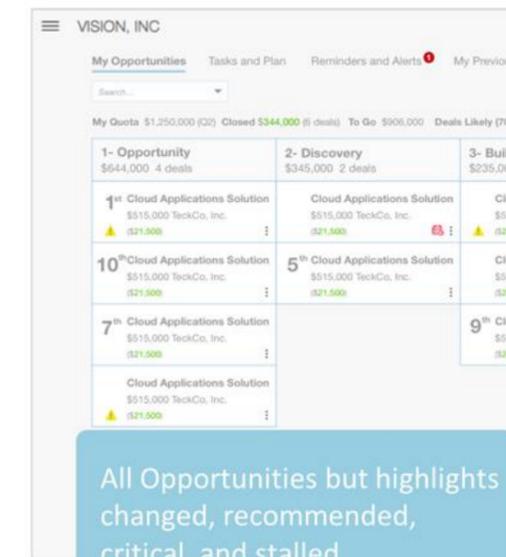
Solution



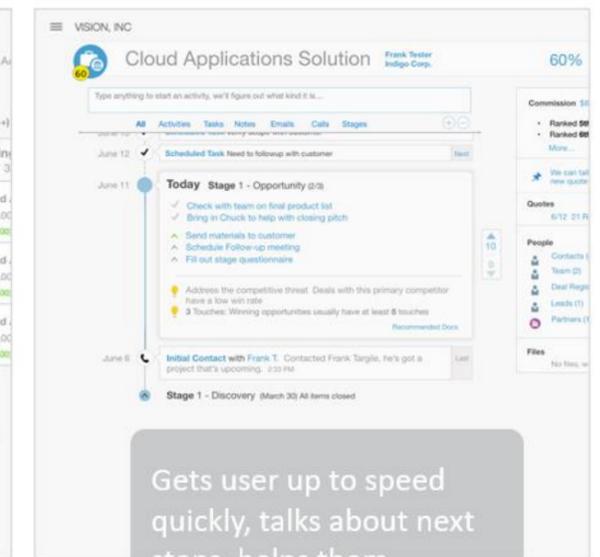
Home Page



Pipeline (Kanban)



Detailed Opportunity



Context

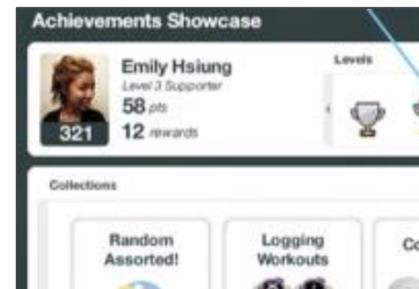
- I left Apple to start a UX practice at Badgeville (an enterprise gamification platform, the founder and CEO tasked me with leading a 'radical revision' to the usability of the current gamification platform.

Problem

- V.1 version constructed with no professional design talent
- Little formal documentation of the customers' pain points or needs existed

Activities

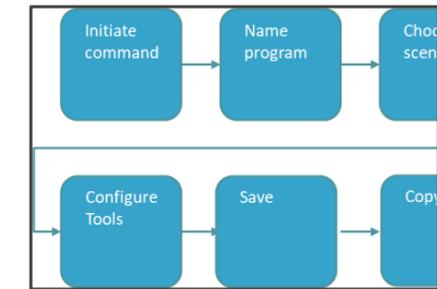
- Worked with **Account Management**, **Product Management**, **Support** and even **Sales** to quickly understand who our users were
- UX methods: user research, task flows, wireframes, prototyping
- Worked with customers to collect pain points, tasks, and other inputs
- Hired and managed a visual designer
- Worked with PMs on new requirements and with Engineers to get the new designs implemented



Understand the domain

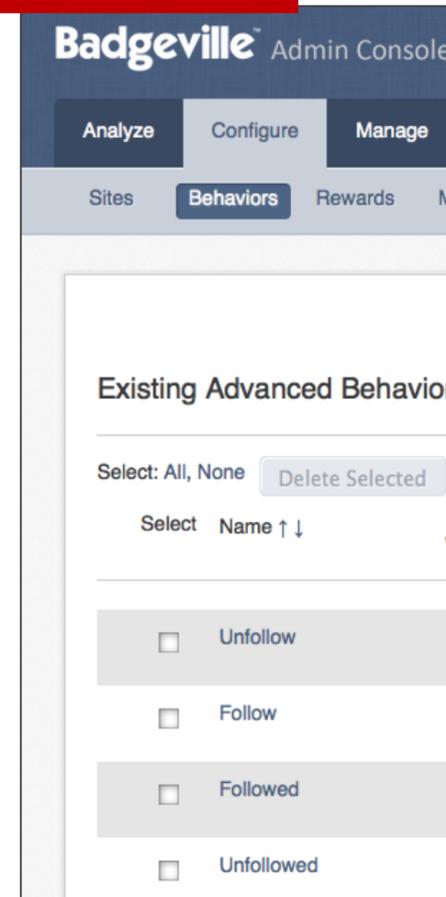


Empathize with the user

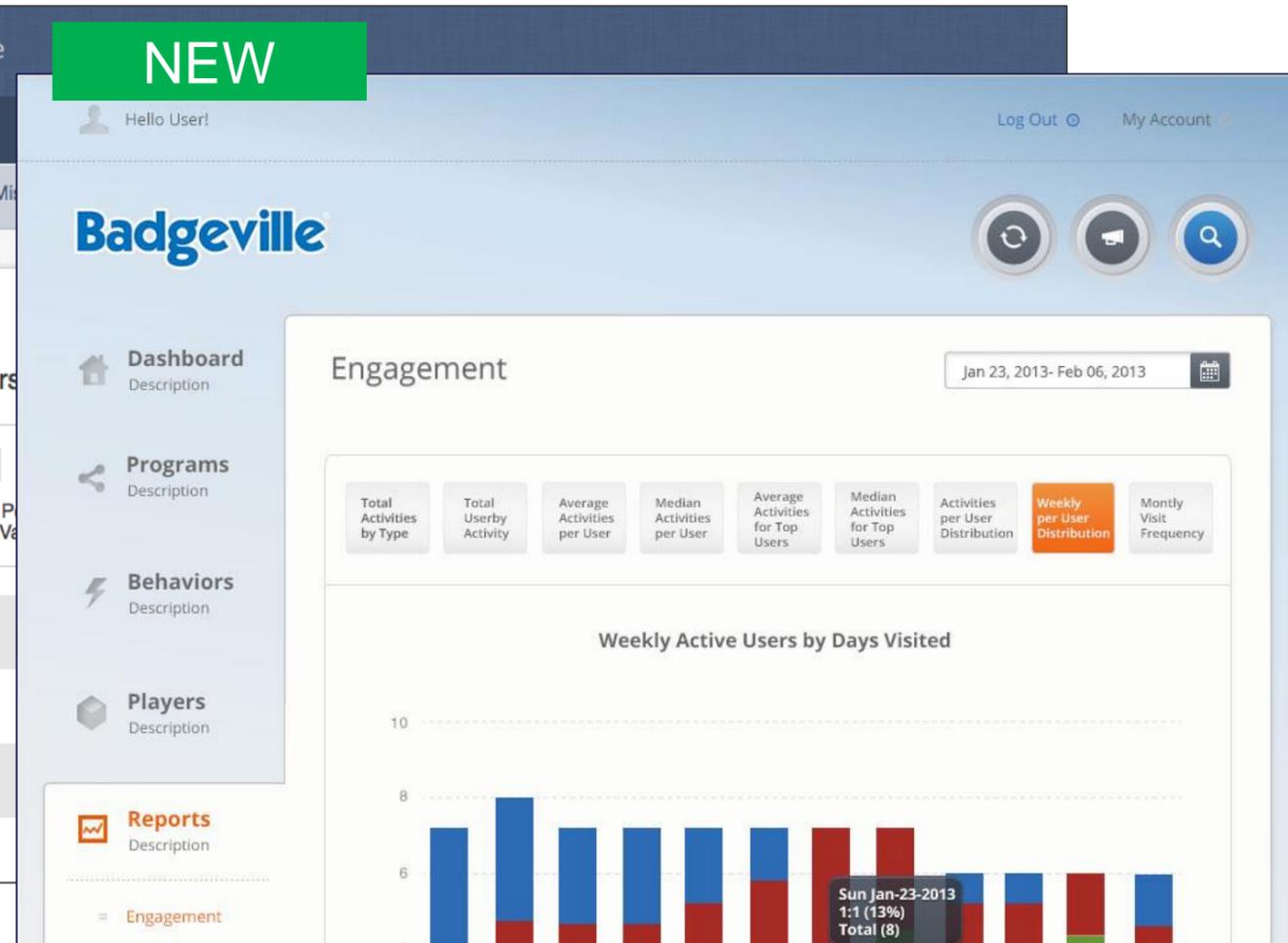


Map key user flows

OLD



NEW



Customers and stakeholders were thrilled with the new version!



Apple, Inc.

Context

- At Apple I helped design a tool for the VP of iPhone/iPad sales and his sales force to manage large account sales and the overall sales lifecycle and process.

Problem

- Apple salespeople needed ways to handle common sales objects like Opportunities and Leads

Activities

- Worked with users to understand their problems and needs
- Designed ways to handle opportunities, leads, companies, and contacts all in a single tool

The screenshot displays the SFA! CRM interface. On the left is a navigation sidebar with sections for Opportunities, Leads, Companies, Contacts, and Reports. The main area is divided into several panels:

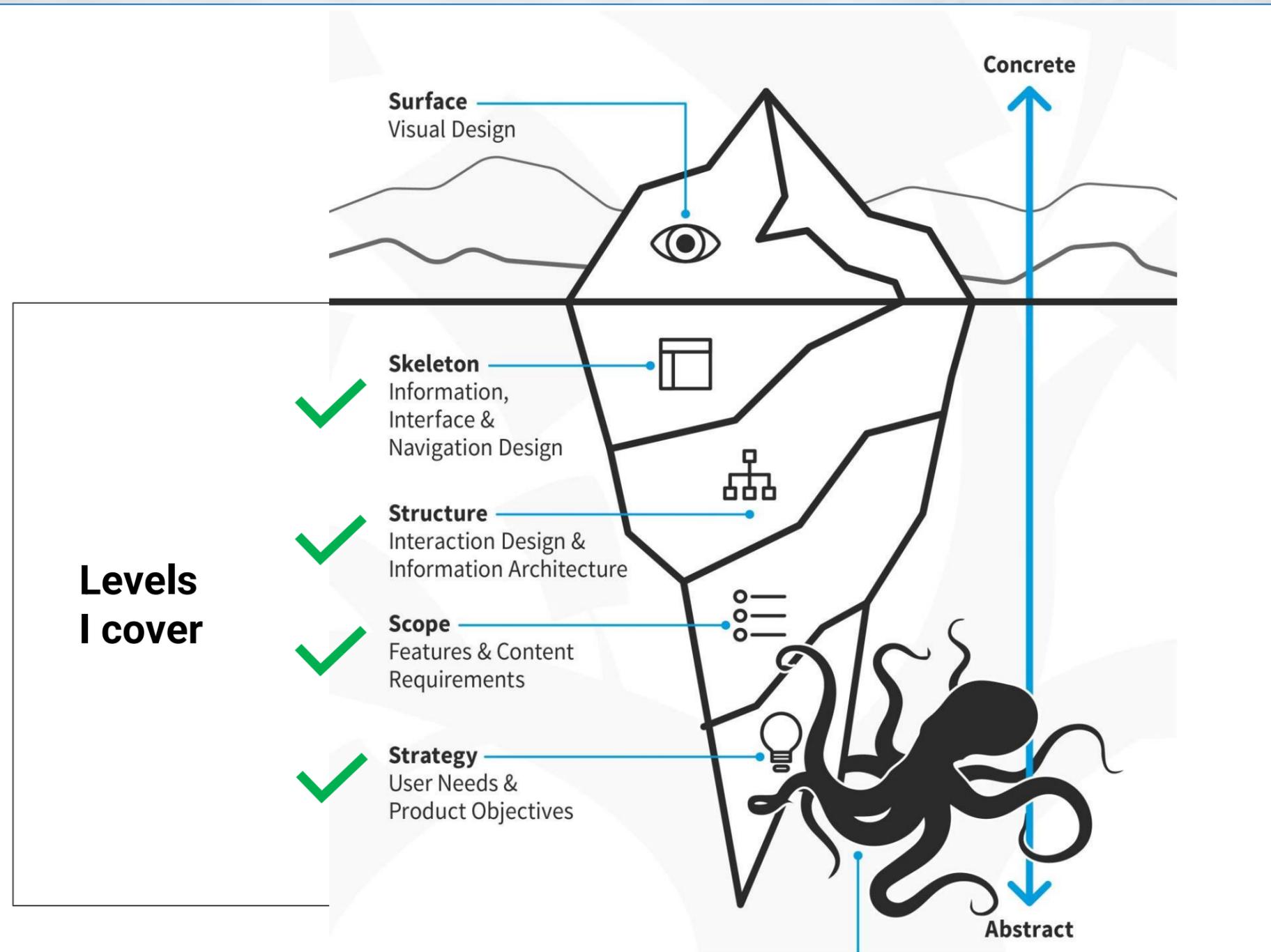
- Reports Panel:** A table showing report performance.

Report Name	Total Companies	Start Date	End Date	Average Revenue	Average CPUs
Pipeline Report - Closed-Won	6	Jan 1, 2010	Dec 31, 2010	\$539,750	136
Pipeline Report - Open	6	Jan 1, 2011	Dec 31, 2011	\$497,198	119
- Charts Panel:** Two bar charts comparing weekly performance.
 - CPUs Per Week:** Shows weekly CPU quantity (bars) and a trend line (Average).
 - Revenue Per Week:** Shows weekly revenue in \$1000s (bars) and a trend line (Average).
- Data Panel:** A table of leads with columns for Lead Name, Company Name, Rating, Status, Revenue, Contact, Email, and Primary Phone.

Lead Name	Company Name	Rating	Status	Revenue	Contact	Email	Primary Phone
BA iPods for SPC	Associated Press	Hot	Open	\$125,000	Jane Doe	janedoe@example.com	(408) 555-1212
BA14u	BBC	Warm	Open	\$ 30,128	John Doe	john DOE@example.com	(800) 888-8888
DK iMac	Chevron	Cold	Rejected	\$ 19,108	Dee Light	d.light@example.com	(650) 123-5678
DW Animation Dept.	DreamWorks	Hot	Converted to Opportunity	\$ 7,608	Doe Deer	d.deer@example.com	(555) 121-5689
- Lead Detail Panel (DW Animation Dept.):** Shows specific lead information including lead ID (987654321), status (Open), type (Inquiry), rating (Hot), estimated close date (Jan 21, 2012), lead source (Apple Academy), territory (TH1157), estimated revenue (\$7,608), and web order number (W24680). It also includes a description, my comments, and a list of associated products.

Category	Group	Description	MPN	Quantity	Unit Price
Apple Hardware	iPad	iPad Wi-Fi 16GB	MB292LL/A	1	\$ 499.00
Apple Hardware	iPod	iPod classic 160GB - Silver	MC293LL/A	1	\$ 249.00
Apple Hardware	MacBook Pro	MacBook Pro, 15-inch, 2.53GHz Intel Core i5	MC372LL/A	1	\$ 1,849.00

Where do I contribute?





Best Career Lessons

**Focus on user
pain points and
what value
means to them**

**Don't build
human
intervention
into the
process**

**Good ideas
can come from
anywhere**

**Design fast
and iterate
quickly**



Questions I Like to Ask

How is this going to be used?

What pain point does this address?

How do we provide value to the user?

What is our design center or north star?

How can we fulfill the company's goals through design



What Differentiates Me?

20+ years in UX

Research background – academic and professional

Strengths in **data** and **problem** analysis

Pragmatic – get things done quickly and get feedback

Range of experiences in shipping complex consumer and enterprise products



What Do I Like Doing the Most?

**Blue-sky
designs from
concept to
implementation**

**Owning the user
experience
whether a
feature, product
or platform**

**Providing design
leadership,
innovative ideas
and processes**



Philosophy

Get quick
design wins to
build
organizational
credibility

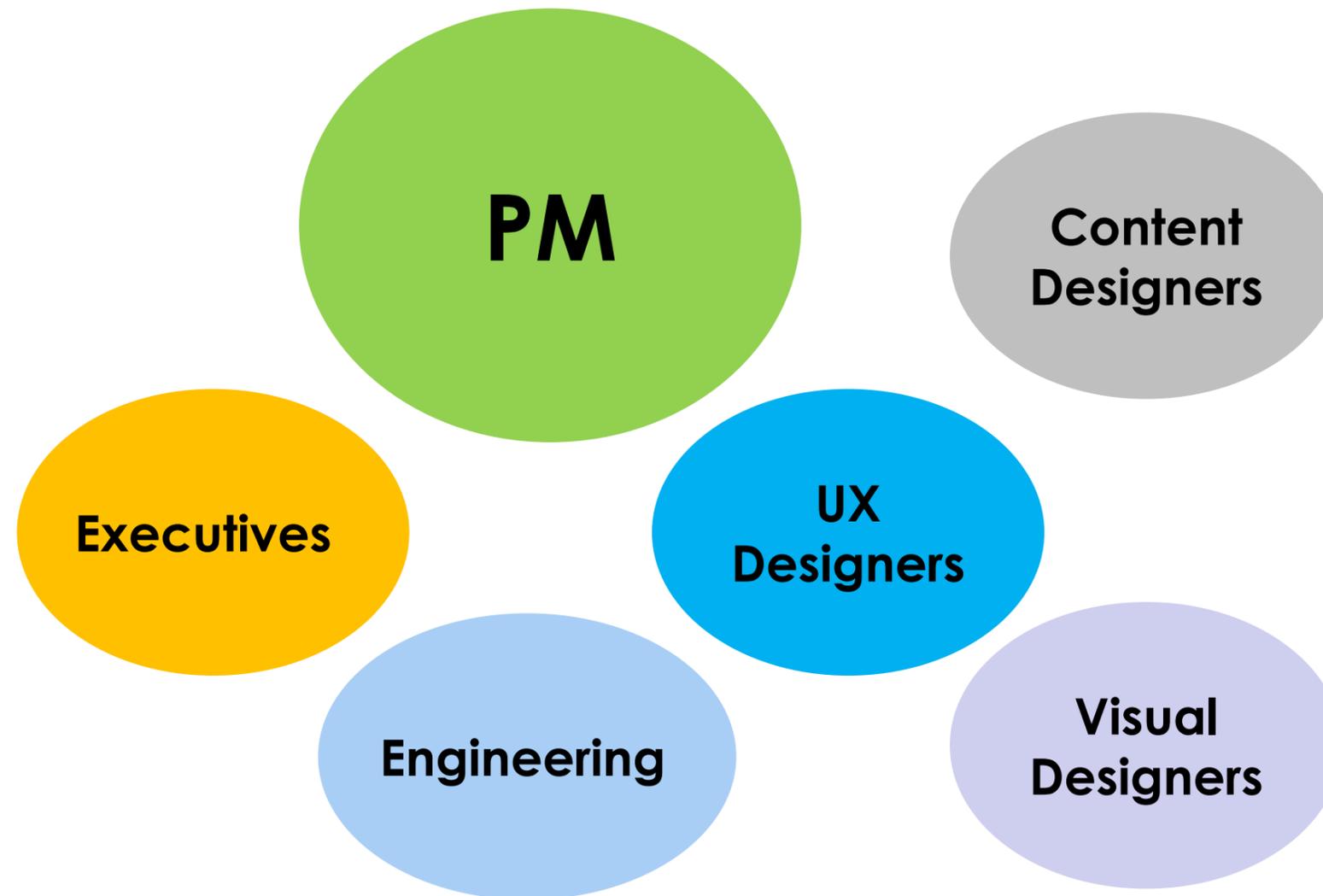
Find what can
be reused,
made more
consistent
and
systematized

Think
consistently
about value
for the user

Collaboration

Who do I team with?

- PMs
- Engineering
- Executives
- Content designers
- Visual designers
- Other UX designers



Collaboration Tools

 Miro  Figma  JIRA  Confluence

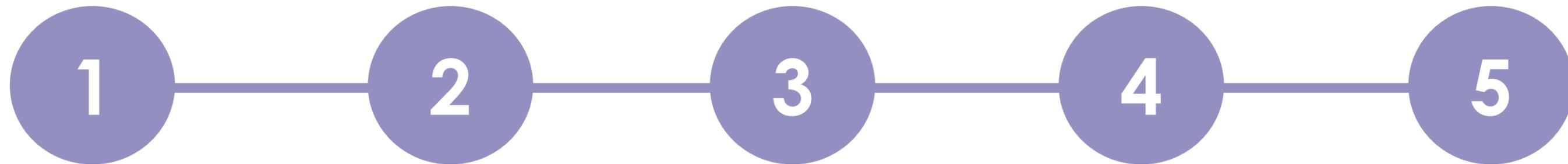


My Typical Design flow

PROBLEM



SOLUTION



Research

Understand the problem space (use cases), the personas, the business' goals, PM's goals. Work with customers and industry members.

Design center

What's going to constitute an appropriate design? How will we measure it and know that we've reached our goals?

Concepting

Now is the time to create alternate designs and spiral towards a single proposal, getting feedback and validation along the way.

Refinement

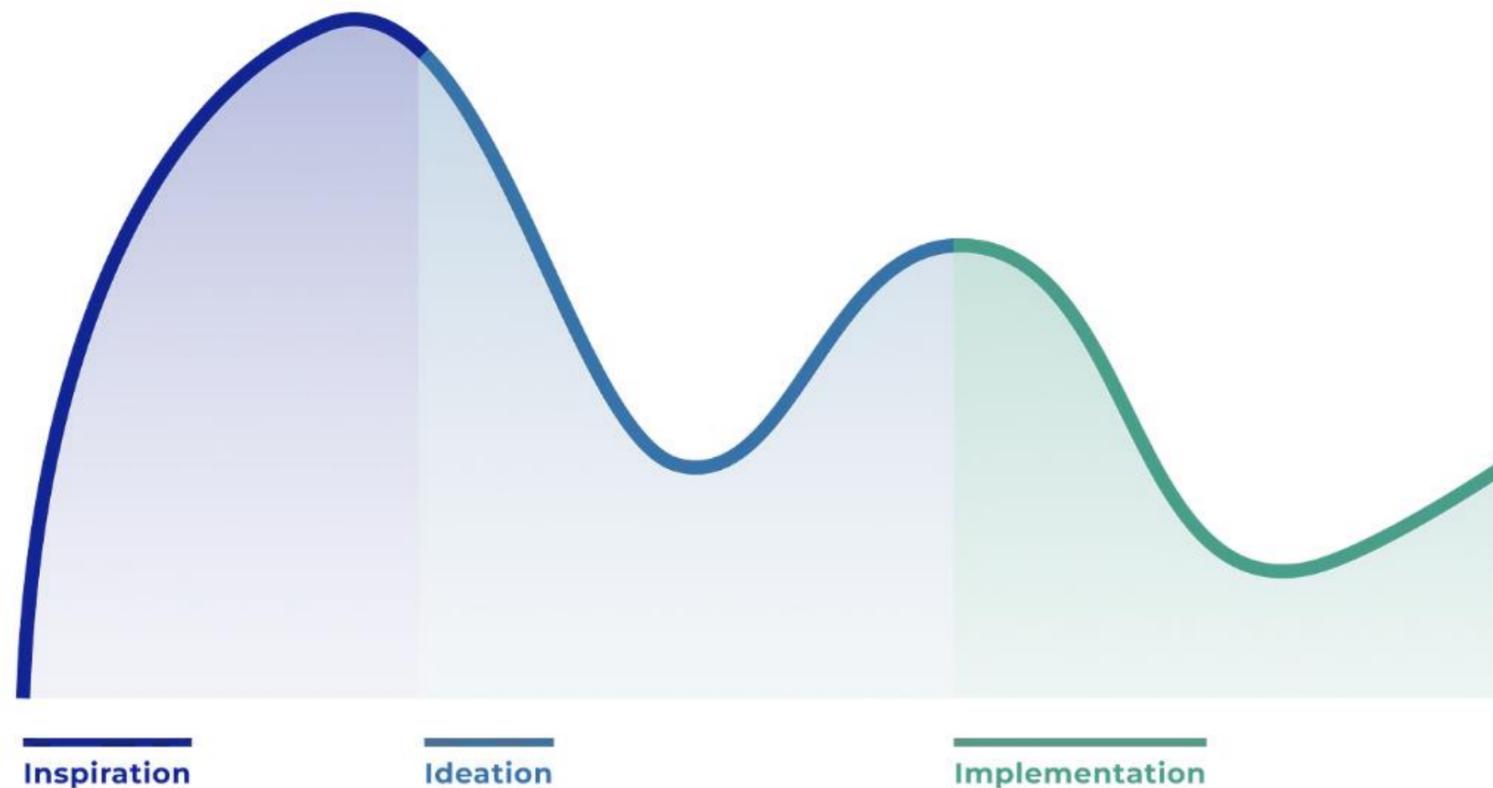
Understand implementability, reflect incoming feedback, iterate and work in the details. Select UI components and patterns.

Handoff

Create specs, document the components, apply visual system, follow the implementation and validate the specs



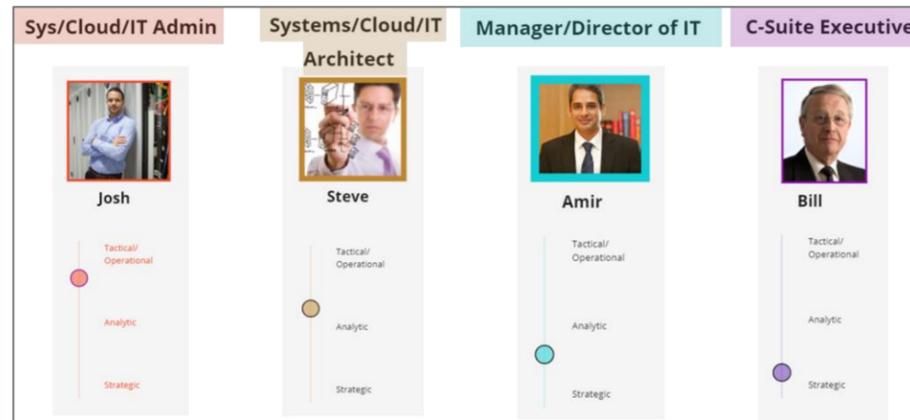
Process – Steps to Bring a Design to Life



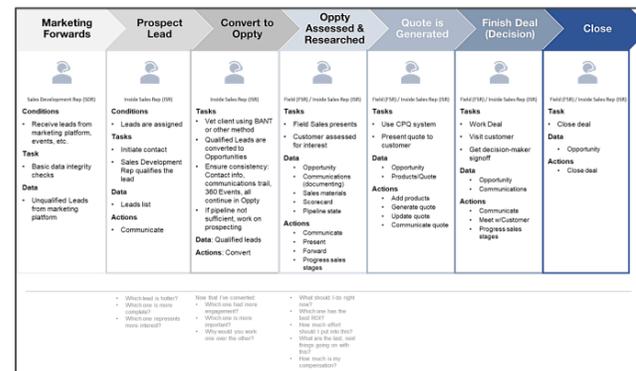
1. Research to understand your users and the competition
2. Build Personas, Scenarios, Journeys
3. Organize using Story Maps, Use Cases, and User Stories
4. Decide on design centers or north stars
5. Find inspiration
6. Start concepting and ideate
7. Create clickable wireframes
8. Research to get feedback
9. Iterate on your designs
10. Narrow focus down to a winning solution
11. Create a system that's consistent and can be extended to other situations
12. Document it all in a spec
13. Work with engineers to validate against your spec

Methods

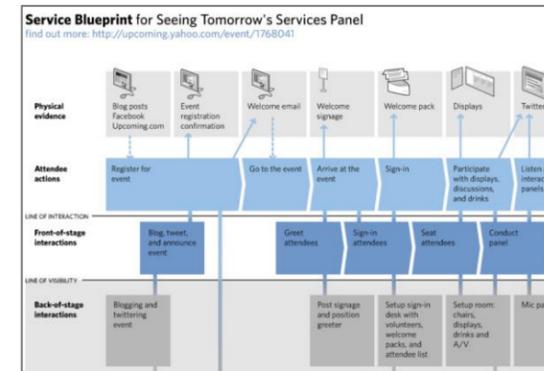
Personas



User Journeys



Service Blueprint



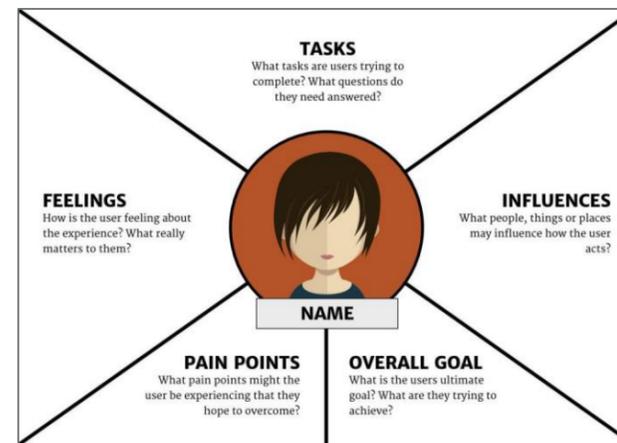
Taxonomy/Mapping



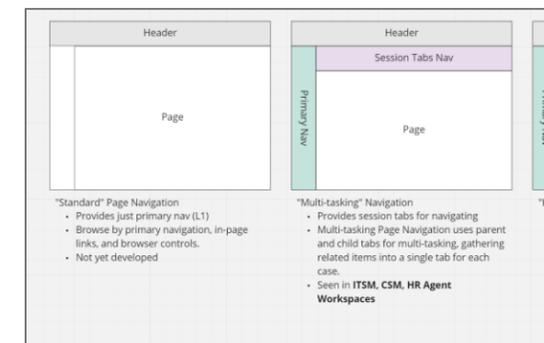
Competitive Research



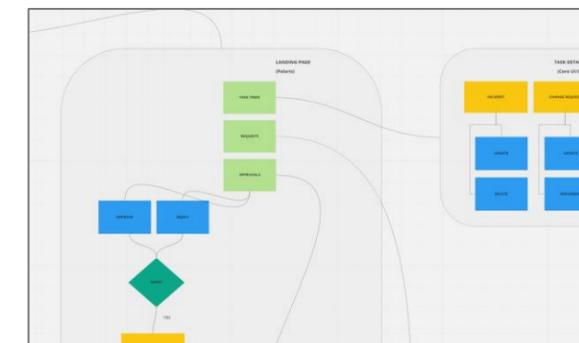
Empathy Maps



Navigational Models



End-to-End Flows





What is a Modern User Experience?

Based on patterns and user needs I identified, I formulated several major principles of what it means to have a modern user experience

Principles of Modern UX



Prescriptive - AI (Wisdom + Insights that are actionable)

- Organize and Prioritize
- Wisdom not data
- Dynamic not Static
- Automation of simple tasks
- Reactive

Info Meaning: Comparison & Baselineing

- Comparison
- Gamification
- Understand relative performance

Convenient

- Don't make me interact
- Minimize Navigation
- Visual UI
- Streamlined / Simple First
- Rapid scaling
- Social / Collaborative

Knowledge: Contextual and Relevant Content

- Recency / Frequency
- Curated - Role-specific or showing users where activity is
- Display choice
- Knowing where user in their journey
- Role-driven
- User-driven Recommended Content

Personalized & Customized Experiences

- Personalized & Customized Experiences
- Customization = Flexibility
- Resume: Pick up where you left off
- Use data to personalize
- Remember how you were using something

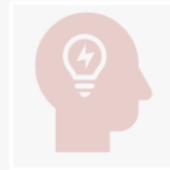
What is a Modern User Experience?

Concepts to Drive Productivity



Contextual Knowledge

- Raise awareness in the user of their own actions, of what others are currently doing, and also of what the system is doing outside of automation
- Show present users, their status, and their actions
- Allow real-time collaboration



Personalization

- UX fits the way I want to work, either automatically or through my manual intervention
- I want to tell the system what notifications, what tickets, what data are important



Prescriptive AI

- A prescriptive approach that relies on intelligence and recognition to convey insights to the user.
- Accomplished by creating smart algorithms means that the system reacts, has a POV, and is actively assisting the user.

I believe these three concepts enable more productive user experiences

Concepts map neatly to the 3 important questions:

What's Happened?

- History (Me)
- Activity (Me + Others)

What's Happening?

- Current Activity
- Personalized Alerts

What's Next?

- Recommendations
- Prioritization



Tools



All day.



Every day.

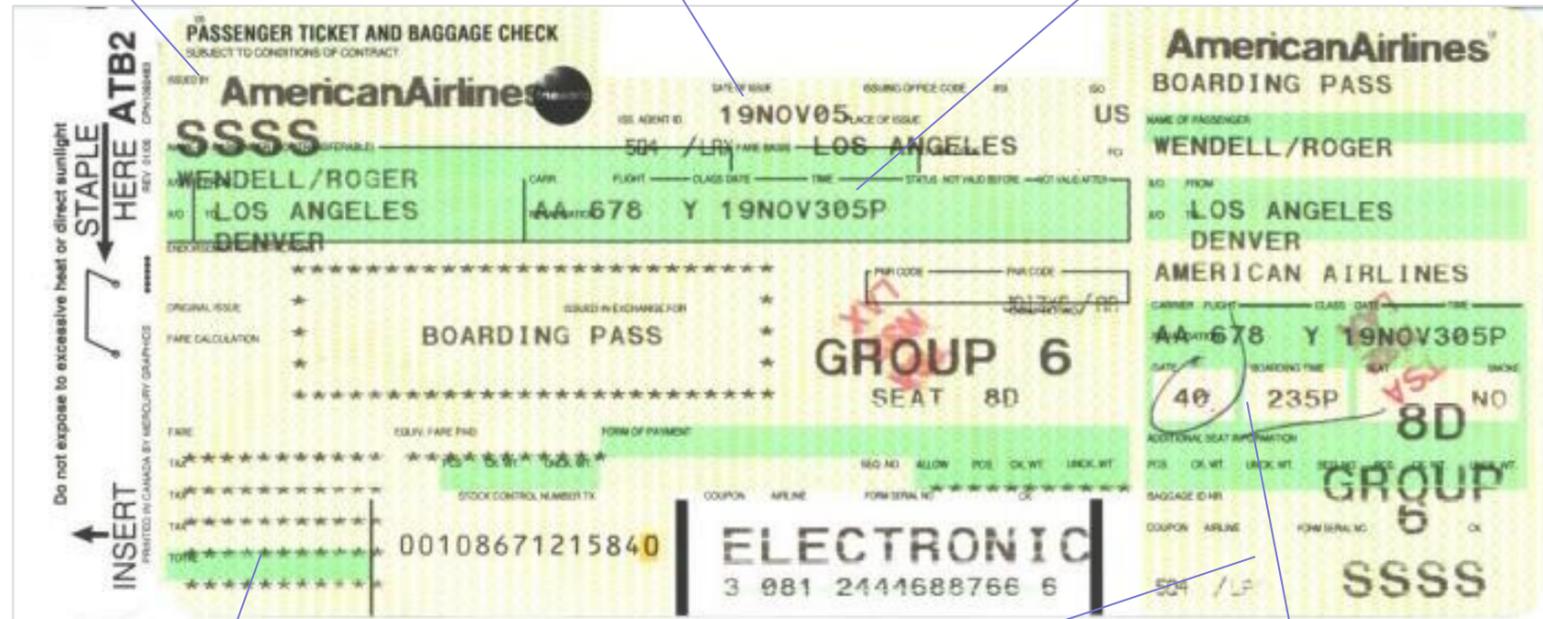
How I'd Redesign an Airline Ticket in 10 minutes

Airline name and initials repeated 5x

It's barely possible to find the important information on this

Time and date is in an unfamiliar and hard to read format

Remember the old ticket formats?
Let's fix this!



Information relevancy actually shifts depending on when and where you are

Information hierarchy is not effective and inconsistent

You can barely find the gate and departure time

To create a great design, start with the questions that users have:

1. What is my **destination**?
2. What is my **gate**?
3. What is my **seat**?
4. What **boarding group** am I in?
5. What **airline** am I flying?
6. What is my **departure time**?
7. What's my **flight number**?
8. Is this **my ticket** and not another family member's?

The Information Hierarchy is Key

The image shows an American Airlines boarding pass and ticket stub. The boarding pass is on the right, and the ticket stub is on the left. The boarding pass includes the following information: Passenger Name: WENDELL/ROGER; Flight: AA 678; Class: Y; Date: 19NOV305P; Time: 235P; Seat: 8D; Boarding Group: GROUP 6. The ticket stub includes the following information: Issued by: American Airlines; Issue Date: 19NOV05; Issue Office: LOS ANGELES; Passenger Name: WENDELL/ROGER; Flight: AA 678; Class: Y; Date: 19NOV305P; Time: 235P; Seat: 8D; Boarding Group: GROUP 6. The ticket stub also includes a barcode and the text "ELECTRONIC" and "3 981 2441688766 6".

Next, create an information hierarchy:

1. Preboarding

- My Name
- Airline
 - Flight Number
- Destination City
 - Origination City
- Departure Time and Date

Need to know first, then second, third, and so on.

2. Boarding

- Gate
- Boarding Group
- Seat

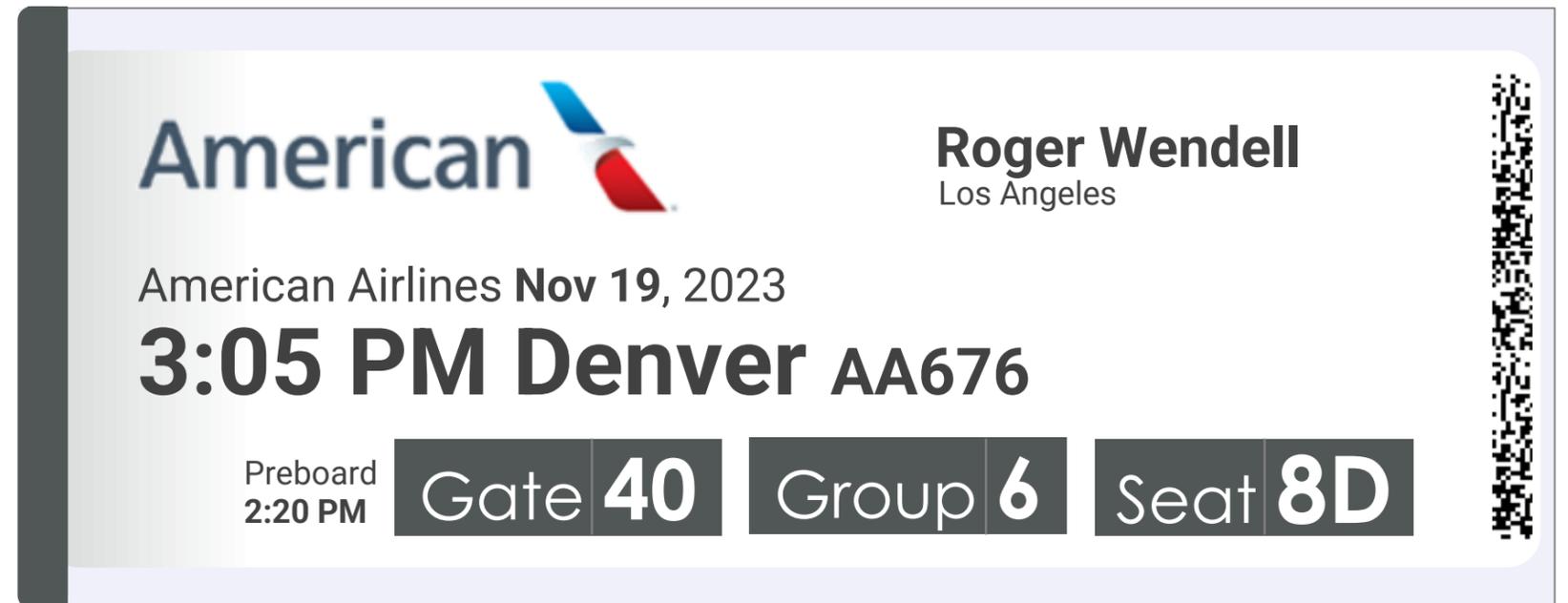
Get me to the gate, then tell me how to board and where to sit.

A 10-minute Design is Born

Highlight the most important information by building an information hierarchy using visual design cues



Operations First Design



User First Design

It's the exact same information minus extraneous text



Case Studies

virtana

New AI Experience Vision for Infrastructure Performance Management

Helping an enterprise platform become AI-driven

servicenow

Component Testing Console

A tool for internal developers to improve UI component performance

ORACLE

Field Sales Proof of Concept

for Sales Cloud

Badgeville
The Behavior Platform™

Badgeville Platform Redesign

Enterprise gamification platform



New AI Experience Vision
for Infrastructure
Performance Management
for Virtana Platform

Helping an enterprise platform
become AI-driven

Project and Goal

- When I was hired as a UX Architect, Virtana had a pressing need to start to simplify their product offerings and have an integrated experience model that would unite two strategic areas: Infrastructure Performance Management and Capacity Management.
- AI has raised new possibilities for helping with problem diagnoses, interpretation, and solution recommendations for infrastructure problems.



New AI Experience Vision
for Infrastructure
Performance Management
for Virtana Platform

Helping an enterprise platform
become AI-driven

Challenges

- Virtana had been struggling to sell on-premise software and needed to quickly transition to a cloud-based web platform to cover infrastructure troubleshooting, monitoring, and capacity management use cases.
- With AI (ChatGPT) a viable option for data interpretation and explanation, I made that a central part of my vision for the new version of the Virtana Platform.
- Performance PM: *“Our customers don’t understand their own data, let alone the performance problems that they have”*



New AI Experience Vision
for Infrastructure
Performance Management
for Virtana Platform

Helping an enterprise platform
become AI-driven

Activities

- Worked with experienced users and customers who are domain experts to collect pain points, personas, use cases, and new ideas through interviews, design sprints, and card sorts
- Teamed with PMs, Professional Services, current customers, and other designers
 - *Reduce the data shown to users*
- Presented vision to key stakeholders to get buy-in
- User research, data analysis, concepting, wireframing and Figma prototypes



New AI Experience Vision
for Infrastructure
Performance Management
for Virtana Platform

Helping an enterprise platform
become AI-driven

Outcomes

- Getting quick wins was essential, so focusing on specific areas (performance and capacity management) and producing designs early helped demonstrate the feasibility of my vision
- Produced a prototype (infrastructure) of the vision that centered around a **troubleshooting** use case which demonstrated the power of an **AI-based** experience



New AI Experience Vision
for Infrastructure
Performance Management
for Virtana Platform

Helping an enterprise platform
become AI-driven

Process

- Understand where we're at with the **product**
- Fully document the business' **goals** and **strategy**
- **Understand the user** as well as possible from many angles
- Create **themes** that describe what the user is trying to do
- Author a **model** of the relevant concepts (objects, tasks, data) interaction model
- Translate all that into a coherent interaction model
- Produce artifacts that allow for gathering **feedback** and eventually **specifications**

Research

- Methodology
- Pain points
- Analysis

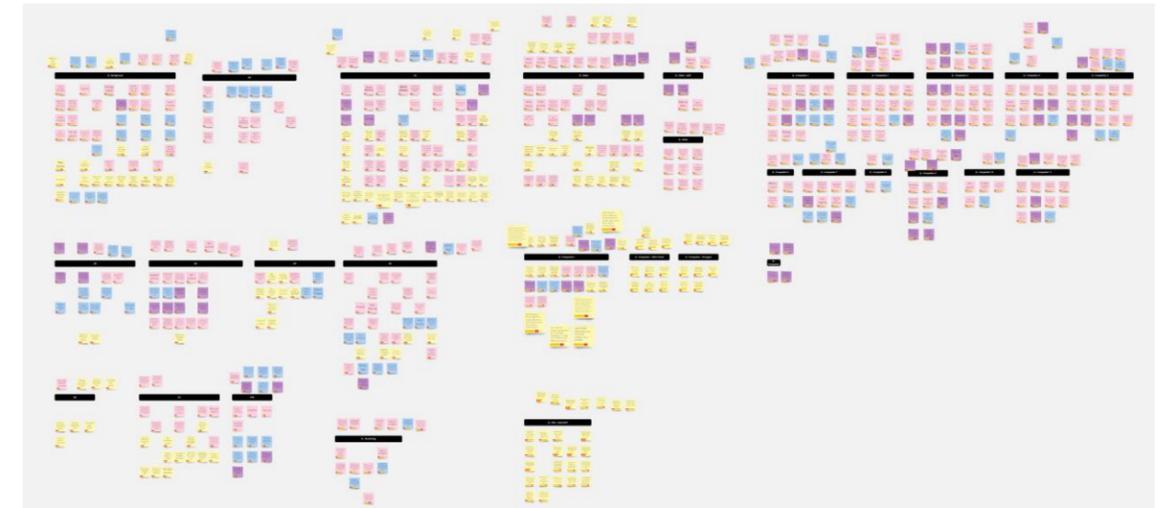
Goals & strategy

Artifacts

Design

Outcomes

- Talked to 9 IPM professionals
- Asked users questions about pain points, what their needs were, and showed competitor screens
- 560 unique data points (Miro sticky notes)
- Tagged all 560 notes by interviewee and question
- Clustered the data notes into study question groupings
- Assembled the notes into conceptual categories
- Created an analysis framework – Persona – Product – Principal Themes – Design – Features
- Summarized Findings
- Articulated major themes



Research

Methodology

● Pain points

Analysis

Goals & strategy

Artifacts

Design

Outcomes

Users get too many alarms, in addition to being overloaded with data

- It's not clear who owns what error source

The big picture is hard to get

- Platforms don't effectively support creating a clear mental model of users' infrastructure
- Users don't want to find problems, they should find users – they want the product to be proactive even before problems arise
- It's hard to pull together log file information into a coherent picture
- Users like to think in terms of 'what's connected to what'

Poor UX design is a reality for users of IPM platforms

- UI's are too complicated, require training, or are hard to share with other teams and personas
- Graphs or visuals often don't add value to operational problem solving, but are more suited for executives
- Most visual or page designs are not clearly solving a problem
- Users want to go to related objects but frequently cannot get there easily

Users don't want to be in reactive mode continuously

Data is generally poorly represented, even in cloud platforms

- Millions of data points are generated a day; there is too much going on and too much to keep track of
- A lot of work goes into filtering down data to an addressable set of problems

Hard to correlate infrastructure changes with performance issues

Research

Methodology

Pain points

● Analysis

Goals & strategy

Artifacts

Design

Outcomes

1. UI for all - **simplicity and learnability**

- Design of IPM tools are a problem
- Complexity / Information Overload
- Customers are drowning in information
- **Heat map visualizations** are noisy and not useful

2. Users want **solutions not data**

- Actionable insights + Manage by exception
- UI must be task-oriented and focused on the problems at hand
- Users think in terms of **applications** not individual pieces of equipment, metrics, or specific problems

3. **Holistic / agnostic platform**

- Show me the connections and the causal chain
- Contextualizing problems with recent changes
- We make it very hard to connect the dots and we don't align with customer's mental model of their environment

In a critical situation - we don't look at this

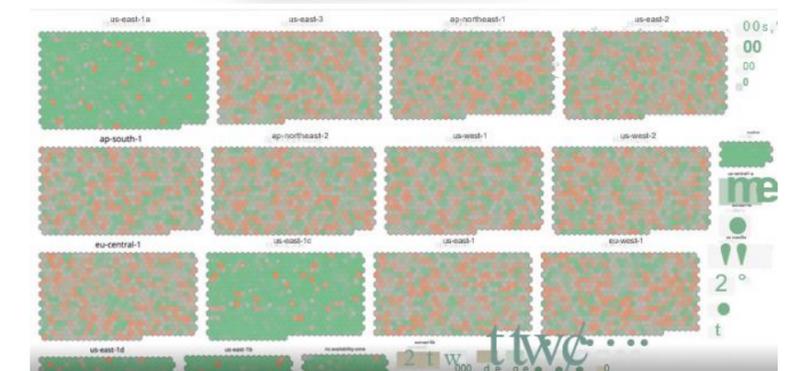
Q - Competitor 2 Vignesh

designers waste too much time on this stuff

Chris Q - Competitor 5

I can't make sense of what this is showing me. I don't know what I should take away from it

Lance Q - Competitor 1



#2: Users want **solutions** **not data**

Research

Methodology

Pain points

● Analysis

Goals & strategy

Artifacts

Design

Outcomes

- Multiple users (the most articulate ones) voiced that they cared about solutions not the data

Solve my problem

How long the duration of impact was for an issue
Have to define the service somewhere
Component of app might work, but what is the period of time
Start/end log

Joshua Q3

Show me the things I care about

- Users care about their services, business processes, applications, or critical endpoints

Offline is irrelevant.
Dashboard whether biz proc are affected like Order Confirmation. Want to know what services are red...what's the biz impact to these red

Q - Competitors Steve

- Users want a product that understands their wants, needs, and problems and helps them solve issues quickly in a focused way.

Get me answers

How to I get to a resolution in less than 3 clicks?

Q - Vidata Vignesh

Research

Goals & strategy

Artifacts

Design

Outcomes

- **Capacity and Performance were silos.** We needed to unite the experience
 - **Application centric:** Infrastructure exists to support applications. Infrastructure issues are most relevant in the context of application performance.
- Surface errors in a '**manage by exception**' paradigm
- Create a simpler, more learnable UI **for less technical personas** and other groups and vendors to drive adoption
 - Make the product more **organizationally aware** of who owns what
- AI-driven: Leverage ChatGPT to provide **natural language** diagnoses, recommendations, and concept explanations

Research

Goals & strategy

Artifacts

Design

Outcomes

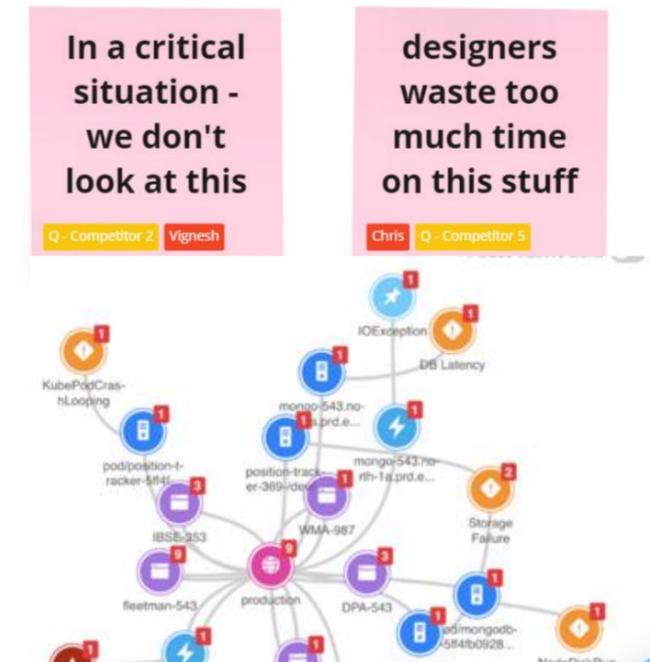
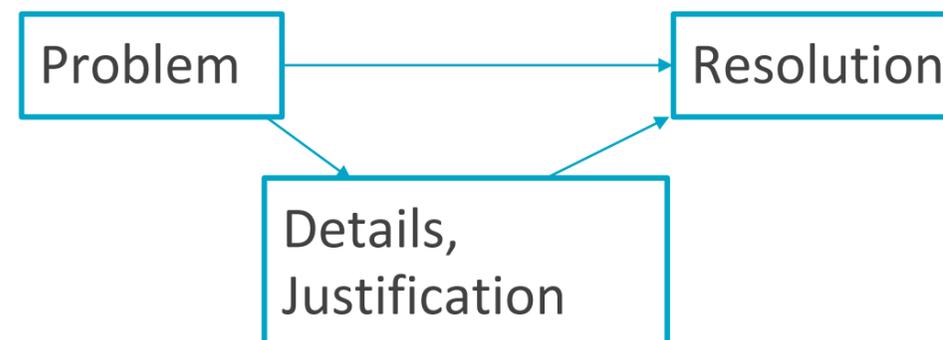
What Users Really Want

“Solve my problem in 2-3 clicks”

“Tell me what the problem is and how to fix it”

Users want solution-oriented experiences

The Model



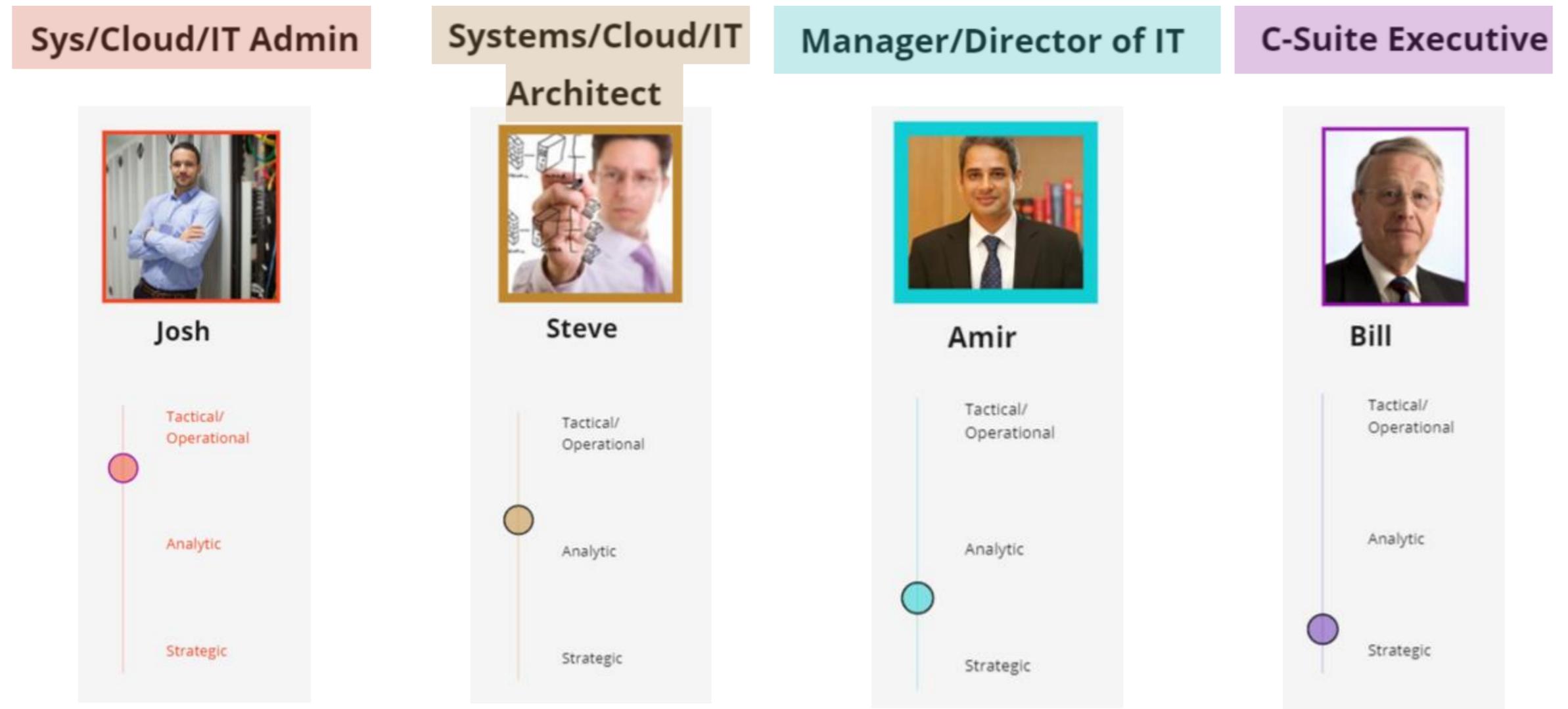
Research
Goals & strategy

Artifacts

- Personas
- Scenarios
- Use cases & Taskflows
- Card Sort
- Storymap
- Architecture

Design
Outcomes

Instead of many personas or many permutations, I simplified the user set down to four canonical positions that would touch the use cases in varying ways



Research

Goals & strategy

Artifacts

Personas

● Scenarios

Use cases & Taskflows

Card Sort

Storymap

Architecture

Design

Outcomes

Deepening the personas with realistic scenarios helps you understand and evaluate the context of usage.



Josh



Scenario: Troubleshooting

- Josh the admin gets a slack message that a particular device is triggering an alarm. He clicks on the link in the message and opens an airy, clean, and simple platform page that details the alarm (the trigger, the conditions that triggered it) and the performance metrics for that device. There's a recommendation that he adjust the configuration of the device to allow more bandwidth. After looking at the visuals, he decides to adjust the device's configuration by clicking on the link to the administration page for that device.

Signature Moment

- Direct access to the detailed alarm and out of band data
- Recommendations on the immediate course of action
- Visuals that support the recommendation



Steve



Scenario: Complex Troubleshooting

- Steve the architect gets a more complex alarm notification. It seems that several devices that are connected to each other are in an alarm state. Steve also goes to a case page that shows all of the affected devices that are related. There isn't a specific fix recommended but he is advised to look upstream. He browses the topology of the connected devices to see the one that is most upstream. He sees that the device's **change history** is highlighted for the most recent changes. Since there was a recent change he drills into the change and realizes that the adjustment wasn't the right thing to do (thanks Josh) so Steve clicks on the access link in Platform to go to the device's configuration page and fix things.

Signature Moment

- Multiple-entity alarm notifications
- Change history shows why the performance problem happened
- In-line access to device configuration pages

Support reverting the change

Research

Goals & strategy

Artifacts

Personas

Scenarios

● Use cases & Taskflows

Card Sort

Storymap

Architecture

Design

Outcomes

I also deepened the use cases with taskflows that we planned to support in the design.

Troubleshoot



Plan for capacity growth



Research

Goals & strategy

Artifacts

Personas

Scenarios

Use cases &
Taskflows

● Card Sort

Storymap

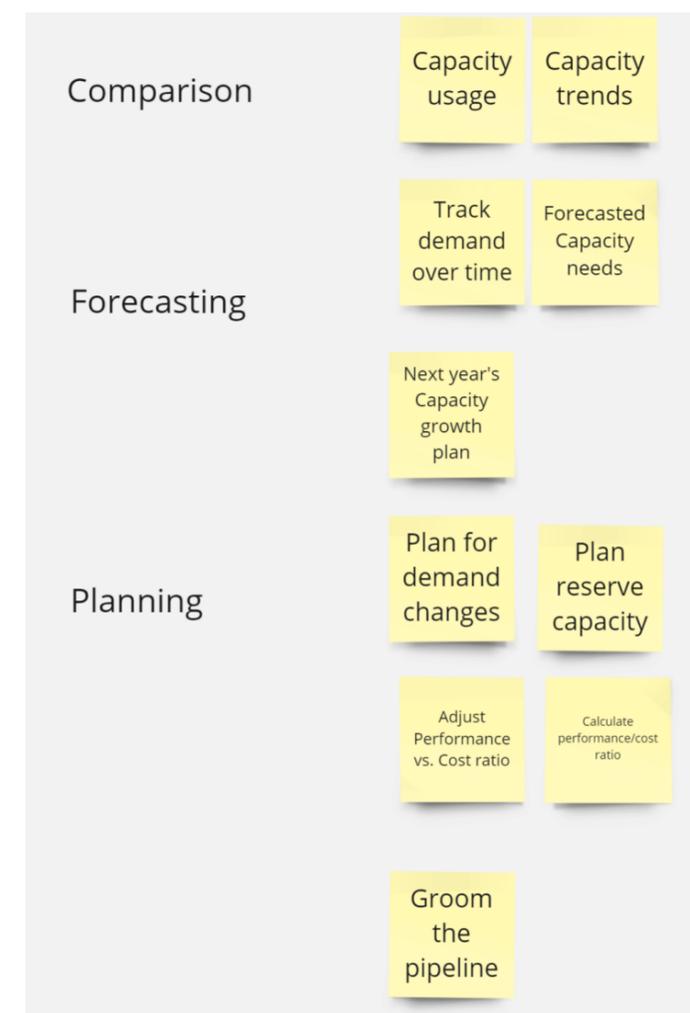
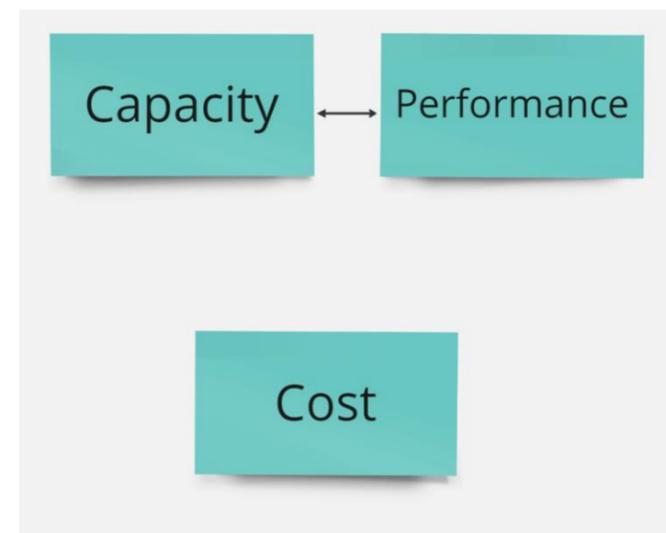
Architecture

Design

Outcomes

I asked users to arrange cards detailing capacity concepts and cost into a flow. An interesting outcome was that users showed consistent agreement on clusters that the cards fell into.

Users also indicated that capacity was more related to performance.



Story maps show how the entire user model fit together.

Research

Goals & strategy

Artifacts

Personas

Scenarios

Use cases &
Taskflows

Card Sort

● Storymap

Architecture

Design

Outcomes

Goals

Comparison

Forecasting

Planning

Tasks

Understand Current Cap Usage

View this year's cap growth plan

Understand trends

Model Capacity Requirements

Plan reserve capacity

Data Model

Data Needed | 21

Usage data
Operational view: by SAN, data center, etc.
Total storage consumption (aggregate view)
Tiers using tagging

Current year's budget plan

Trend data

Latency
Budget numbers
App priorities > dependencies

Capacity plan
Impact of new application or anticipated growth

Things running in the red

Recommendation n amount of space..

(timeframe)

+

Typical overages, usage of spare capacity
Capacity growth trends

Typical overages, usage of spare capacity
Capacity growth trends

AI Recommendations

Data center

Recommendations for n amount of space (based on trend projections)

\$ needed | \$ tracking to budget | \$ based on new additions

Problems

Problems to solve | 1

Monthly Capacity Planning Reports (historical) are Too Time-Consuming

Subtasks

Tasks | 20

See chargebacks?

Open current capacity growth plan

View forecasted capacity needs

Show impacts of adding new applications

Show impacts of adding new applications

See current usage

View the YTD information

Track demand over time

Chart out the need and the rest is done automatically

Actions

Research

Goals & strategy

Artifacts

Personas

Scenarios

Use cases &
Taskflows

Card Sort

Storymap

● Architecture

Design

Outcomes

Goal 1

Surface performance errors to the top of the interface

Goal 2

Make the UX application-centric

Goal 3

Incorporate ChatGPT to serve up natural language diagnoses and solution recommendations

Goal 4

Bring together Capacity (storage) management into the Performance area

Research

Goals & strategy

Artifacts

Personas

Scenarios

Use cases & Taskflows

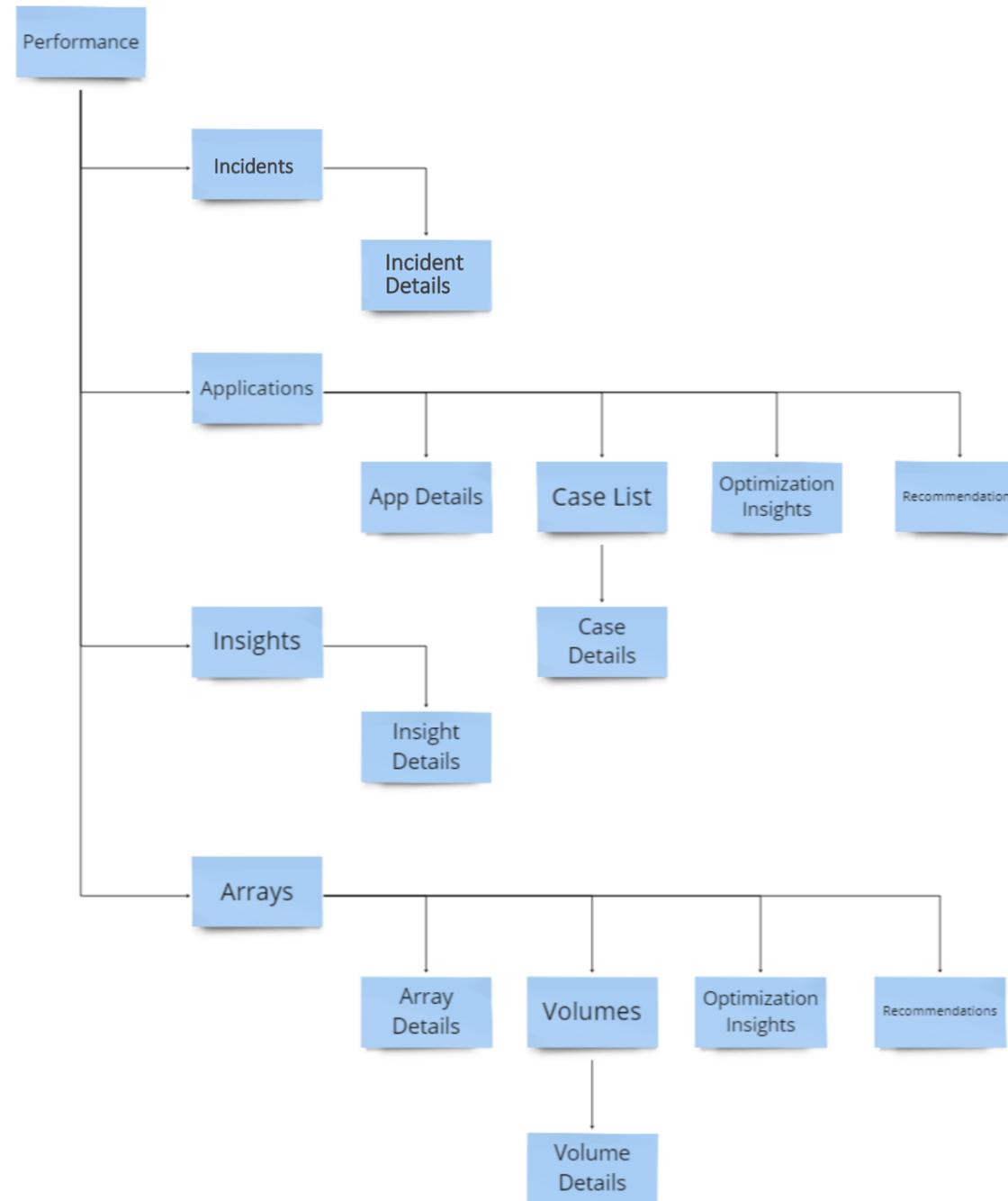
Card Sort

Storymap

● Architecture

Design

Outcomes



Research

Goals & strategy

Artifacts

Personas

Scenarios

Use cases & Taskflows

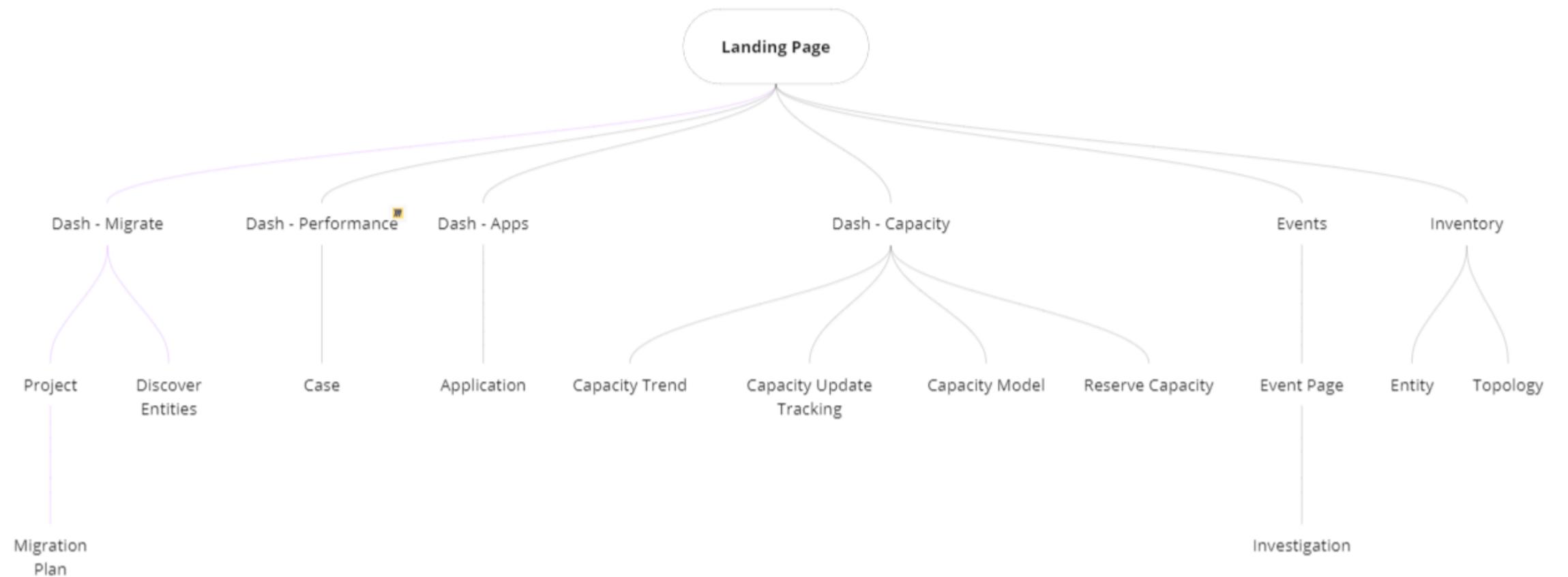
Card Sort

Storymap

● Architecture

Design

Outcomes





Old On-Premise Page Style

Research

Goals & strategy

Artifacts

Design

Wireframe Concepts

Figma Prototypes

User Feedback

Outcomes

The screenshot shows the Virtana IPM interface. The top navigation bar includes the Virtana logo, 'Inventory > Compute', a search bar, and a user profile 'Administrator'. The main content area is titled 'Compute: Clusters, Hosts and VMs' and features a date range filter 'from Feb 20, 12:00 PM to Feb 20, 01:30 PM' and buttons for 'New' and 'Help'. A table with 47 items is displayed, with columns for Entity Name, Entity Type, Latency, IOPS, Total Errors, and Open Cases. The first row is highlighted in red, indicating an error.

Entity Name	Entity Type	Latency	IOPS	Total Errors	Open Cases
Entity	Cluster	41.543 ms	27.561 IOPS	429	1
Entity	Cluster	22.431 ms	21.540 IOPS	0	0
Entity	Cluster	16.373 ms	16.373 IOPS	0	0
Entity	Cluster	19.135 ms	11.583 IOPS	0	0
Entity	ESX Host	12.213 ms	19.135 IOPS	0	0
Entity	ESX Host	22.431 ms	21.540 IOPS	0	0
Entity	ESX Host	16.373 ms	16.373 IOPS	0	0
Entity	FC Host	19.135 ms	11.583 IOPS	0	0
Entity	FC Host	12.213 ms	19.135 IOPS	0	0
Entity	FC Host	19.135 ms	11.583 IOPS	0	0
Entity	HyperV	16.373 ms	16.373 IOPS	0	0
Entity	HyperV	19.135 ms	11.583 IOPS	0	0
Entity	HyperV	12.213 ms	19.135 IOPS	0	0
Entity	HyperV	22.431 ms	21.540 IOPS	0	0
Entity	ESX VM	16.373 ms	16.373 IOPS	0	0
Entity	ESX VM	19.135 ms	11.583 IOPS	0	0
Entity	ESX VM	12.213 ms	19.135 IOPS	0	0
Entity	ESX VM	19.135 ms	11.583 IOPS	0	0
Entity	ESX VM	12.213 ms	19.135 IOPS	0	0

Research

Goals & strategy

Artifacts

Design

- Wireframe Concepts
- Figma Prototypes
- User Feedback

Outcomes

View partition



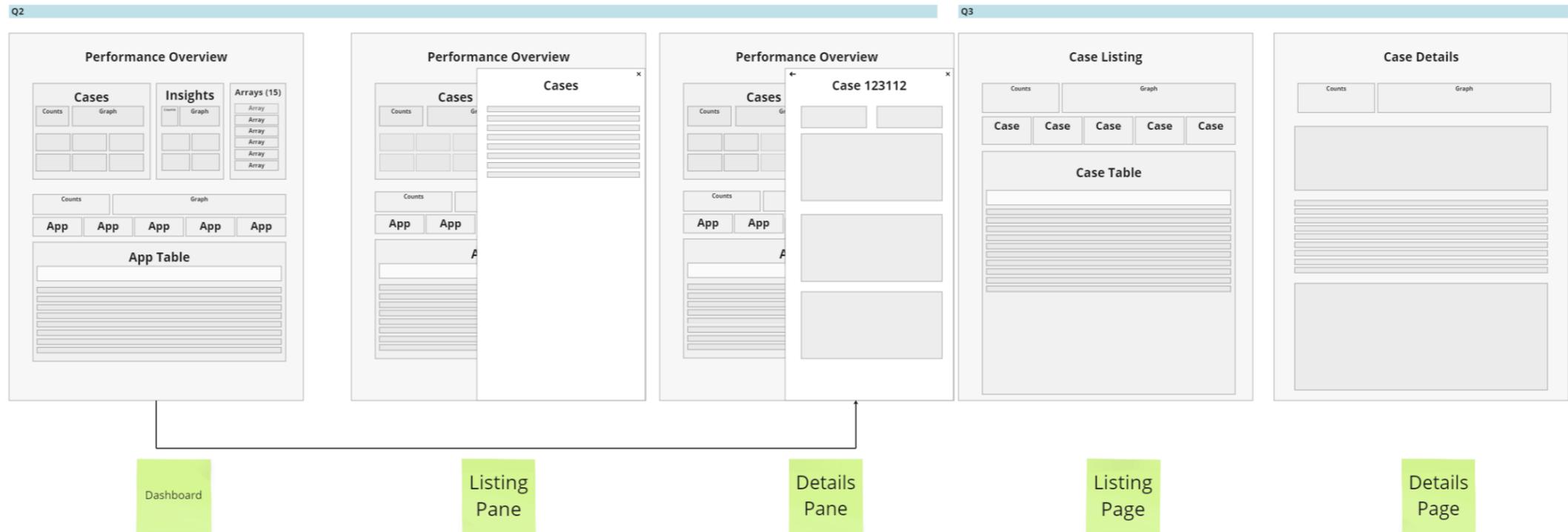
Global single pane of glass



Card-driven single pane of glass



Some of the layout possibilities were whether to be card driven or to use a hybrid card + table layout to drawers



Performance Overview

Research

Goals & strategy

Artifacts

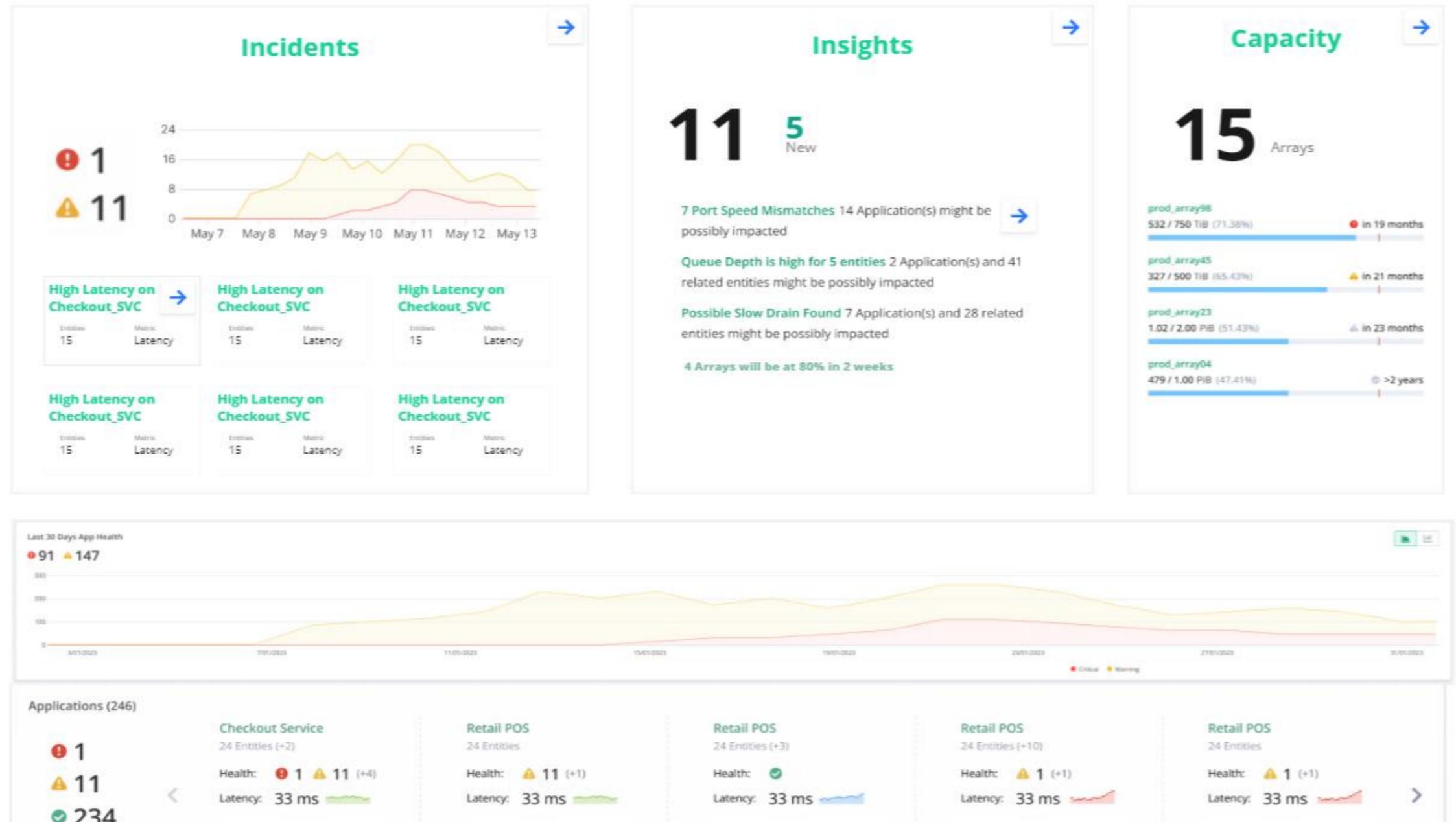
Design

- Wireframe Concepts

- Figma Prototypes

- User Feedback

Outcomes



Research

Goals & strategy

Artifacts

Design

● Wireframe Concepts

Figma Prototypes

User Feedback

Outcomes

Performance Overview

Incidents

Event Name	Severity	Entity	Alarms	Age	Started	Last
Link Buffer-to-buffer Credits →	Critical	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today
Port Utilization	Critical	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today
Chatbot App	Critical	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today
HPE Volume High IOPS crossed the threshold	Warning	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today
Customer Support Bot	Warning	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today
Network Monitor	Warning	Host SVC_Server_!	15	2 hrs.	2:22 PM Today	4:34 PM Today

Research

Goals & strategy

Artifacts

Design

- Wireframe Concepts

- Figma Prototypes

- User Feedback

Outcomes

Performance Overview

←

High Latency on Check_SVC

×

Applications
Array
Port Entities
Storage Ports

Checkout_SVC

Array_C

Server A, A1

Server A, B1

PMAX_0123: FA-1D:5

PMAX_0123: FA-2D:5

Counts

Observation

An anomaly was observed on 4/12/23 at 2:00pm. Latency for Checkout_SVC has risen above the 4ms desired response time for read operations. This appears to be caused by a workload that has driven the port of the HBA to exhaustion at 100% utilization. The vSphere VM Guests Guest12 had a workload from 12:30pm to 1:00pm that was 1600MB/s during that time frame and subsequently dropped to 100MB/s afterwards while on ServerA.

[+ Why is latency important? \(expand\)](#)

Possible Causes

Checkout_SVC went above threshold of 4ms from 12:30pm to 1:00pm to peaks of 45ms. This could have been caused by:

- Hosts with a high workload
- HBA Ports with a high workload
- HBA Port Flow Control rising too high
- Storage Ports capacity mismatch

Recommendation

- Increase the CPU resources allocated to the virtual machines.
- Increase the memory resources allocated to the virtual machines.
- Increase the storage resources allocated to the virtual machines.
- Increase the network resources allocated to the virtual machines.

Troubleshooting Guide

1 Check the 'Read Utilization' metric to understand if the Host Port is overutilized

Not Checked

2 Check the 'Virtual Disk Read Rate' metric to understand if any workload was added

Not Checked

3 Check if the 'Port Speed' is matching ...

Read Utilization

on Host Port: **PROD_UCS12_A**

If this metric is consistently high, it may indicate that the port is overutilized and unable to handle the workload. If you determine that your host ports are overutilized, you may need to adjust... [Show more](#)

Research

Goals & strategy

Artifacts

Design

- Wireframe Concepts

Figma Prototypes

User Feedback

Outcomes

Remember this model?

Performance Overview

High Latency on Check_SVC

← ×

Applications: Checkout_SVC
 Array: Array_C
 Port Entities: Server A, A1, Server A, B1
 Storage Ports: PMAX_0123: FA-1D:5, PMAX_0123: FA-2D:5

Observation	Possible Causes	Recommendation
An anomaly was observed on 4/12/23 at 2:00pm. Latency for Checkout_SVC has risen above the 4ms desired response time for read operations. This appears to be caused by a workload that has driven the port of the HBA to exhaustion at 100% utilization. The vSphere VM Guest workload from 12:30pm to 1:00pm was 1600MB/s during that time frame and dropped to 100MB/s afterward.	Checkout_SVC went above threshold of 4ms from 12:30pm to 1:00pm to peaks of 45ms. This could have been caused by: • Hosts with a high workload • HBA Ports with a high workload • HBA Port Flow Control rising too high • Storage Ports capacity mismatch	<ul style="list-style-type: none"> • Increase the CPU resources allocated to the virtual machines. • Increase the memory resources allocated to the virtual machines.

Problem → **Resolution**

Details, Justification

Troubleshooting Guide

- 1 Check the 'Read Utilization' metric to understand if the Host Port is overutilized
Not Checked
- 2 Check the 'Virtual Disk Read Rate' metric to understand if any workload was added
Not Checked
- 3 Check if the 'Port Speed' is matching ...

Graph: % Time at Zero vs. % Time at Zero

Research

Goals & strategy

Artifacts

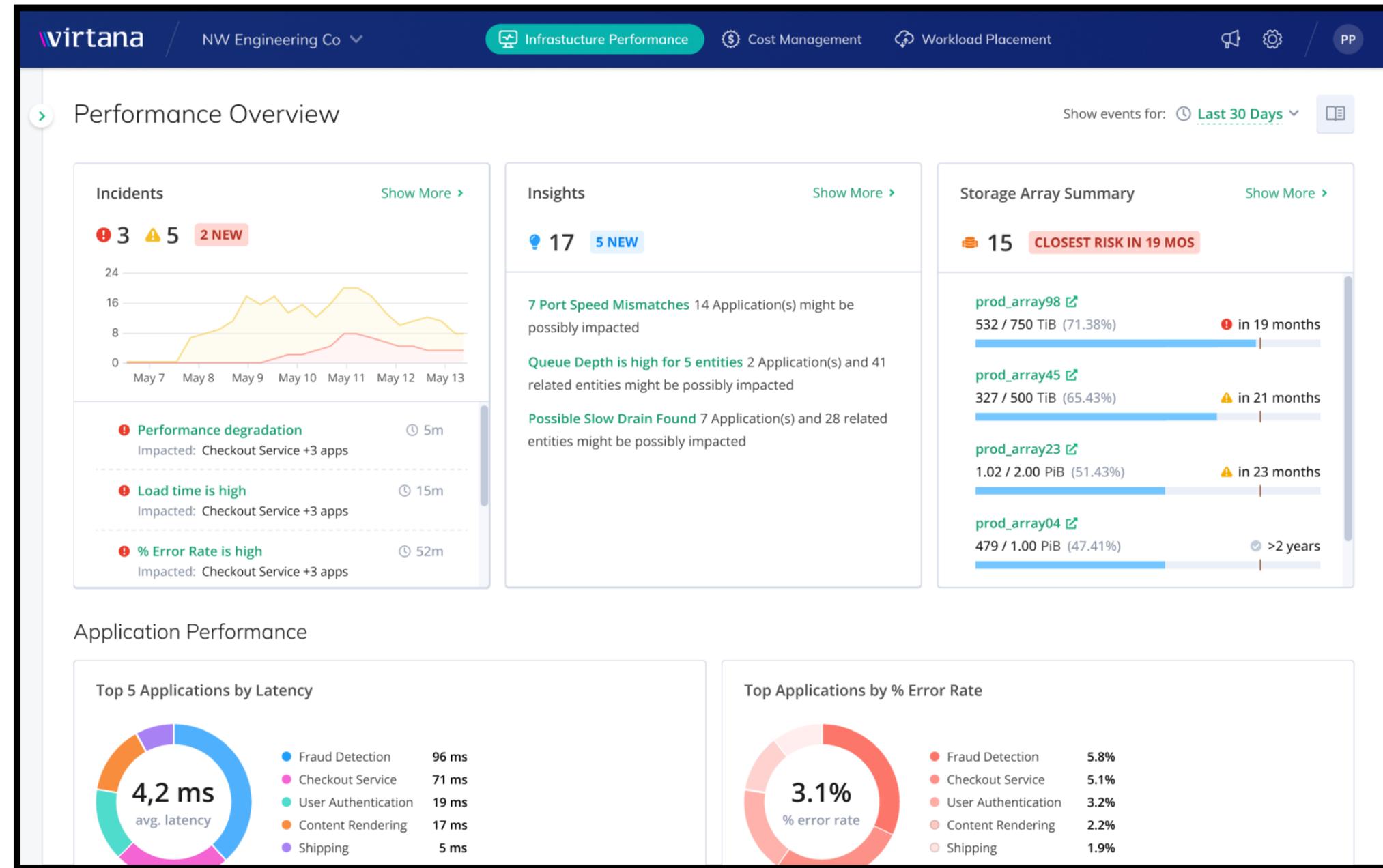
Design

Wireframe Concepts

● **Figma Prototypes**

User Feedback

Outcomes



Research

Goals & strategy

Artifacts

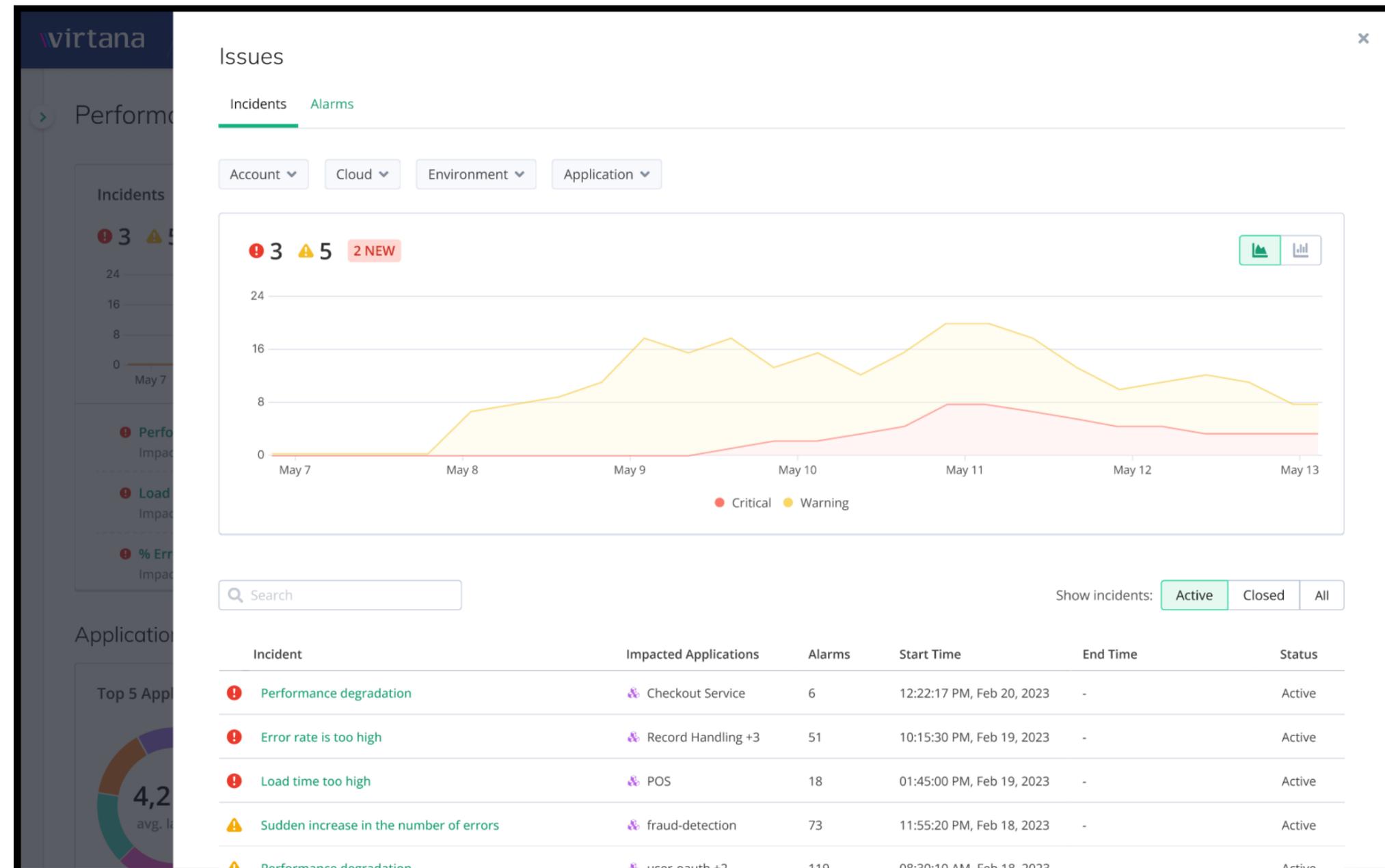
Design

Wireframe Concepts

● Figma Prototypes

User Feedback

Outcomes



Research

Goals & strategy

Artifacts

Design

Wireframe Concepts

● **Figma Prototypes**

User Feedback

Outcomes

virtana
1 out of 102
✕

🚨 Checkout Service performance degradation

Status: Open Started: 12:22:17 PM, Feb 20, 2023

Problem Description

Checkout Service application latency was > 5ms (avg 41 ms) for 4 min starting from 12:22 PM

Suggested Root Cause

High workload on VM PROD002 caused the **B2B Credits** exhaustion on Host Port PROD_UCS12_A, this led to **Slow Drain** issue in the application infrastructure.

Resolution Recommendations

- Reduce the application workload on server;
- Upgrade or reconfigure infrastructure to accommodate increased workload;
- Use infrastructure methods to restrict workloads (QOS settings on storage, reduce queue depth on operating system, etc.);

Involved Infrastructure

- 🔗 Impacted Applications
Checkout Service
- 🖥️ Virtual Machines
PROD002
- 🏠 Hosts
PROD_UCS12
- 🔌 Host Port
PROD_UCS12_A
- 📦 Storage Ports
500507680c22151b, 500507680c22151a,

Timeline

Alarms Details

🚨 Virtual Disk Read Rate increased to 1,193 MB/s (192% higher) on VM PROD002
Started: 12:21:27 PM

🚨 Avg. Read Utilization increased to 100% (avg. value 35%) on Host Port PROD_UCS12_A
Started: 12:21:44 PM

⚠️ Avg. Read Utilization increased to 54% (avg. value 35%) on Host Port PROD_UCS12_A
Started: 12:21:44 PM

Virtual Disk Read Rate
on VM: PROD002

Started: 12:22:17 PM, Feb 20, 2023 Duration: 4 min 9 sec

If this metric is consistently high, it may indicate that the port is overutilized and unable to handle the workload. If you determine that your host ports are overutilized, you may need to adjust... [Show more](#)

Research

Goals & strategy

Artifacts

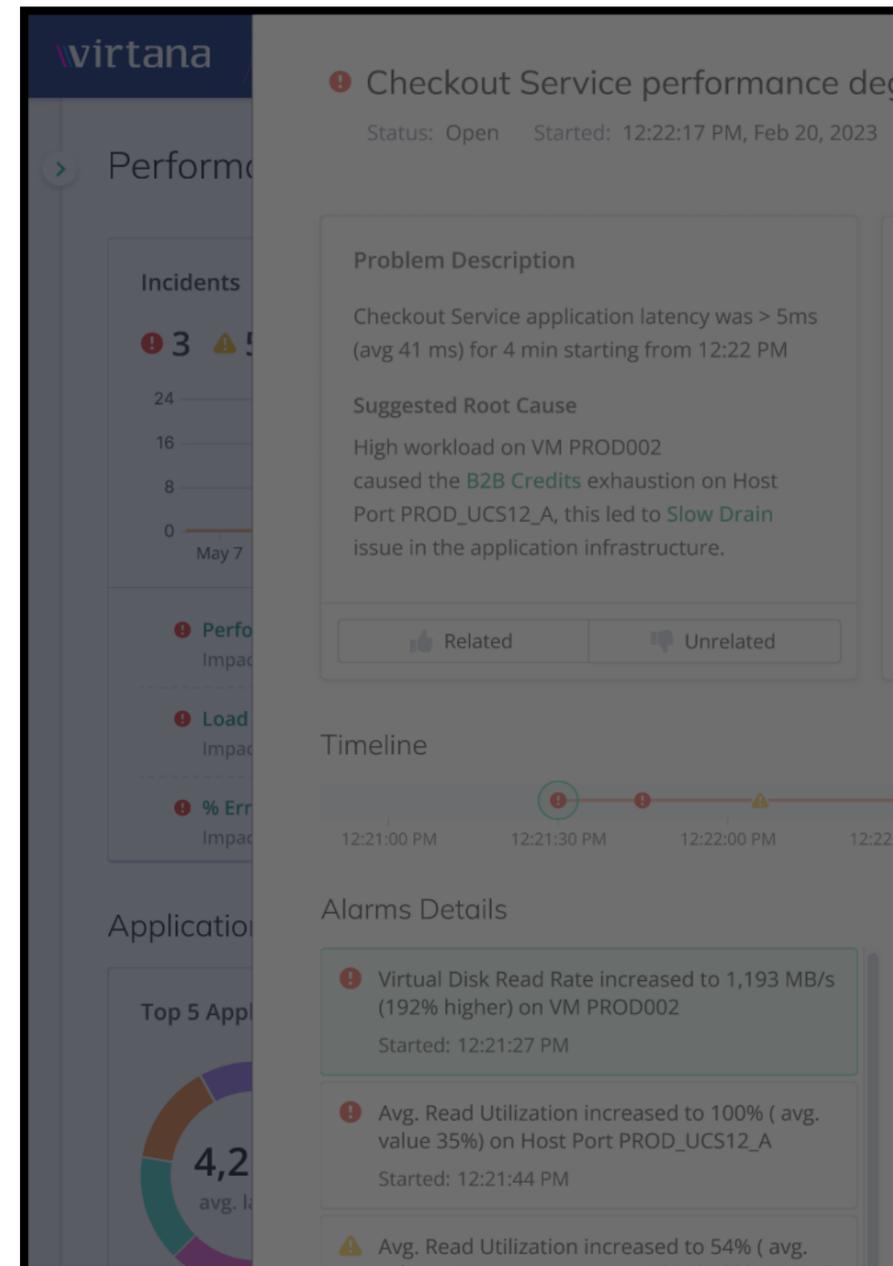
Design

Wireframe Concepts

● **Figma Prototypes**

User Feedback

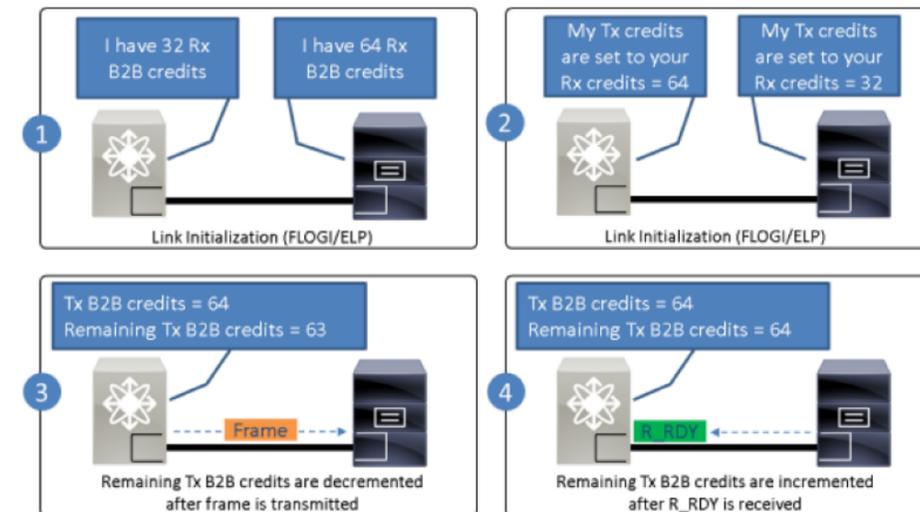
Outcomes



Buffer-to-Buffer Credits

What are Buffer-to-Buffer Credits?

A Buffer-to-Buffer Credit is part of the default link-based flow control mechanism for Class 3 service. These "credits" are used to start and stop a transmitting device in order to keep the receiving device from overflowing its buffer, while still maintaining maximum throughput. The number of credits available at any time is the number of receive buffer "slots" available (initially set during FC Login). As each frame is transmitted, the transmitting node decrements the number of credits remaining. When the transmitting node receives an R_RDY character from the receiver, indicating that a frame has been processed, the transmitting node increments the number of credits remaining. If the remaining credits count reaches zero, the transmitting node stops sending and waits for an R_RDY character.



Why is a Lack of Buffer-to-Buffer Credits a Problem?

If a port's credit counter (the number of Buffer-to-Buffer Credits it has) becomes zero, it cannot transmit data until it receives an R_RDY character. If it remains in this state for long, it will impact throughput and performance.

Research

Goals & strategy

Artifacts

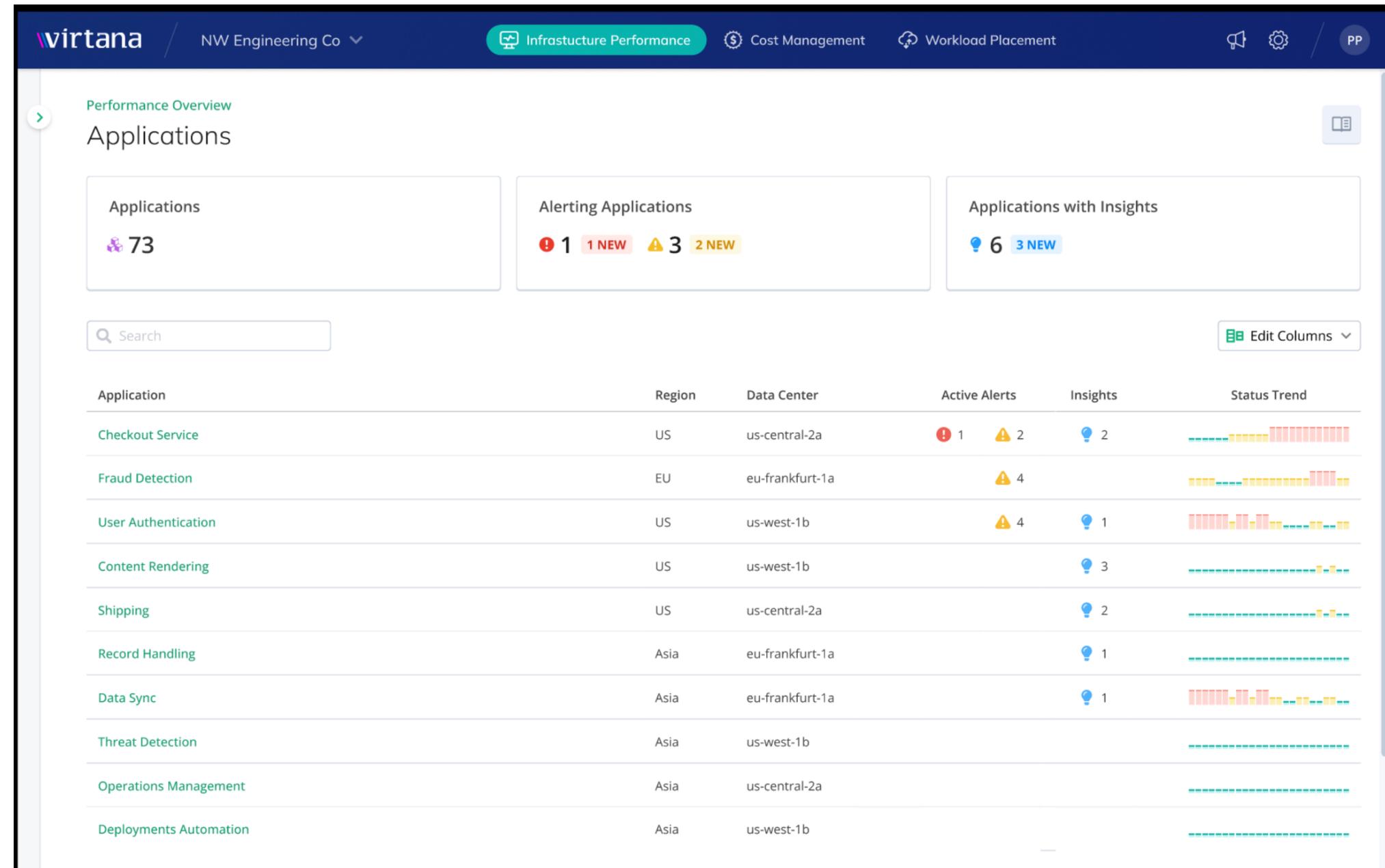
Design

Wireframe Concepts

● Figma Prototypes

User Feedback

Outcomes





FIGMA HIGH FIDELITY: Expandable Left Nav

Research

Goals & strategy

Artifacts

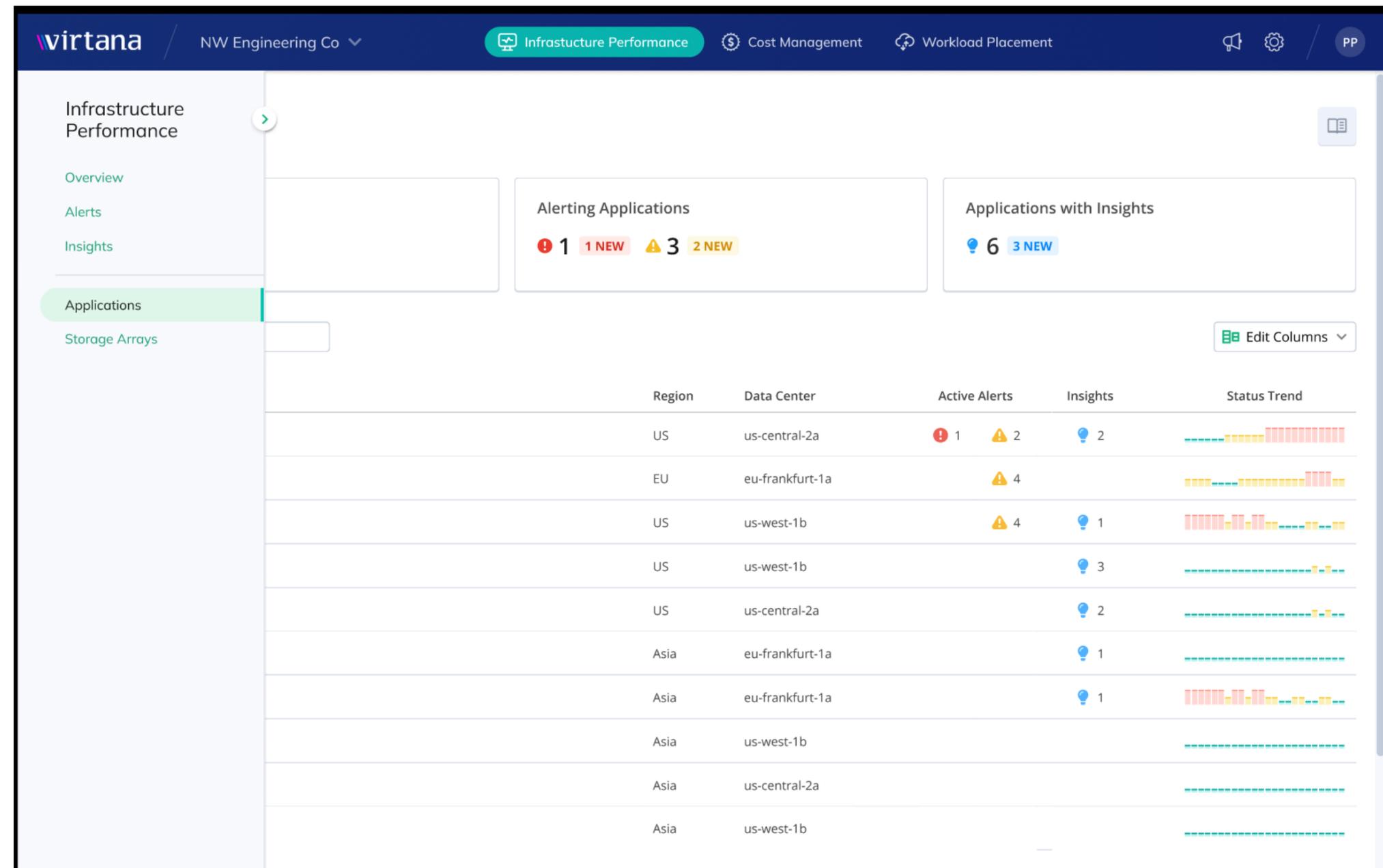
Design

Wireframe Concepts

● Figma Prototypes

User Feedback

Outcomes



Research

Goals & strategy

Artifacts

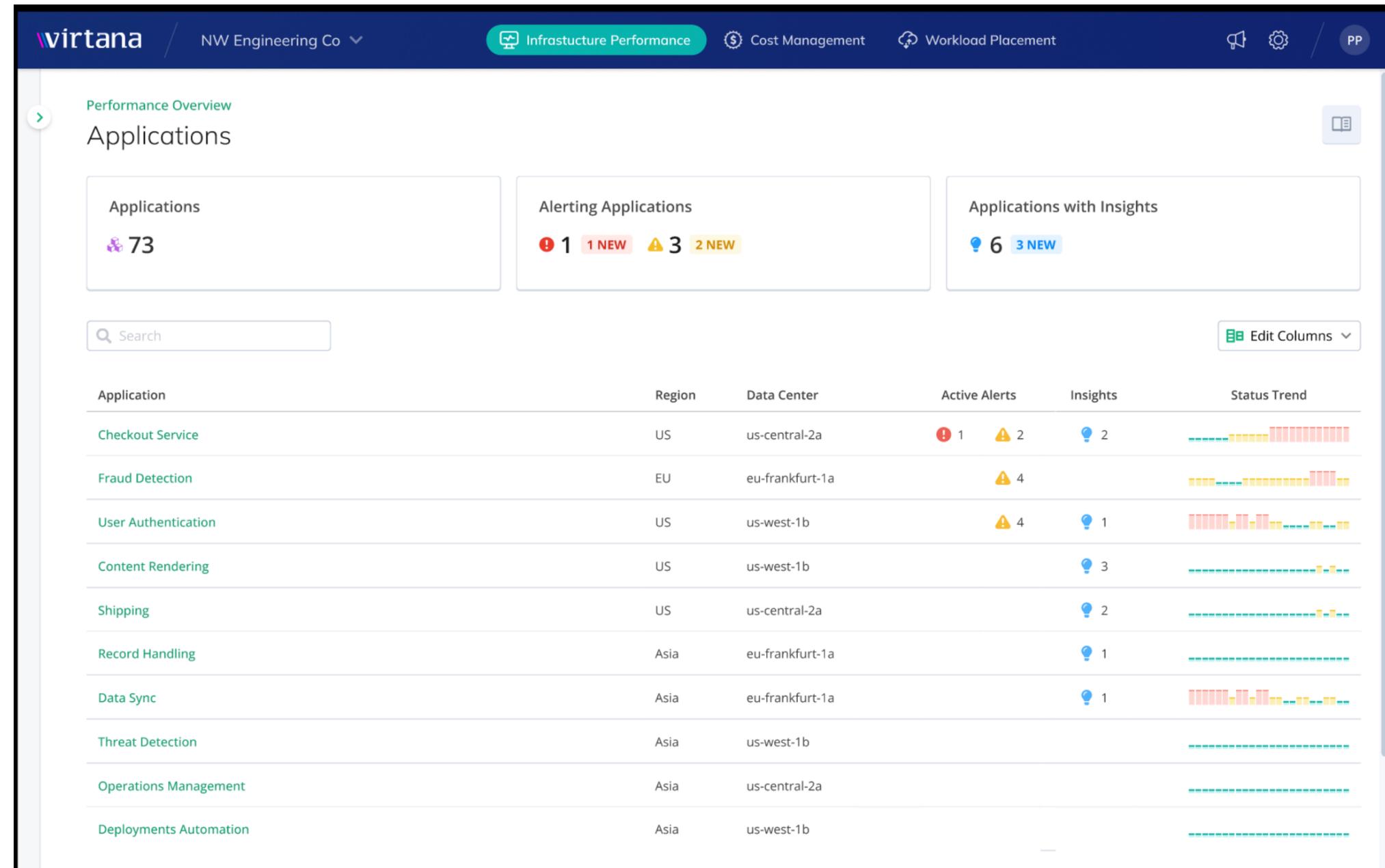
Design

Wireframe Concepts

● Figma Prototypes

User Feedback

Outcomes



Research

Goals & strategy

Artifacts

Design

Wireframe Concepts

● **Figma Prototypes**

User Feedback

Outcomes

The screenshot displays the 'Application' details for 'Checkout Service' in the Virtana IPM. The interface includes a search bar, a 'Show alerts' filter set to 'Active', and a table of alerts. The table columns are Alert, Impacted Entity, Entity Type, Impacted Applications, Duration, Events, and Status.

Alert	Impacted Entity	Entity Type	Impacted Applications	Duration	Events	Status
! % Time at Zero Receive B2B Credits > 0%	DEV-VM011	VM	🔗 Checkout Service	1 min	44	Active
! Virtual Disk Read Rate > 800 Mb/s	PROD-VM002	VM	🔗 Threat Detection +2	3 min	193	Active
! % Time at Zero Receive B2B Credits > 0%	PROD_UCS12_B	HBA Port	🔗 Shipping +21	2 days	56	Active

Research

Goals & strategy

Artifacts

Design

Wireframe Concepts

● **Figma Prototypes**

User Feedback

Outcomes

The screenshot displays the 'Checkout Service' application page in the Virtana IPM. It features a table of storage arrays with the following data:

Storage Array	Model	Usable Us...	Usable Capacity	Dedupl icati...	Effective Us...	Effective Capacity	% Capacity Used	30 Days Trend	At Capacity
prod_array98	FAX90-R3	532.50 TiB	750.00 TiB	1.9	1.01 PiB	1.42 PiB	71%	0.99% ▲	IN 19 MOS
prod_array17	FAX90-R3	1.25 PiB	612.5 TiB	2.1	1.25 PiB	612.5 TiB	36%	1.09% ▲	>6 years

Research

Goals & strategy

Artifacts

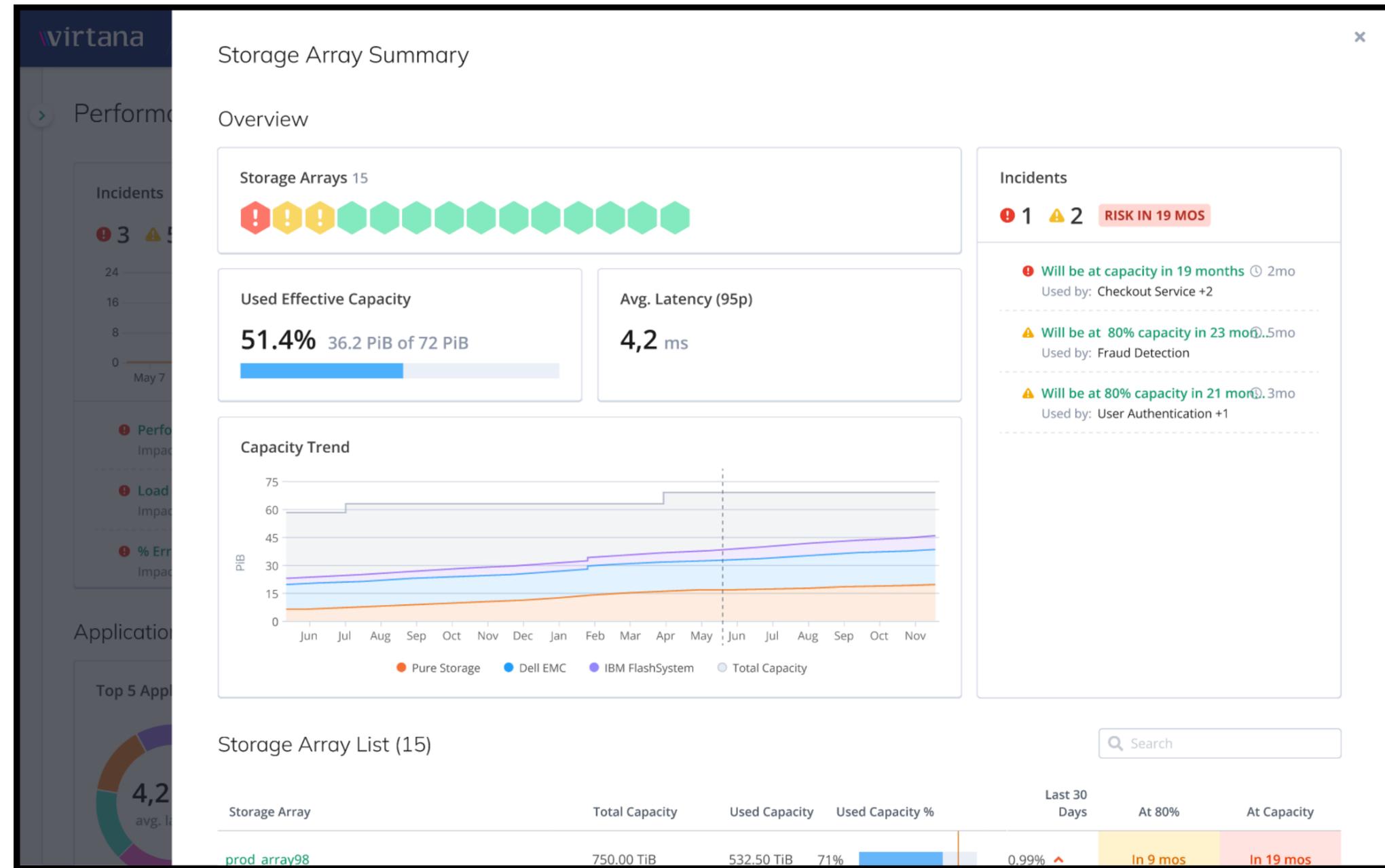
Design

Wireframe Concepts

● Figma Prototypes

User Feedback

Outcomes



Research

Goals & strategy

Artifacts

Design

Wireframe Concepts

Figma Prototypes

● User Feedback

Outcomes

Edwin Jean-Gilles - Network Architect



"What I like is that I'm not bombarded with information, but I can drill down to the metrics and the graphs to get a detailed look!"

IHG
HOTELS & RESORTS

Ron Neroes - Storage Engineer



"Nice to spell out the problem, causes and recommendations could help junior team members out."

DIRECTV

Jeremy Huddle - Security Engineer



"I love the recommendations ... that would be a differentiator"


Palo Alto Networks

Research

Goals & strategy

Artifacts

Design

Outcomes

- Based on my analysis of the initial user research, I was able to make specific recommendations of use cases to pursue and features to build as a UX vision

Simplified interaction models, reduced navigation/complexity/data density

AI & Insights into: What to do, what's next, being proactive

Higher value / order experiences to enhance productivity

- Imagine a slider that lets a user mediate between performance and cost

Re-envisioning the platform as a knowledge / collaboration environment particularly around wisdom and expertise capture

- Multiple teams interacting to drill into a problem
- Complex problem solving in a team-centric

- The product manager was immediately wrote up the full list of recommendations as an epic
- Virtana's executives agreed with my conclusions and the proposed direction. They also recognized that the prototypes tested well.
- Engineering produced the first version of AI-driven Troubleshooting by creating working POC's within 2 months incorporating ChatGPT functionality



Component Testing Console

Project and Goal

ServiceNow needed a solution for an internal tool experience to monitor the outcomes of component performance testing

Activities

- Worked with PM, users, engineers, and visual designers
- User research, concepting, wireframing
- Conducted research with PM, designed the initial concepts, and collaborated with visual designers on the final look and feel.

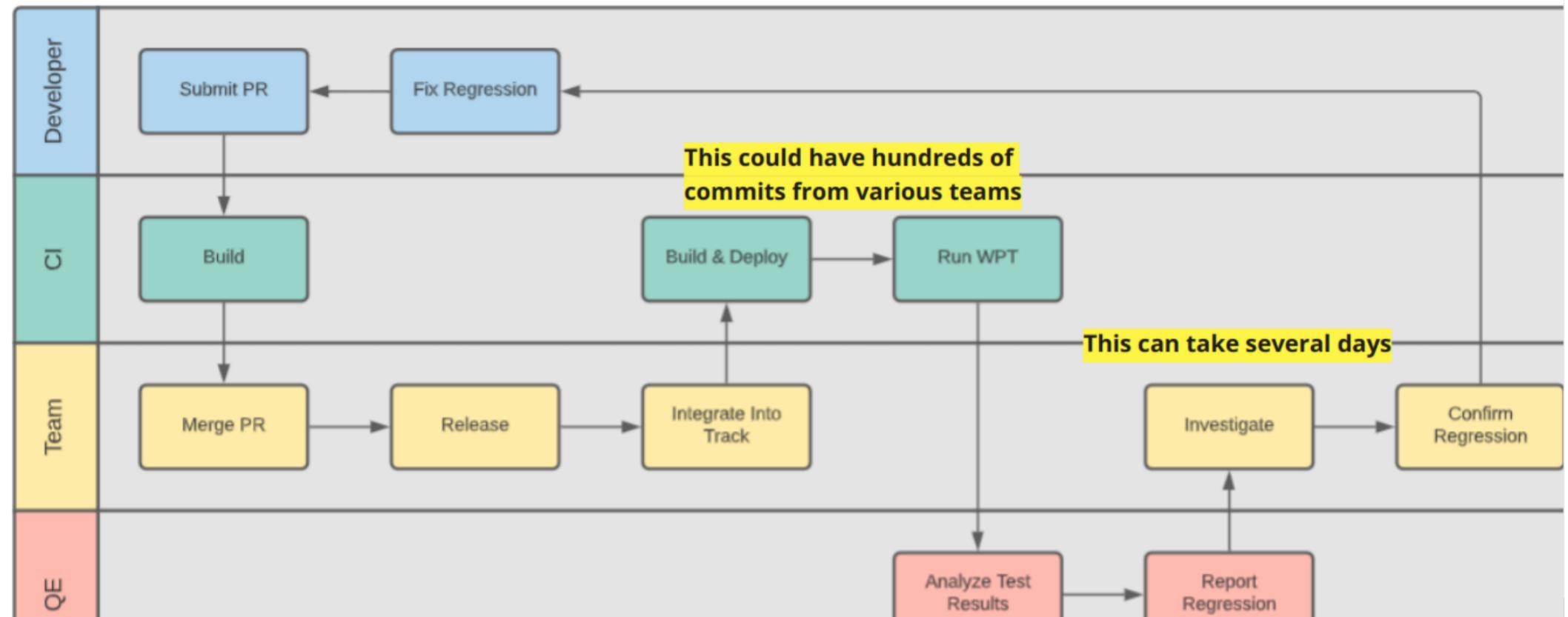
Outcomes

- By innovating on the interaction model, I was able to create a product that developers were far more productive with.

- 1. Goals & Analysis
 - 2. User Research
 - 3. Design Goals
 - 4. Tasks
 - 5. Objects & Interactions
 - 6. IA & Architecture
 - 7. Wireframes
 - 8. High-Fidelity Prototypes
- Utility - Help engineers identify performance regressions and improvements early in dev cycle
 - Quick feedback about performance results
 - Provide UI to help understand results
 - Generate data, make it actionable

- 1. Goals & Analysis
- 2. User Research
- 3. Design Goals
- 4. Tasks
- 5. Objects & Interaction
- 6. IA & Architecture
- 7. Wireframes
- 8. High-Fidelity Prototyping

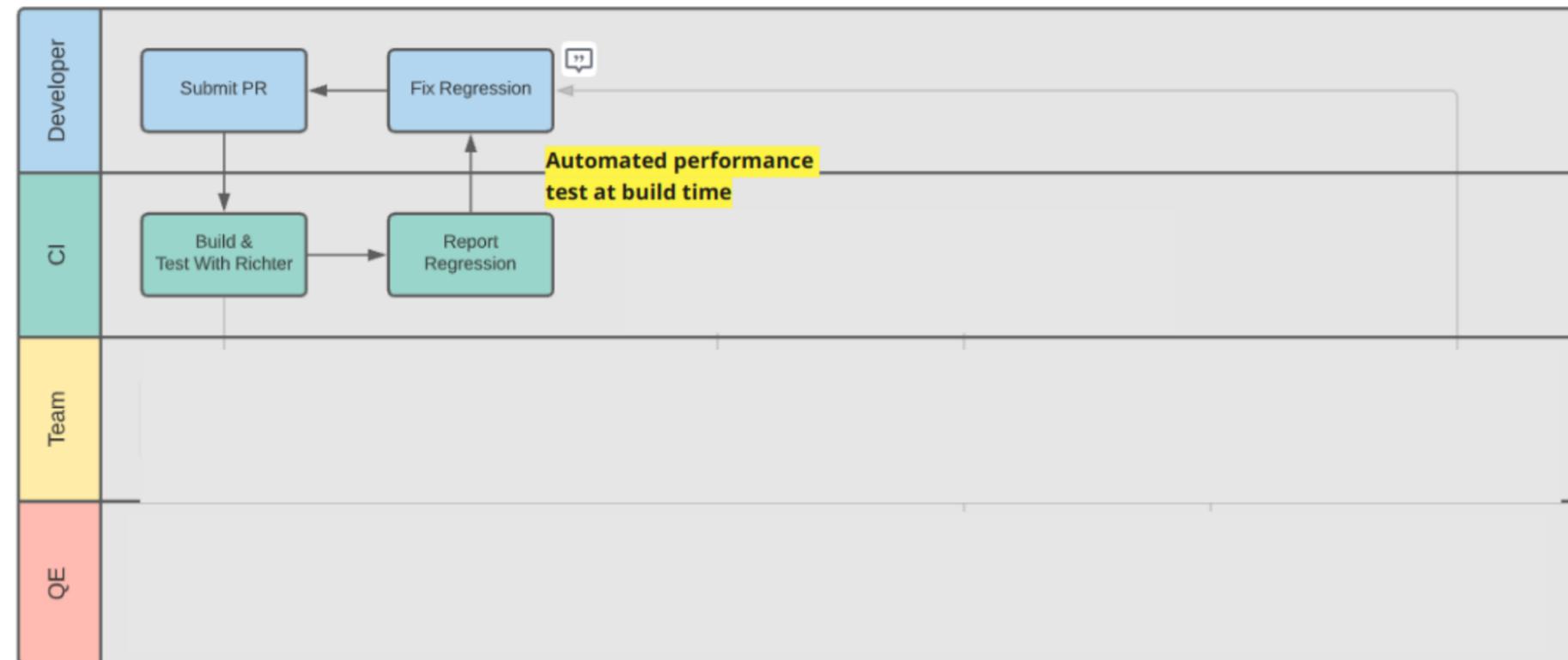
1. **Hard to identify root cause of performance regressions at the application/page level when there are multiple changes from different components. Long investigation cycles and churn.**
2. **Current component performance testing leverages current WPT infrastructure and has a high overhead and maintenance cost.**



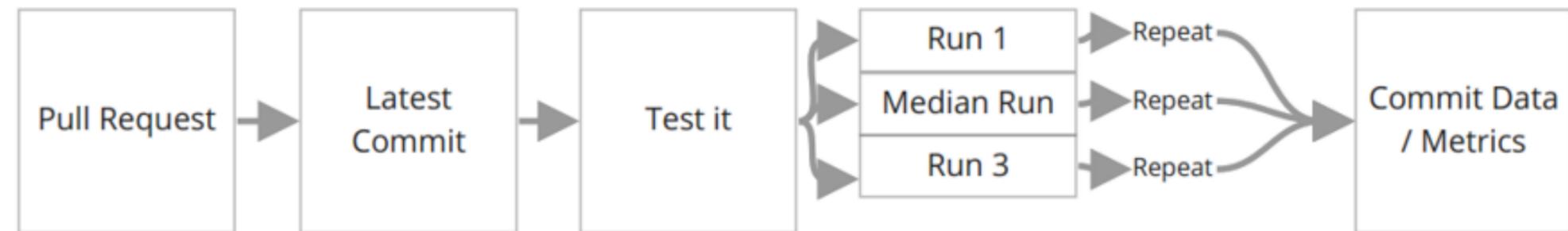
Revised Model

- 1. Goals & Analysis
- 2. User Research
- 3. Design Goals
- 4. Tasks
- 5. Objects & Interactions
- 6. IA & Architecture
- 7. Wireframes
- 8. High-Fidelity Prototypes

1. Shorten feedback cycle on performance impact for component authors from days to minutes via build automation
2. Controlled environment test component performance in isolation first
3. Provide a summary view if there is a performance impact
4. Provide test results details that shorten investigation



- 1. Goals & Analysis
- 2. User Research
- 3. Design Goals
- 4. Tasks
- 5. Objects & Interactions
- 6. IA & Architecture
- 7. Wireframes
- 8. High-Fidelity Prototypes



Data Shape

- One component
 - Commit (3-8 per day)
 - Median Run data
 - Multiple Metrics
 - API List

- 1. Goals & Analysis
- 2. User Research
- 3. Design Goals
- 4. Tasks
- 5. Objects & Interactions
- 6. IA & Architecture
- 7. Wireframes
- 8. High-Fidelity Prototypes

Richter

Identify component



Find metric out of bounds (red) / trend that's up



Investigate data; focus on individual metric



Identify and trace source



Examine source



Fix source

Need to move this boundary downwards

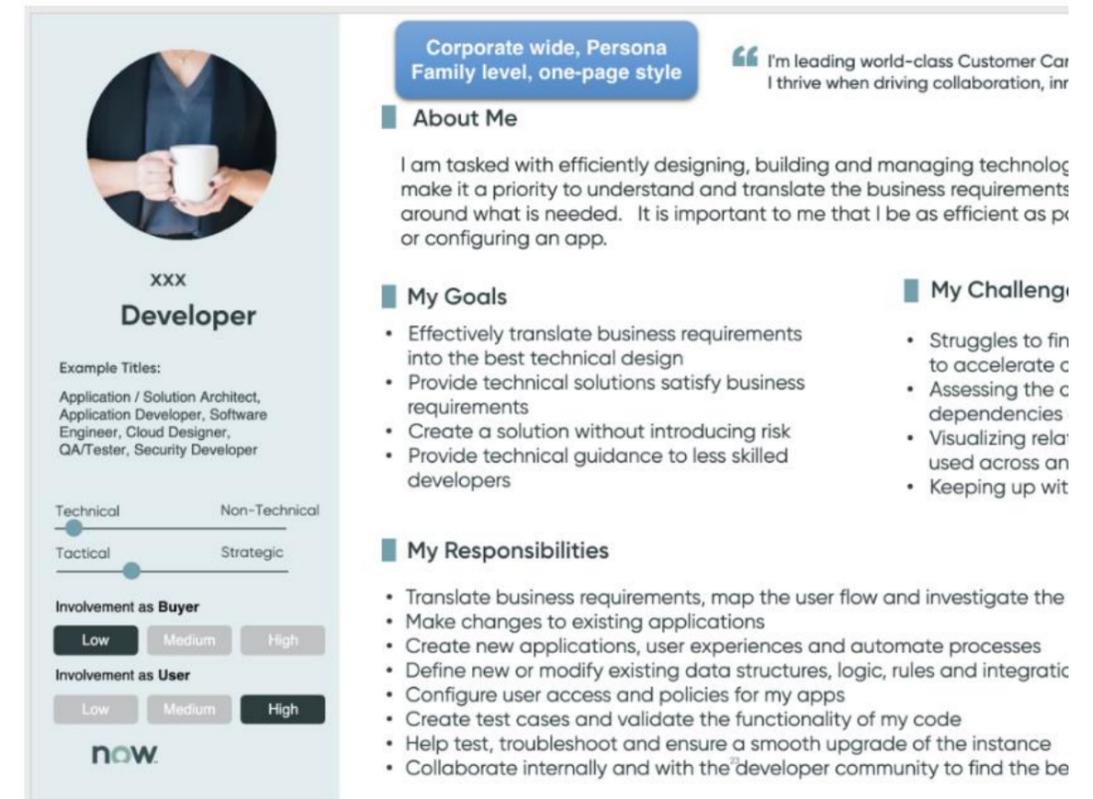


User Need

Developer

- 1. Goals & Analysis
- 2. User Research
- 3. Design Goals
- 4. Tasks
- 5. Objects & Interactions
- 6. IA & Architecture
- 7. Wireframes
- 8. High-Fidelity Prototypes

- Devs/QEs working on authoring or changing components at the code level
- A given developer focuses on one component



- **Component Dev: I want to see whether there's a performance impact from the code changes I checked in**
- **QE: I see performance problems in checking this component and want to share with the developer**
- *I want to see what's broken*
- *I want to show my boss all the fixes/improvements*

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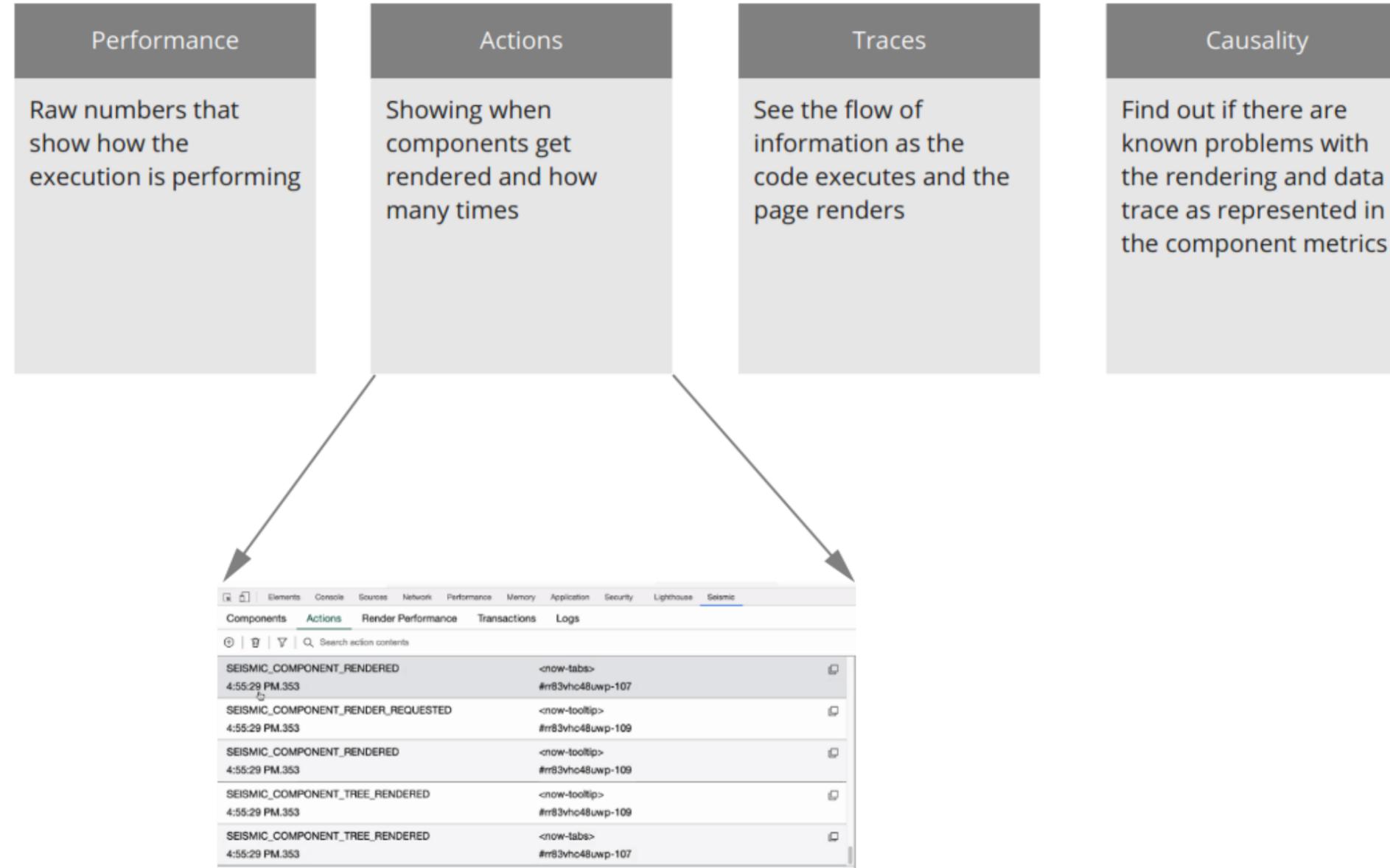
We Saw

- Users want to focus on trends over time (increasing is bad)
- Need to know what is out of bounds (establish the baseline)
- Users seemed to specifically want to focus on one metric, not see all of them when they drilled in
- Users care more about the *median* data, rather than individual runs (summary & progressive disclosure)

We Concluded

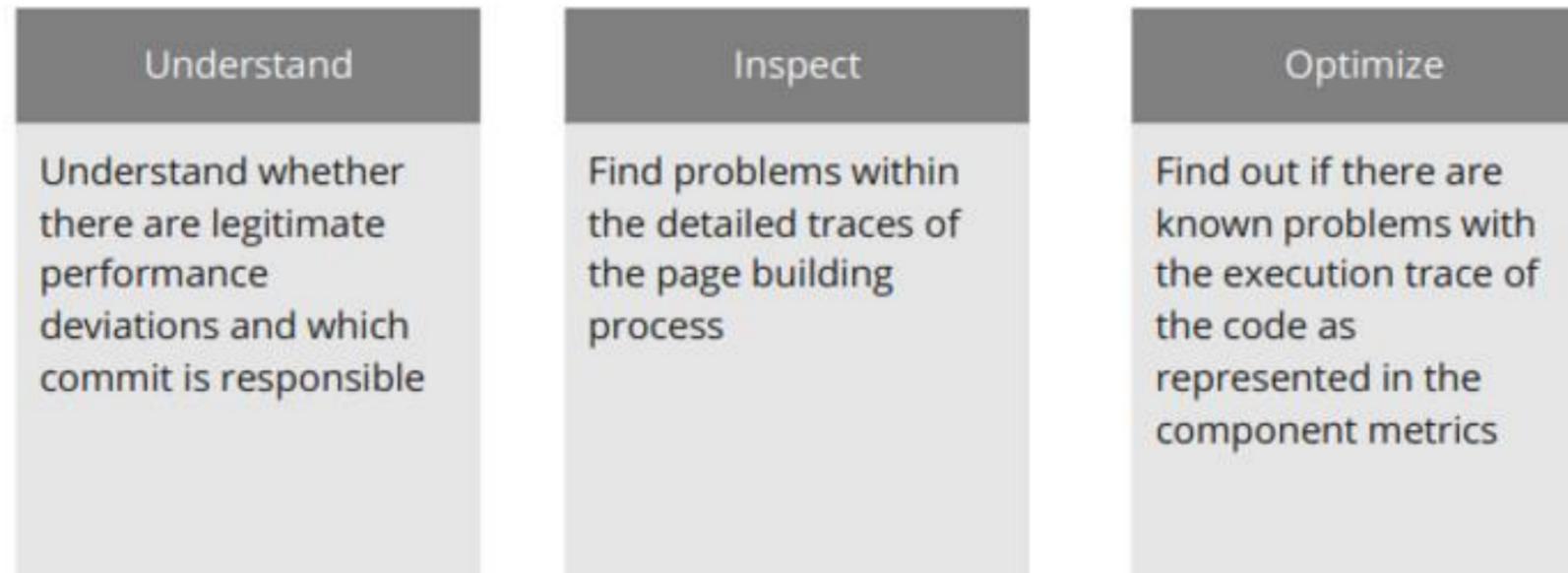
- No need to have users go through a component chooser screen
 - Could be a popup or other control
- Multi-metric graphs are fairly hard to scan as the legend has to be referenced visually
- Users want to focus on a single metric
 - Let users do a 'close up' of a selected metric
- Drilling down should be fluid
- Tab structure doesn't scale (and users mainly care about median data)

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User Goals



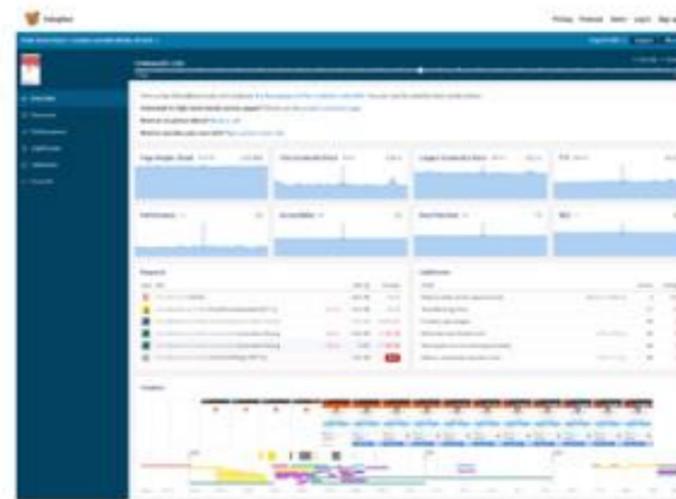
Tasks

1. Get more information on the deviation
2. Trace the deviation to a particular commit
3. Understand the mechanics of the performance degradation
4. Understand what issues are present and what can be done for performance

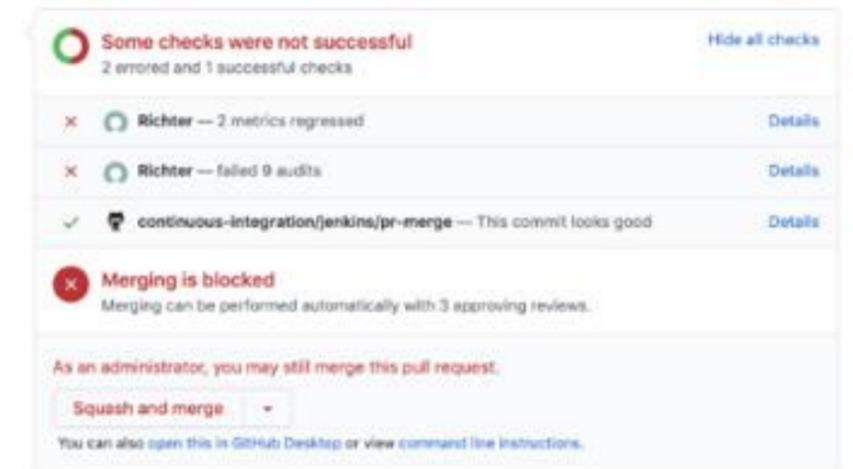
- 1. Goals & Analysis
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[SpeedCurve](#)

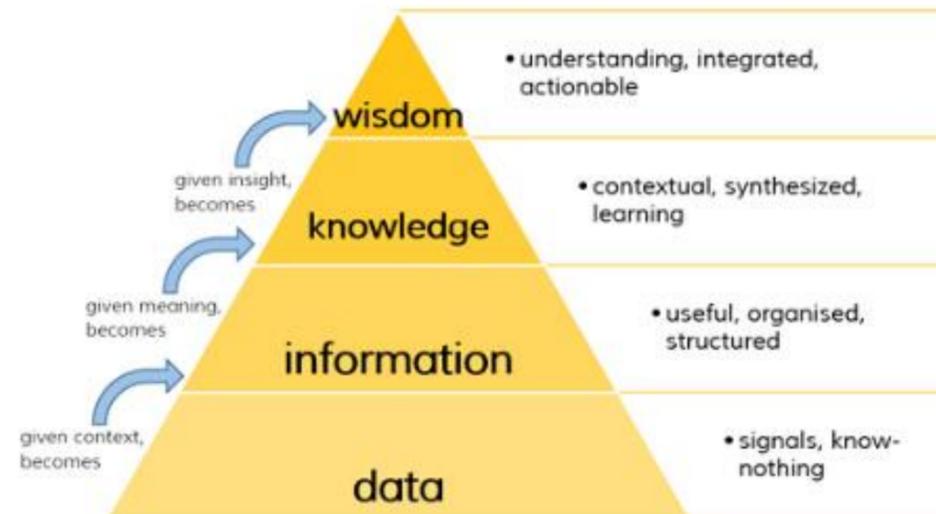
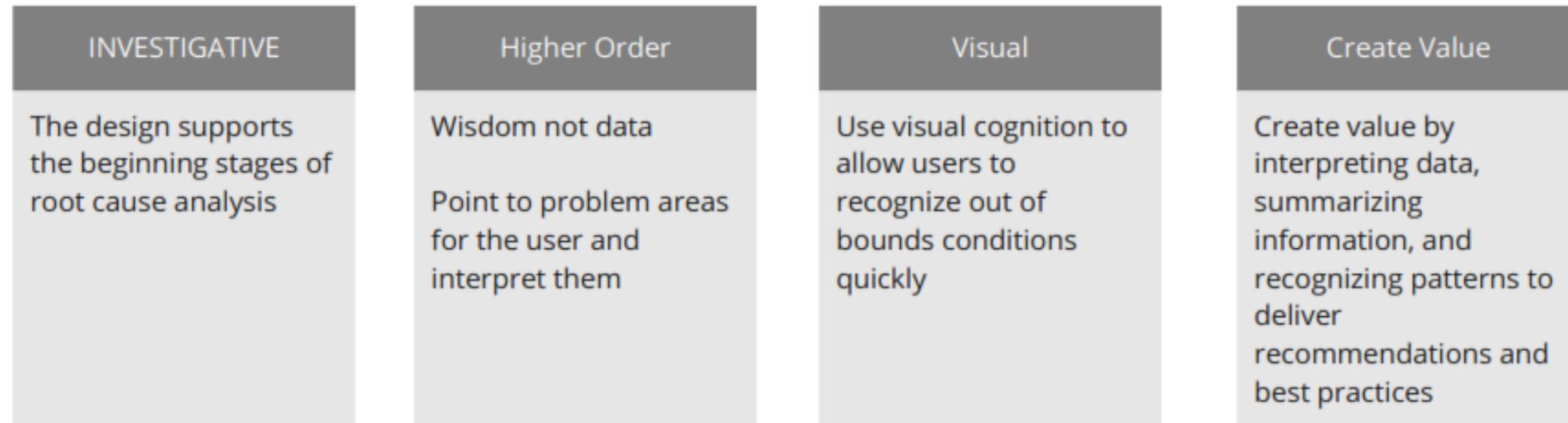


[DebugBear](#)

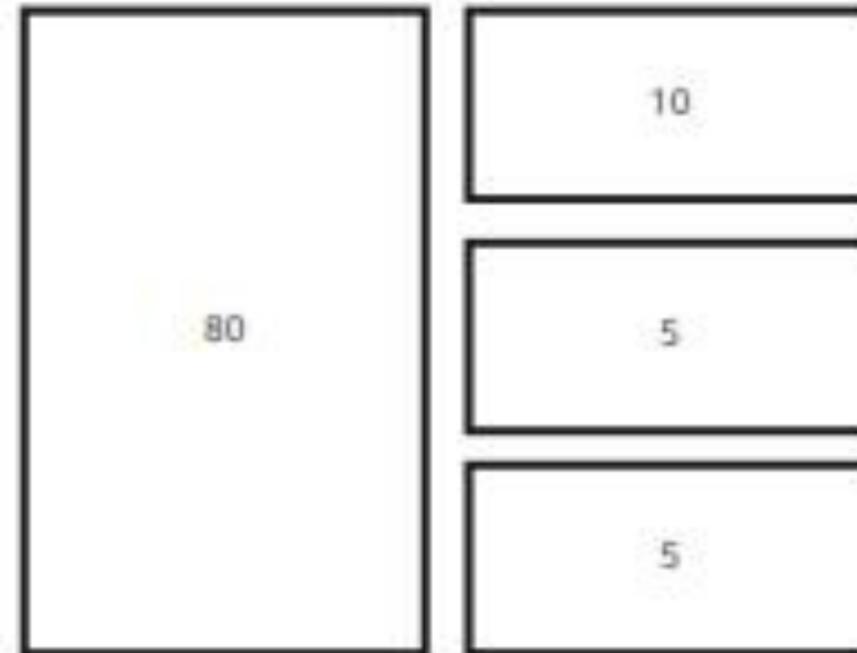


Github

1. Goals & Analysis
2. User Research
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- 8.

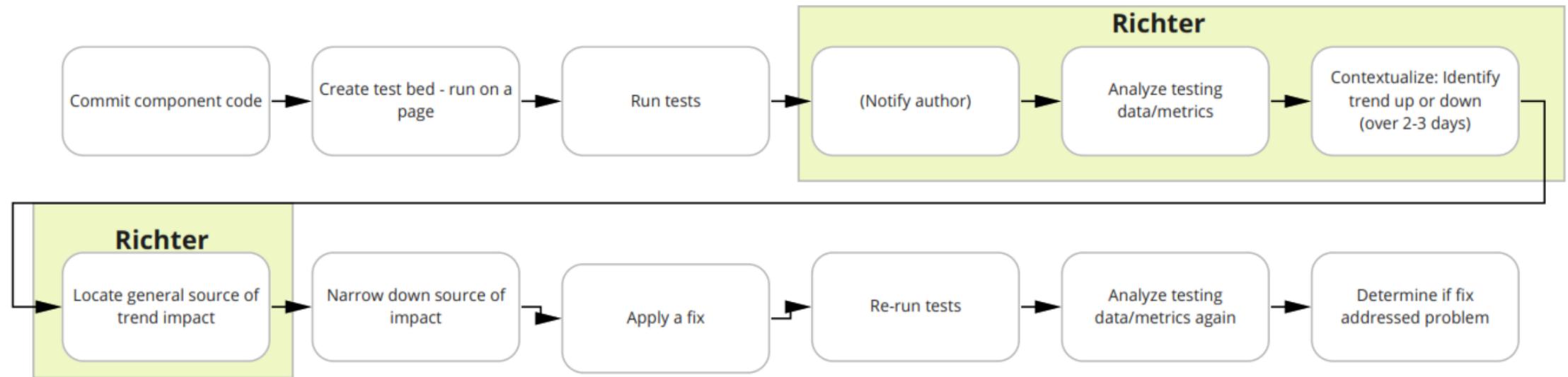


1. Goals & Analysis
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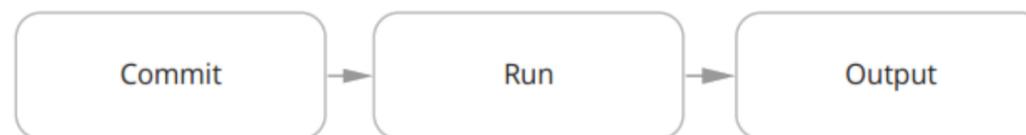


**80% of the time should be spent
on the first page before
navigating
80% of the useful info should be
on the first page**

1. Goals & Analysis
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Test Flow



1. Goals & Analysis
2. User Research
3. Design Goals
- 4. Tasks
5. Objects & Interactions
6. IA & Architecture
7. Wireframes
8. High-Fidelity Prototype

User Goals

- Understand whether there are performance deviations

Task 1

- Get more information on the deviation

Task 2

- Trace the deviation to a particular commit

Task 4

- Understand what issues are present and what can be done for optimization

Task 3

- Understand the mechanics of the performance degradation

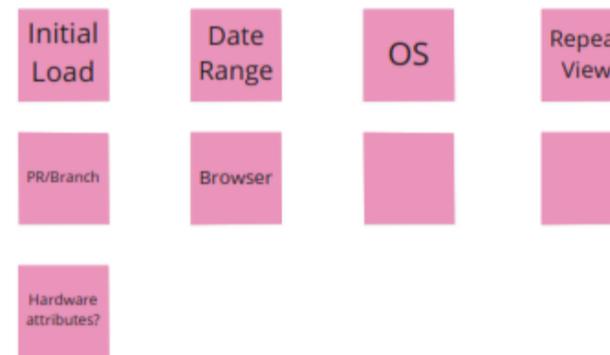
Task 3 below Task 4 for scalability reasons

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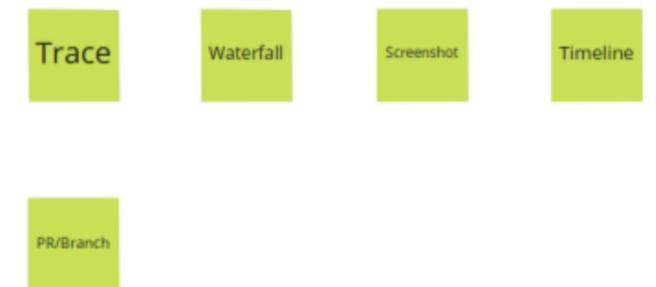
System Objects



Categories



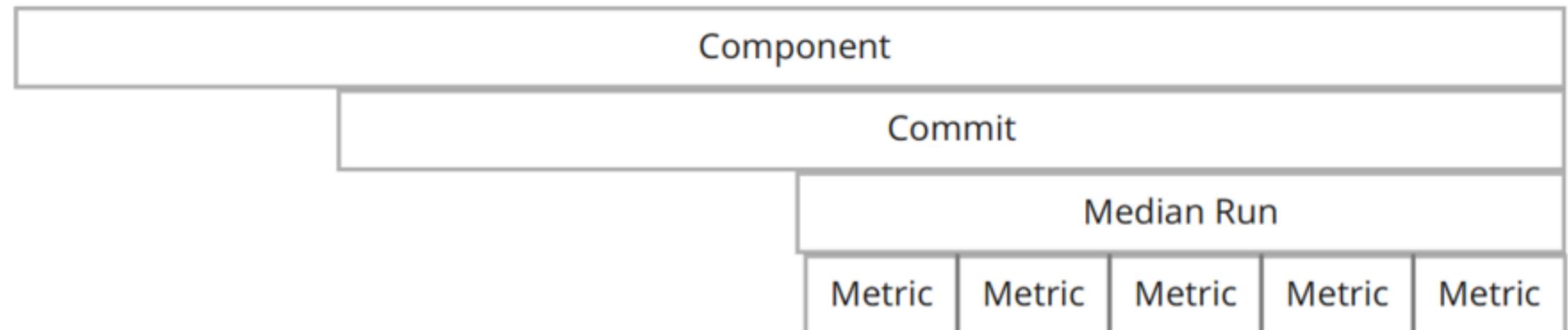
Source



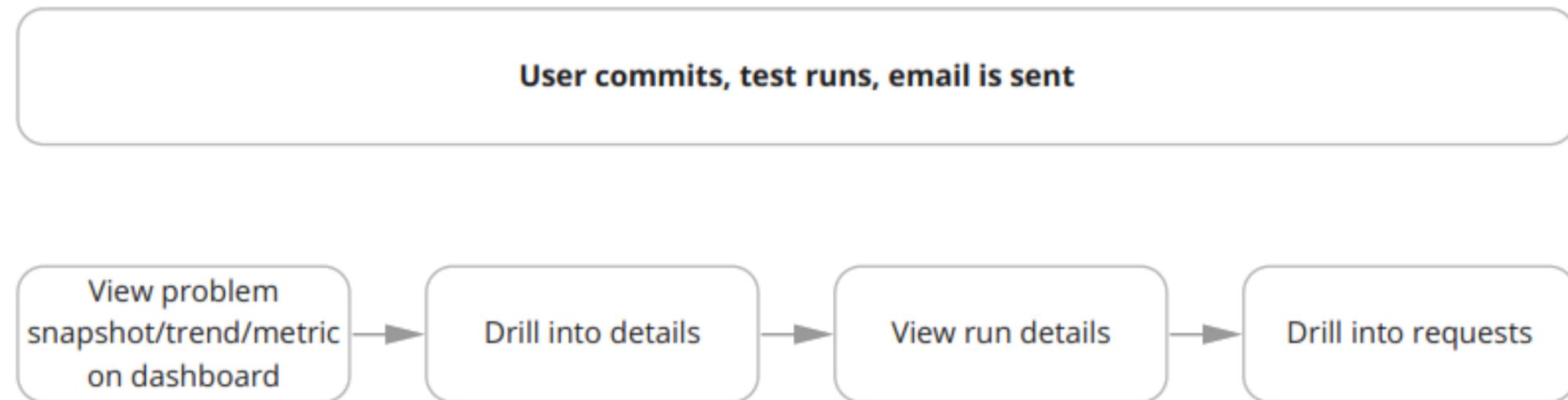
Data



1. Goals & Analysis
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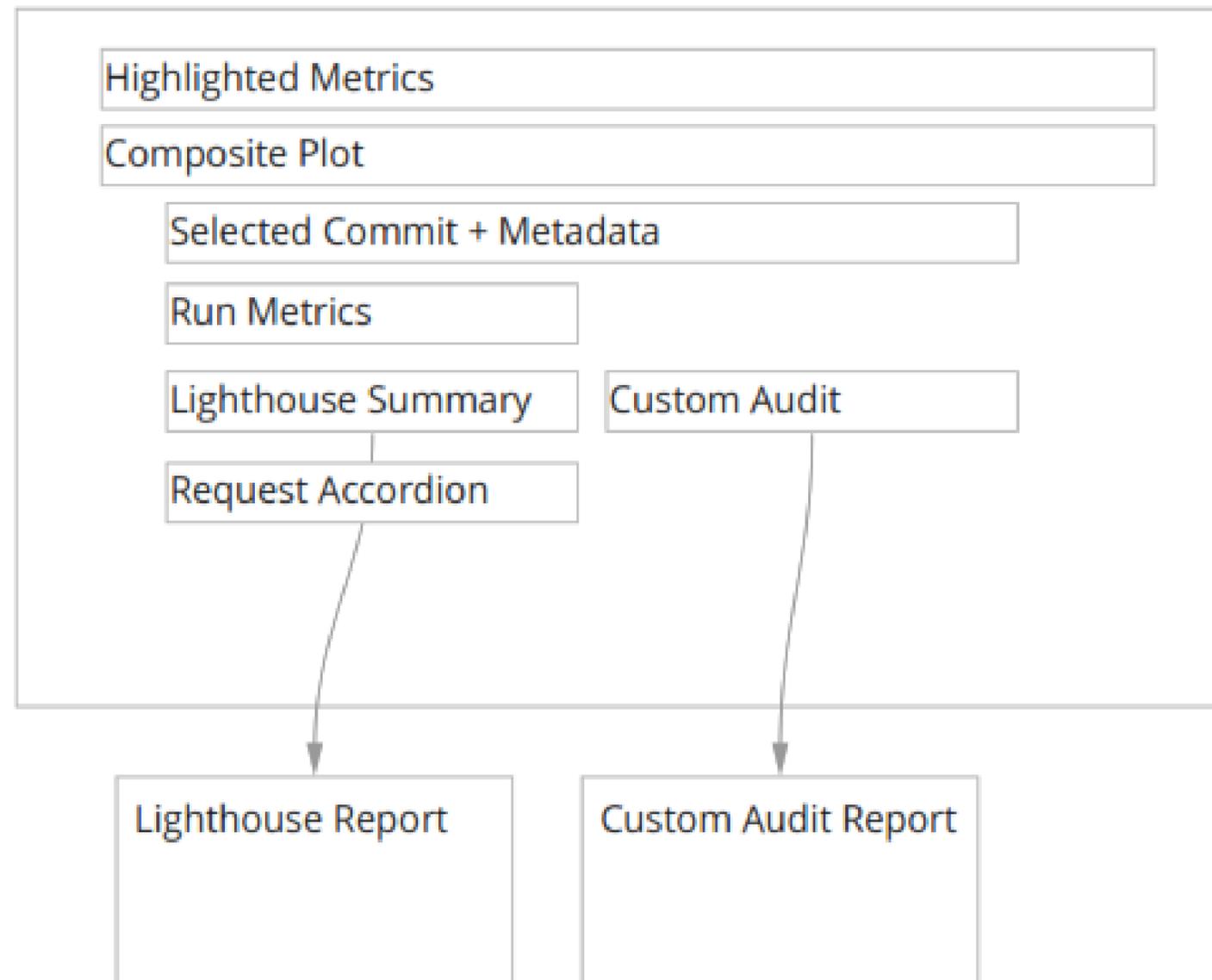
Instead of



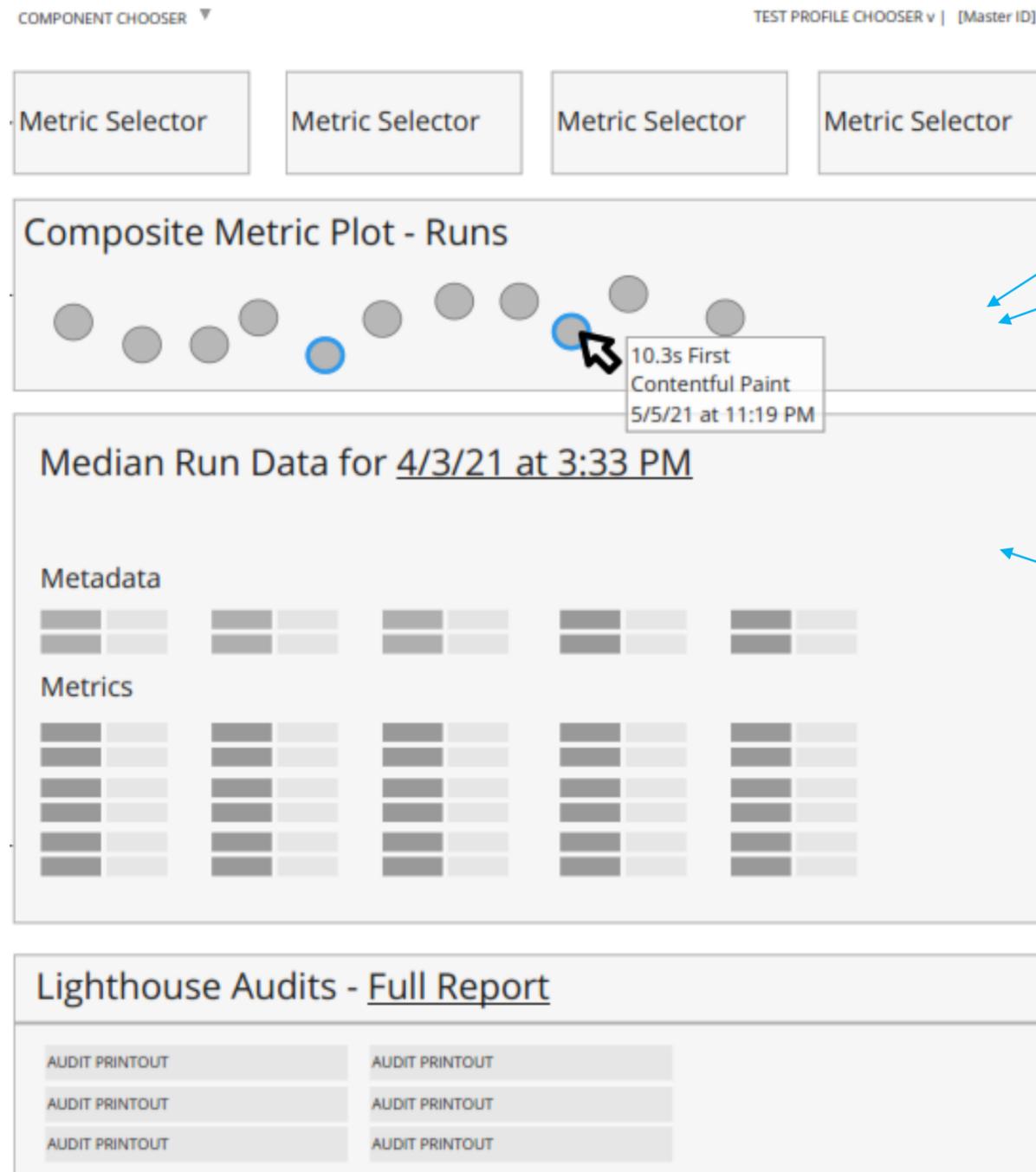
Do this



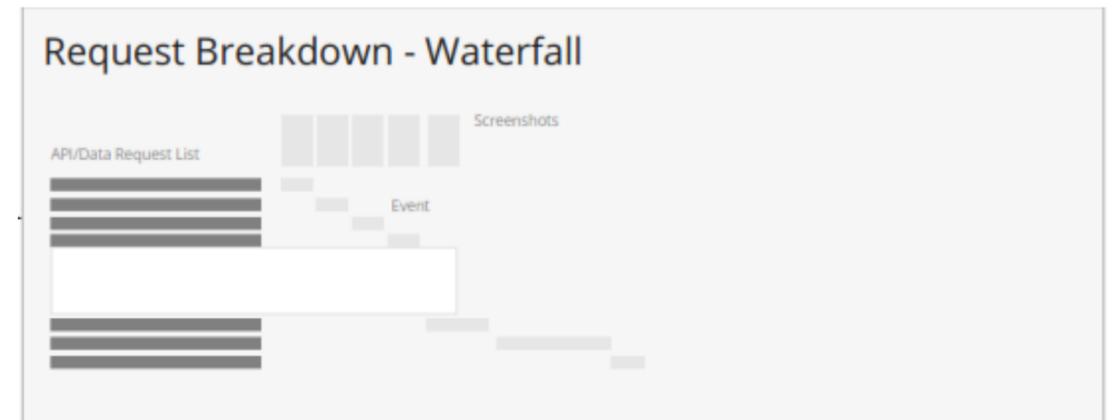
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Commit 9c9345c on Apr 5th

Component	@devsnr/sn-layout	Test	Test Profile	Commit	9c9345c
Pull Request	My Request			Executed At	April 5, 2021 13:50:23
Run Count	5	Browser	Chrome	OS	Windows

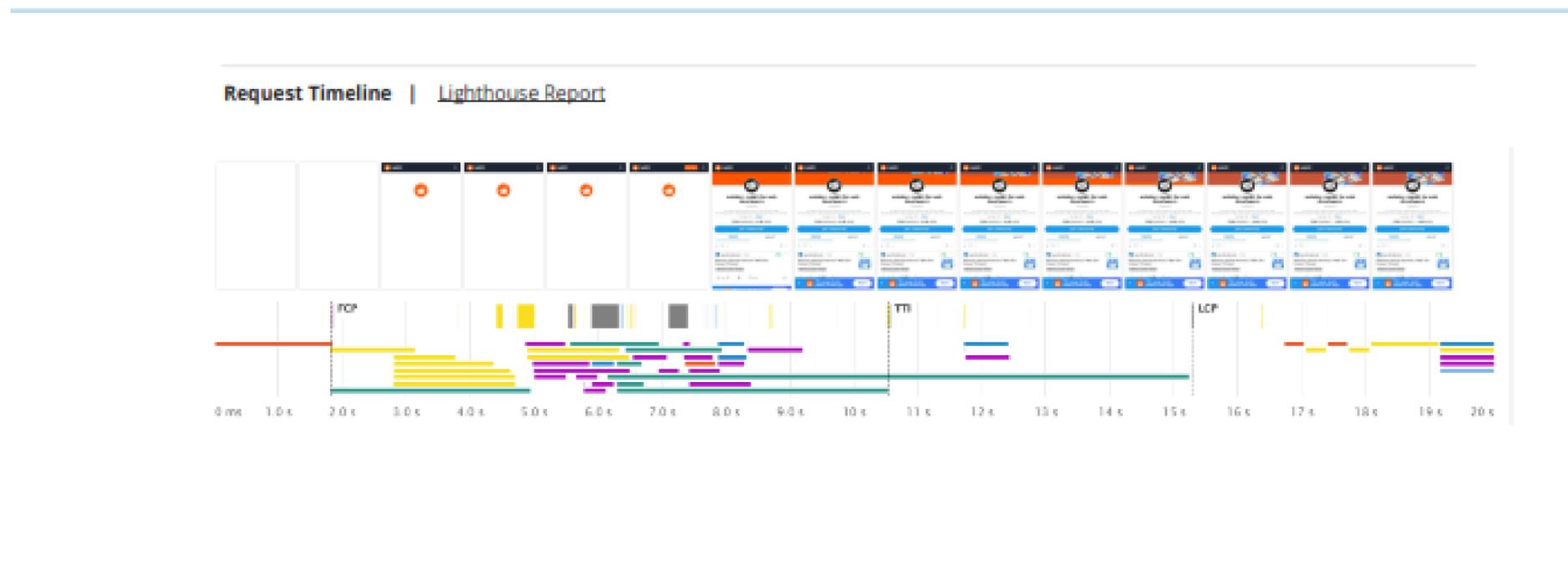
			R1	R2
SpeedIndex	1.75	sec	.2%	.1%
Largest Contentful Paint	1.5	sec	.2%	.1%
First Input Delay	200	ms	.2%	.1%
Cumulative Layout Shift	0.25		.2%	.1%
Bundle Size	1.2	MB		
Render Count	3			
Request Count	12			

			R1	R2
DOM Node Count	20			
Fully Rendered	2	sec	.2%	.1%
Visual Complete 80%	1.75	sec	.2%	.1%
Memory Heap	1.2	MB	.2%	.1%
Code Coverage	80	%		
Cache Hit Ratio	100	%		

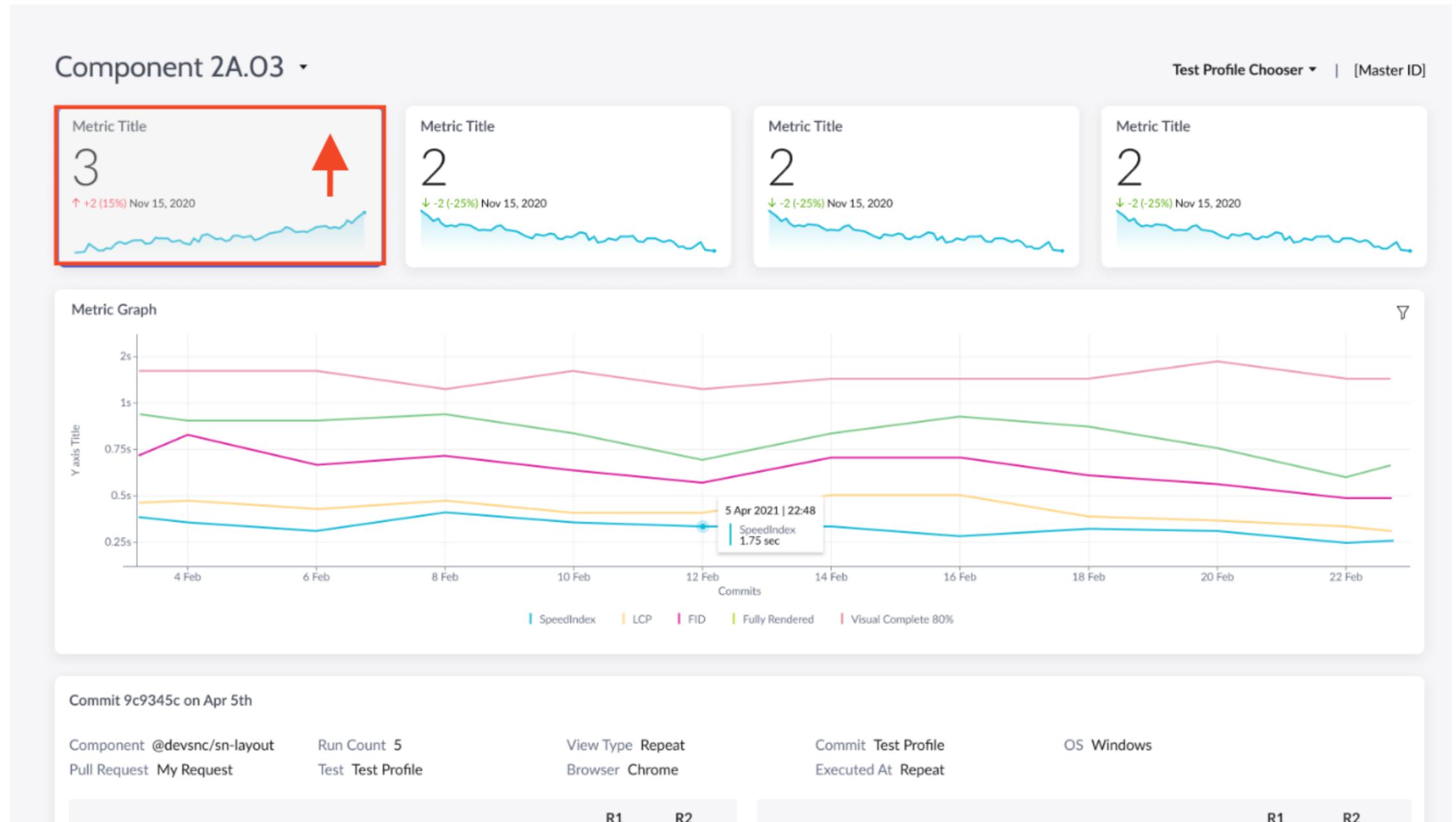
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First Input Delay	200	ms	.2%	.1%
Cumulative Layout Shift	0.25		.2%	.1%
Bundle Size	1.2	MB		
Render Count	3			
Request Count	12			

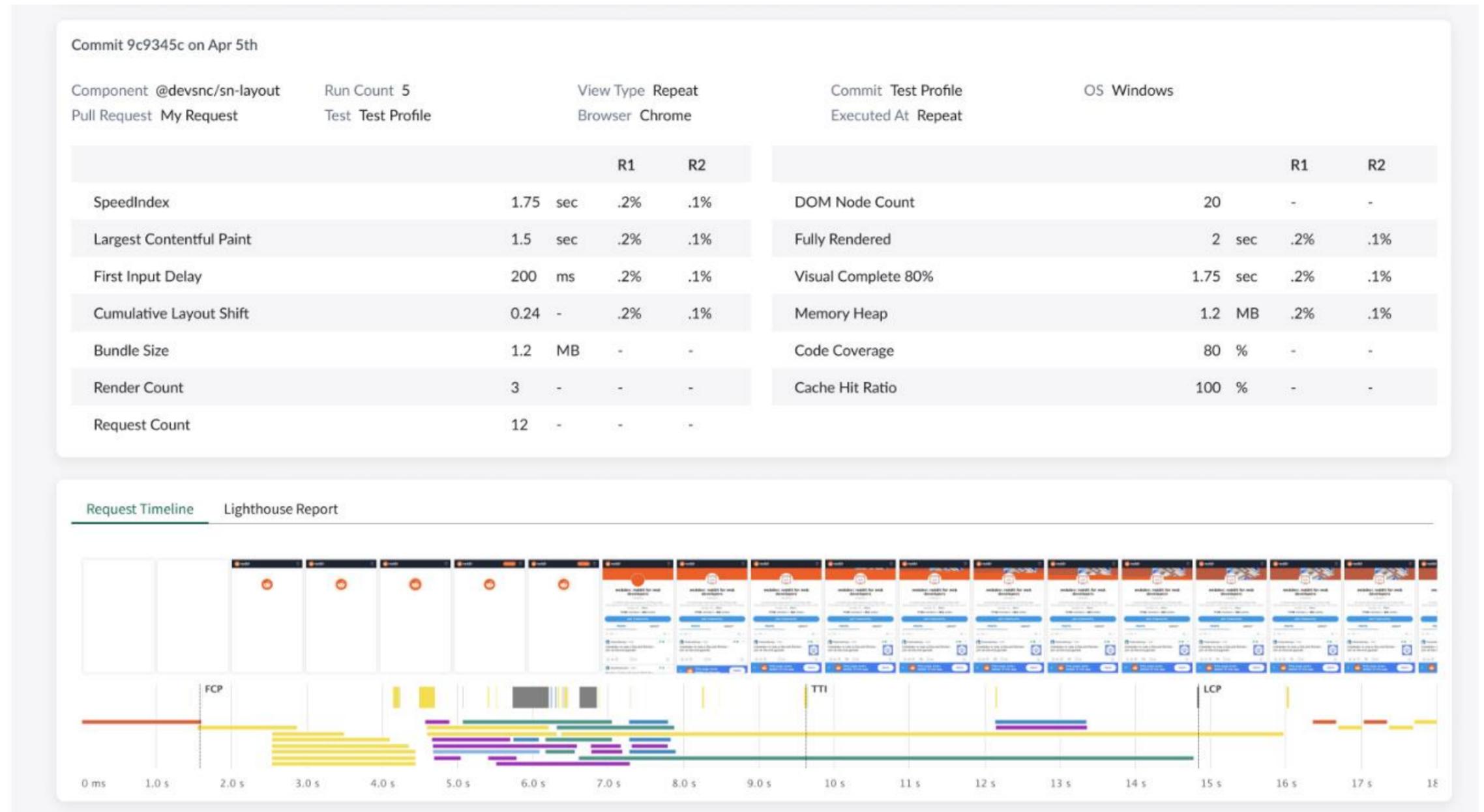
Memory Heap	1.2	MB	.2%	.1%
Credit Coverage	80	%		
Cache Hit Ratio	100	%		



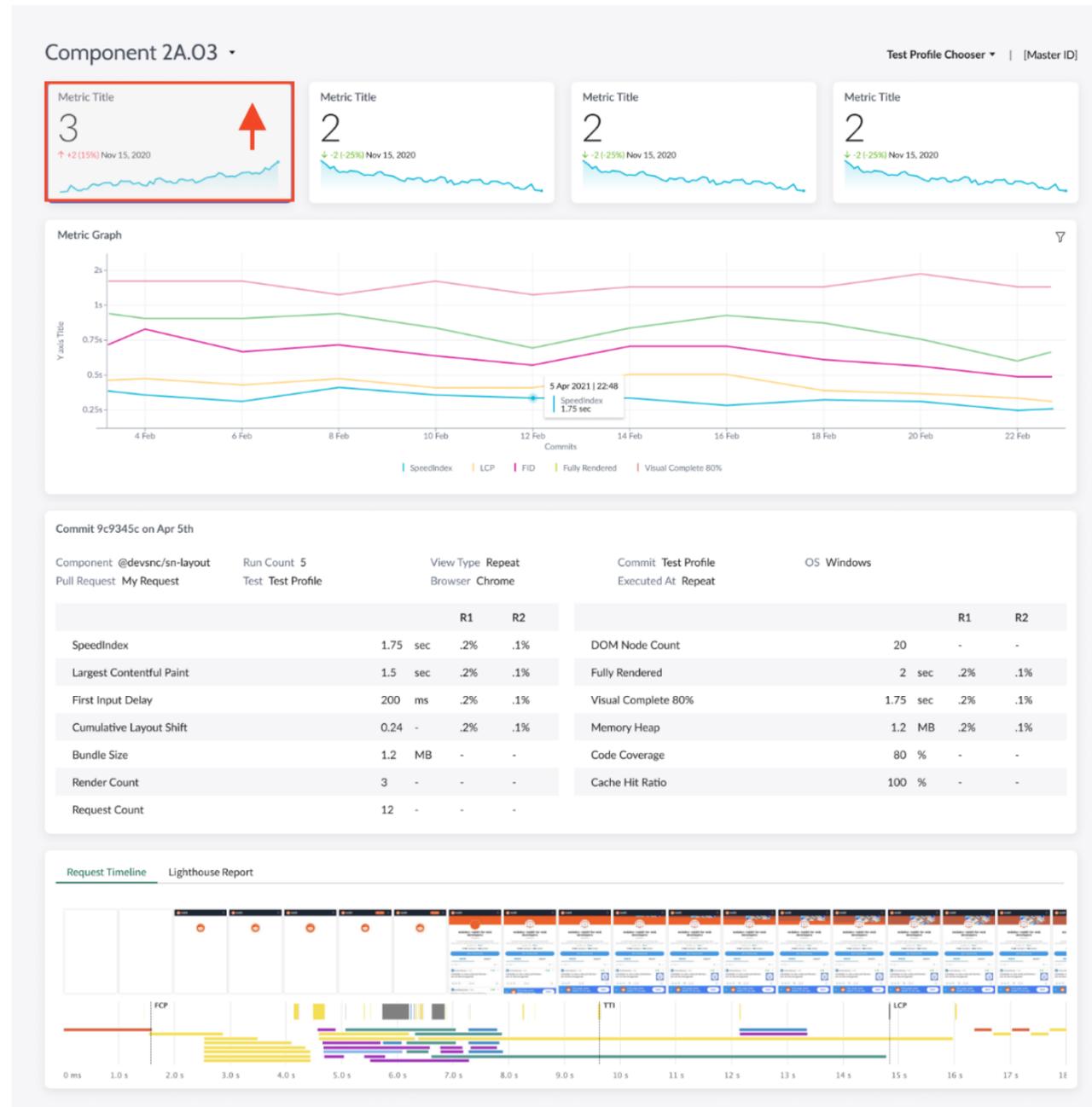
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Page Level

- a. Show last component viewed upon page entry - save state such
- b. Show recently-used components in the list

1. **Component chooser** - dropdown component that allows for k
2. **Test Profile chooser** - Select an available test profile
3. **Master branch ID**, Branch Name, Commit ID?
4. **Metric Chooser** - use a carousel control if there are more than
 - a. **Metric Tile control**: Metric Name, latest value, direction previous commit, trend line plotting all the individual data
 - b. Selection: user clicks on one metric tile to update the main graph
 - i. Default is the leftmost metric (should be a component single value)
5. **Graph** - Dependent pane based on selected metric tile control
 - a. Graph can be compound or single lined - for compound, b. Rollover interaction: A dot or vertical set of dots shows the data
 - i. Tooltip: The tooltip displayed will be of all the data points
 - c. Click interaction: User can click anywhere in a vertical line
 - i. The area immediately below the graph is dependent on the selected metric
6. **Commit metadata** - Show high-level metadata that describes the commit
7. **Commit metrics** - Show an exhaustive list of metrics in a two-column table
 - a. Layout of columns: Metric Name, value, unit, repeat 1 per column
8. **Subtab mechanism** - Request Timeline and Lighthouse Report
9. **Request Timeline**
 - a. Screenshot sequence - mapped to each sequential timeslice
 - b. Data/API request - plot these out as the requests were received on the timeline, and later ones are added on top as a stack
 - i. Requests can cross timeslices
 - c. Metric events - plot a metric when completion happens
 - d. Interaction - user can click and hold to scroll the timeline
 - e.

The Oracle logo, consisting of the word "ORACLE" in white, uppercase, sans-serif font, centered within a red rectangular background.

Field Sales Proof of Concept for Sales Cloud

Project and Goal

One of the Sales Cloud projects I was tasked with by the VP of Product Management was to design a proof of concept for Sales Pipeline Management, but first I needed to understand the user, the Field Sales Representative.

Activities

- Worked with PM and senior Oracle Field Sales Reps to collect needs, tasks, questions, and scenarios
- User research, concepting, wireframing
- Designed initial concepts

Outcomes

- Since we identified user needs beyond pipeline management, I expanded the scope to include general field sales use cases
- I was able to get buy-in from management that this was a gap for Sales Cloud

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

Need to uncover use cases centered around field sales

How do we get there?

#4: Beware the 5 Pipeline Killers

Once you start paying attention to the 3 metrics listed above, you'll start to notice that some of the opportunities in your Pipeline are outliers, which can clog your Pipeline. To maintain Pipeline integrity, you should remove these outliers from your Pipeline.

But how do you know which to purge? Watch out for these 5 signs of Pipeline Killers:

- 1. Age in Stage** – Stalled deals convert at much lower rates than quickly progressing ones. Look for opportunities in your Pipeline that have **stayed in the same stage** for as long as your average Lost Deal and flag them as at-risk.
- 2. Non-Linear Stage Leaps** – The beauty of the Sales Pipeline is that it matches up so well with the buyer's journey. Therefore, if an **opportunity goes through the Pipeline haphazardly** without a linear progression, it usually means that that opportunity is less likely to convert.

Understand the domain

Raphael B. [redacted]
people.oracle.com/@rbi
Application Sales Representative
West Conshohocken PA, US 1:20 AM Thu

"Gap between what they use and what they're supposed to use on Sales Cloud"

- How do I get 10/20 to 30/40's?

Empathize with the user

Problem	Goals
Don't have a feel for what's going on with my pipeline; Need to know what's been done or changed	Understand: Want to see my pipeline (whether I'll make quota). Which are late? Surface activity of myself
Don't know what to work on - where should I focus my efforts? What are next steps?	Prioritize: Decide which Opportunities to work on and also plan out my time/activities
Need to work quickly to get a deal with customers and team members	Communicate: Send materials, assign tasks
Hard to keep things up to date	Document: Update opportunities and easily communicate the updates
Have to keep my pipeline full	Develop: Find new opportunities for prospecting

Articulate Problems, Goals, & Solutions

VISION, INC
Cloud Applications Solution

Type anything to start an activity, we'll figure out what kind it is...

- August 3 **Follow-up Meeting with Frank T.** Meeting concluded with...
- August 2 **Customer Response** Hi John, I did get your materials the last July 29th. They look good, I just have a question, 9:44 PM
- August 1 **Scheduled Meeting with Frank T.** Was able to call Frank, availability for the next steps coming up. 4:55 PM

Author a proof-of-concept

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

Get to know the typical concepts and problems in this space.

#4: Beware the 5 Pipeline Killers

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2. **Non-Linear Stage Leaps** – The beauty of the Sales Pipeline is that it matches up so well with the buyer's journey. Therefore, if **an opportunity goes through the Pipeline haphazardly** without a linear progression, it usually means that that opportunity is less likely to convert.
3. **Opportunity Size** – An opportunity's size dictates a lot about how it will act and how

Field Sales Rep Interviews

1: Goals & Process

2: User Interviews

3: Analysis

4: Problems

5: Architecture

6: Concepts

7: Outcomes

- Oracle field sales reps interviewed on multiple occasions + iterations
- CX, CRM space, Health, Upmarket
- Tend to have less than 10 opportunities at a time that they're working

Getting a variety of interviewees helps identify universal issues

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
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“Need a perspective on what's going on with an account”



“My contacts can't be visible to my sales team (*Inside Sales reps*) will pick up contact and activity and start calling into that account - throws a wrench into that relationship!”



What would make you 10x more effective?
“Text or instant thing on phone that says ‘Do you want document that?’”

I asked sales reps macro questions like: “What would make you 10x more effective?”
Thanks to using higher-level questions, we were able to identify unanticipated needs like ‘keep them from stealing my deals’

Sales Rep's Own Questions

1: Goals & Process

2: User Interviews

3: Analysis

4: Problems

5: Architecture

6: Concepts

7: Outcomes

- (When your boss asks) “How are you getting to your number this quarter?”
- “What are other deals, assets, purchases, or trouble tickets for this customer?”
- “What do I do now that I found out a competitor is on this deal too?”
 - “How do I put together a Kill Sheet for a particular competitor?”
- “The customer’s CIO is outraged on a P1 issue open for an entire month”
- “Sales Manager needs you to bring in one or two deals in the next few days to make the team’s numbers this quarter”

Questions reveal needs as well as set the context for how Field Sales reps operate.

Field Sales Rep Persona

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

DANIEL RICHARDSON

Field Sales Rep

AGE: 41
 LOCATION: San Francisco, CA
 EXPERIENCE: 11 years
 WORK PATTERN: Road Warrior



Job Roles by Area	Persona	Typical Tasks	Critical Tasks	Focal Task(s)
Sales Representative	Daniel Richardson	<ul style="list-style-type: none"> • Prep for Client Meetings • Conduct Post-Meeting Activities • Communicate w/Sales Team and Management • Networking • Create proposals • Schedule meetings and follow-ups 	<ul style="list-style-type: none"> • Meet with stakeholders • Close Deals • Sign Contracts 	<ul style="list-style-type: none"> • Maintain Customer Relationships • Create trust • Help customer define the problem

Break tasks into TYPICAL, CRITICAL, and FOCAL types to understand user needs

Eye-opening Findings

1: Goals & Process

2: User Interviews

3: Analysis

4: Problems

5: Architecture

6: Concepts

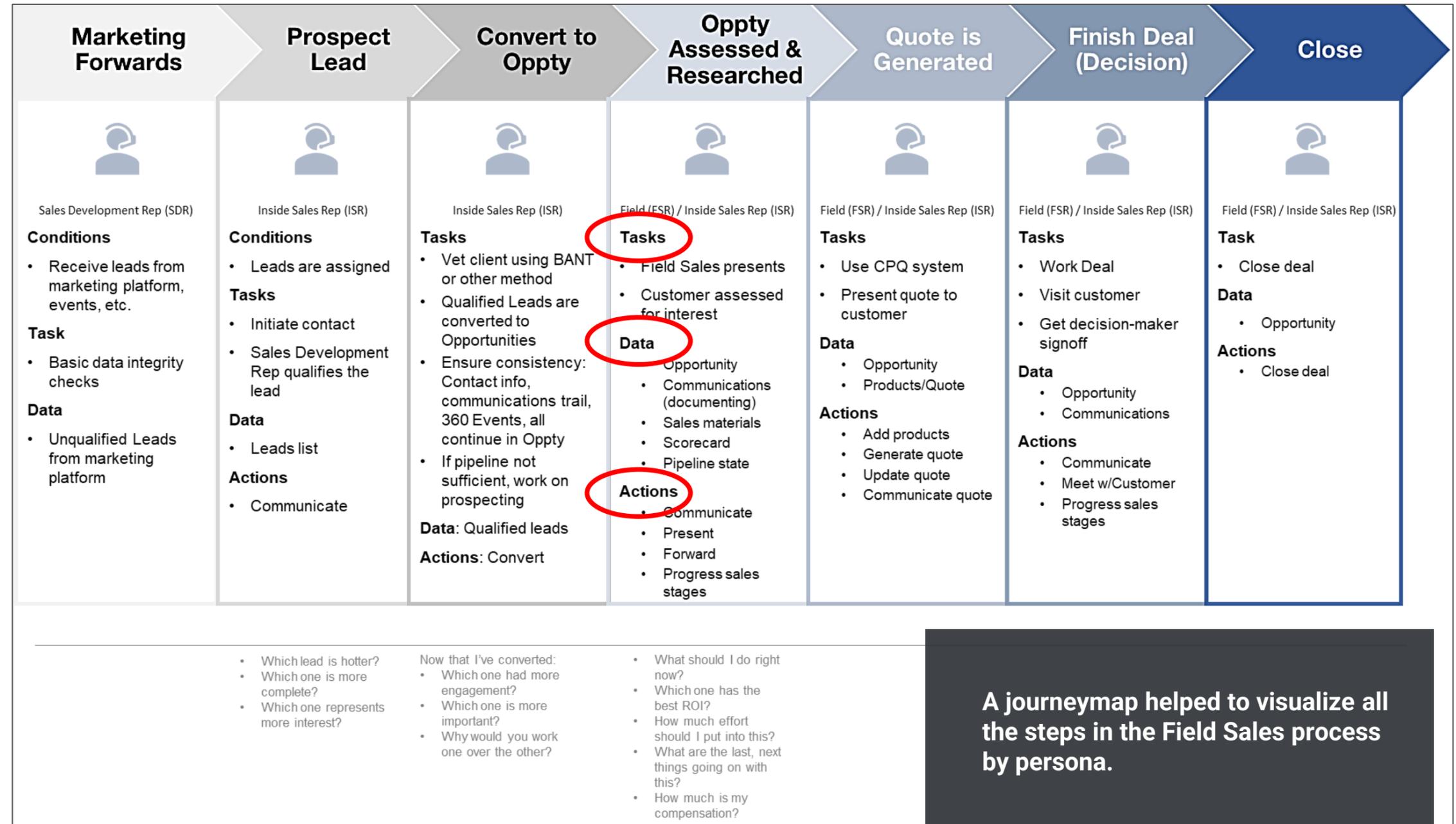
7: Outcomes

- ▲ Our biggest competitor is Outlook
- ▲ Oracle isn't even using its own software
 - Outlook integration isn't set up
- ▲ Several custom solutions have been made because the software doesn't provide the necessary solutions

There were some surprising lessons-learned.

Field Sales Journey

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes



Problems and Goals for an FSR

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

Main Problems

- Don't have a feel for what's going on with my pipeline; Need to know what's been done or changed
- Don't know what to work on - where should I focus my efforts? What are next steps?
- Need to work quickly to get a deal with customers and team members
- Hard to keep things up to date
- Have to keep my pipeline full



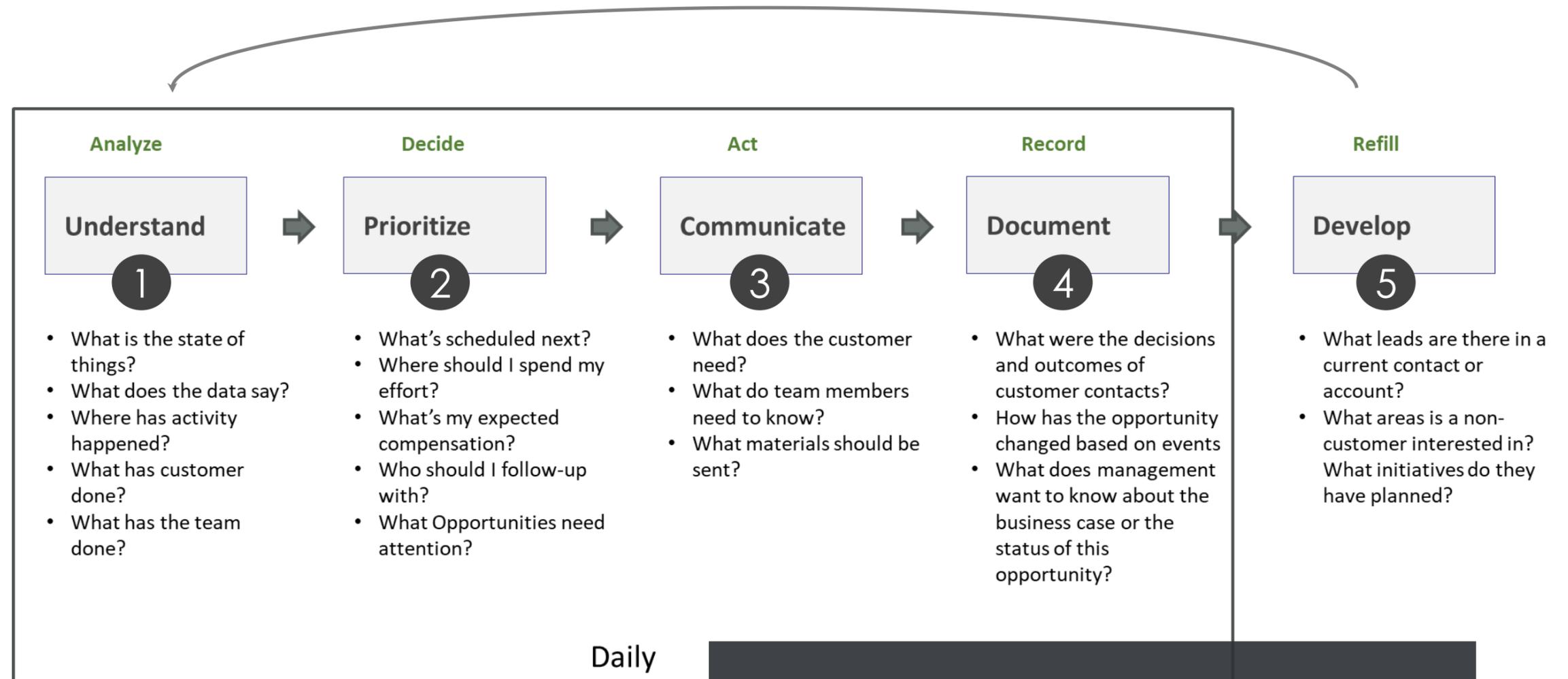
Goals

- Understand:** Want to see my pipeline health stats (whether I'll make quota). Which opportunities are late? Surface activity of myself and team...
- Prioritize:** Decide which Opportunities to work on and also plan out my time/activities
- Communicate:** Send materials, follow-up, assign tasks
- Document:** Update opportunities quickly and easily communicate their status upwards
- Develop:** Find new opportunities by prospecting

- Understand 1
- Prioritize 2
- Communicate 3
- Document 4
- Develop 5

Key insight: There's a Progression to This

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
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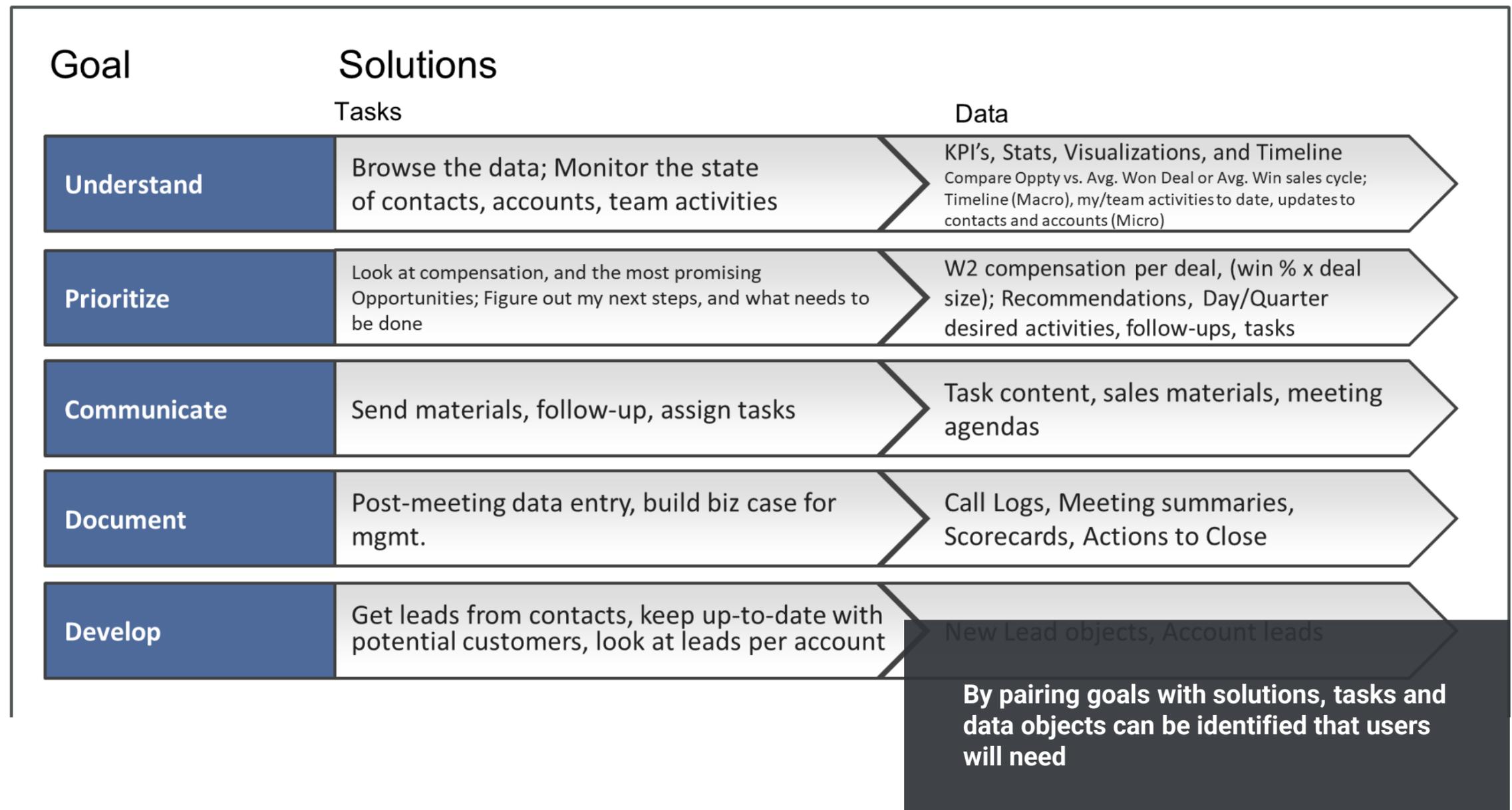


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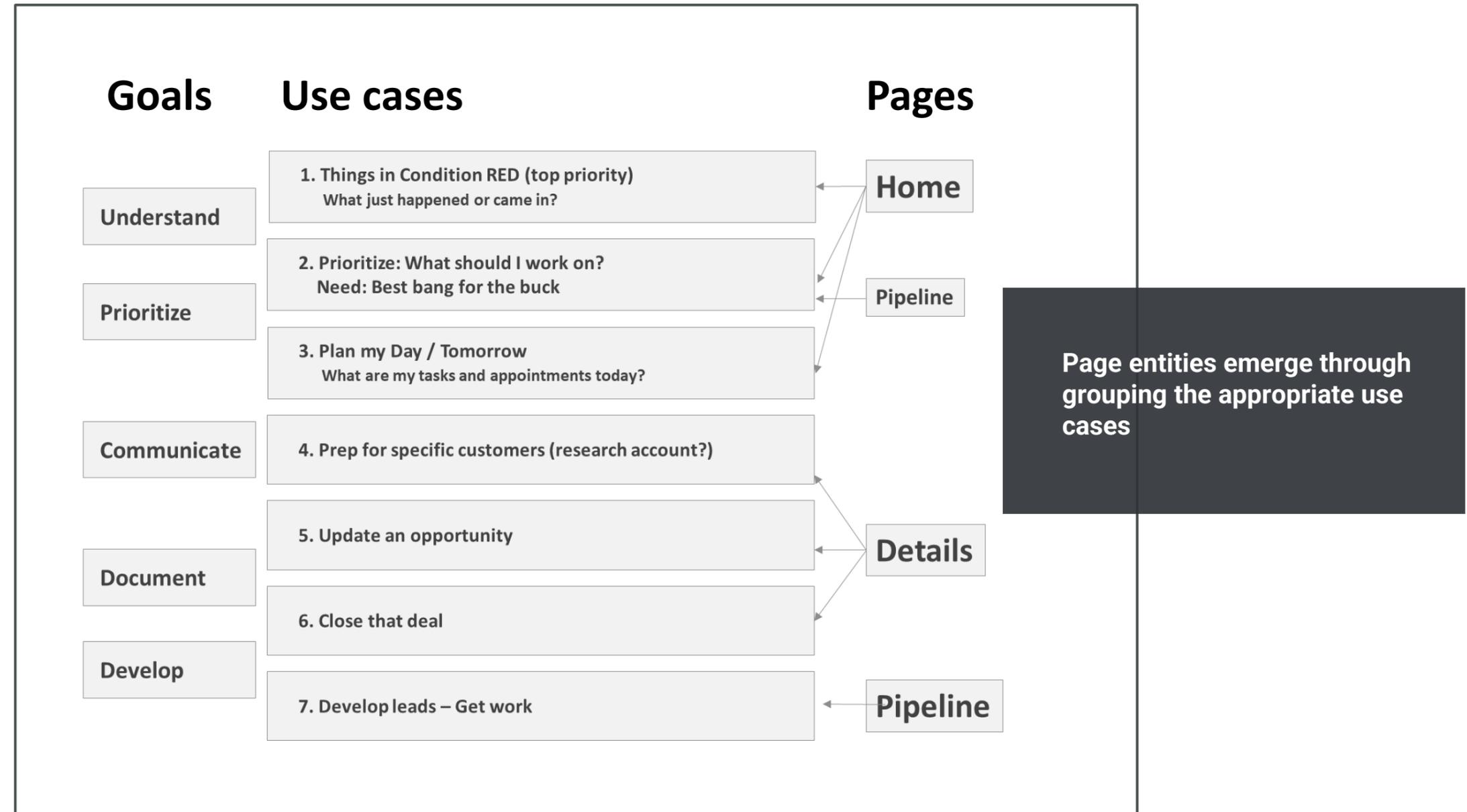
Another key insight: The goals fit together in a coherent process flow.

Solutions articulate tasks and data

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture**
- 6: Concepts
- 7: Outcomes

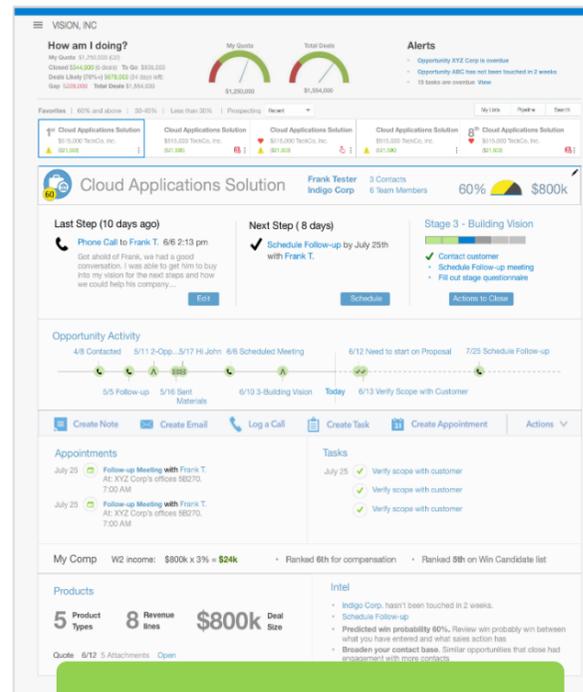


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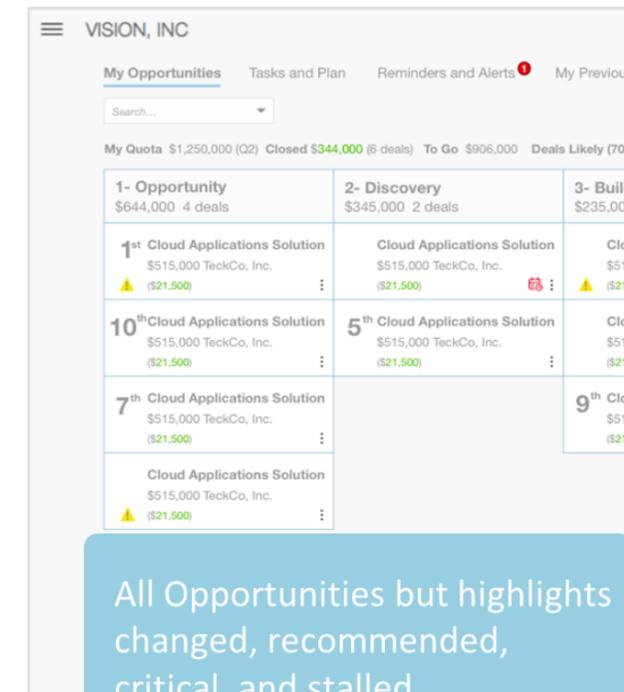
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Home Page



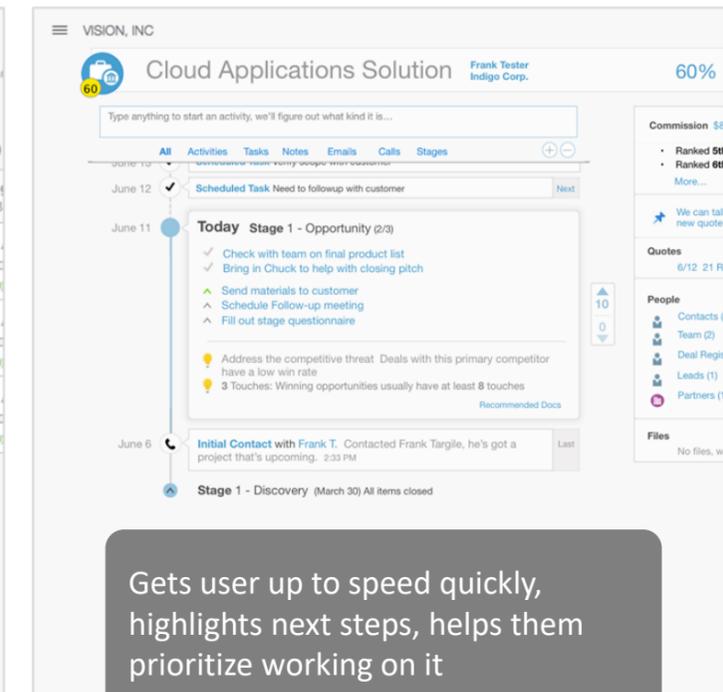
Surfaces critical opportunities in a fast-switch interaction mechanism

Pipeline (Kanban)



All Opportunities but highlights changed, recommended, critical, and stalled (Filter for favorites or other dimensions)

Detailed Opportunity



Gets user up to speed quickly, highlights next steps, helps them prioritize working on it

General > Specific

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

Everything to get up to speed on this opportunity can be seen in seconds

VISION, INC

How am I doing?
 My Quota \$1,250,000 (Q2)
 Closed \$344,000 (6 deals) To Go \$906,000
 Deals Likely (70%+) \$678,000 (34 days left)
 Gap \$228,000 Total Deals \$1,554,000

My Quota \$1,250,000 **Total Deals** \$1,554,000

Alerts

- Opportunity XYZ Corp is overdue
- Opportunity ABC has not been touched in 2 weeks
- 15 tasks are overdue [View](#)

Cloud Applications Solution | 60% and above | 30-40% | Less than 30% | Prospecting | Recent

1st Cloud Applications Solution \$515,000 TeckCo, Inc. (\$21,500)

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Cloud Applications Solution \$515,000 TeckCo, Inc. (\$21,500)

Cloud Applications Solution \$515,000 TeckCo, Inc. (\$21,500)

8th Cloud Applications Solution \$515,000 TeckCo, Inc. (\$21,500)

Cloud Applications Solution | **Frank Tester** | 3 Contacts | 6 Team Members | **60%** | **\$800k**

Last Step (10 days ago)
 Phone Call to Frank T. 6/6 2:13 pm
 Got ahold of Frank, we had a good conversation. I was able to get him to buy into my vision for the next steps and how we could help his company... [Edit](#)

Next Step (8 days)
 Schedule Follow-up by July 25th with Frank T. [Schedule](#)

Stage 3 - Building Vision
 Contact customer
 Schedule Follow-up meeting
 Fill out stage questionnaire [Actions to Close](#)

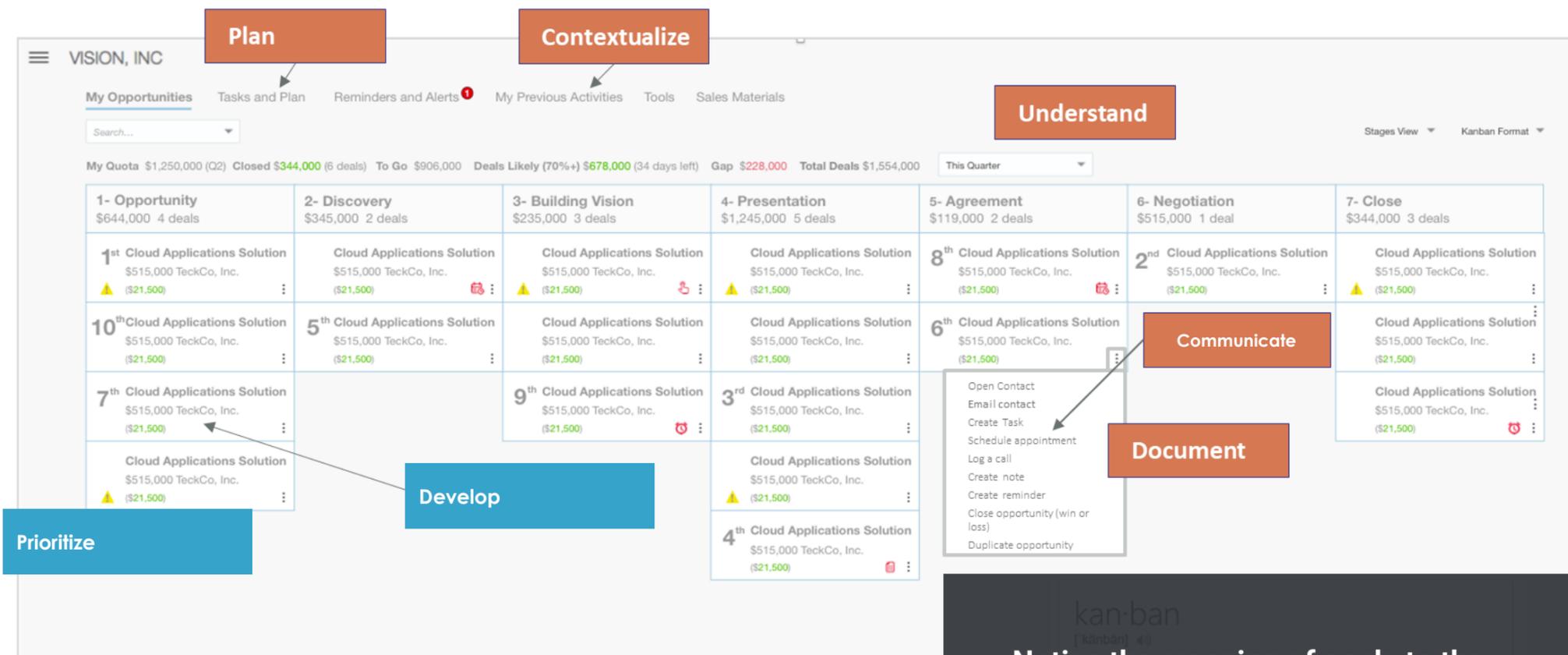
Opportunity Activity

4/8 Contacted | 5/11 2-Opp...5/17 Hi John | 6/6 Scheduled Meeting | 6/12 Need to start on Proposal | 7/25 Schedule Follow-up

5/5 Follow-up | 5/16 Sent | 6/10 3-Building Vision | Today | 6/13 Verify Scope with Customer

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

Pipeline (Kanban) Dashboard



kan-ban
[kanban] ⓘ

Notice the mapping of goals to the page design. We see that those goals are being supported through design elements.

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

The screenshot displays a CRM interface for a sales opportunity titled "Cloud Applications Solution" for "VISION, INC". The interface features a central vertical timeline with various activity entries, a right-hand sidebar with summary statistics, and a detailed task view for the current date.

Activity Timeline:

- June 12: **Scheduled Task** Need to start on proposal
- June 11 (Today): **My Tasks and Appointments**
 - Check with team on final product list
 - Bring in Chuck to help with closing pitch
 - Stage 3 Tasks** (2 of 3 items still open)
 - Contact customer
 - Schedule Follow-up meeting
 - Fill out stage questionnaire
 - Recommendations**
 - Address the competitive threat: Deals with this primary competitor have a low win rate
 - 3 Touches: Winning opportunities usually have at least 8 touches
- June 6: **Scheduled Meeting** with Frank T. Was able to call Frank, and get his availability for the next steps coming up. 4:55 PM
- May 17: **Customer Response** Hi John, I did get your materials that you sent on May 16th. They look good, I just have a question. 3:44 PM
- May 16: **Sent Materials** to Frank T. Hi Frank, I'm forwarding you some of our promotional literature. Enclosed you will find all of the items that we were talking about 1:05 PM
- May 5: **Change Stage to 3 - Building Vision**
- Stage 2 - Discovery (April 1 to May 5) All items closed
- April 18: **Sent Materials** to Frank T. Hi Frank, I'm forwarding you some of our promotional literature. Enclosed you will find all of the items that we were talking about 1:05 PM

Summary Sidebar:

- Frank Tester** (Sr. Purchasing Director): 650-989-0090, ftester@indigo.com
- Indigo Corp.** (Chicago, IL): Software Services
- Status: Open
- Progress: 60% (represented by a gauge chart)
- Value: \$800k
- My Comp** W2 income: \$800k x 3% = \$24k
 - Ranked 5th on Win Candidate list
 - Ranked 6th for compensation
- Commissions**: \$169k Total (Gauge chart showing \$145k current and +24k target)
- Quota**: \$1.4M QTD, +800k, To go: \$1.6M
- Quotes**: 6/12, 21 Revenue lines, 5 Attachments
- People**:
 - Contacts (4)
 - Team (2)
 - Deal Registrations (1)
 - Leads (1)
 - Partners (1)

A timeline effectively handles a large set of data in an ordered structure.

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

VISION, INC

Cloud Applications Solution

Frank Tester
Sr. Purchasing Director
Indigo Corp.
Chicago, IL
Status: Open

650-989-0090
ftester@indigo.com
Software Services

Notes

60% **\$800k**

Understand

Next Step (within 8 days)
✓
Schedule Follow-up by July 25th with Frank T.

Last Step (10 days ago)
☎
Phone Call to Frank T.
6/6 2:13 pm
Got ahold of Frank, we had a good conversation. I was able to get him to buy into my vision for the solution. We agreed to move forward.

Prioritize

Stats

- W2 income: \$800k x 3% = **\$24k**
- Ranked **5th** on Win Candidate list
- Ranked **6th** for compensation

Commissions: \$169k Total
\$145k +24k

Quota: \$1.4M QTD +800k To go: \$1.6M

Stage 3 - Building Vision 1

2 of 3 Items still open

- ✓ Contact customer
- Schedule Follow-up meeting
- Fill out stage questionnaire

Recommended Docs

Tasks and Appointments 2

- July 25 ✓ Schedule Follow-up Meeting
- June 13 ✓ Scheduled Task Verify scope with customer
- June 12 ✓ Scheduled Task Need to start on proposal

Recommendations 4

Address the competitive threat Deals with this primary competitor have a low win rate

3 Touches: Winning opportunities usually have at least 8 touches

Timeline 3

- June 6 ☎ Scheduled Meeting with Frank T. Was able to call Frank, and get his availability for the next steps
- May 17 ✉ Customer Response Hi John, I did get your materials th 6th. They look good, I just have a question. 3:44 PM
- May 16 ✉ Sent Materials to Frank T. Hi Frank, I'm forwarding you some of our promotional literature. Enclosed you will find all of the items that we were talking about 1:05 PM
- May 5 ☎ Follow-up with Frank T. Called Frank and he agreed to review some of our sales materials.
- April 8 ☎ Initial Contact with Frank T. Contacted Frank Targile, he's got a project that's

People

- Contacts (4)
- Deal Registrations (1)
- Partners (1)
- Team (2)
- Leads (1)

Quotes

6/12 21 Revenue lines 5 Attachments

- Router 3827 \$32k
- Blade Server \$12k
- Hubs \$4k
- Switch 296 \$2k

Notice the goal mapping here as well.

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes

The screenshot shows a CRM interface for a sales opportunity. At the top, it displays the company name 'VISION, INC', the solution 'Cloud Applications Solution', the value '\$800k', a progress indicator at '60%', and the current 'Stage 3'. Below this, contact information for Frank Tester (Sr. Purchasing Director) and Indigo Corp. (Software Services) is shown.

The main content area is divided into several sections:

- Where It's At:** A location pin icon.
- What To Do Next:** A blue arrow icon.
- What Will Seal the Deal:** A dollar sign icon.
- What Else to Know:** A question mark icon.

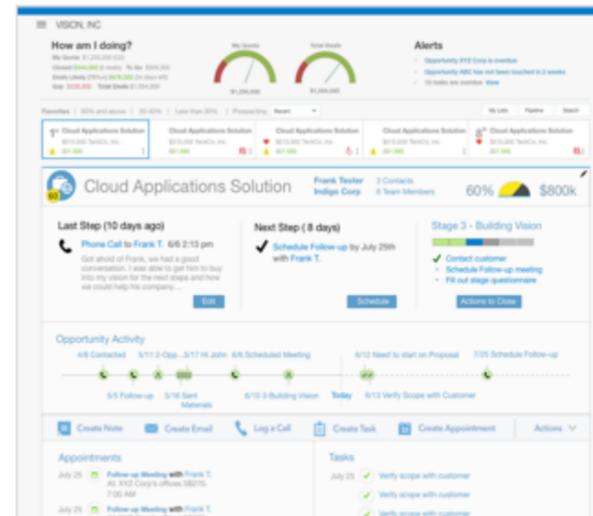
The right-hand side of the interface contains detailed information:

- Last Step (10 days ago):** 'Phone Call to Frank T. 6/6 2:13 pm'. Description: 'Got ahold of Frank, we had a good conversation. I was able to get him to buy into my vision for the solution...'
- Notes:** 'We can talk to John Kayser about the new quote... 5/12' and 'Think we'll need to move the date of the closing d... 6/13'.
- Next Step (within 8 days):** 'Schedule Follow-up by July 25th with Frank T.' with a 'Schedule Followup' button.
- Tasks and Appointments:** A list of tasks including 'Meeting with VP Purchasing' (July 11), 'Scheduled Task Verify scope with customer' (June 13), and 'Scheduled Task Need to start on proposal' (June 12). Includes a 'New Item' button.
- Stage 3 - Building Vision:** '2 of 3 Items still open' with a list: 'Contact customer', 'Schedule Follow-up meeting', and 'Fill out stage questionnaire'. Includes a 'Recommended Docs' link.
- Things to Address:** 'Address the competitive threat Deals with this primary competitor have a low win rate'.
- How Many Touches:** '3 Touches: Winning opportunities usually have at least 8 touches'.
- Stats:** 'W2 income: \$800k x 3% = \$24k', 'Ranked 5th on Win Candidate list', 'Ranked 6th for compensation', '\$169k Total'.
- Quotes:** '6/12 21 Revenue lines 5 Attachments' with a list of items like 'Router 3827 \$32k', 'Blade Server \$12k', 'Hubs \$4k', 'Switch 296 \$2k', 'Switch 387 \$2.3k'.
- People:** 'Contacts (4)', 'Team (2)', 'Deal Registrations (1)'.

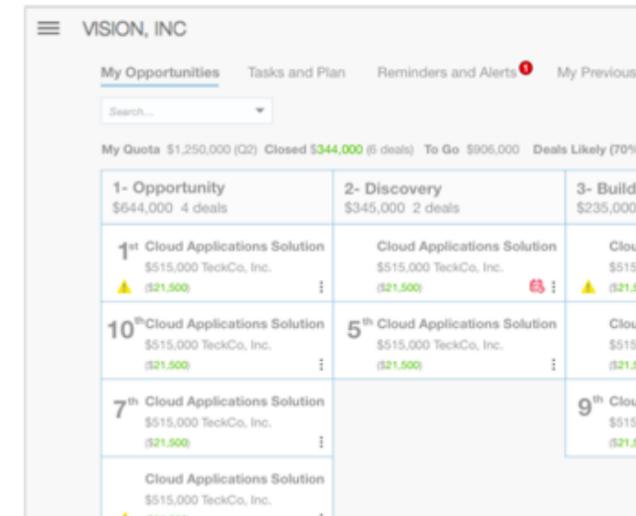
The Guided concept is prescriptive and chunks the data model into a scannable set of ordered sections.

- 1: Goals & Process
- 2: User Interviews
- 3: Analysis
- 4: Problems
- 5: Architecture
- 6: Concepts
- 7: Outcomes**

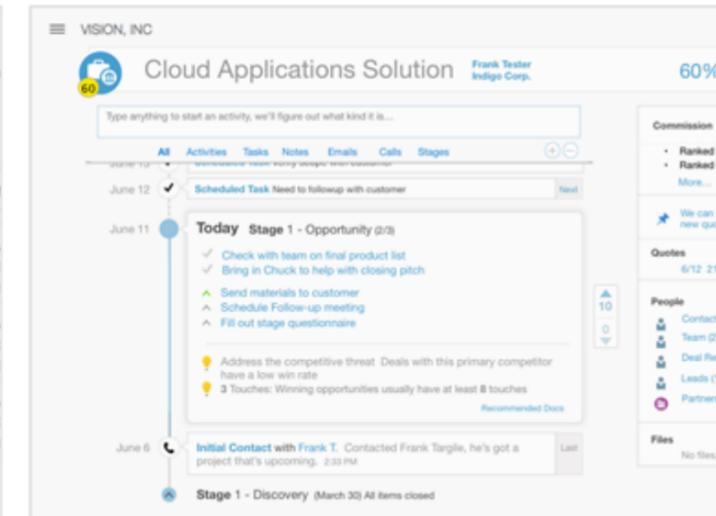
Home Page



Pipeline (Kanban)



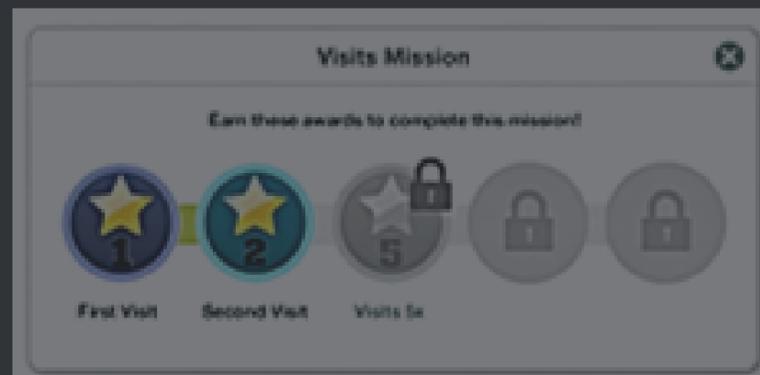
Detailed Opportunity



The POC effort helped convince Oracle's UX leadership that Field Sales and Pipeline management use cases needed to be addressed by our Sales Cloud product.



Badgeville Platform Redesign



About the Company

Badgeville was an enterprise gamification startup dedicated to helping other companies leverage game mechanics to incentivize user behaviors.

Project and Goal

I left Apple to start a UX practice at Badgeville, reporting to the VP of Product Management. The founder and CEO tasked me with leading a 'radical revision' to the level of usability of the product which had not had formal UX design practices applied.

Activities

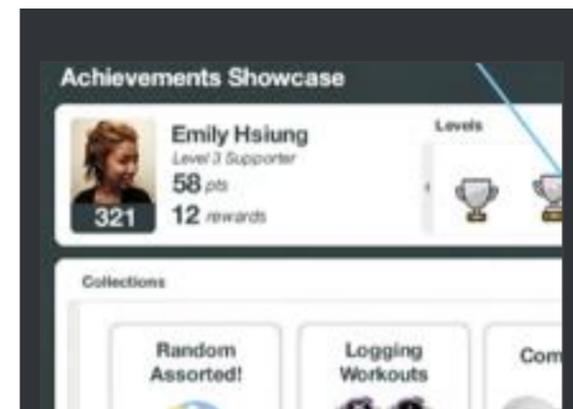
- UX design practices: user research, task flows, wireframes
- Worked extensively with customers to collect needs, tasks, and other inputs
- Redesigned the platform
- Created a new VX design language
- Worked with PMs and Engineers to get the new designs implemented

Goal: 'Radically improve' the usability of the platform

- in a matter of months, because our \$70 million dollar startup is centered on this platform

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact

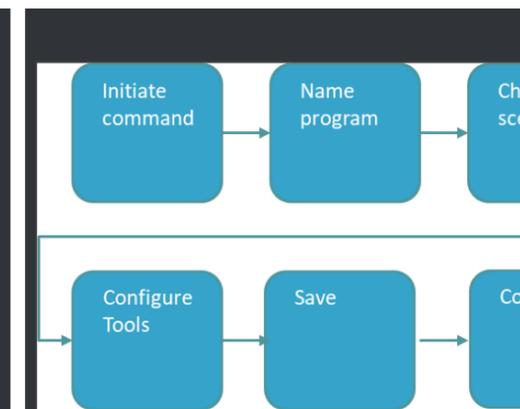
How do we get there?



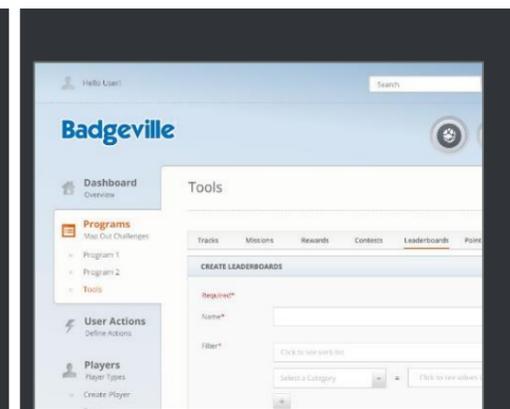
Understand the domain



Empathize with the user



Map key user flows



Propose new UX system

Primary goals for the redesign project

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
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- 11: Outcomes and Impact

- Increase self-service in the product
- Lower campaign producer and support costs
- Re-orient the product from a primarily developer platform to a campaign design & management one.
- Reduce the implementation time by lowering the learning curve
- Create more customer success stories

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
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- 6: Proposal
- 7: Navigation and IA
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- 10: Patterns
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Core

Behaviors score points
Non-repeatable Missions set goals
Collect Badges



Achievements Showcase

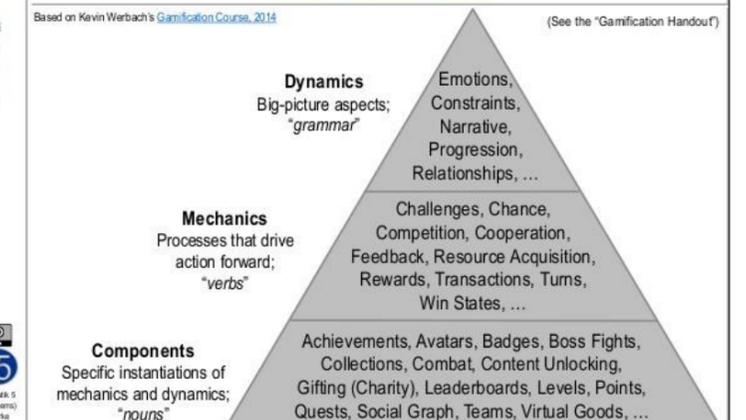
Emily Hsiung
Level 3 Supporter
58 pts
12 rewards

Levels: You've made it to Level 3: Supporter

Collections: 20 out of 84 Rewards

- Random Assorted! 2/5
- Logging Workouts 1/8
- Comments 0/5
- Visits 2/7
- Check Ins Complete!

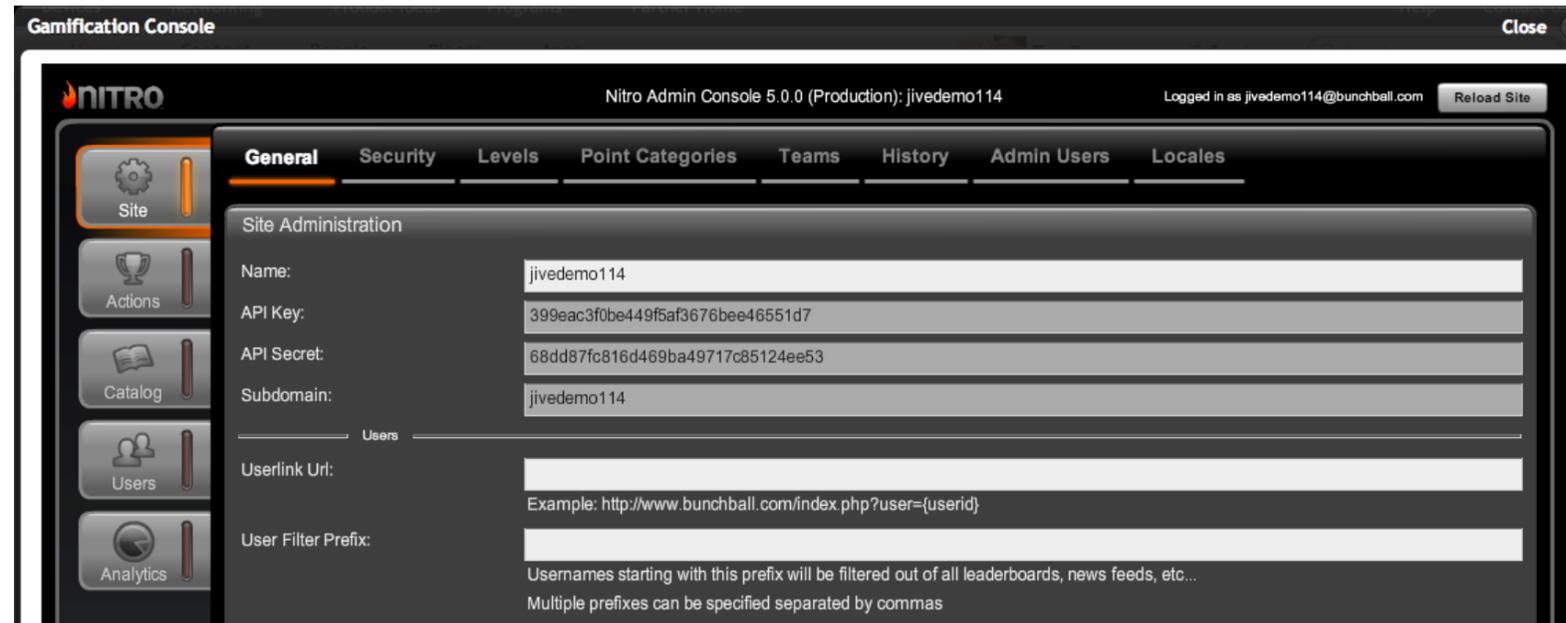
Game Elements Pyramid for Gamification



Competitive Analysis

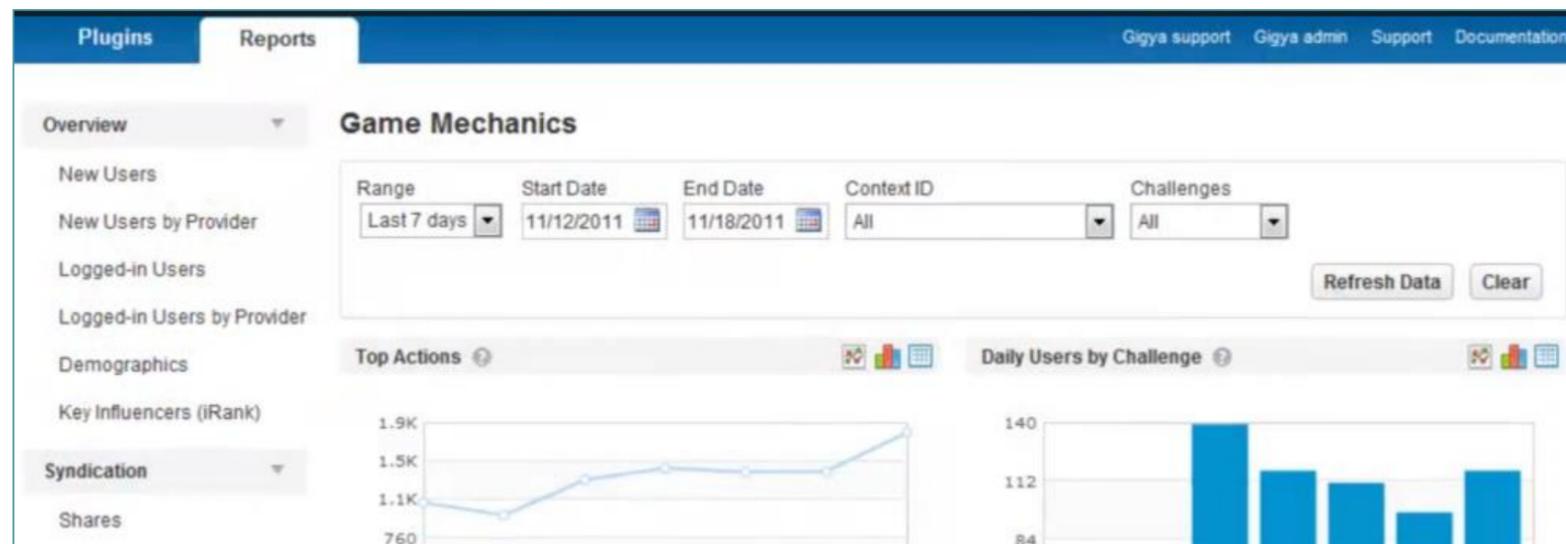
- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
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Bunchball Nitro



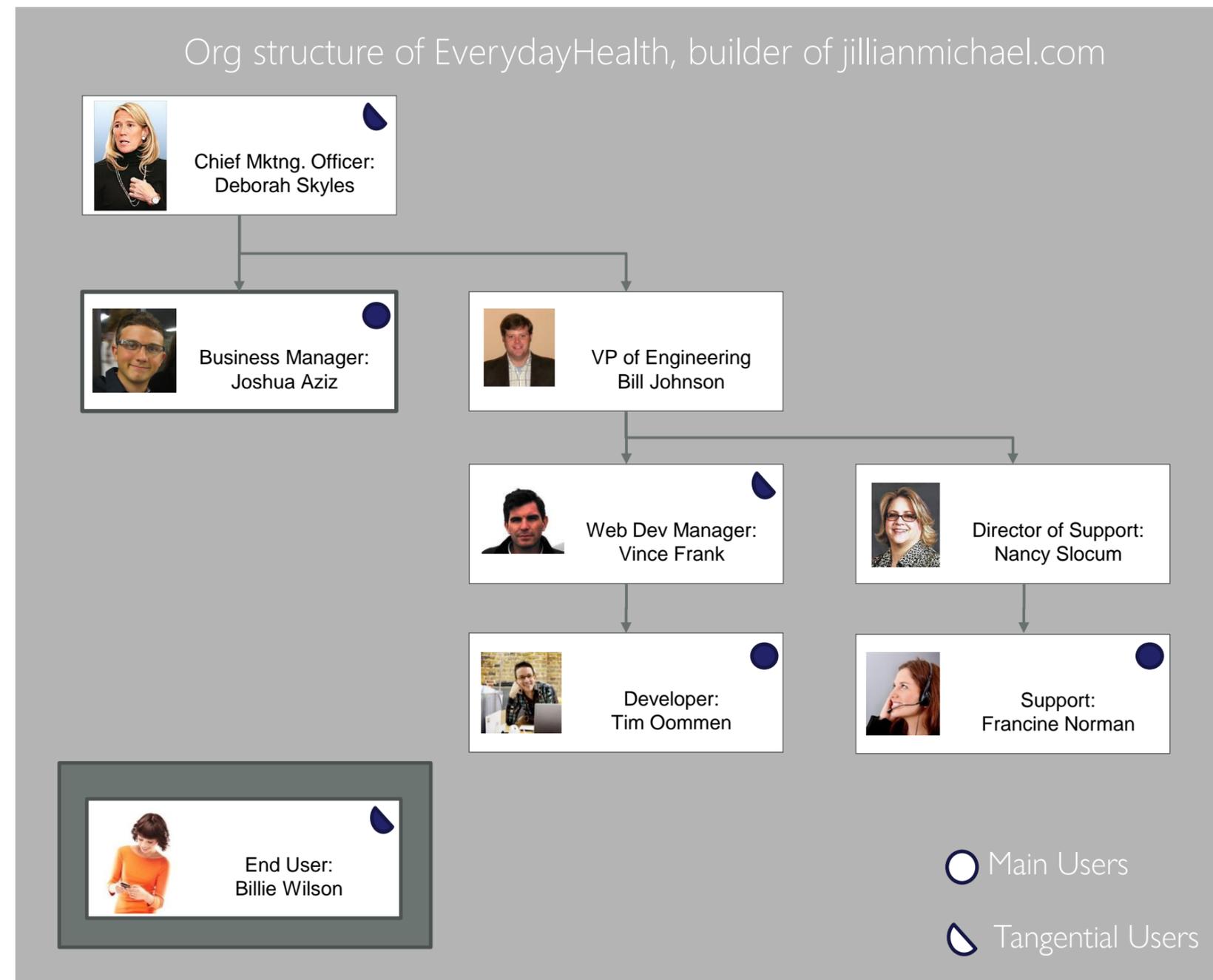
Are there competitors in this space?
Are they doing something interesting?
How are they solving the same problems?
What can I steal?

Gigya



Customer Personas and Org Structure

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
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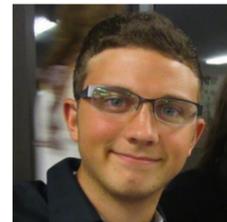
After working with the VP of Account Management and identifying key personas, I then built an org structure to see the relationships between personas.

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
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- 9: High Fidelity Mocks
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- 11: Outcomes and Impact



Chief Marketing Officer: Deborah Skyles

- Deborah wants her product or social platform manager to develop a gamification strategy and to get up and running quickly. She needs her product manager to report to her often about effectiveness and ROI.



Business Manager: Joshua Aziz

- Joshua needs a new campaign for Jillian Michaels' site. They want to increase retention and need to create a new site in the console.



Developer: Tim Oommen

- Tim gets tasked with making sure that new product personas are configured in the BV console. He needs to have them show up and contextualize the usage of your product correctly on the targeted Web pages.

Developing scenarios alongside the identified personas helps contextualize the usage of your product correctly on the targeted Web pages.



Support: Francine Norman

- A customer calls with questions about where their badge went. It turns out that the badge was taken away when a mission was repeated. Francine files a support ticket with Badgeville about the issue.



End User: Billie Jo Wilson

- Billie Jo knows is proud of her Super Shopper badge but it disappeared one day. Feeling annoyed, she called up customer support to ask for it back.

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact

1. Design Game

1. Create Program
 1. Initiate command
 2. Name program
 3. Choose scenario
 4. Choose goal(s)
 5. Review template and add/subtract from list of Tools
 6. Add existing component instances
 7. Configure Tools
 8. Save
 9. Copy code
 10. Copy widgets

2. Monitor Program

1. Go to program or to dashboard
2. View the desired set of reports
3. Click on a report to go to full page

3. Manage Players

1. View Profile Information
 - a. Adjust player points, badges, rewards
 - b. Manage teams player is on
 - c. Examine player graph
 - d. View Player Activities
2. View Team
 - a. View Team lineup
 - b. Edit Team info
 - c. Assign rewards
 - d. Assign Points
 - e. View Team Activities
 - f. Examine Team Graph

- c. Configure levels
 1. Set specific behaviors for levels (or all)
 2. Set count thresholds for levels

4.2 Create Behaviors (optional)

1. Name behavior
2. Add metadata
3. Select primary metadata pair
4. Add Points - Optional
5. Add/Create Point Systems (w/value) - Optional
6. Add scheduling & Timed reset - Optional

4.3 Create Leaderboard

1. Select Type (Behavior-*create points schedule/Reward/Player/Team/Virtual Team*)
2. Select behaviors, and units/metadata (if appropriate)
3. Filter teams (if appropriate)

4.4 Create Mission

1. Select Mission type (random or progressive)
2. Select if this is a 'Levels Mission' (if progressive)
3. Add Rewards

4.5 Create Reward

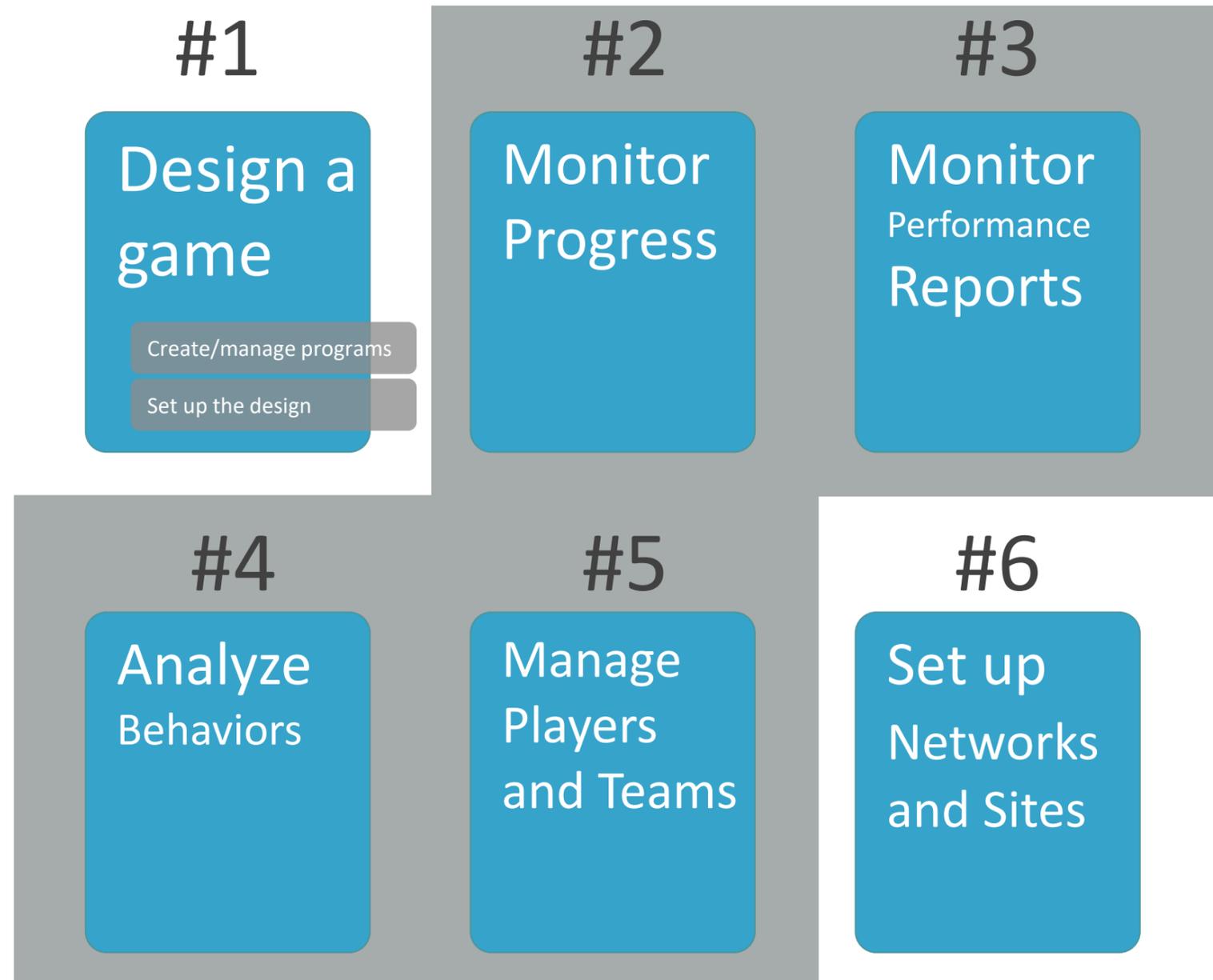
1. Select Player or Team reward
2. Add image
3. Add Points
4. Add/Create Point Systems (w/value) - Optional
5. Add scheduling & Timed reset – Optional
6. Select/Add Category Value (metadata)
7. Trigger: Behavior/Social Behavior, X times, Category and Value(s) (metadata)

4.6 Create Contest

1. Select Leaderboard
2. Make Active

Core User Task Groupings

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
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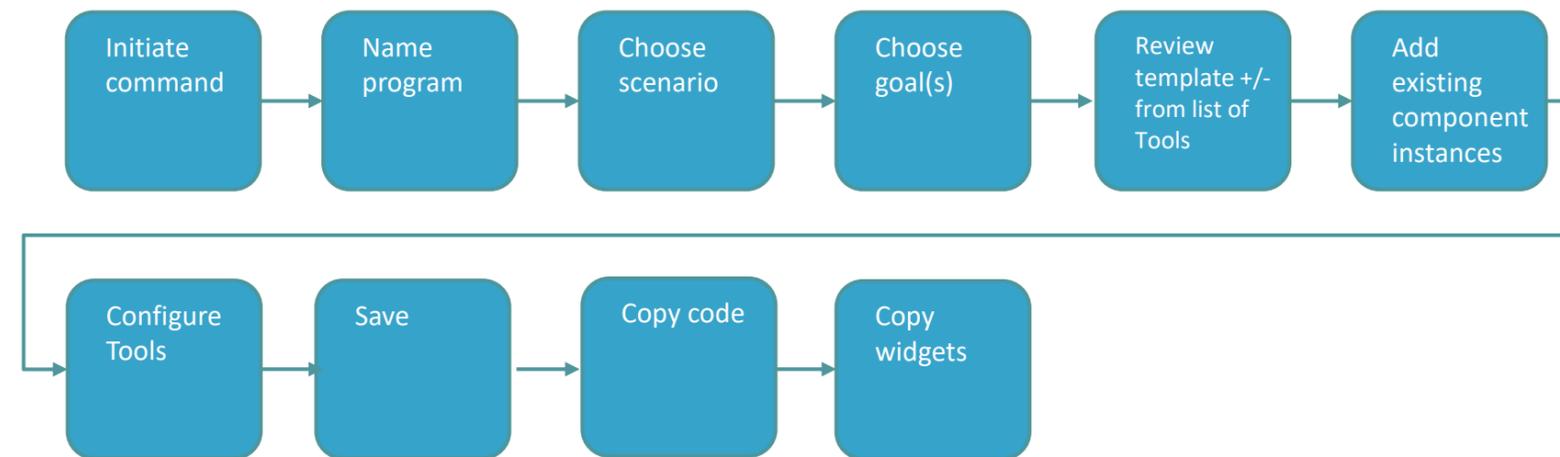
Let a business manager persona take over step #1 by making games much easier to configure. Tasks #2-5 can be accomplished by a campaign manager and #6 by an admin or developer.

- 1: Problem & Process
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1. Design Game

A. Create Program

1. Initiate command
2. Name program
3. Choose scenario
4. Choose goal(s)
5. Review template and add/subtract from list of Tools
6. Add existing component instances
7. Configure Tools
8. Save
9. Copy code
10. Copy widgets



2. Monitor

1. Go to program or to dashboard
2. View the desired set of reports
3. Click on a report to go to full page



Badgeville Usage Stats

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
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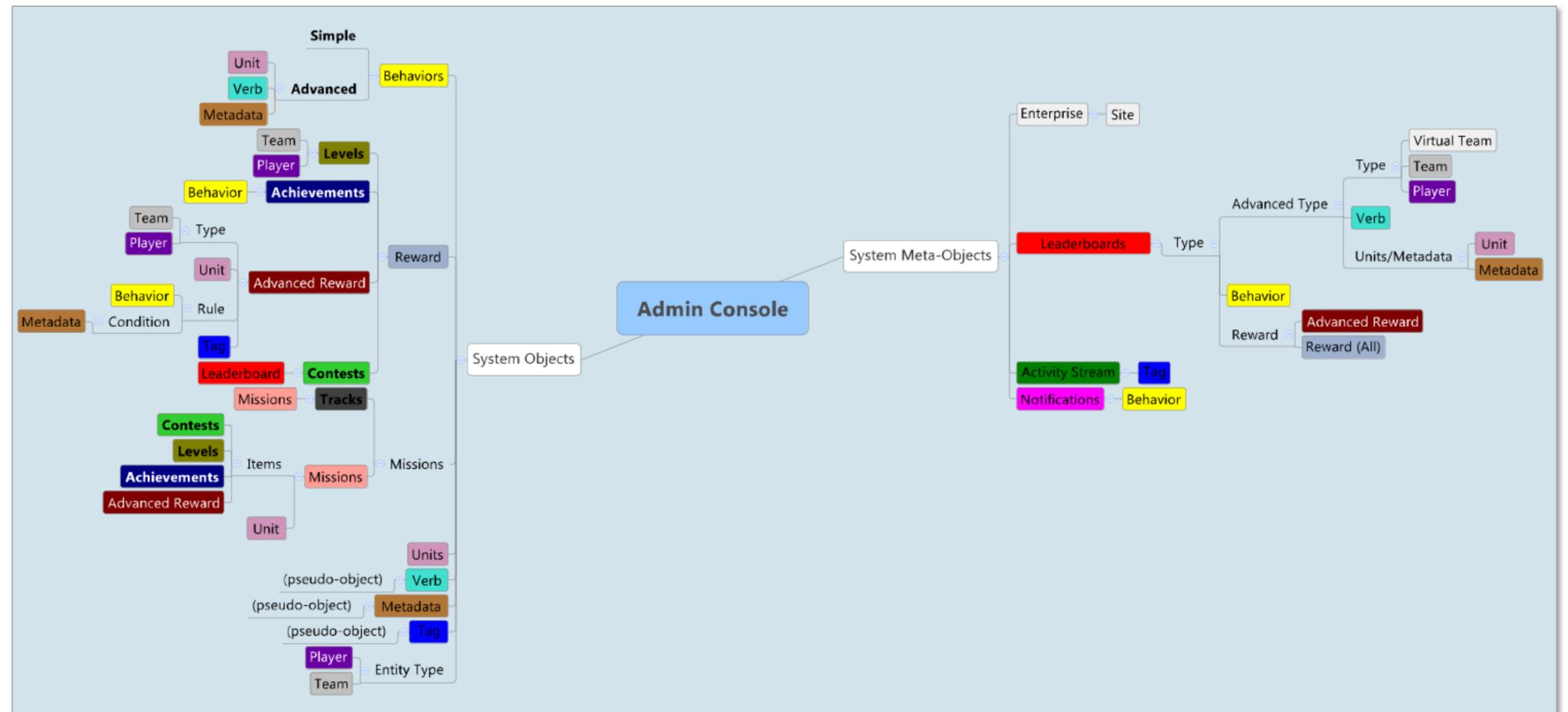
Site	Simple Be	Advanced	Levels	Rewards	Advanced	Missions	T
Baseline Configuration (baseline.hsn.net)	0	1	1	1	1	1	
Basic (basic.api.com)	0	1	1	0	1	1	
Beat The GMAT (www.beatthegmat.com)	0	1	0	0	1	0	
Bedsider Production (bedsider.org)	0	1	1	0	1	1	
Best Life (www.thebestlife.com)	0	1	1	1	1	1	
Beyond the Guide (beyondtheguide.com)	1	0	1	1	0	1	
Bill Hennessy Test (hennessygrp.com)	0	1	1	1	1	1	
Binekarac SilentMode (binekarac.vw.com.tr)	1	1	1	0	1	1	
BlackBook Production Site (blackbookmag.com)	1	0	1	1	0	0	
BradsDeals (bradsdeals.com)	1	1	1	1	1	1	
Buddy Press KidzVuz (kidzvuz.com)	1	1	1	1	1	1	
Buzznet (buzznet.com)	1	1	0	1	1	1	
C3 (c3.com)	0	1	1	1	1	1	

Pulling data from the system tells us what's being used (or not)

I also worked with internal teams to get insight into customer support issues

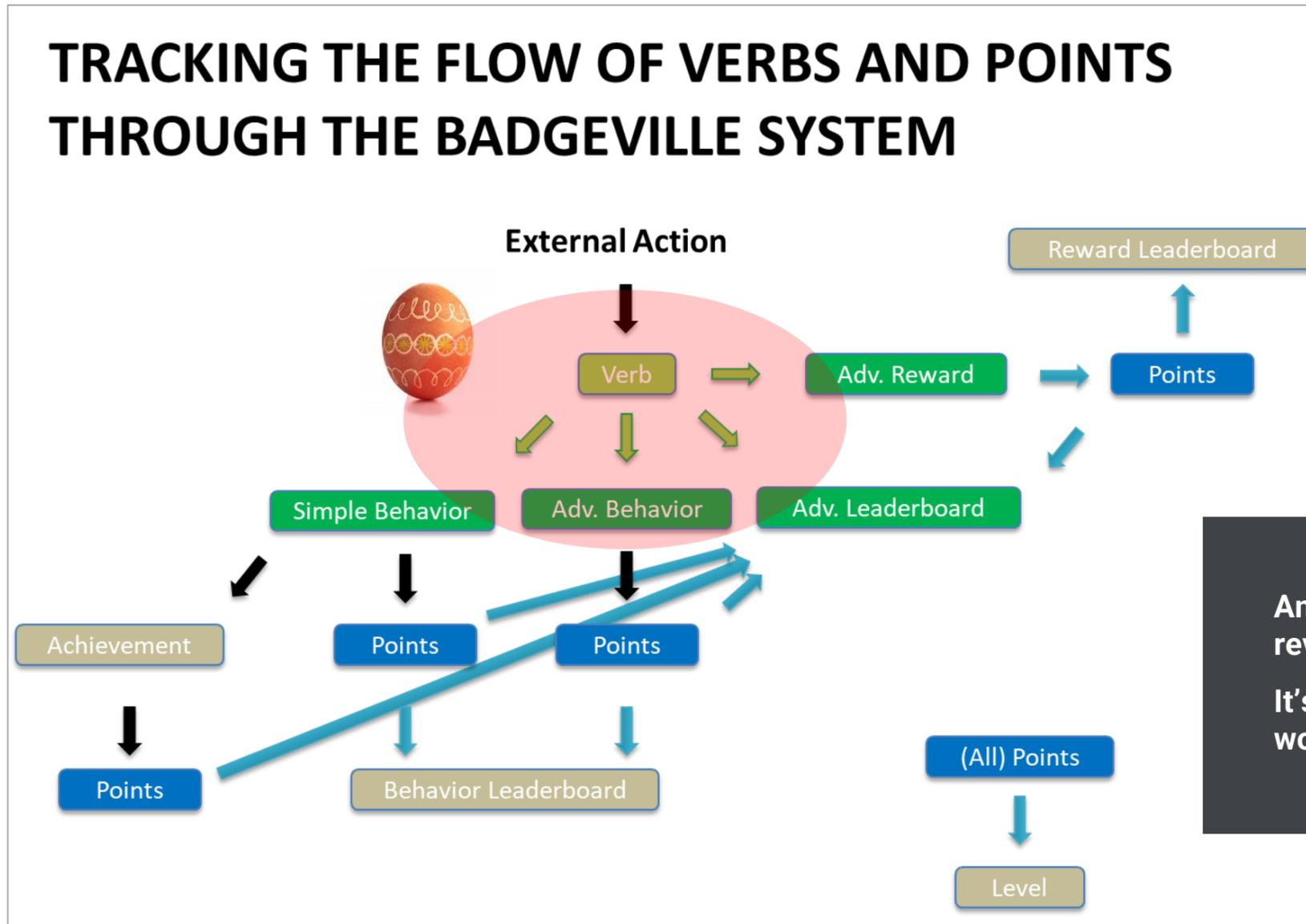
Conceptual-mapping of Object Relationships

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
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Mapping out Objects and Data Flows

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
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Analyzing how the system works reveals a hidden truth:
It's the verbs that underlie the working of major system objects

Simplify and Consolidate

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
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- 10: Patterns
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Treat all 3 types of behaviors consistently as a singular object (just **Behaviors**)



Treat **Achievements** and **Advanced Rewards** consistently (just **Rewards**)



Deprecate **Levels** in lieu of a Mission type that accomplishes the same goal.



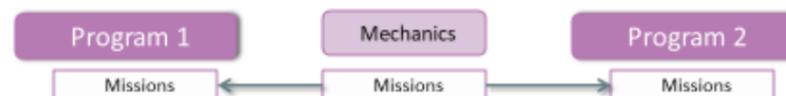
Deprecate Tags in favor of a single Metadata library (use Keys only in place of Tags)



Create new object: **Programs**

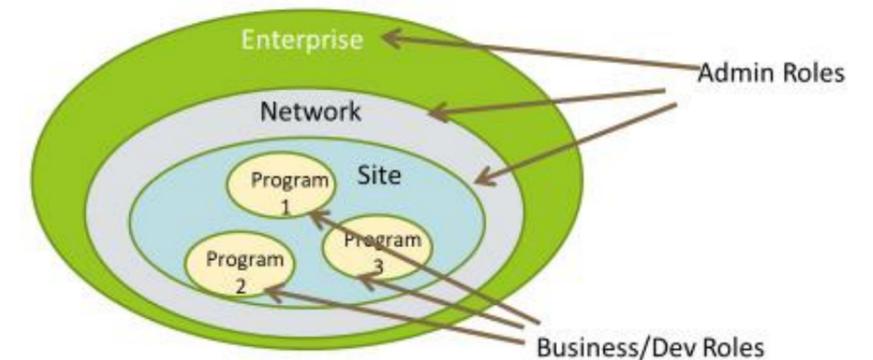


Architect the product so that programs can share and reuse common system objects



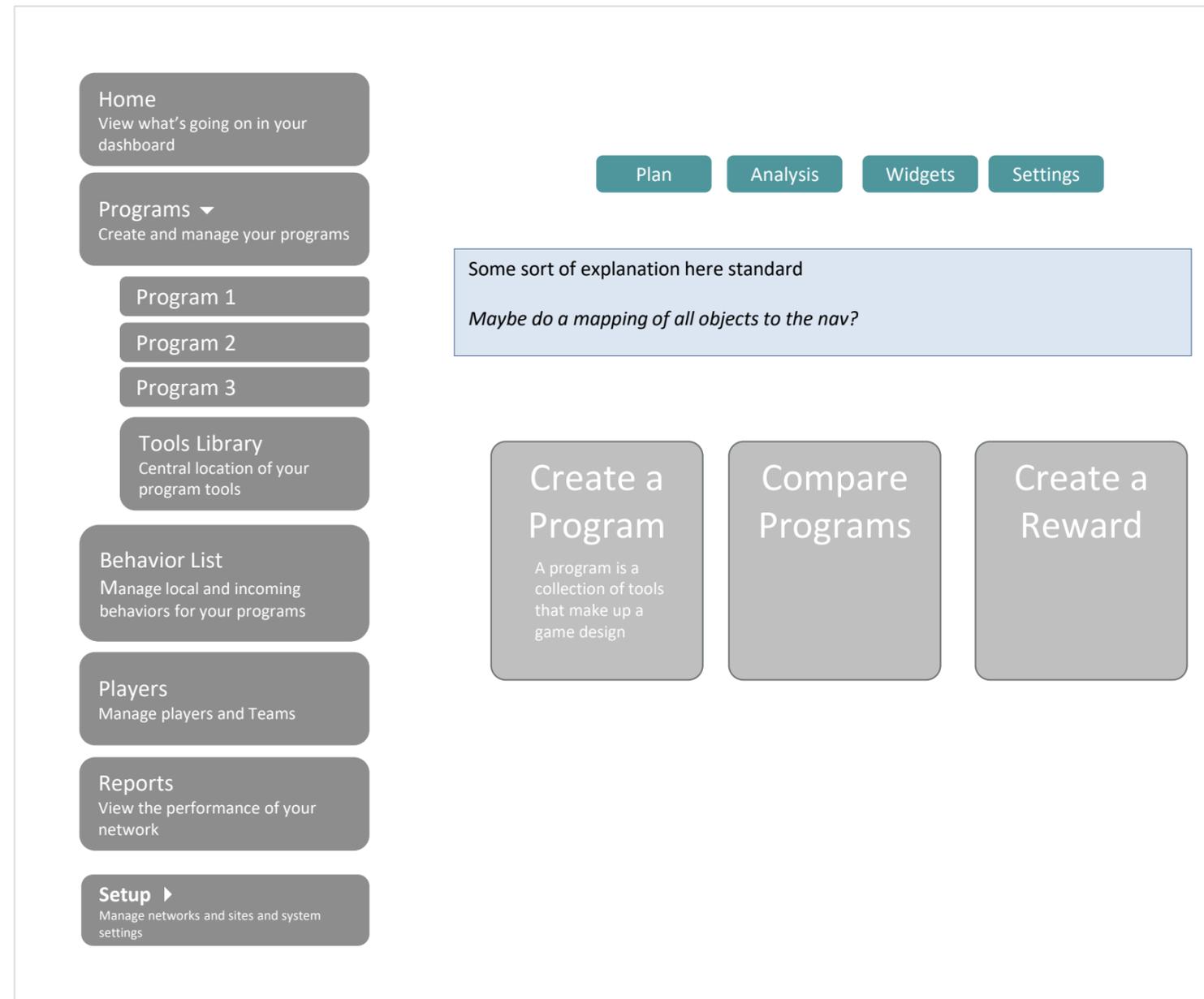
There were a lot of opportunities to simplify the representation of the system for users.

Further, I proposed new UI concepts such as 'Programs' that would make it easier to structure campaigns as well as share and reuse game objects.



Improved Navigational Model

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact



A new information architecture supported the core user needs more simply and directly than before.

Create a Simple Object

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact

Create a Program

Community Sharing Project | Community | Goals: Increase Conversion, Increase social sharing...more

Dashboard | Programs | **New Program** | Tools | Behaviors | Players | Reports | Setup

Track 2

- Mission 1
- Mission 6
- Mission 5 - 1
- Mission 5 - 2
- Mission 5 - 3
- Mission 5 - 4
- Mission 5 - 5

Tracks | Missions | **Rewards**

Create a new Reward

Create a new Reward Detailed →

Reward 3 |

Behavior | **Count**

Read | 5 | + | V Add Context V

Points

12 | Credit: Player

Reward Hint: Enter

Reward Message: Enter

Reward Image: ? | Browse

Save | Cancel

I proposed using advanced interactions like direct manipulation to make the configuration experience easier and more natural.

Simplifying Complex Objects

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact

**Scannable
structure**

Create Advanced Reward

Definition — Define your Reward by naming it and select its type

Name

Active to

Triggers — First select an Action to count, set the count threshold, and then set the criteria by entering categories and values.

User Action	Count	Chosen Criteria (each action must meet ALL criteria)
<input type="text" value="Read"/>	<input type="text" value="5"/>	<input type="text" value="Category 1"/> = <input type="text" value="One Value"/>
<input type="button" value="+"/>		<input type="button" value="+"/>
<input type="button" value="+ Add Rule"/> Any Rule will trigger		

Points — Select the number of points to Reward

Points Credit: First player(s) only Other Points

Reward — Give the user a hint and a success message

Reward Hint

Reward Message

Reward Image

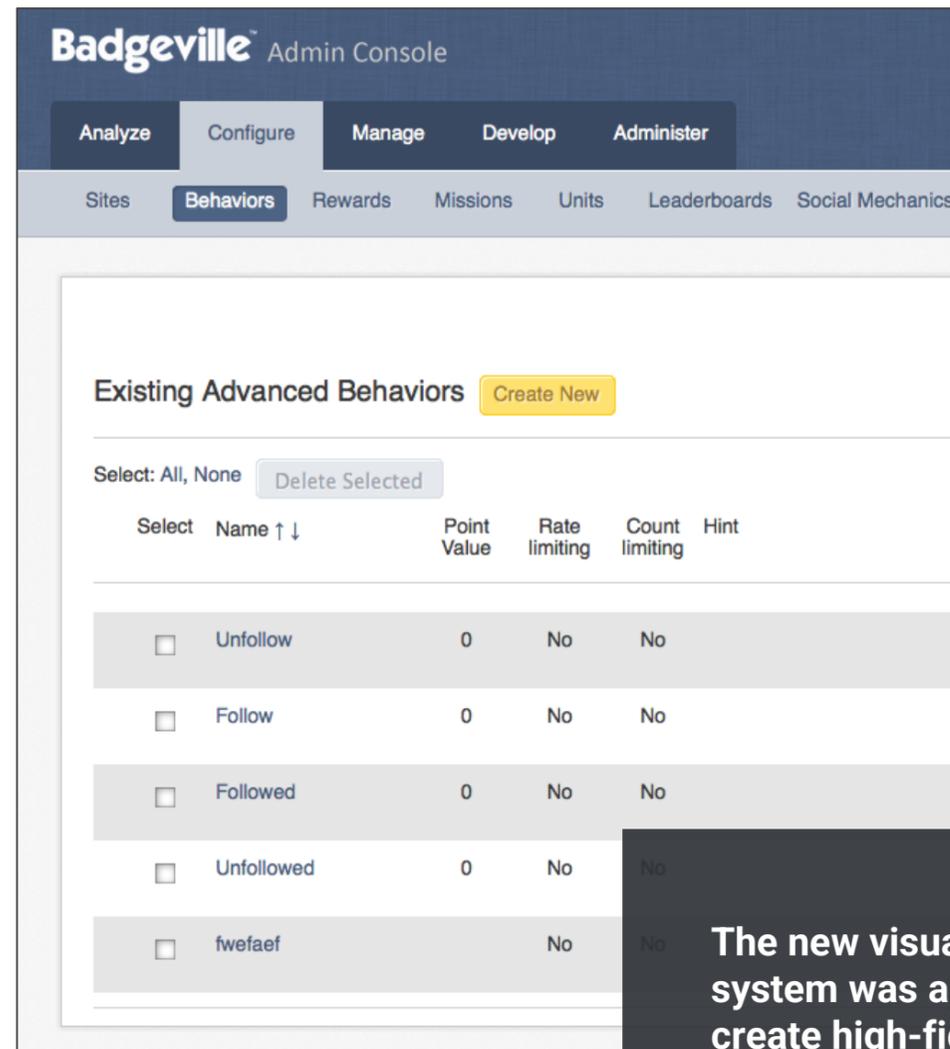
Additional Settings Add more detailed settings like time windows and earnings limits

More complex objects with a deeper data model were improved to be easier to understand by enhancing scannability.

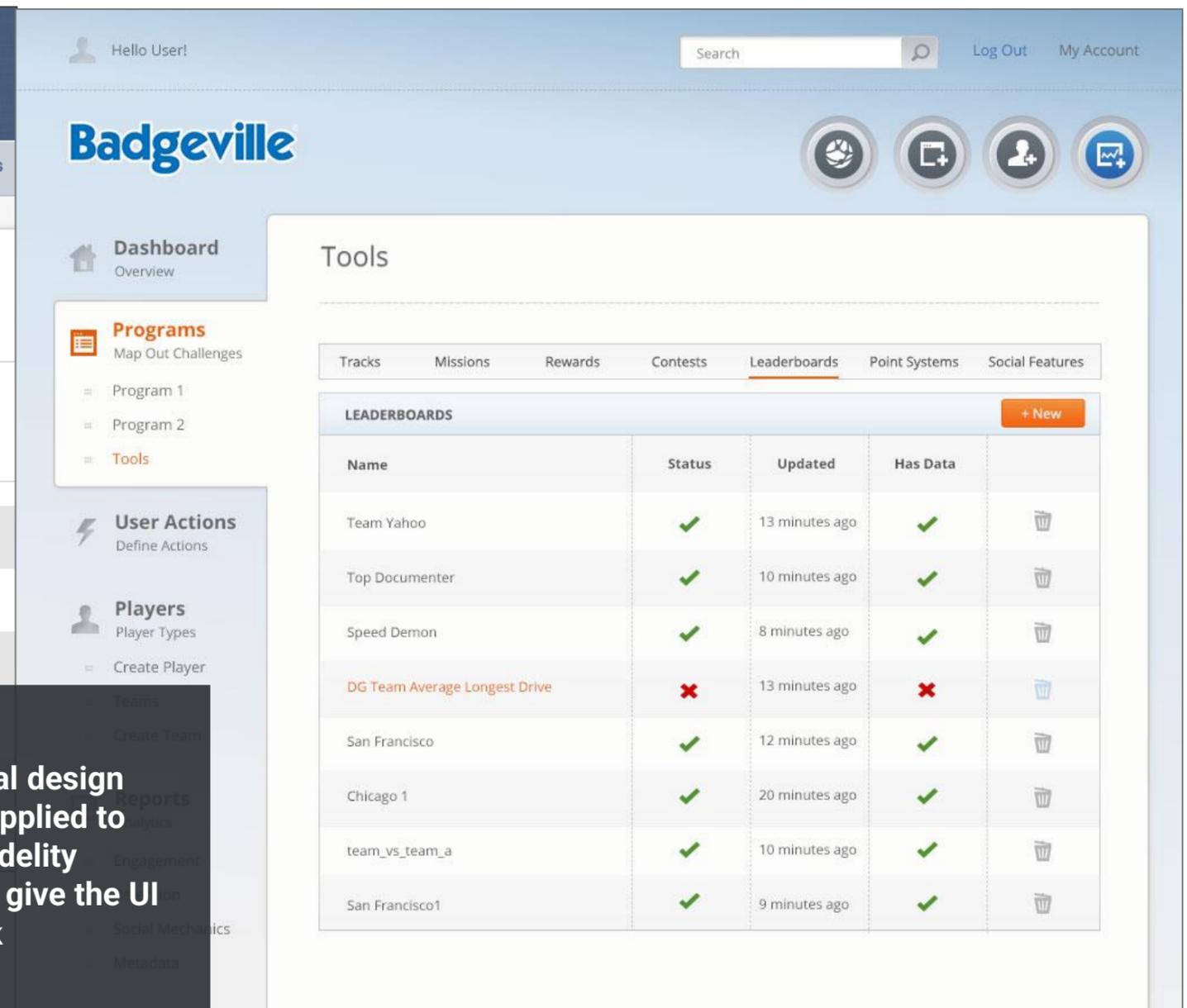
New Visual System

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact

From this:



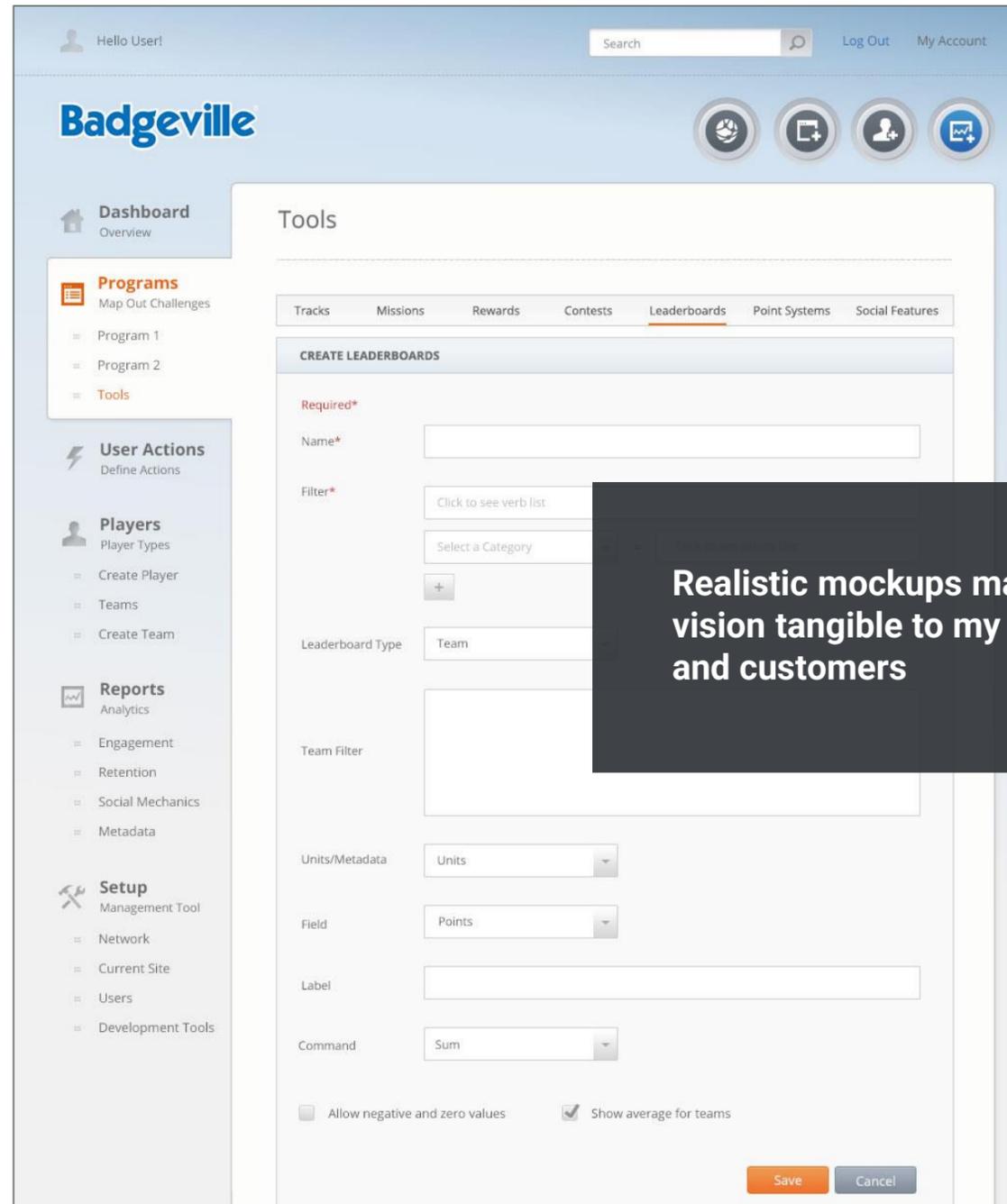
To this:



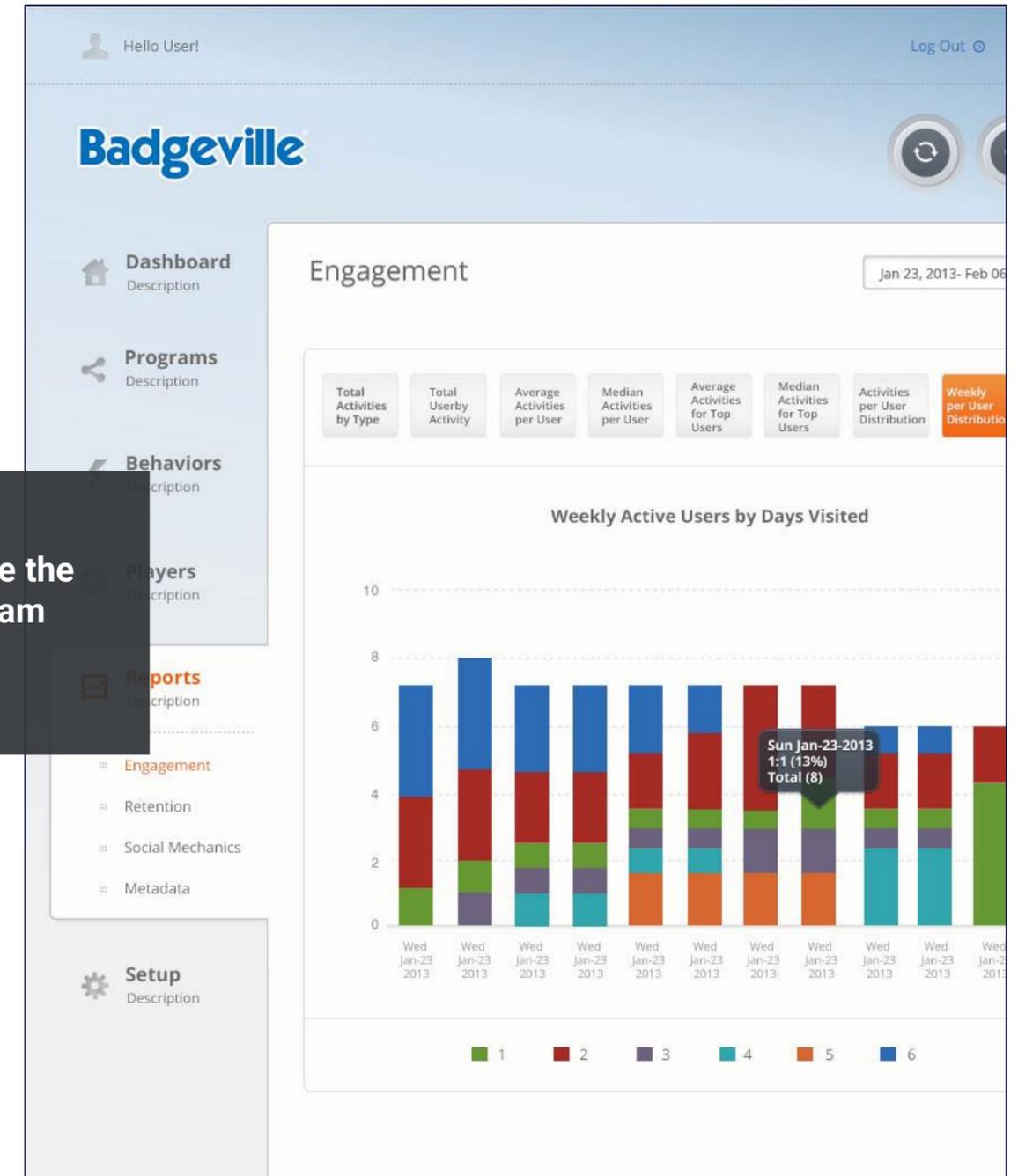
The new visual design system was applied to create high-fidelity mockups and give the UI a fresher look

Benefits of High-Fidelity Mockups

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact



Realistic mockups made the vision tangible to my team and customers



- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns**
- 11: Outcomes and Impact

The screenshot shows the Badgeville dashboard with the following annotated patterns:

- Pattern: Auxiliary Links (top navigation)
- Pattern: Network & Site UX (top navigation)
- Pattern: Universal Search (top navigation)
- Pattern: Buttons (Shortcuts) (top navigation)
- Pattern: Buttons (Table) (main content area)
- Pattern: Filter Control (Table) (main content area)
- Pattern: Link to object (main content area)
- Pattern: Table Quick Entry (main content area)
- Pattern: Combo box + Auto-suggest (main content area)
- Pattern: Duplicate (main content area)
- Pattern: New (main content area)
- Pattern: Delete (main content area)
- Pattern: Image Chooser (table) (main content area)
- Pattern: Link to object (main content area)
- Pattern: Table (main content area)
- Pattern: Cell + Table text (main content area)
- Pattern: Lefthand Nav (sidebar)
- Pattern: 3rd-Level Menu (sidebar)

Image	Behaviors	Context	Points	Count/Day
	Comment-India	Category Technology	0	
	Readit	Civilization = Persia	5	24
	Read-Persia	Topic = Fiction	20	24
	Lookwhatidid		25	34
	Last Word	Comment	12	
	Share-Twitter	Share_123	45	45
	Visit	Service = Twitter		
	Went There	Visit	10	27

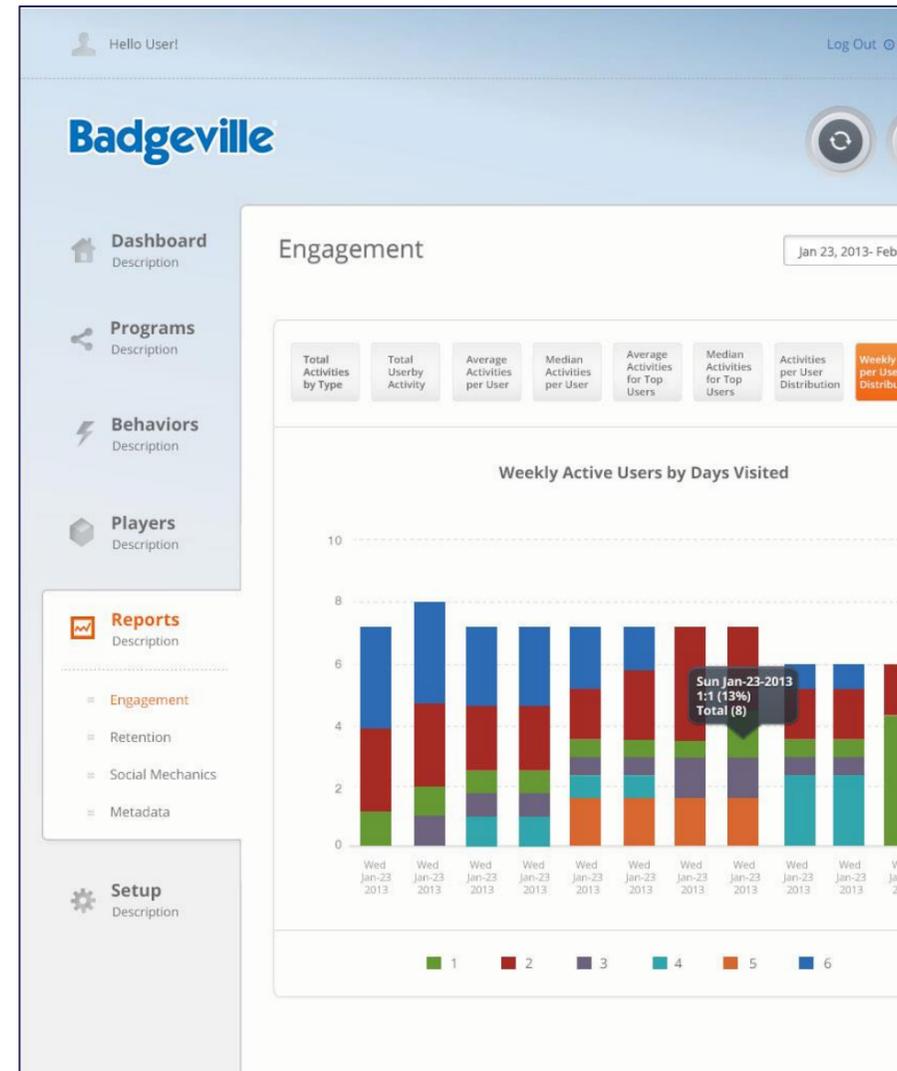
Please list these in the project management google doc on spreadsheet 'Design Patterns':
https://docs.google.com/a/badgeville.com/spreadsheet/ccc?key=0Ao_6IusBxqRMdDBRamwwZnpWMFdQcUx4RTA3WmdDVkE#gid=1

Each pattern needs a Unique Confluence page – some patterns can be grouped together like buttons, etc

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After specifications, I created a pattern library to enhance UI component reusability.

- 1: Problem & Process
- 2: Domain
- 3: Personas
- 4: Task Flows
- 5: Objects & System
- 6: Proposal
- 7: Navigation and IA
- 8: Wireframes
- 9: High Fidelity Mocks
- 10: Patterns
- 11: Outcomes and Impact



Customers were excited to see the prototypes which allowed me to collect detailed feedback and drive design iterations. The new UI went into the next major platform release.



END OF CASE STUDIES



Designs

Intuit + Yahoo!

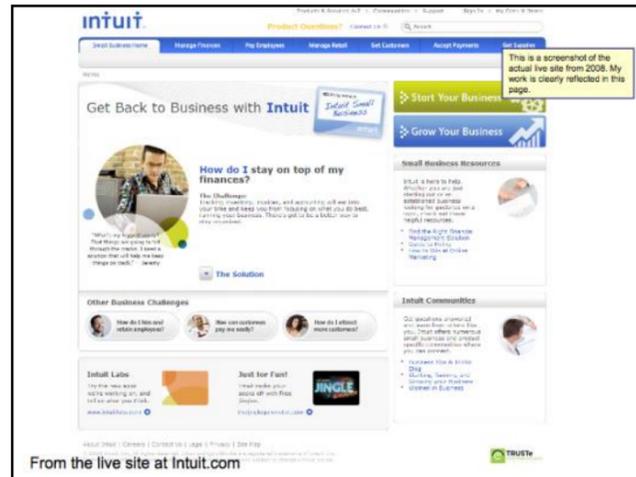
Apple

Dreamworks

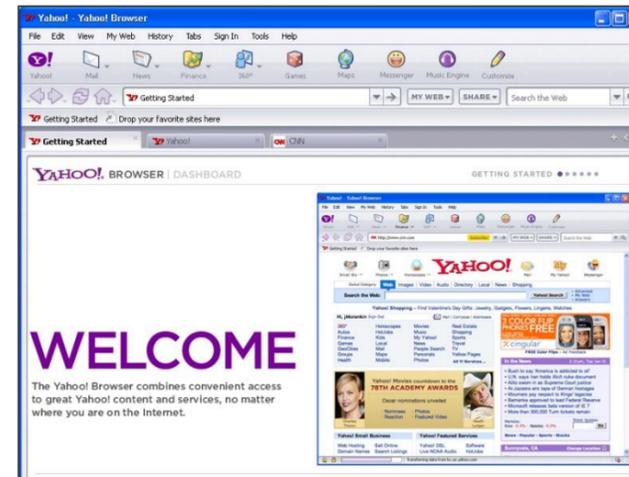
Oracle



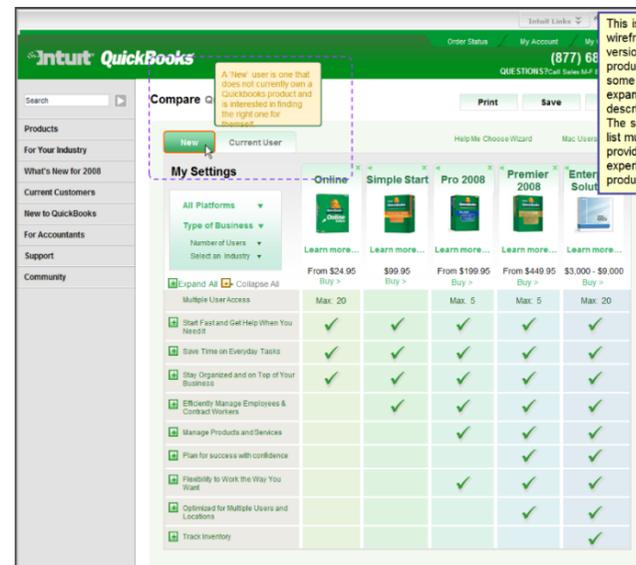
Consumer Design (10 million+ users)



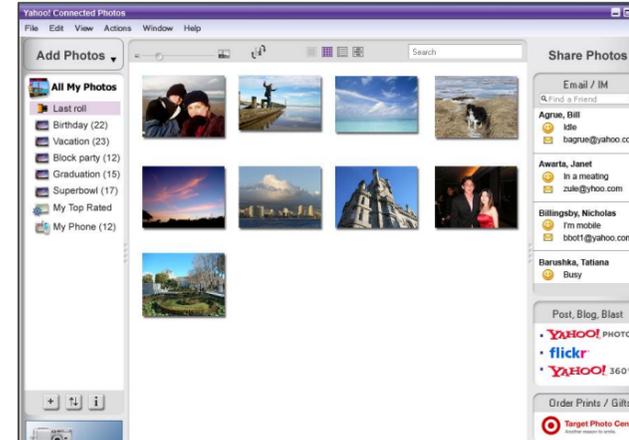
- Intuit.com redesign



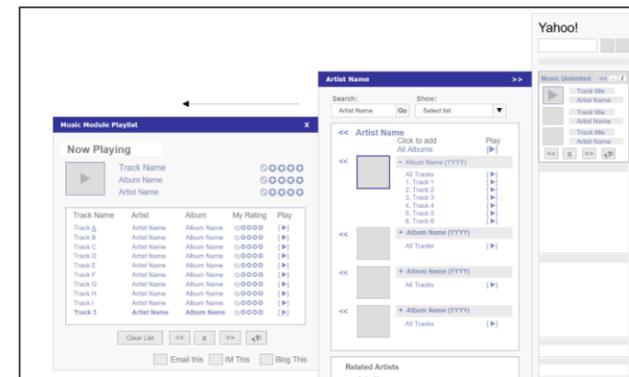
- Yahoo! Social Browser



- Quickbooks Product Chooser
- Quickbooks Online
- Intuit Mortgages



- Yahoo! Photos

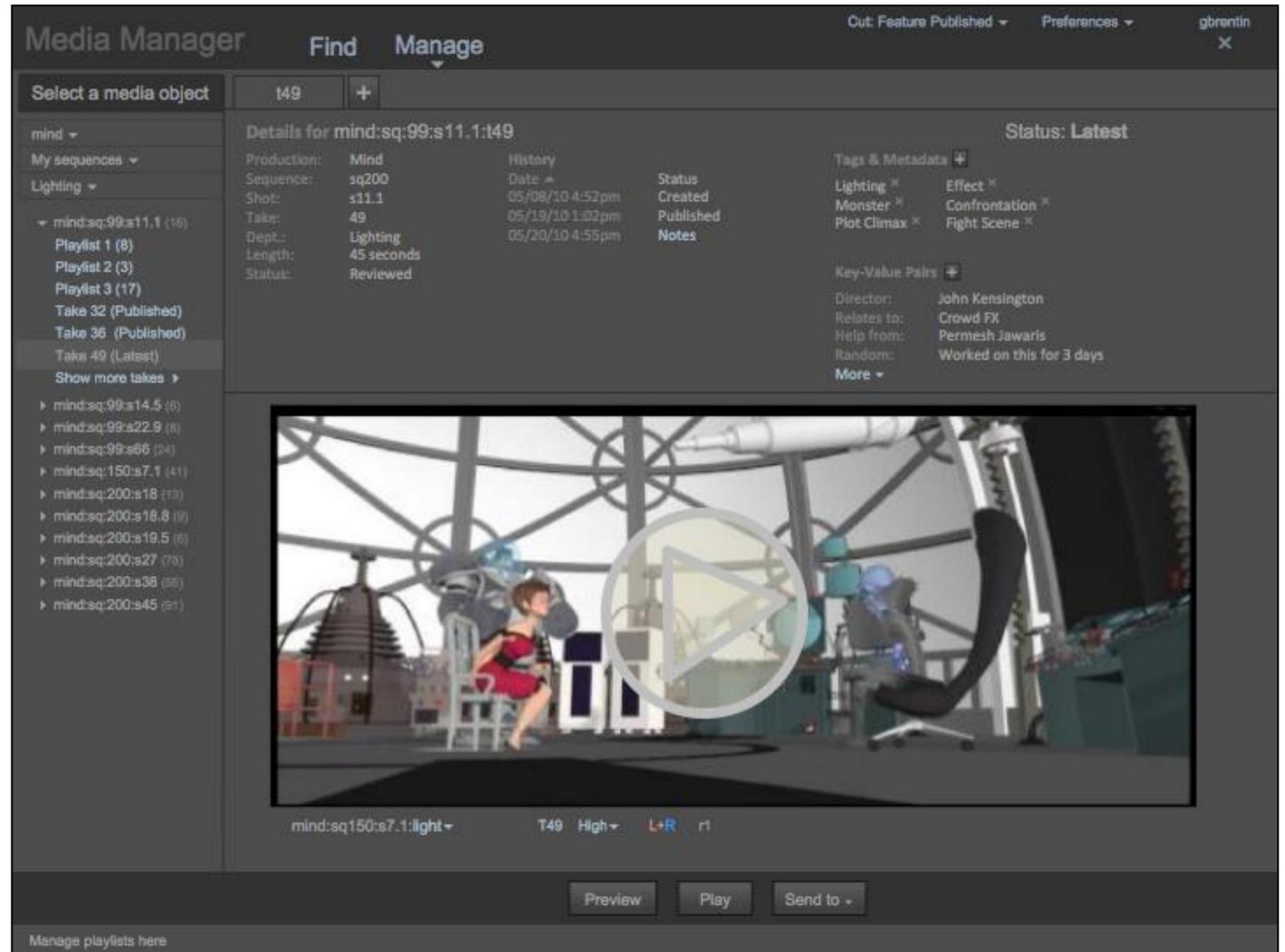


- Yahoo! Sidebar



Media Manager

I designed an internal tool for DreamWorks called Media Manager to allow animators and directors to manage the flow of daily animation sequences as movies are being crafted. Media Manager was a content management platform designed to help animators manage large animation renderings and to move them through an approvals workflow.





Sales Cloud Opportunity Modernization

Edit Opportunity: OpptyWSf3731416788: Summary

Finance Org Upgrades Desktop & Laptops & Tablets | \$144,000 | 80% | **John Hasse Ignite Technologies**

Close Date: October 18, 2018 | Status: Open | Owner: Fred Barnes | Last: 5 days ago

Stage: Qualification > Discovery > **Presentation** > Agreement > Negotiation > Close

Actions: Create Note, Create Appointment, Create Call Report, Create Task

Notes

Upcoming

- Phone Call TO Mel C We'll need to talk over the various options for the proposal (Dec overdue)
- Meet with John Brandeis We'll need to talk over the various options for the proposal (Dec 8 8:30 AM)
- Meet with Mel C We'll need to talk over the various options for the proposal (Dec 5 1:30 AM)
- Schedule a bulk email

Products

Type	Name	Quantity	Estimated Price	Amount	Sales Credit
Router 45 Family	Router 234782	6	\$45,000	\$185,000	(\$67,000)
Router 45 Family	Router 234782	6	\$45,000	\$185,000	(\$67,000)
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Finance Org Upgrades Desktop & Laptops & Tablets

Owner: Fred Barnes | Primary Contact: John Hasse | Win Probability: 80% | Amount: 5 years | Close Date: October 18, 2018

Stage: Qualification > Discovery > **Presentation** > Agreement > Negotiation > Close

Presentation Stage

- Prepare Presentation Documentation (Completed)
- Refine and Present Proposal
- Management meeting with Decision Maker (Dec 15 3:00 PM)
- Engage with Customer Contracts

Recommended Documents: Ten Ways to Win the Customer, Effective Sales Strategies, Discovering Customer Value

Coach (4): 1. Generate a proposal that is very clear and sells your value as it relates to the pain points.

Filter: Internal | External | Milestones | Created | Notes | My Activities

- December 4 (2 days ago): Customer Carl sent an email to Frank M.(Me) After looking at a lot of documents, I've determined that... (6:14 PM)
- December 3 (3 days ago): Pages Viewed: Help > 23422 Variant > What to do when your server is on fire (5:55 PM)
- Created Opportunity New Server Project (4:33 PM)
- Email from Julie K: Please see the following information in this article: Help > 23422 Variant > What to do when your server is on fire (2:11 PM)

Products

Type	Name	Quantity	Estimated Price	Amount	Sales Credit
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I redesigned the Overview page for Sales Opportunities to be richer, more actionable (you can now create notes, send emails etc.) and more structured visually with more curb appeal.



Sales Cloud Opportunity Modernization

Objects

Tasks

Edit Opportunity: OpptyWSf3731416788: Summary

Overview: Finance Org Upgrades Desktop & Laptops & Tablets, \$144,000, 80% Win Probability

Contact: John Hasse, Ignite Technologies, 415-888-5555, john@it.com

Close Date: October 18, 2018, Status: Open, Owner: Fred Barnes

Stage: Qualification > Discovery > **Presentation** > Agreement > Negotiation > Close

Notes:

- Phone Call TO Mel C: We'll need to talk over the various options for the proposal (Dec overdue)
- Meet with John Brandes: We'll need to talk over the various options for the proposal
- Meet with Mel C: We'll need to talk over the various options for the proposal
- Schedule a bulk email

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Finance Org Upgrades Desktop & Laptops & Tablets

Owner: Fred Barnes, Primary Contact: John Hasse, Email: john@it.com, Phone: 415-888-5555

Win Probability: 80%, Amount: 5 years, Close Date: October 18, 2018

Stage: Qualification > Discovery > **Presentation** > Agreement > Negotiation > Close

Presentation Stage:

- Prepare Presentation Documentation (Completed)
- Refine and Present Proposal
- Management meeting with Decision Maker (Dec 15 3:00 PM)
- Engage with Customer Contracts

Recommended Documents:

- Ten Ways to Win the Customer
- Effective Sales Strategies
- Discovering Customer Value

Coach (4):

- Generate a proposal that is very clear and sells your value as it relates to the pain points.

Notes:

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Notice the mapping of the objects to an information architecture hierarchy that is determined by information priority and frequency of use.



END OF PORTFOLIO