

# Yunhao Shen Portfolio Presentation

## Contact Information

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**Yunhao Shen**

2020.



# Hi, I'm Yunhao Shen

## A “full stack” designer’s story

User research, interaction & visual design  
and web development

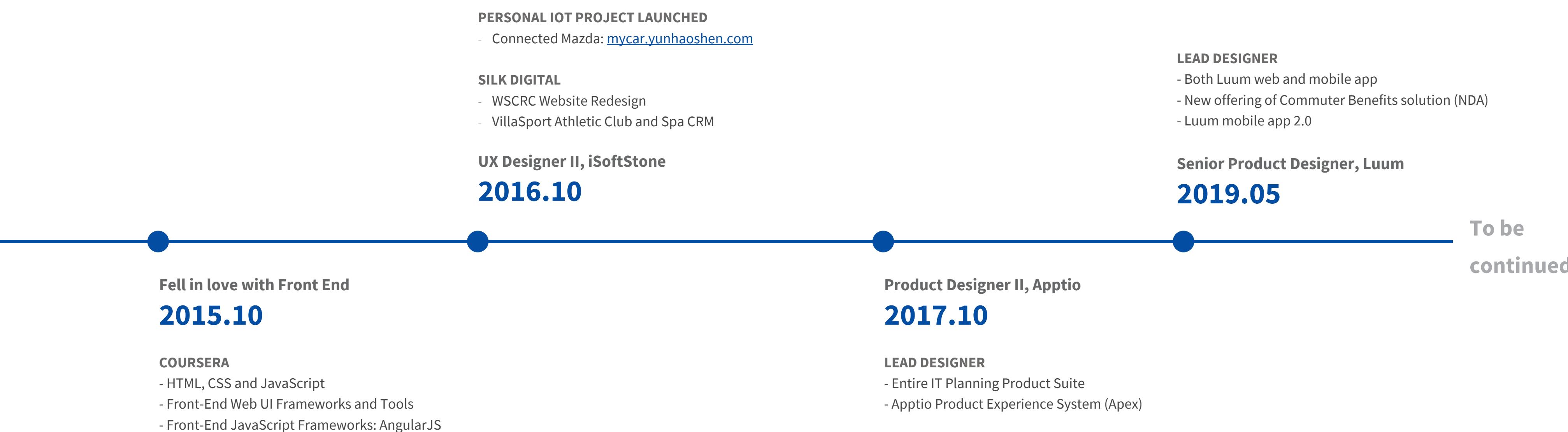
I'm a full-stack designer, storyteller,  
researcher, as well as a gamer working to  
expand the possibilities of design thinking  
and product experiences.

And I'm also a great photographer, a  
constant traveler for the world adventure,  
and an awesome pilot. There's a saying  
from one of my designer friend and it's too  
true not to share: "if your life is plain, so is  
your design."



# A “full stack” designer’s story

User research, interaction & visual design and web development





# Highlighted Projects

This screenshot shows the Apptio IT Financial Management Foundation product. It displays financial metrics like Actuals FY17 - YTD OpEx (\$300.6K) and Actuals FY17 - YTD CapEx (\$276.4K). Below this, there's a section for 'Processes' with a 'Create Process' button and a timeline for 'FY2017 Q4 Forecast' and 'FY2017 Q3 Forecast'.

This screenshot shows the Apptio Product Experience System (APEX) design system. It features a dark-themed interface with a central card labeled 'APEX' and the tagline 'To deliver more consistent, polished, and delightful experiences to our customers in a way that is faster, cheaper, more efficient, and uses better engineering practices'. On the left, there's a sidebar with various design components and a 'Filter' dropdown.



## IT Financial Mgmt Foundation 2.0

**Company :** Apptio  
**Role :** Product Design Lead

ITFMF 2.0 was a major update to Apptio's IT Financial Management Foundation product targeted for release in H1 2019.

This update improved the user experience, reduced data loading complexity and delivered a fully upgradeable system.

## Apptio Product Experience System

**Company :** Apptio  
**Role :** Design System Lead

Apex was a comprehensive design system that enabled Apptio to deliver more consistent and polished experiences to customers in a way that is cheaper more efficient.

The new Apex system brought UX guidelines, design patterns, HTML/CSS/React framework, accessibility, and UI text standard all together with the best design and engineering practices.

## Connected Mazda

**Personal Project:** [mycar.yunhaoshen.com](http://mycar.yunhaoshen.com)  
**Role :** Design & Development

I did an interesting side project to turn my Mazda3 into a Smart Car, and built a fully responsive web app to track where I went and all my driving statistics.

My driving data dates back to March 5<sup>th</sup>, 2017, and has a total of 2,641 trips and 1.53 million geo coordinates till today, and is continuing growing.

Username: yunhaoshen  
 Password: yunhaoshen

# IT Financial Management Foundation 2.0

## Company

Apptio

## Role

Product Design Lead

## Project Details

ITMF 2.0 was a major update to Apptio's IT Financial Management Foundation product targeted for release in H1 2019.

## Business Goals

Apptio's **key initiative to expand lower enterprise market.**

40+ new logo acquisitions in this segment per qtr (currently ~8) by end of Q3 2019



## Apptio Key Initiative

Alex Anderson ▾ ⚙ ?

Welcome to Apptio IT Financial Management Foundation

Actuals FY17 - YTD OpEx  
**\$300.96K** ↓ 2.3% / \$0.4K under  
 Last Plan \$310K

Actuals FY17 - YTD CapEx  
**\$276.48K** ↑ 5.8% / \$5.4K over  
 Last Plan \$281.88K

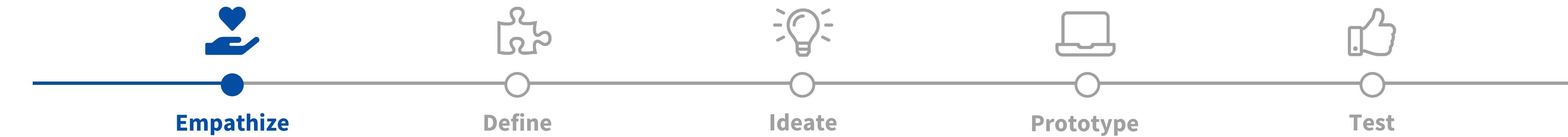
**What's New**  
 Capabilities coming into Apptio Fusion Product Suite.

- 1 New Cloud Cost Management Capabilities  
 Apptio presents Cloud Cost Management, a new product that can help you understand, manage, and optimize purchases and usage of public cloud services. It's important to track costs of public cloud because the consumption of public cloud is so easy. [Learn more](#)
- 2 IT Management Reports  
 The IT Management reports focus on the budget, forecast, and spend numbers by IT tower. [Learn more](#)

**Processes**  
 Get started with your financial processes.

FY2017 Q4 Forecast	Deadline	Status	Total Plan
Created Sept 1st, 2017 OpEx Totals <span style="color: orange;">—</span>	Sept 30th, 2017	Not Started	1
	Unsubmitted	\$235,592	<a href="#">Go to Process</a>
			In Progress 1

FY2017 Q3 Forecast	Deadline	Status	Total Plan
Created June 1st, 2017 OpEx Totals <span style="color: orange;">—</span>	In 3 days	Approved	3
			<a href="#">Process Tracking</a>



# To offer Apptio IT Finance products in lower enterprise

*Who are the users?*

*What pain points do they have?*

## Primary Persona – IT Finance Manager



**Blake Hathway**

Age: 36  
Company: Acme Corp  
Role: IT Finance Manager

### Background

- Run IT finance office
- Prepare, maintain and report internal and external IT financial records
- Help IT Exec do quarterly business review with Corp finance department

### Needs

- Forecast more frequently and hold IT department owners accountable for spend
- Reduce spend with insights and analytics that surface cost reductive opportunities
- Ability to present insights to key stakeholders

### Frustrations

- Current tools not IT-specific – too financially oriented
- Gathering inputs for planning process is too cumbersome and error-prone – mash up of excel, Sharepoint, etc
- Can only do quarterly forecast given current tooling and resources

## Secondary Persona – IT Exec



**Kinsley Tucker**

Age: 44  
Company: Acme Corp  
Role: Director of Information Technology

### Background

- Lead and direct the workforce of entire IT organization
- Map out both IT strategy and IT policy within company
- Responsible for IT budget

### Needs

- Reduce IT budget variance overall
- Reduce waste from overpurchase and underuse
- Ability to communicate the business value of IT and drive strategic value

### Frustrations

- Business units consume IT services like they are free, and unlimited
- Being identified as the face of just another cost center – with no value-add to a business conversation



Empathize



Define



Ideate

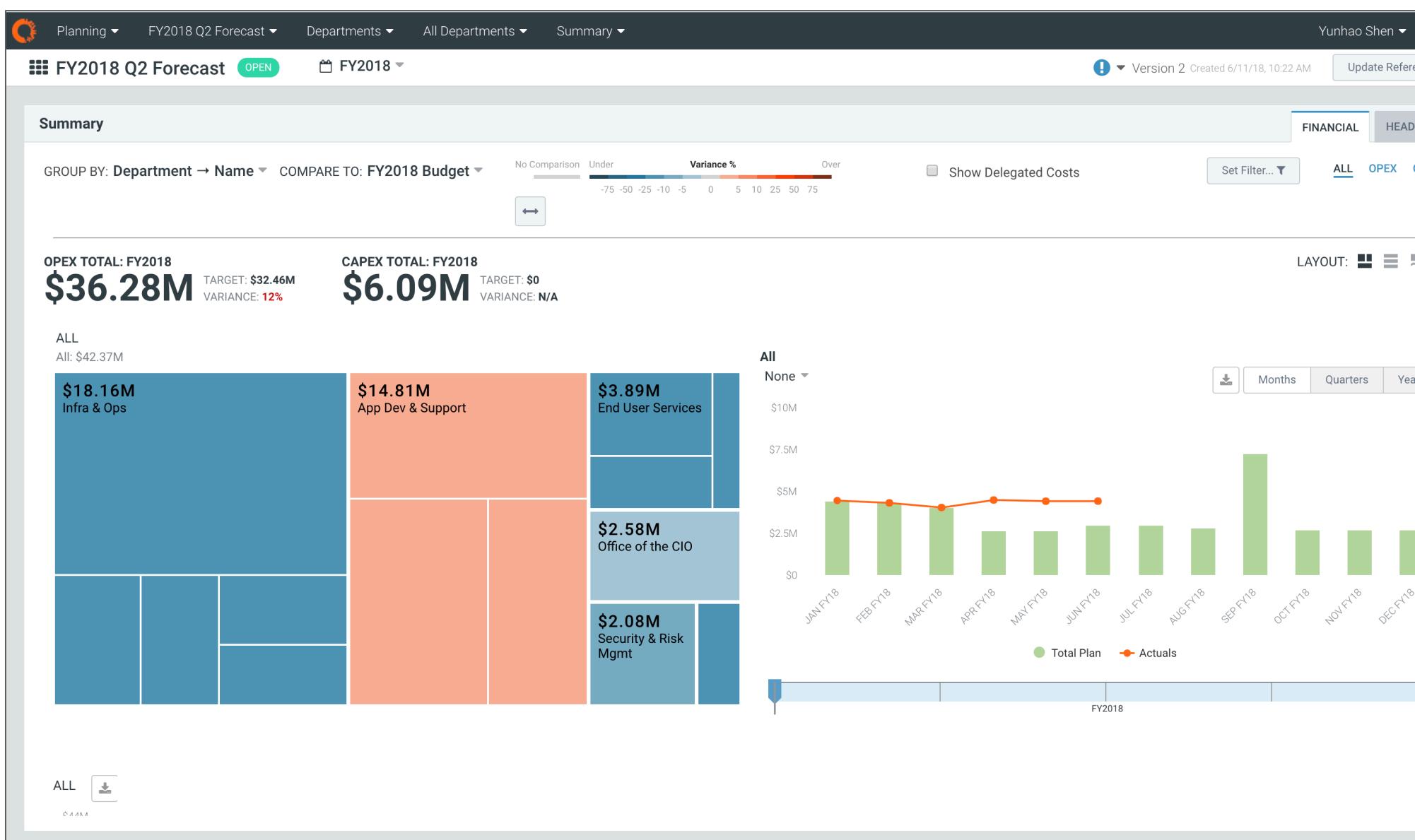


Prototype



Test

## Current ITMF 1.0 product



ITMF 1.0 – Home Page

The screenshot shows the ITMF 1.0 Expense Page. It displays a table of expenses for the Data Center Ops department. The table includes columns for Account: Cost Pool, Cost Center, From Project Cost Center, and various monthly and total amounts. The total OPEX for the year is listed as \$36.28M and the CAPEX as \$6.09M.

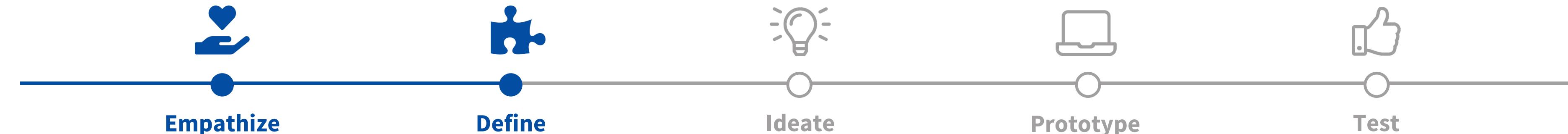
Account: Cost Pool	Cost Center	From Project Cost Center	YTD FY18 - FY2018 Budget				Total	Var	Var %	Apr FY18	May FY18
			Jan FY18	Feb FY18	Mar FY18	YTD FY18					
External Labor	4 unique	10 unique	300,872	300,872	300,872	902,616	904,615.75	(2,000)	0%	301,539	301,539
Facilities & Power	Ian Larrosa	Data Center Ops	197,475	197,475	197,475	592,425	85,237.5	507,188	595%	28,413	28,413
	Ian Larrosa	Data Center Ops				0			--	20,913	20,913
	Ian Larrosa	Data Center Ops				0			--	3,200	3,200
	Ian Larrosa	Data Center Ops				0			--	1,300	1,300
	Ian Larrosa	Data Center Ops				0			--	3,000	3,000
	Ian Larrosa	Data Center Ops	11,917	11,917	11,917	35,750			--		
	Ian Larrosa	Data Center Ops	47,667	47,667	47,667	143,000			--		
	Ian Larrosa	Data Center Ops	43,667	43,667	43,667	131,000			--		
	Ian Larrosa	Data Center Ops	7,833	7,833	7,833	23,500			--		
	Ian Larrosa	Data Center Ops	19,917	19,917	19,917	59,750			--		
	Ian Larrosa	Data Center Ops	35,583	35,583	35,583	106,750			--		
	Ian Larrosa	Data Center Ops	20,292	20,292	20,292	60,875			--		
	Ian Larrosa	Data Center Ops	1,075	1,075	1,075	3,225			--		
	Ian Larrosa	Data Center Ops	2,025	2,025	2,025	6,075			--		
TOTAL			4.45M	4.31M	4.03M	12.78M	8.09M	4.69M	58%	2.66M	2.65M

ITMF 1.0 – Expense Page

- Navigation not intuitive
- User experience is not great
- Data input is still time consuming compared to traditional tools like Excel
- Lack of ability to annotate variances
- Lack of ability to do analytics and quickly gain insights
- Lack of color contrast for users with disabilities

**Can't solve customers' pain points**

**Major upgrade is necessary**

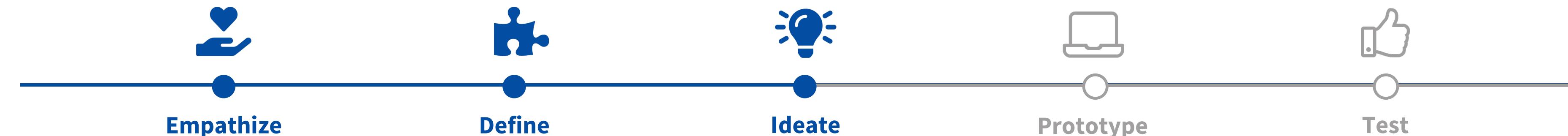


## How might we help users

- Reduce level of effort
- Increase engagement and usage
- Seamlessly deliver capabilities
- Drive strategic value

## Internal business goals for ITFMF V2

- 40+ new logo acquisitions (~8 at that time)
- 93% retention rates and high NPS (~42)
- Tangible in value quickly
- Profitable – Low COGS



## Research finding 1

IT finance departments have defined workflows to complete recurring tasks.



### IT Finance

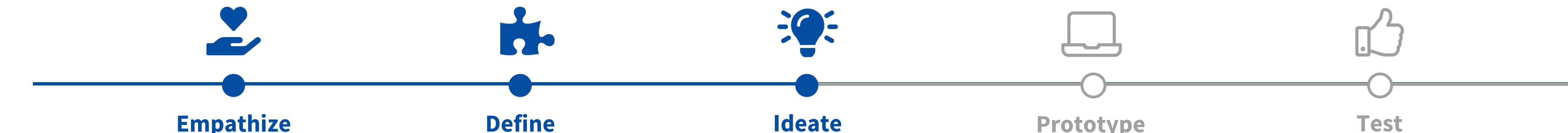
- ▶ User Personas
  - IT Finance Manager (BPO/Admin)
  - IT Exec (Approver)
  - Department Owners

### Recurring end-to-end process

- ▶ Financial review
- ▶ Forecasting
- ▶ Budgeting

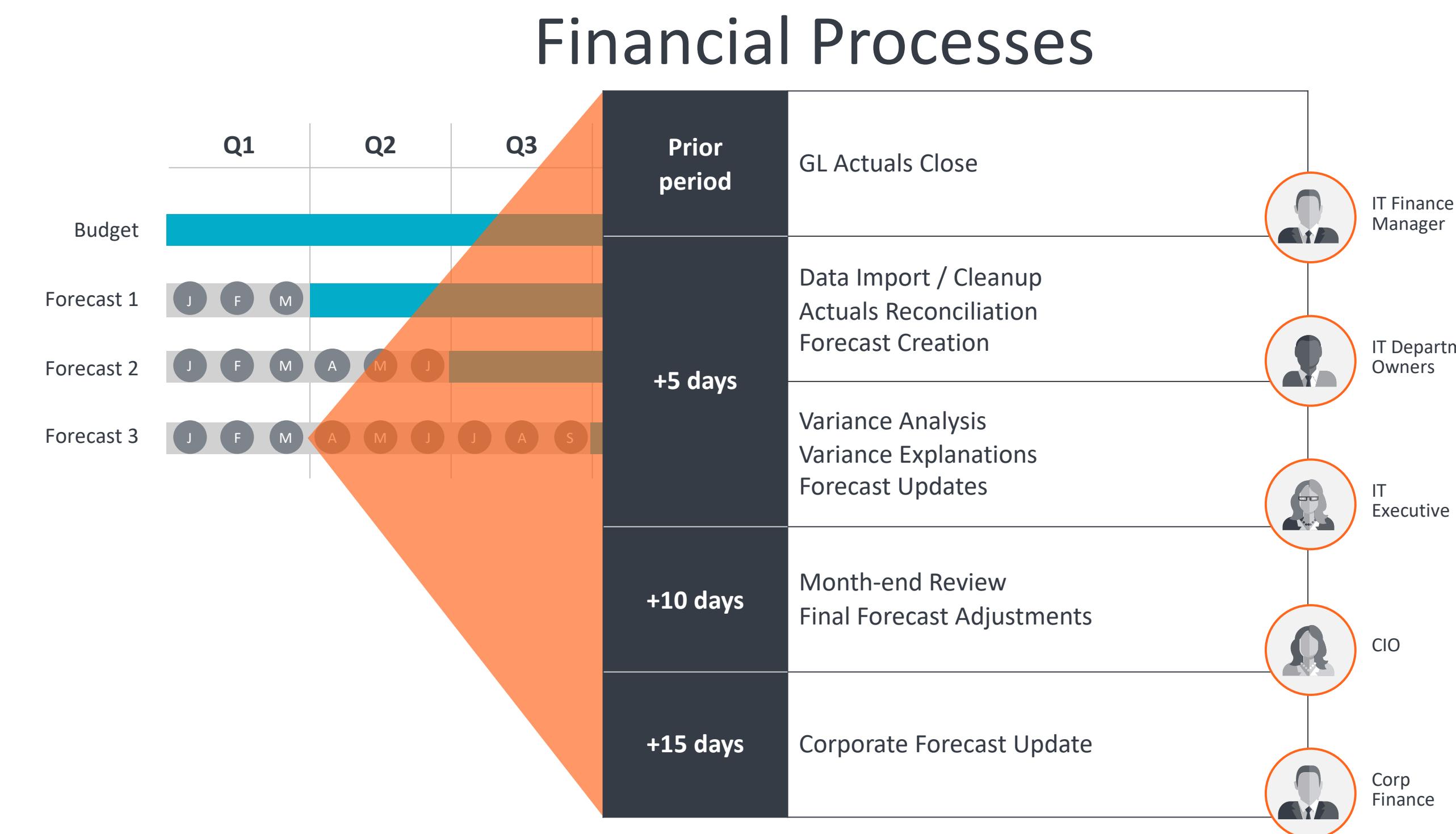
### Non-process capabilities

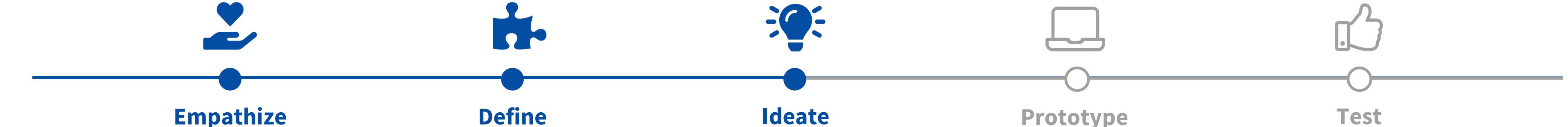
- ▶ Data Management
- ▶ Analytics



## Research finding 1

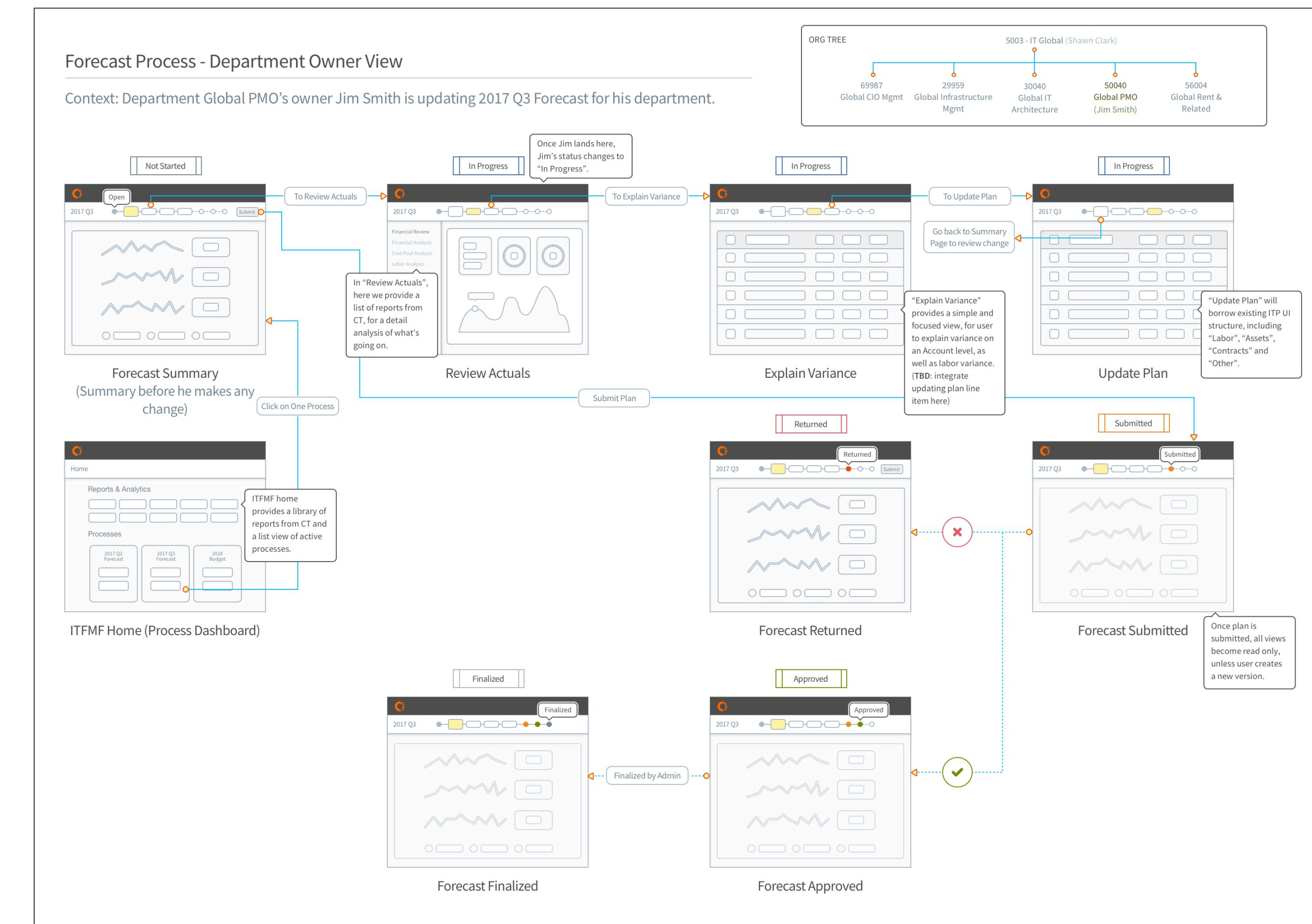
IT finance departments have defined workflows to complete recurring tasks.

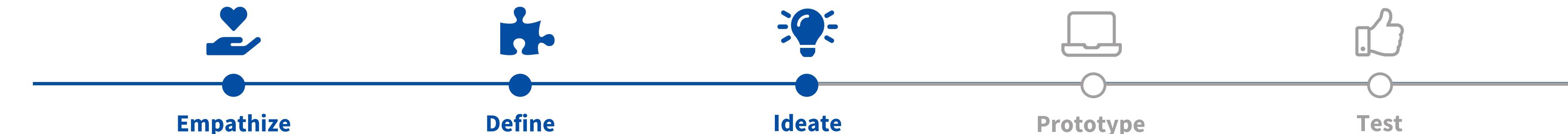




# Idea 1

Process flow to give users context and guide users to quickly complete complex financial tasks, and prevent errors.



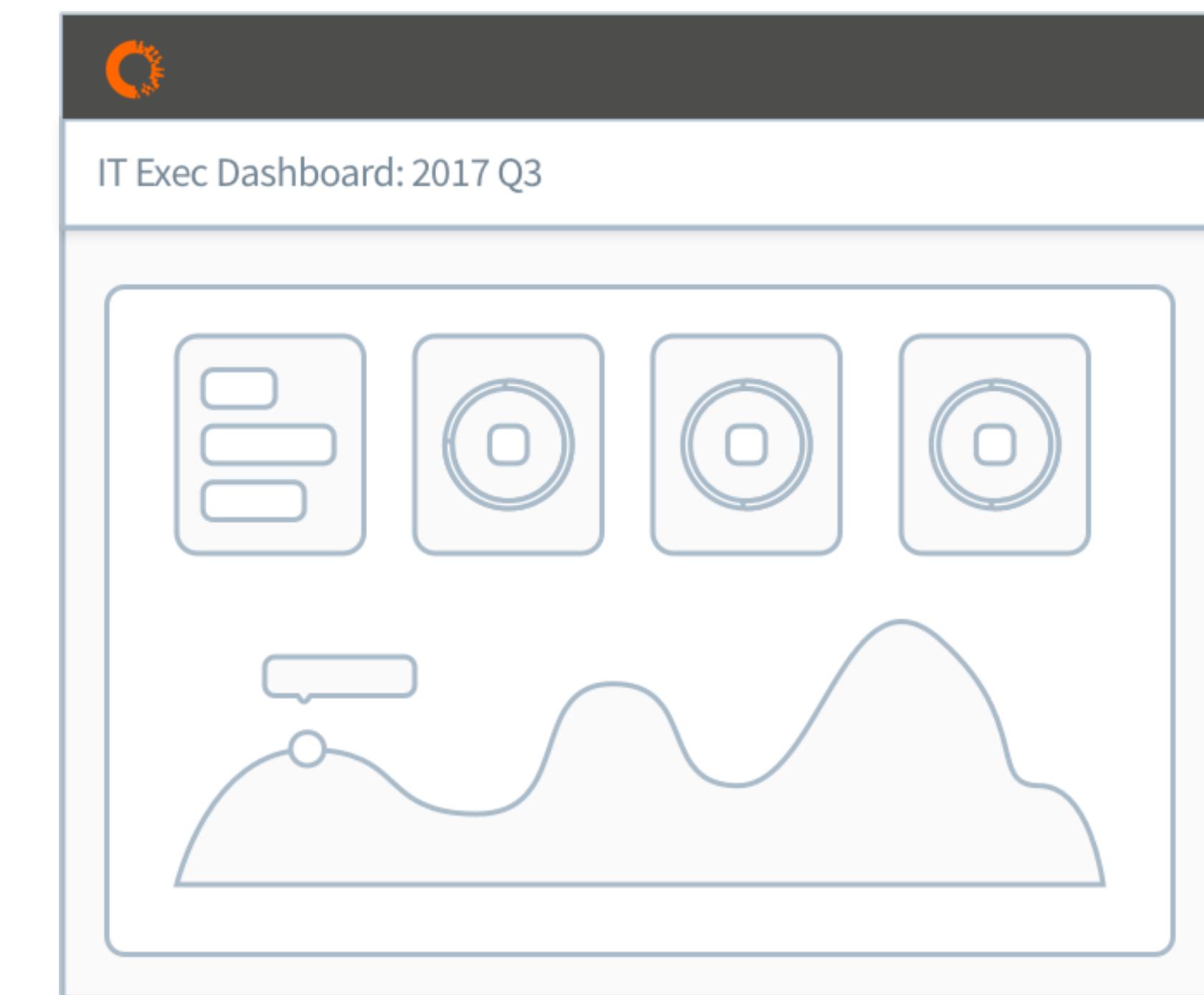


## Research finding 2

IT Exec leaders need better tooling to present financial insights besides PowerPoint.

### Idea 2

Aggregated IT Exec Dashboard





Empathize



Define



Ideate

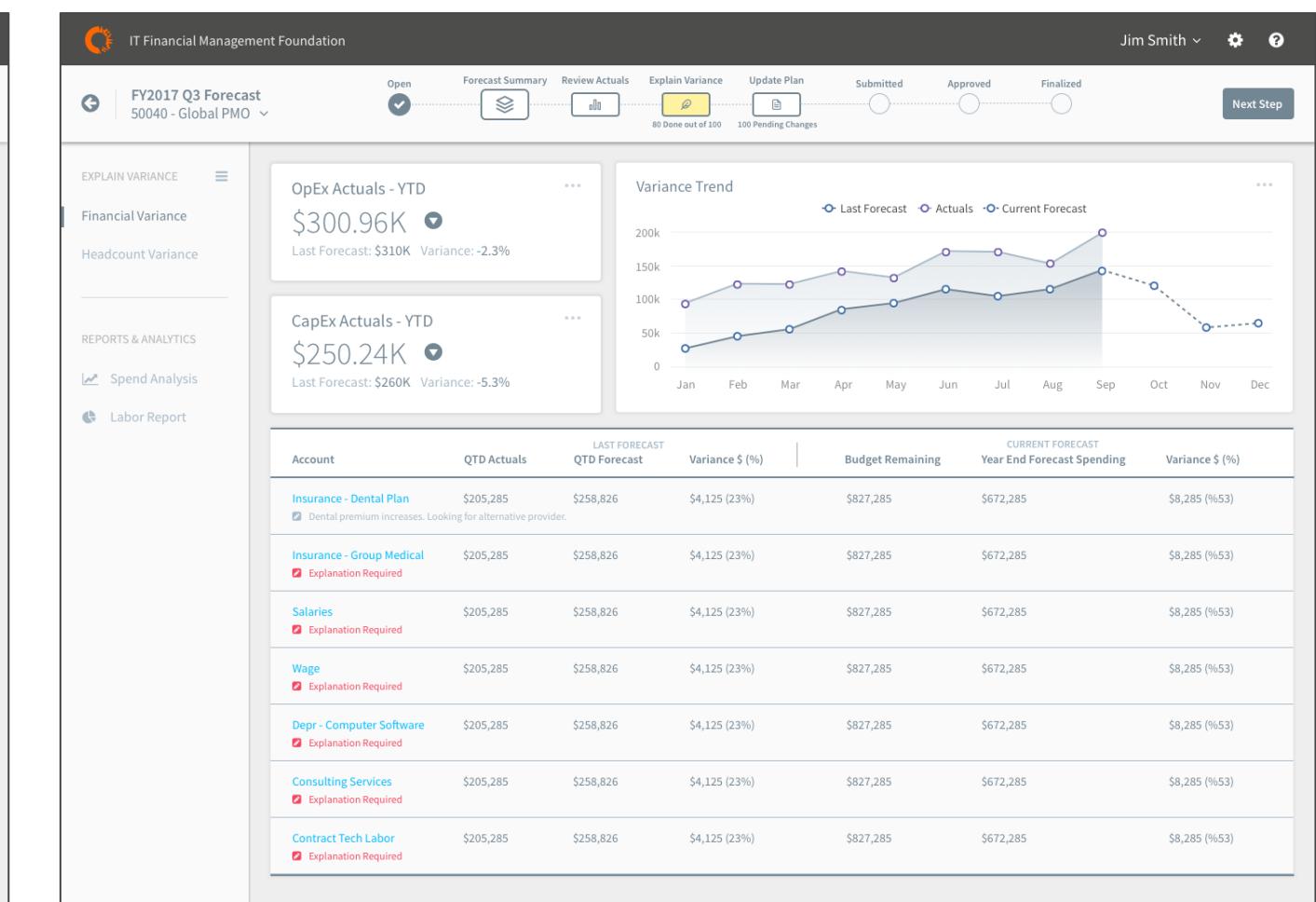
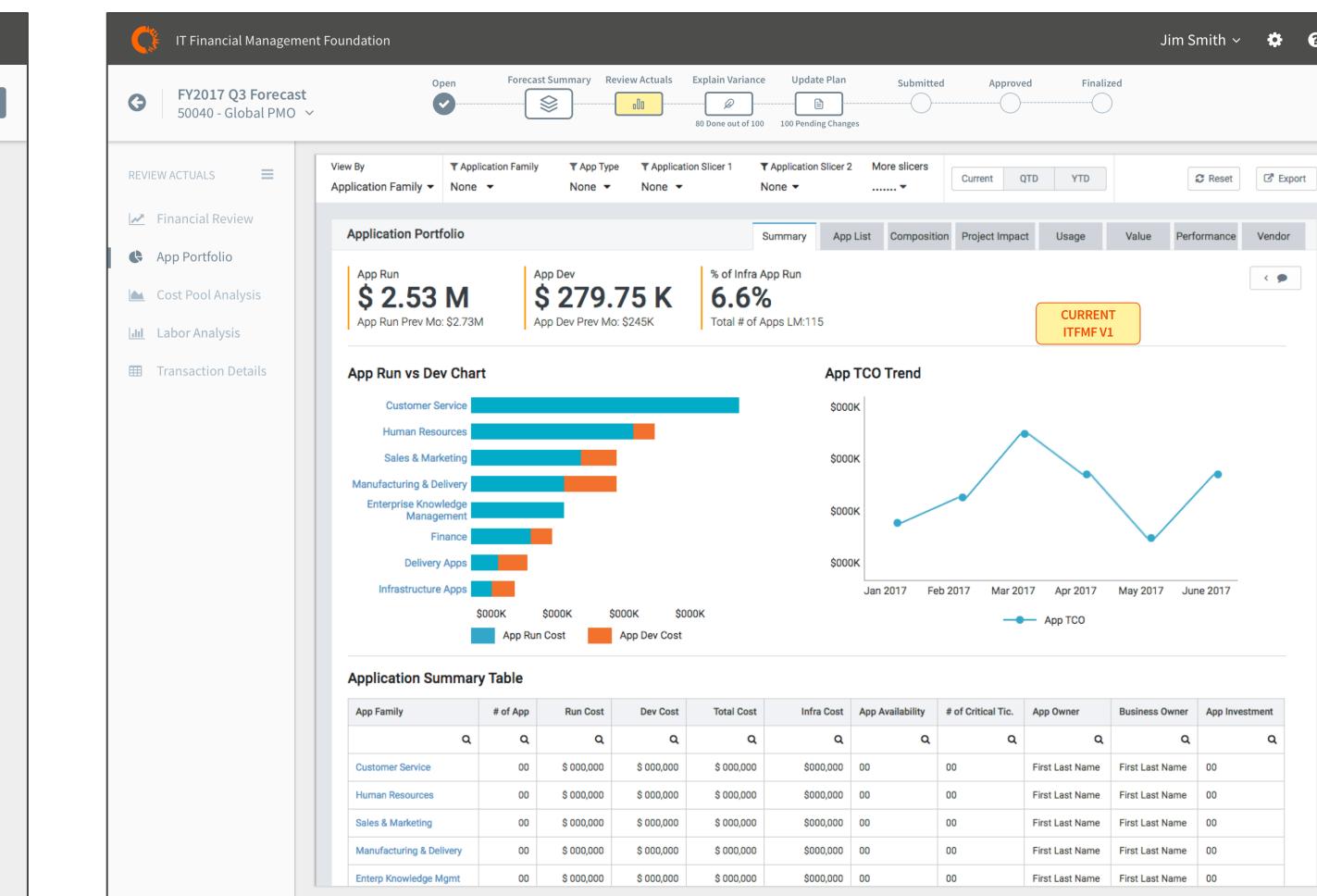
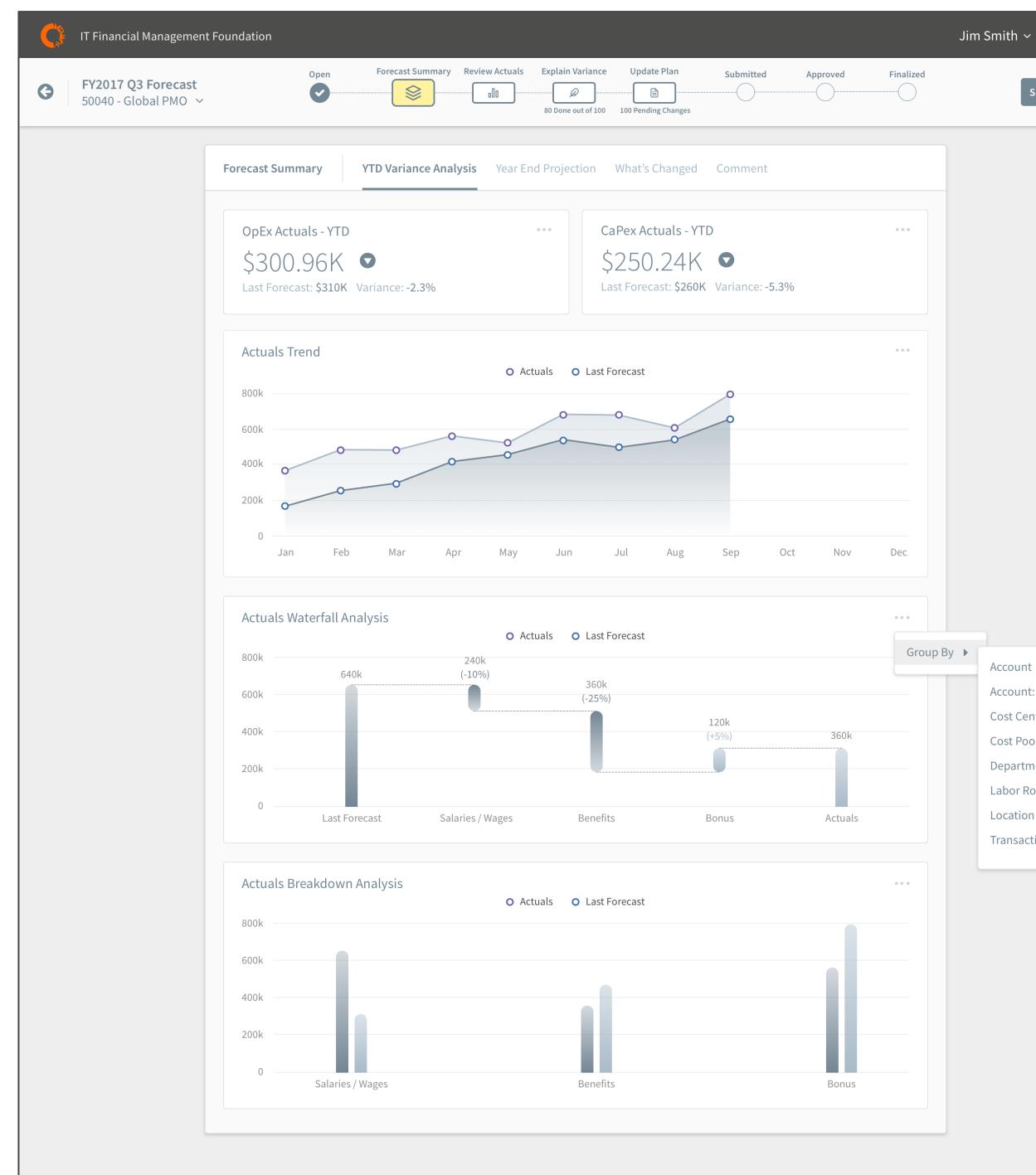


Prototype



Test

# Interaction design iteration



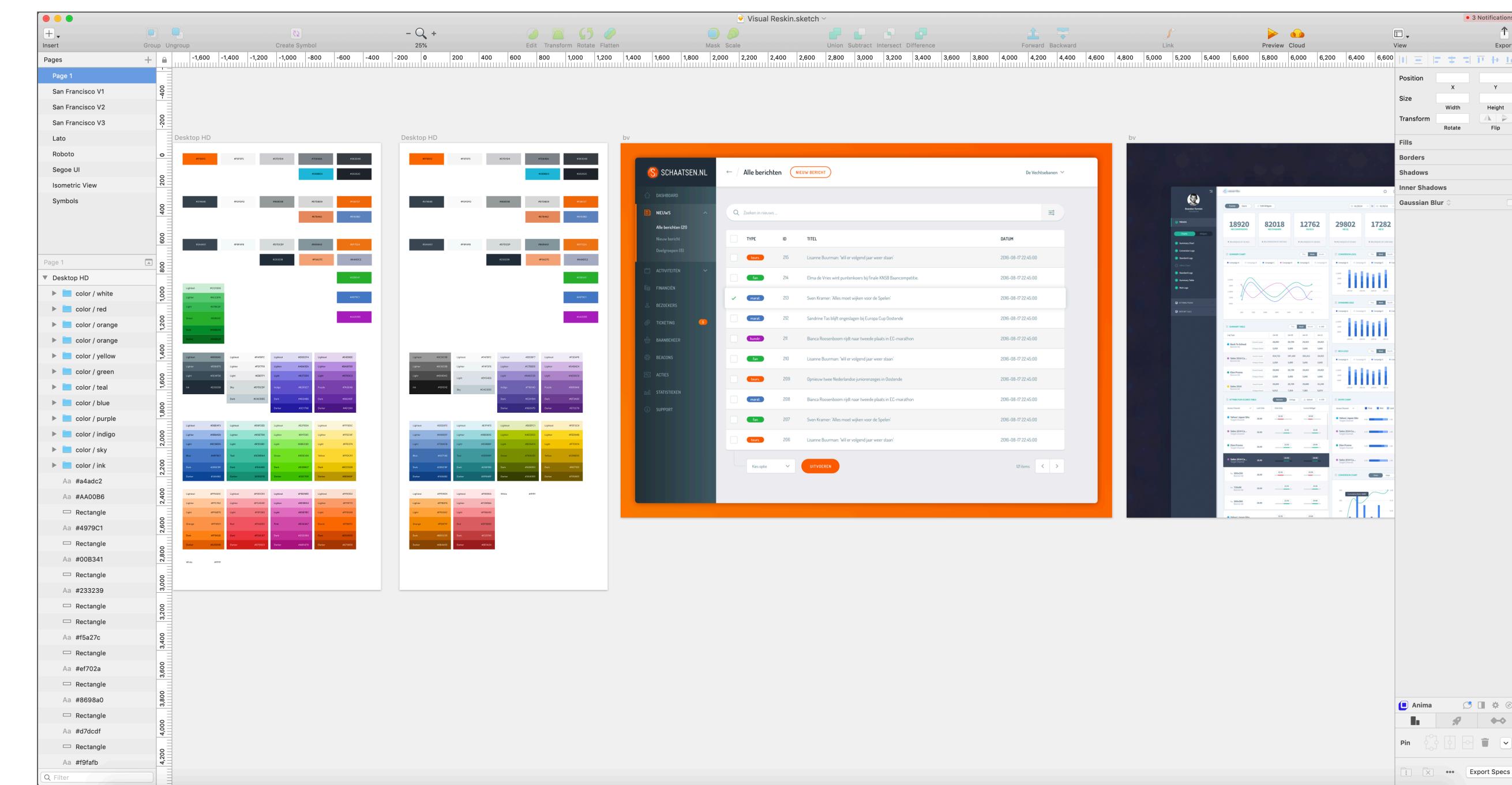
## Early feedback

- "Get Started" page should be added as first step to give IT department owners more context of what's happening. "Summary" page should be moved to the end.
- "Review Actuals" step should be part of Admin workflow, sitting with data importing and reconciliation functions.
- Budget variance is not calculated on individual Chart of Accounts level, but on an aggregated Account Category level.
- Knowing which Account Category is over budget variance threshold is good, but knowing where the variance is coming from is even better.



## Visual design exploration

Appealing color system with high contrast to meet accessibility standard





Empathize



Define



Ideate



Prototype



Test

# High fidelity design combined with visual

Welcome to Apptio ITMF

Actuals FY2018 - YTD OpEx: \$1.51M (3.4% / 50K) Last Plan: \$1.46M

Actuals FY2018 - YTD CapEx: \$0 Last Plan: \$0

**Processes**: Get started with your financial processes.

**FY2018 Q2 Forecast**: Created April 1st, 2018; Due Date April 15th, 2018; Status Not Started; Total Departments 1

CC-210 - Apps - Sales & Ops Status: Not Started | Due on April 15th, 2018

**Admin Message**: We have a company wide initiative to cut travel expense in half.

In FY18 Q1, 1 account category was overspent beyond threshold... And 0 out of 1 explanation has been given.

Explain variance >

Current year end outlook is ... \$5.62M on OpEx, which is 0.8% / \$50K more than original budget. \$0 on CapEx, which is equal to original budget.

Update plan >

Once everything is looking good, you can review and submit the change Start reviewing >

Account Category	Currency	FY18 Q1	FY18 Q1 - FY2018 Budget			FY18 Q1 - FY2017 Budget		
			Total	Var	Var %	Allocated Var	Total	Var
External Labor	USD	125,000	125,000	0	0%	125,000	0	
Internal Labor	USD	688,263	688,505.73	-242.66	0%	688,505.73	-242.66	
Outside Services	USD	271,750	233,440	38,310	16%	241,750	30,000	
		426,833	414,838.33	11,995	3%	425,583.33	1,250	
	USD	1.51M	1.46M	50.06K	3%	0	1.46M	50.06K

ITMF 2.0 – Home Page

ITMF 2.0 – Financial Forecast "Get Started" Page

ITMF 2.0 – Financial Forecast "Explain Variance" Page

Account Category - Outside Services

**Current Period Recap**: \$178.82K was spent in FY17 Q3, which is 1K / 0.3% more than last plan. \$249.87K was spent YTD, which is 1.5K / 0.34% less than original budget.

**Comment**: You can provide additional comment here.

**Year End Outlook**: Current FY17 Year end outlook is \$234.98K, which is 23K / 2.3% over original budget.

Variance breakdown: Group By: Vendor

900k  
750k  
500k  
250k  
0

900k  
740k  
-\$24k (-10%)  
-\$36k (-20%)  
12k (+5%)  
\$720k

Current Plan ABC Consulting XYZ Consulting Atusnt Inc. Last Plan

Update Plan

Add Comparison > FY2018 > Filter > Actions >

Account Category	Vendor	Account	Account: Expense	Location	Description	Currency	Jan FY18	Feb I
External Labor	Contract Tech labor	OpEx	Seattle	USD	41,667	41		
Internal Labor	4 Unique	OpEx	Seattle	USD	229,368	229		
Outside Services	3 Unique	OpEx	Seattle	USD	80,583	80		
	Eloqua	OpEx	Seattle	USD	5,750	5		
	Software as a Service	OpEx	Seattle	USD	50,000	50		
	IBM Services	OpEx	Seattle	USD	24,833	24		
	Salesforce.com	OpEx	Seattle	USD	142,111	14		
	Software	OpEx	Seattle	USD	493,73K	49		

ITMF 2.0 – “Explain Variance Drill Down” page

ITMF 2.0 – Financial Forecast "Update Plan" Page

Executive Summary

OpEx Actuals: Q1 FY2018: \$1.51M (3.4% / \$50K) Last Plan: \$1.46M

OpEx Year End Total: FY2018: \$5.62M (1% / \$50.06K) Last Plan: \$5.57M

Total Headcount: 50 (10% / 5 over) Last Plan: 45

Var. Explained / Line Item Changed: 1 / 2

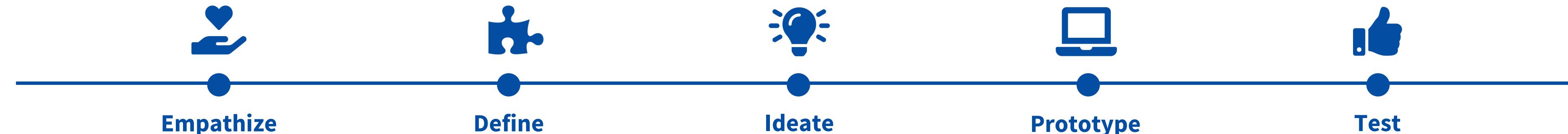
Trend Chart

All OpEx CapEx Months Quarters Years

4M  
3M

Current Plan

ITMF 2.0 – Financial Forecast "Review Change" Page



## Customer preview

The Apptio Customer Preview program was an opportunity for customers to try the newest capabilities before the rest of the world and provide input to help shape these capabilities before they're released to the public.

7 preview customers: CoBank, Farmers, HomeAway, Northwell, Cancer Research UK (UK), Sanofi (FR) and Total (FR)

## Clickable prototype

[https://mbdsj.axshare.com/#g=1&p=single\\_dept\\_-\\_home&c=1](https://mbdsj.axshare.com/#g=1&p=single_dept_-_home&c=1)

### Company Profile

Acme Corp.  
Fiscal Year: January - December  
Current Period: April FY2018

### Admin/Budget Process Owner (Kim Johnson):

- Invoke Create Process dialog from Home page:
  - Create a process for FY2018 Q2 Forecast
  - Configure process to include variance explanation and update financials, labor, contracts and asset details
  - Configure variance threshold to be 3% or \$5,000 by Account Category. Variance analysis should be completed for the previous quarter.
  - Configure default comparisons for variance analysis
- Navigate through the process steps and make adjustments as needed e.g. prepopulate explanations, adjust baseline plan
- Make the process available to Department Owners by starting the process

### Single Department Owner (Tambra Assael – Apps – Sales & Ops):

- Click into **FY2018 Q2 Forecast** from Home page
- Get Started: Review instructions from TBMA and tasks to be completed
- Explain Variance: Review FY18 Q1 actuals compared to FY2018 Budget
  - Drill into the **Outside Services** account category and analyze the key variance drivers by Vendor
    - Review actual transactions and forecast plan to identify the cause of the \$30K variance
    - Provide an explanation for the variance
    - Exit the detailed view
- Update Plan: Review forecast plan summary
  - Select the clipboard icon to provide an executive summary for the department
- Review Change: Review FY2018 Q2 Forecast summary of changes for Apps – Sales & Ops
  - Review executive summary
  - Review forecasted year-end total for FY2018
  - Review variance explanations
  - Review forecast adjustments
  - Submit forecast plan

### Group Department Approver (Alex Smith – App Dev & Support):

- View email notification sent for Apps- Sales & Ops forecast submission
  - Navigate to the FY2018 Q2 Forecast via link in email
- Review Change: Review forecast submission from Tambra Assael
  - Review summary of changes
  - View all variance explanations
  - View all forecast line items

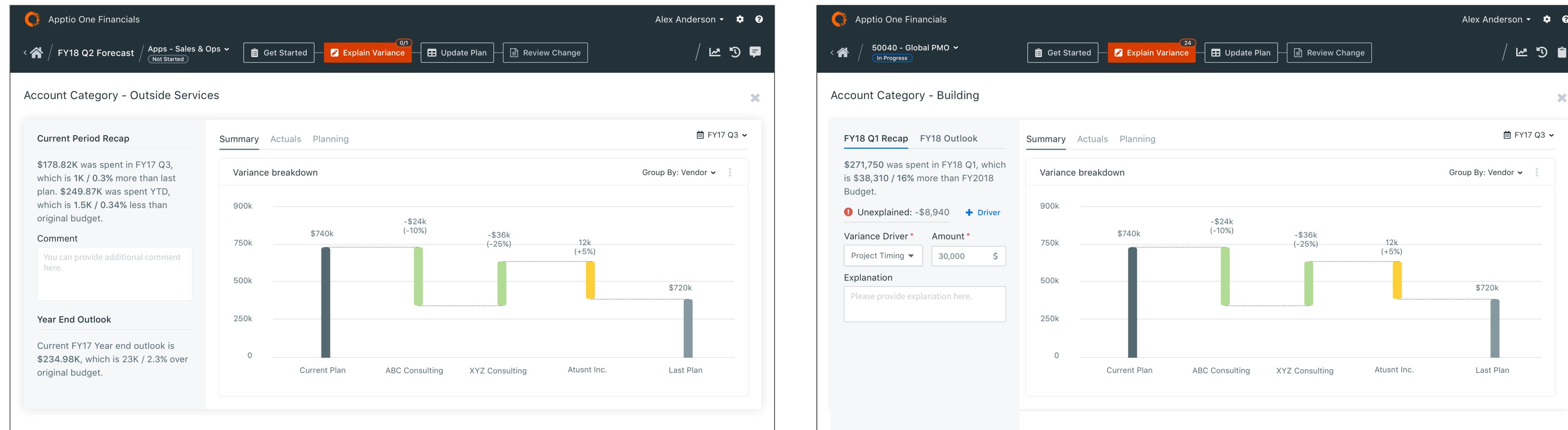


## Customer preview

### Valuable feedback – variance driver

When IT department owners provide explanations to budget variance, instead of just doing plain text comment, it's better to group those explanations into pre-defined variance drivers, like "Resource Demand Variation", "Change in Run Rate", "Project Timing", etc.

This way IT Exec can quickly gain a high-level view of the variance impact and have meaningful conversations with business.



Plain text comment

Allocate variance to variance driver

# Next Project

# Apptio Product Experience System

## Company

Apptio

## Role

Design Lead & Design Technologist

## Project Details

The new Apex system brought UX guidelines, design patterns, HTML/CSS/React framework, accessibility, and UI text standard all together with the best design and engineering practices.

The screenshot shows a dark-themed application interface. On the left, a sidebar contains a search bar with 'APEX' typed in, a 'Filter' input field, and a tree-view navigation menu. The menu items are: 1. Getting Started (expanded), 2. Guidelines (expanded), 3. Style (expanded), 4. Components (expanded). Under each category, there are several sub-options listed. At the bottom of the sidebar, there are four buttons: ACTION LOGGER, ACCESSIBILITY, README, and STORY. In the bottom right corner of the sidebar, there is a 'CLEAR' button. The main content area features a large white 'APEX' logo with a triangle symbol. Below the logo, a block of text reads: 'To deliver more **consistent, polished, and delightful experiences** to our customers in a way that is **faster, cheaper, more efficient, and uses better engineering practices**'.

Apptio TBM Studio

# Right after I joined Apptio I realized...

Apptio has 2 major product suites – Cost Transparency and IT Planning, which includes 14 product modules, **but all with different look**. We got plenty of customer complaints around confusing user experience when switching between Apptio Apps.

To ensure Apptio products' long-term success, was there anything I could help to introduce a **consistent Apptio experience?**

Apptio Cost Transparency

# Disjointed experiences comes with internal pain points

## From design perspective



- Design spec to implementation takes time
- Design team is small and we cannot support all products



## From dev perspective

- The design idea is technically not feasible
- CSS is hard to maintain
- I want something out of box

Apptio IT Planning

# I know the solution...

*Design System*

## **Google Material Design**

Material Design is a visual language that synthesizes the classic principles of good design with the innovation of technology and science

*Design and UI  
Single Source of  
Truth*

## **Microsoft Fluent Design**

Fluent Design includes guidelines for the designs and interactions used within software designed for all Windows 10 devices and platform.

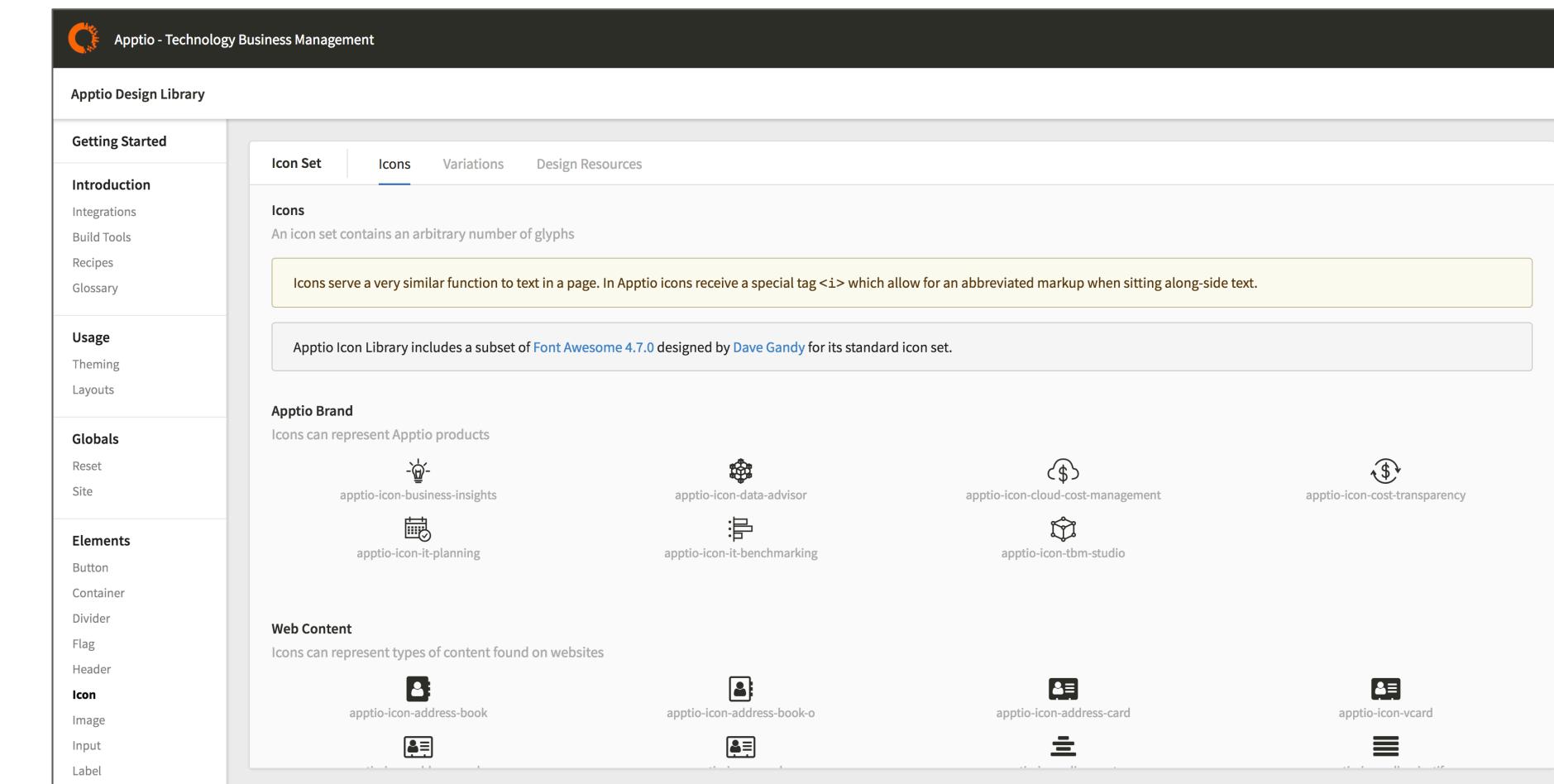
# Challenge

Cross Company Initiative

Executive Sponsorship

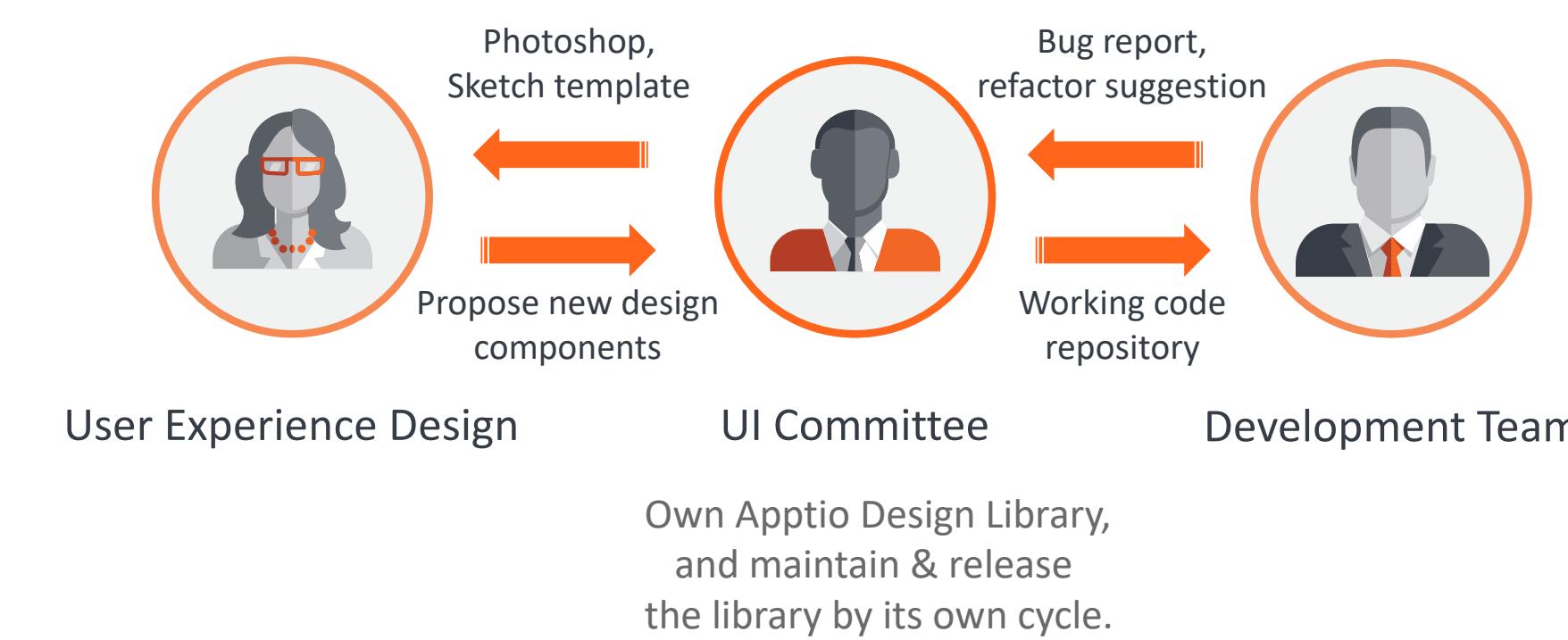
## Everything starts with Apptio Hackathon 2018 – 1<sup>st</sup> Place Winner (2018.01)

After one month joining Apptio, I participated in Apptio Hackathon 2018 and presented a demo of Apptio Design Library - a design guideline as well as a working code repository including master CSS, font icon, and Javascript files.



## UI Committee

During presentation, I went one step further and presented a design system governance model – UI Committee.



# UI Committee > Operation “APEX”

A “uicommittee” slack channel was created right after my presentation at hackathon, which included every Apptio product designers and web developers and had a total of 17 members. Later the group decided to design and build the very first Apptio Product Experience System – code name **operation “APEX”**.

The screenshot shows a Slack workspace interface. On the left is a sidebar with various channels listed, including #apptio-p&e, #uicommittee (which is selected and highlighted in green), and #apex. The main area displays two messages from the #uicommittee channel:

- khanswadkar** 10:42 AM: I was thinking of meeting biweekly (every 2 weeks) and bringing things to the committee meeting. May be in the first one, we list all the UI pain points and then form 2 to 3 people teams to go design and develop, propose changes and then find ways to put those proposals into the products. Very scrappy and agile like Hackathons. Thoughts???
  - rtruong** 10:43 AM: Sounds like a plan.
  - tmeans** 10:50 AM: 👍
  - slee** 10:51 AM: sounds good to me!
  - yshen** 1:17 PM: Reaching a place where we have consistent "look and feel" is extremely hard (yet important). I've been thinking about it for quite long. Given my past experience and past failures, here is my pre-first-meeting proposal:  
@slee has already established an Axure pattern library for some common UI components across Flagship and Vanguard: <https://uyzfmv.axshare.com/#g=1&p=card>. I feel like it's really a good start for us (I really should know better before my last Friday presentation. I owe her credits for this... My bad)
    - From a design perspective**
      - We could leverage that pattern library's table of content and continue tweaking this library, and start incorporating some of Kai's vision on card design system, as the **Apptio design "single source of truth"**
      - Some of my pain points around current design (speaking purely from UI perspective):
        - Font Face: We are currently using Roboto across products, but it seems Roboto lacks quality when reaching 12px below, and renders weird when we go "bold".
    - From a UI development perspective**
      - As you all know, this website was created and hosted on our product design server: <https://productdesign.apptio.lan/design-library/>. It was written in Angular2 and if you have a Bitbucket account, I can invite you to this code repository.
      - The website is just for publishing UI components and giving design and coding guidance, the core is actually the componentized SASS/LESS and javascript files behind it. Ultimately, we can pull SASS/LESS and javascript files out of this website, and package it as an Apptio frontend "single source of truth", and host it somewhere on our private Nexus registry, so all teams can say "npm install".
      - I can change the website's left nav to match Selen's library table of content, then we can form small teams and start coding each component out, based on design pattern library. Or even I can rewrite the entire website in React, it seems we are more familiar with it.
      - Some particular thoughts around coding:
        - We are only providing frontend framework (hopefully we could write every component in pure javascript/typescript). It seems better for each team to integrate it with the particular tech stack (GWT, React, etc.) and test it with real app functions.
        - For each component, we could directly borrow Bootstrap or some other popular frameworks. But it seems better we reach deep into SASS files, copy some settings and build our own, instead of citing the entire .css file and start overwriting.
        - Another thing is "accessibility". It's a particular request from product team. It seems "ARIA" label is the way to do it.
- yshen** 1:35 PM: And fruit of thoughts, we could leverage BEM model: <http://getbem.com/introduction/> to name our UI components, and have apptio or apt as classname prefix. MS Office and Salesforce are using this model for their framework.
- khanswadkar** 10:11 PM: Thanks @yshen on a very detailed writeup. I agree on the two perspectives laid out and we should shoot for some joint outcomes that we can clearly demonstrate.

On the right side, there is a sidebar with the following sections:

- About #uicommittee
- Channel Details
- Highlights
- 1 Pinned Item
- rlarson Mar 28th: Hey folks - here's a link to a slightly old 508 Compliance Standards doc I made! Hopefully this helps with some of the more detailed questions: <https://confluence.apptio.com/display/MD/508+Compliance+Standards>
- 17 Members
- Shared Files
- Notification Preferences

## UI Committee Board

- Director of product design
- Lead designer and design technologist (**Me**)
- Senior web developer of Apptio Cost Transparency
- Senior web developer of Apptio IT Planning

## APEX

### How APEX should work?



## Design

### Consistent & Elegant

- Design principles
- Visual system, including colors, icons, typography, grid system, spacing, etc
- Atomic UI design pattern library



## Development

### Efficient

- UI components need to be built in a reusable way with good documentation
- React and Storybook JS



## Content

### UI Text Standards

- Capitalization
- Punctuation
- Error and information messages
- Localization

# APEX Design Sub-Committee

## **Design team got together twice per week to talk about**

- Design principles
- Accessibility
- Text standard
- Color system
- Typography
- Iconography
- High level page IA
- Scope of the UI components we need

## **Each design team member got assigned a couple of UI components**

- To do thorough research on the use of UI components
- Research came from both existing design systems and Apptio common use cases
- Later came back with design proposal using pre-defined documentation template

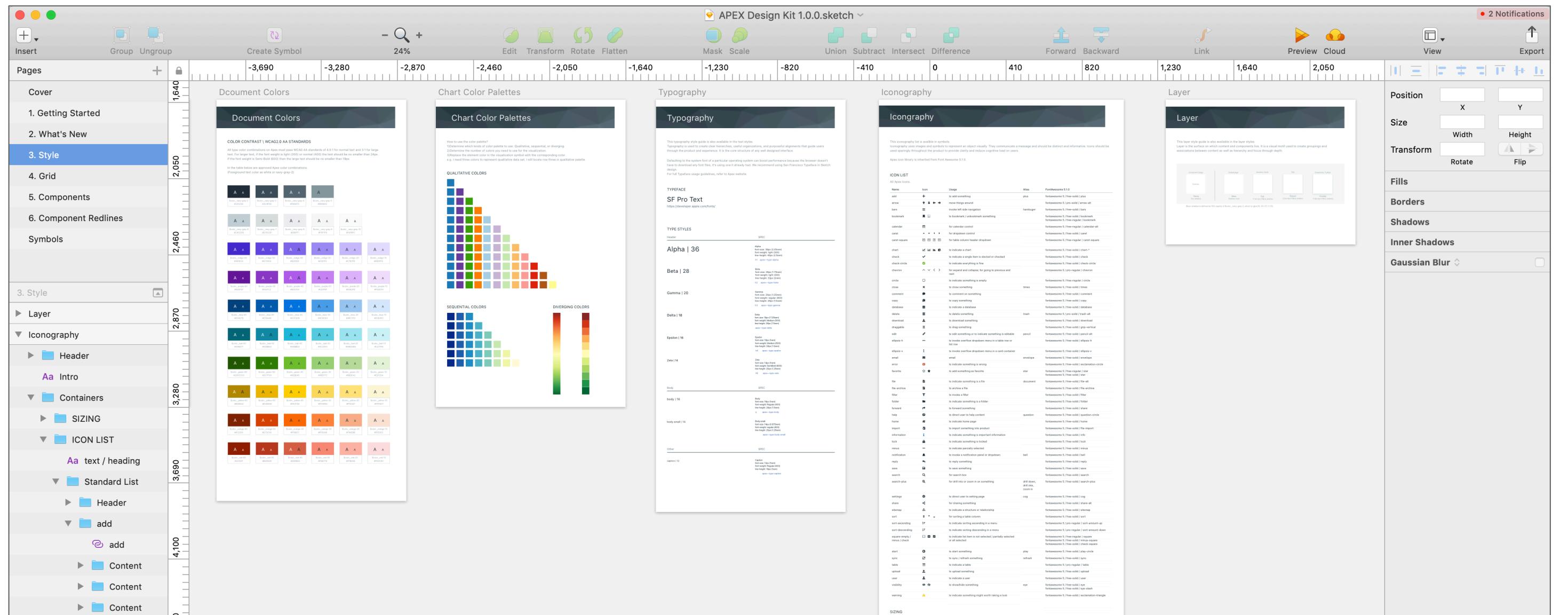
## **Once UI components were signed off by the team**

- Apex sketch symbol library was built, on which all later product feature design was based
- I was further responsible for communicating the design to Engineering team and have UI components built in Apex React component library.

# Design

## Guidelines

Design Principles  
Accessibility  
Content

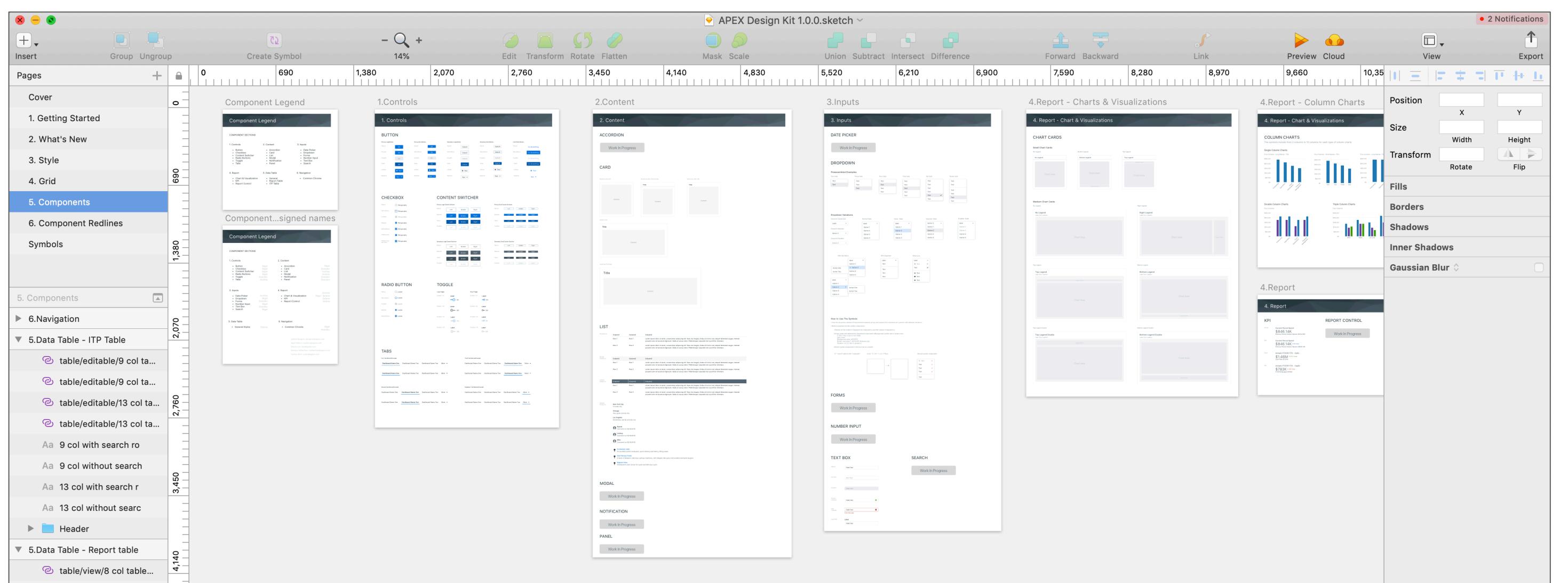


## Style

Color  
Grid  
Iconography  
Layer  
Typography

## Components

Buttons  
Card  
Checkbox  
ContentSwitcher  
Dropdown  
Form  
KPI  
Modal  
...



# Design

## Guidelines

- Design Principles
- Accessibility
- Content

## Style

- Color
- Grid
- Iconography
- Layer
- Typography

## Components

- Buttons
- Card
- Checkbox
- ContentSwitcher
- Dropdown
- Form
- KPI
- Modal
- ...



## Apex Design Kit maintained in GitLab

A

apex-design-kit

Star 0 Fork 0 SSH git@git.dapt.to:design/apex-de

Files (50.7 MB) Commits (29) Branch (1) Tags (0) Readme Add Changelog Add License Add Contribution guide Set up CI

master apex-design-kit / +

feat(box, content switcher, dropdown, modal, tab): adding new sketch symbols Selene Lee committed a month ago

Name Last commit

.images doc(README): add README.md file to git re...

APEX Design Kit feat(box, content switcher, dropdown, ...

Previous Releases/APEX Design Kit 0.0.0 fix(global): including missing files from the la...

README.md doc(README): add README.md file to git re...

README.md

This project Search + 5 1 12

Project Repository Issues 1 Merge Requests 0 Pipelines Wiki Snippets Members Settings

Files Commits Branches Tags Contributors Graph Compare Charts

master apex-design-kit

27 Sep, 2018 8 commits

feat(box, content switcher, dropdown, modal, tab): adding new sketch symbols Selene Lee committed a month ago 0d97b861

Deleting content switcher, dropdowns, tabs, checkbox sketch files Selene Lee committed a month ago 7e76ebd2

fix(button): renamed symbol Selene Lee committed a month ago e17f8409

fix(textbox): renamed symbols Selene Lee committed a month ago fe62a77c

fix(radio button): renamed symbols, adjusted minor styling details Selene Lee committed a month ago add86c7b

feat(kpi): added a kpi with only one metric Selene Lee committed a month ago 4af7b3ce

fix(card): renamed card symbols Selene Lee committed a month ago 22283a4b

fix(button): renamed button symbols Selene Lee committed a month ago d899aec3

Added search cell with 14px font size and modified pagination design. Selene Lee committed a month ago 0e35afb8

Removed version in the folder name Selene Lee committed a month ago 4bf5821f

doc(README): add README.md file to git repo as Get Started tutorial Yunhao Shen committed a month ago b72b09c5

fix(global): including missing files from the last commit Sijin Chen committed a month ago 6a53f7d1

The screenshot shows a navigation sidebar on the left with sections like 'Getting Started', 'Guidelines', 'Style', 'Components' (which is expanded to show 'Buttons', 'Card', 'Checkbox', etc.), 'Number Input', 'Toggle heading', 'File Uploader', 'Radio Button heading', 'Search', and 'ACTION LOGGER'. The main content area displays a component titled '4. Components/Form all Form components'. It includes a brief description: 'Forms are widely used to collect user input. Form can have any number of react components enclosed within Form.Group component. Form.Group component is a wrapper for legend and fieldset component.' Below this is a 'Story Source' code block:

```
<Form className="some-class" onSubmit={onSubmit}>
<FormGroup className="some-class" legendText="Checkbox heading">
<checkbox
  defaultChecked
  className="some-class"
  labelText="Checkbox label"
  id="checkbox-0"
/>
<checkbox
  indeterminate
  className="some-class"
  labelText="Checkbox label"
  id="checkbox-1"
/>
<checkbox
  disabled
  className="some-class"
  labelText="Checkbox label"
  id="checkbox-2" />
<checkbox
  className="some-class" labelText="Checkbox label" id="checkbox-3" />
</FormGroup>
<FormInput
  className="some-class"
  id="number-input-1"
  label="Number Input"
  min={0}
  ...>
```

At the bottom of the content area are tabs for 'ACTION LOGGER', 'ACCESSIBILITY', 'README', and 'STORY'.

# APEX Development Sub-Committee

**Borrowed IBM Carbon Design System code repo (open source)**

<https://github.com/IBM/carbon-components>

The screenshot shows a navigation sidebar on the left with sections like 'Getting Started' (which is expanded to show 'About Apex', 'Designers', 'Developers'), 'Guidelines', 'Style', 'Components', 'Sample Pages', and 'Under Development'. The main content area has a title 'Apex Components React' with a 'pipeline passed' status indicator. It includes a 'Usage' section, a 'List of Available Components' section with a note about viewing usage information via a Yarn command, and a 'Getting Started' section with a Yarn command and a code snippet for importing apex-components into an app. At the bottom are tabs for 'ACTION LOGGER', 'ACCESSIBILITY', 'README', and 'STORY'.

## But did deep customization

Based on Design team's APEX component design proposal

The first screenshot shows the project overview with 1,359 commits, 16 branches, and 28 tags. The second screenshot shows the commit history for the 'master' branch from October 2018, featuring several merge commits and a few feature commits. The third screenshot shows the file structure of the repository, including .gitlab, .storybook, config, docs, scripts, src, ssr-tests, .a11y, and .ignore files.

# APEX Development Sub-Committee

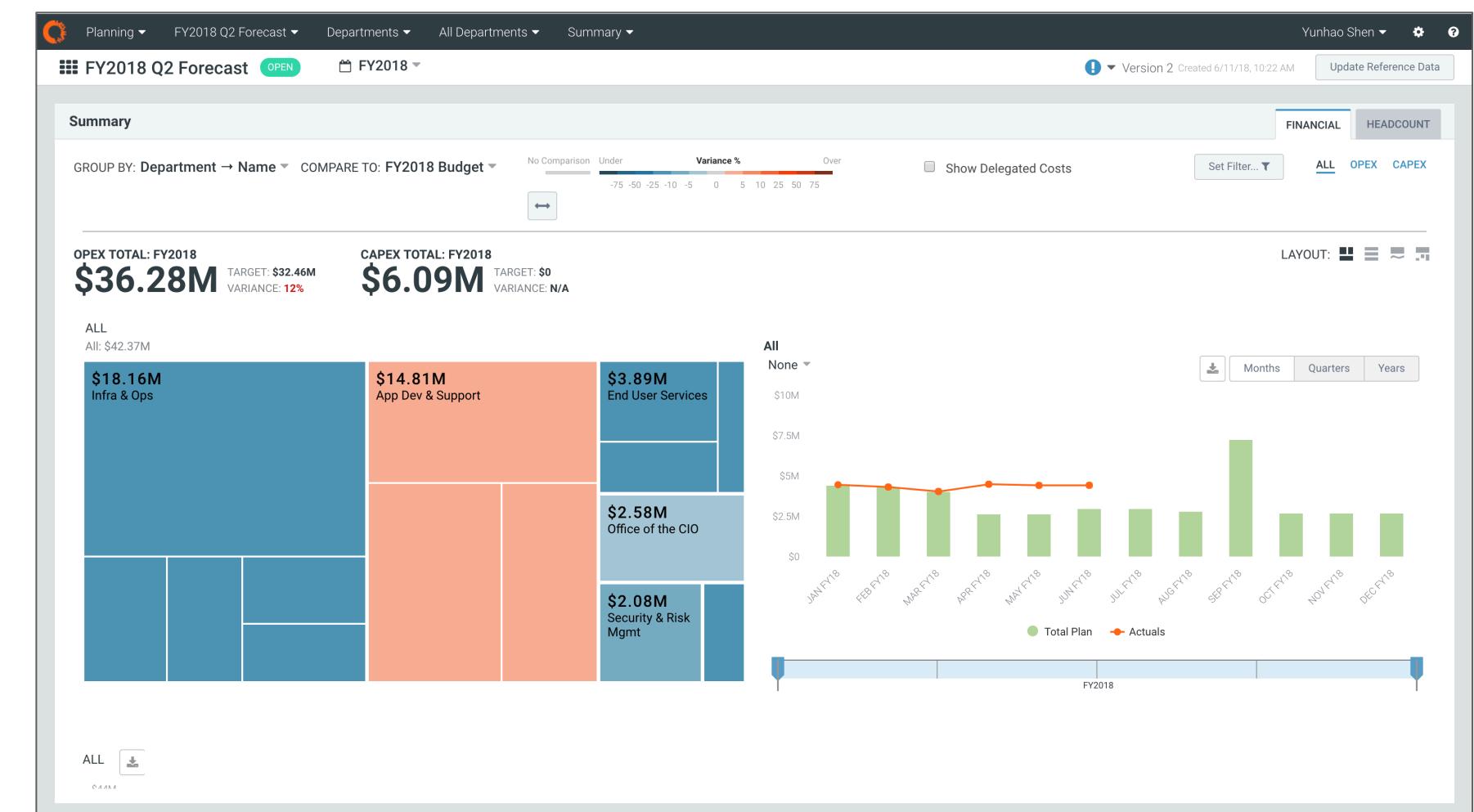
**Borrowed IBM Carbon Design System code repo (open source)**  
<https://github.com/IBM/carbon-components>

The left screenshot shows the 'CONTRIBUTING.md' file, which includes the 'Apex Developer Contribution Guideline' and 'Gitflow' sections. The right screenshot shows the 'Issues' page with 9 open issues, including topics like 'Set default text color for elements in <ModalHeader>', 'Include necessary polyfills in the dist', and 'Follow-up from StructureList selectable cell'.

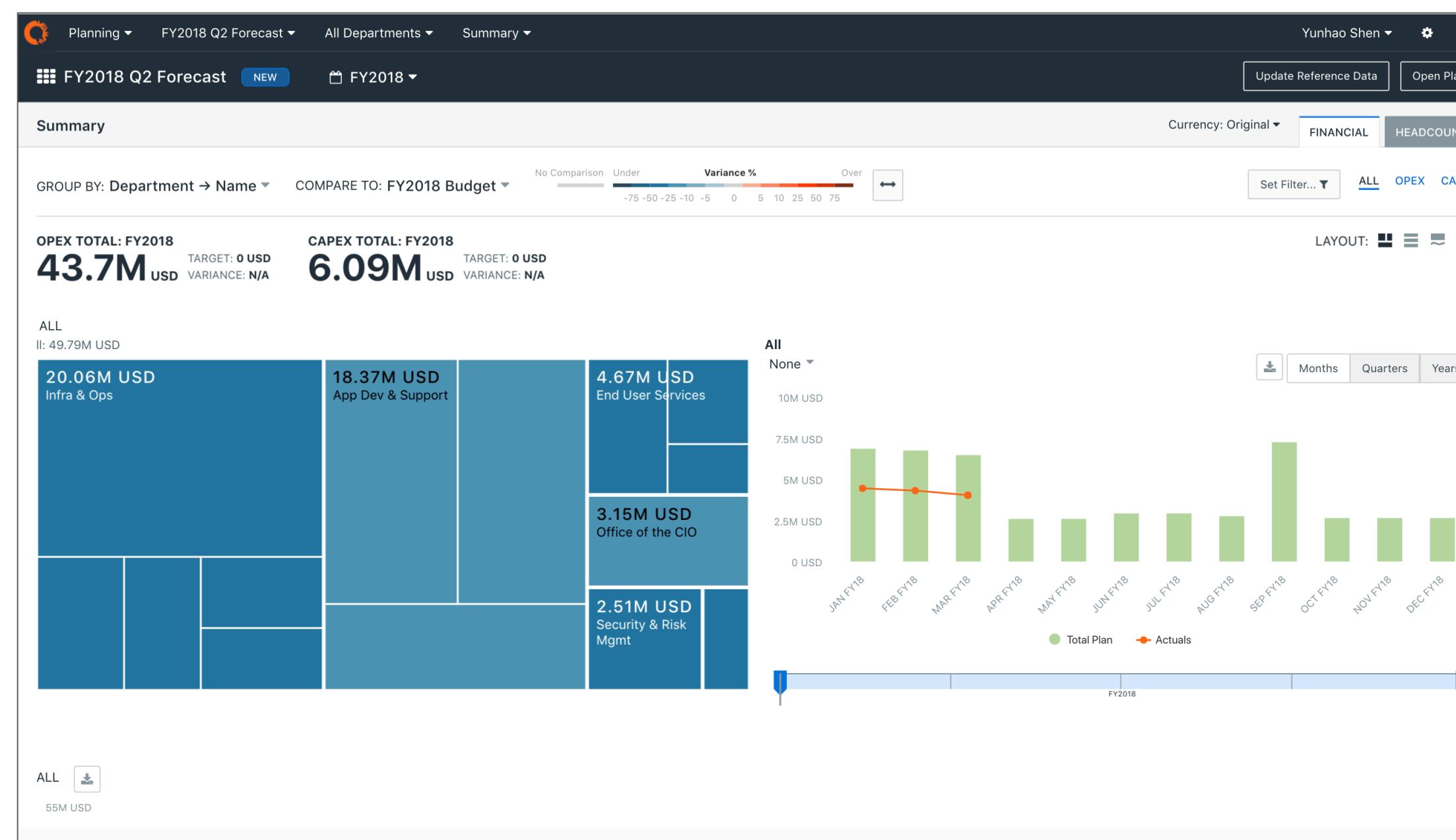
## But did deep customization

Based on Design team's APEX component design proposal

# ITFMF 1.0



## Using APEX in product development



**ITMF 1.5 = ITMF 1.0 + APEX**

# APEX lives even after I left Apptio

Recently released Apptio Agile Investment Planning continues leveraging APEX design system and react component library

The screenshot shows the Apptio Agile Planning interface. On the left, there's a navigation sidebar with options like Strategy, Portfolio, Product, Resource, and Config. The main area is titled "PRODUCT > Roadmap". It shows a "PROGRAM INCREMENT" from "Q1 2018 - Q4 2018" under "PORTFOLIO Vanguard". Below this, there are sections for "BACKLOG" and "RELEASE TRAINS". The "RELEASE TRAINS" section is expanded, showing two release trains: "Agile Planning Release Train" and "Agile Planning Release Train 2". Each train has four columns representing Q1 2018, Q2 2018, Q3 2018, and Q4 2018, with various items listed under each column.

The screenshot shows the Apptio Agile Investment Planning interface. The navigation sidebar is similar to the first screenshot. The main area is titled "RESOURCE > Release Trains". It shows a "PORTFOLIO <All Portfolios>" and a "PRODUCT <All Products>". Below this, there are sections for "Summary" and "Release Trains". The "Release Trains" section is expanded, showing five release trains: "Release Train 1" (Agile Planning), "Release Train 2" (Actionable Insights), "Release Train 3" (Project Planning), "Release Train 4" (Data Ingress), and "Release Train 5" (Cloudability). To the right, there's a detailed view of "Release Train 1" for Q2 2018, showing allocated capacity (170 dev-days) and available capacity (93.5 dev-days, 55% of allocated). A legend indicates the types of investment activities: New Feature (blue), Minor Enhancement (green), Technical Debt \* (purple), and Servicing/Bug Fixes \* (orange).

Apptio Agile Investment Planning

We did APEX in the right way!

# Next Project

# Connected Mazda

**Personal Project**  
[mycar.yunhaoshen.com](https://mycar.yunhaoshen.com)

## Role

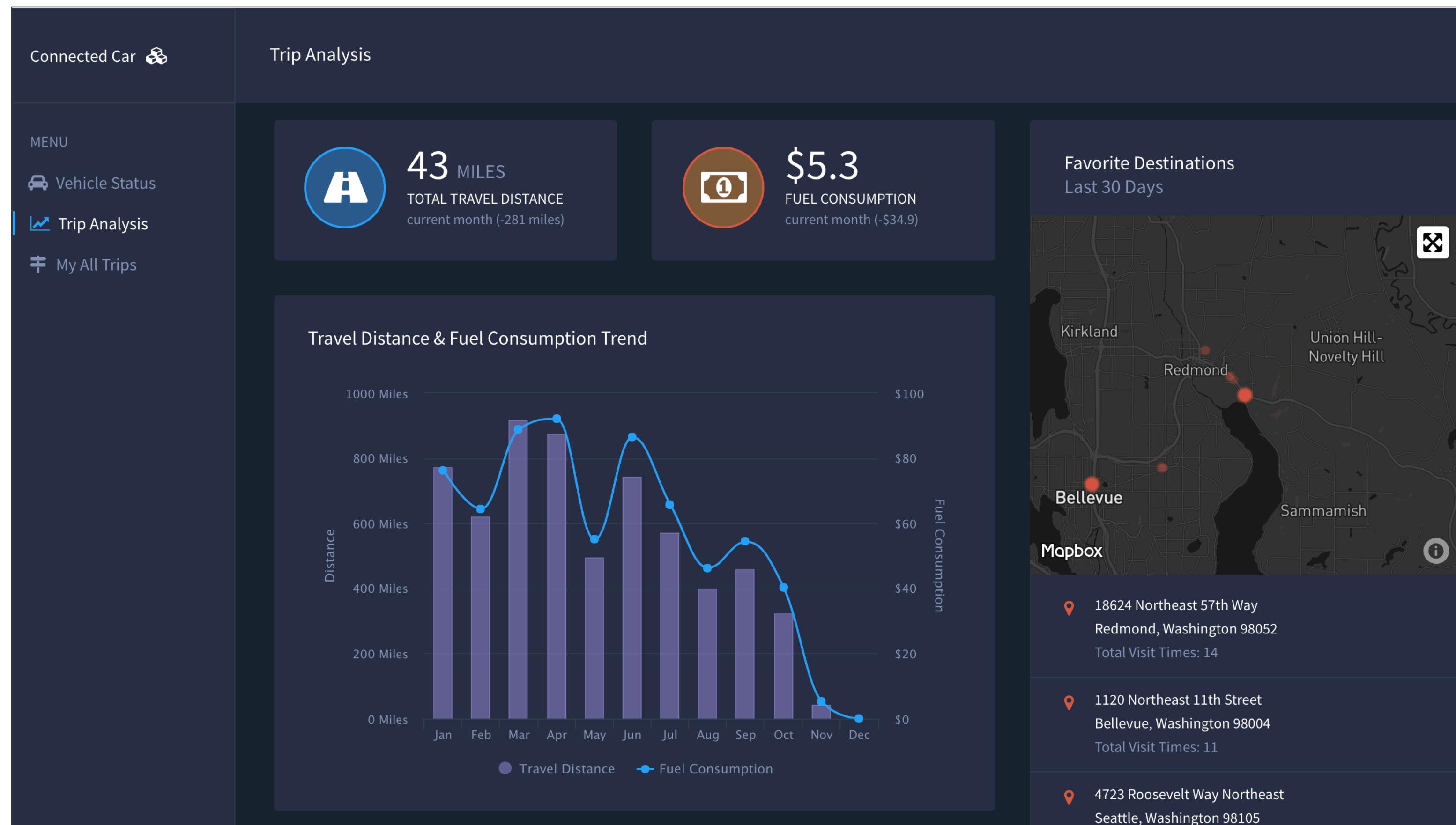
Design & Development

## Project Details

I did an interesting side project to turn my Mazda3 into a Smart Car, and built a fully responsive web app to track where I went and all my driving statistics.

My driving data dates back to March 5<sup>th</sup>, 2017, and has a total of **2,641** trips and **1.53 million** geo coordinates till today, and is continuing growing.

<https://mycar.yunhaoshen.com>  
 Username: yunhaoshen  
 Password: yunhaoshen



Internet of Things

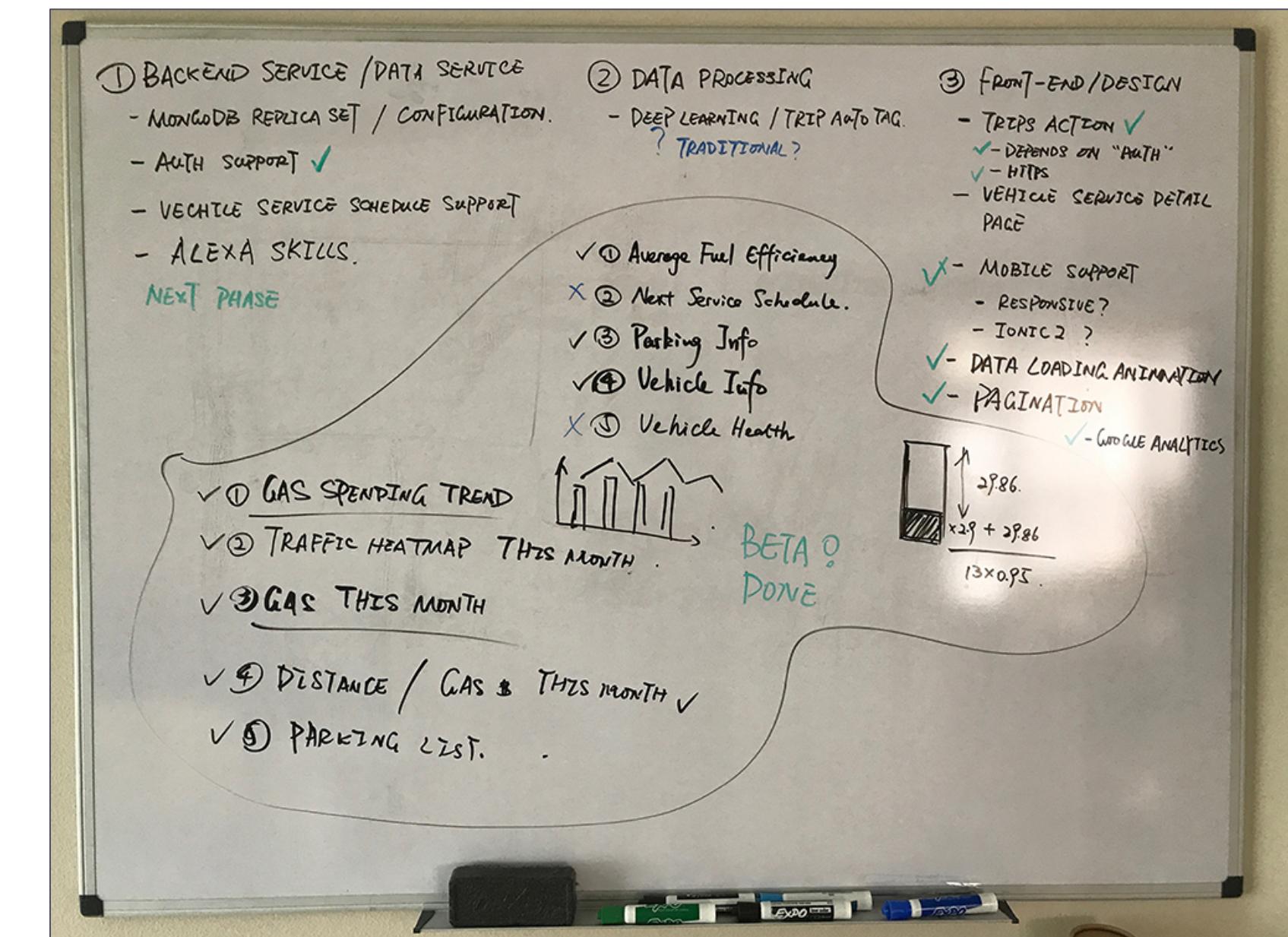
# Design

## Whiteboard Ideas

List out function requirements and brainstorm design ideas.

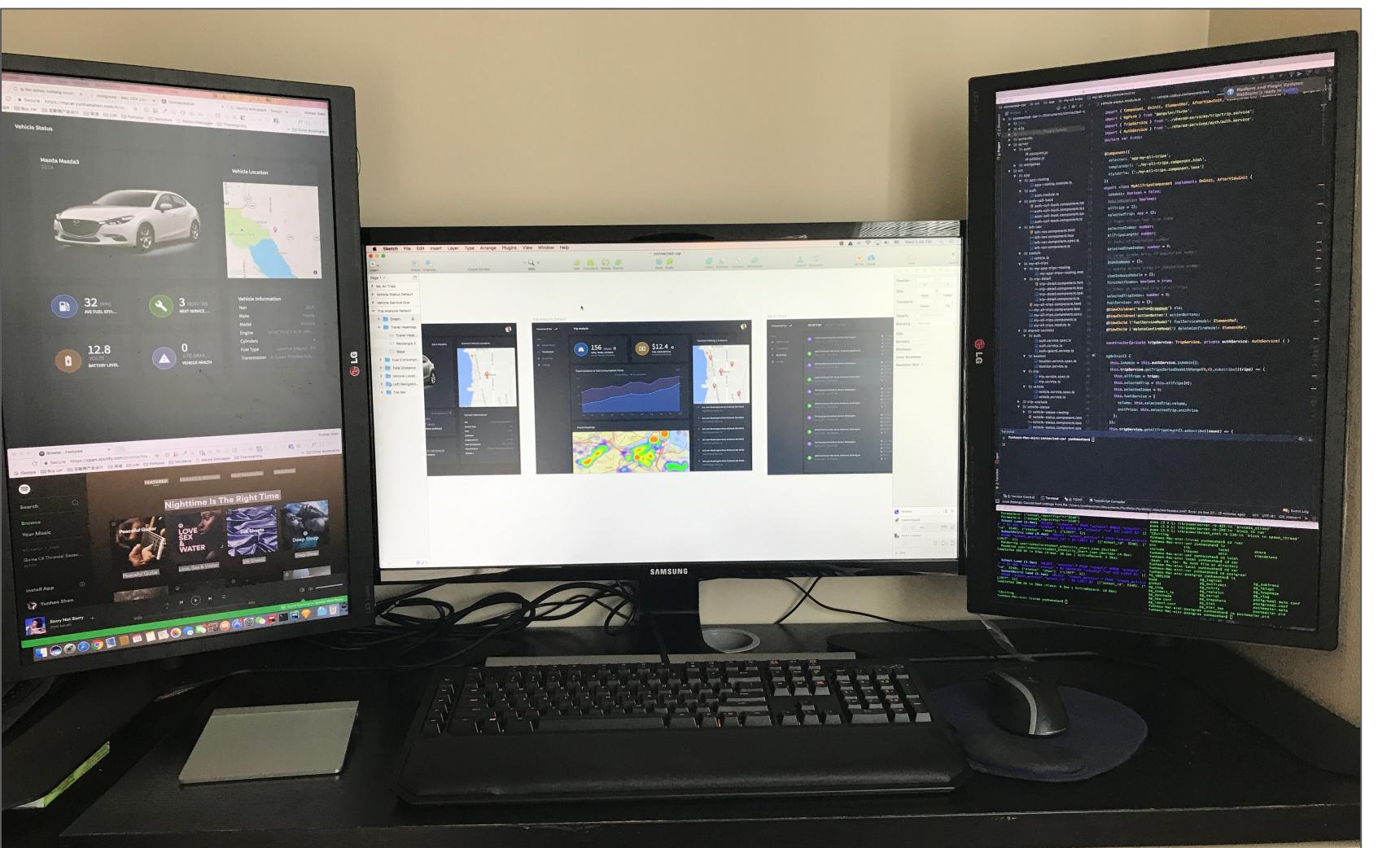
## Design

"Sketch" out main pages.



This dashboard provides a quick overview of the vehicle's status. It features a central image of a 2014 Mazda3, a map showing the current vehicle location, and four key metrics: Current Average Fuel Efficiency (27.6 MPG), Next Service Schedule (3 months, 4,192 miles), Battery Level (12.4 Volts), and DTC Defaults (0).

This dashboard focuses on trip analysis. It shows total travel distance (156 miles) and fuel consumption (\$12.4) for the current month. A line chart tracks Travel Distance & Fuel Consumption Trend over time from January to November 2017. Below it is a Travel Heatmap showing high activity areas in Boston and surrounding regions. A sidebar lists favorite parking locations in Kirkland, WA.



# Development

Analytics | All accounts > My Connected Car | All Web Site Data

**User Report**

Sessions (LTV) 1 Session Duration (LTV) 00:00:44 Revenue (LTV) \$0.00 Transactions (LTV) 0 Goal Completions (LTV) 0

Oct 28, 2018 - Nov 3, 2018

Client Id 322658927.1541205310 BigQuery Client ID 1385809540768656702 Date Last Seen Nov 02, 2018 Device Category desktop Device Platform web Acquisition Date Nov 02, 2018 Channel Direct Source / Medium (direct)(none) Campaign (not set)

Filter by Sort by Create Segment 4 selected Descending Expand All Collapse All Export

Nov 2, 2018 1 session

5:35 PM 0:04:3 Direct

Viewed ConnectedCar /#/my-all-trips  
Viewed ConnectedCar /#/trip-analysis  
Viewed ConnectedCar /#/vehicle-status

Show rows: 100 Go to: 1 1 - 3 of 3

Return to User Explorer Report Delete User

This report was generated on 11/4/18 at 9:30:01 PM - Refresh Report

## Database

MongoDB

## Backend server with REST API

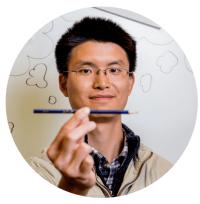
Node JS

## Front end responsive web app

Angular2

## Web analytics

Google Analytics



**Yunhao Shen**

2020.

**Thank you for  
Audience**

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