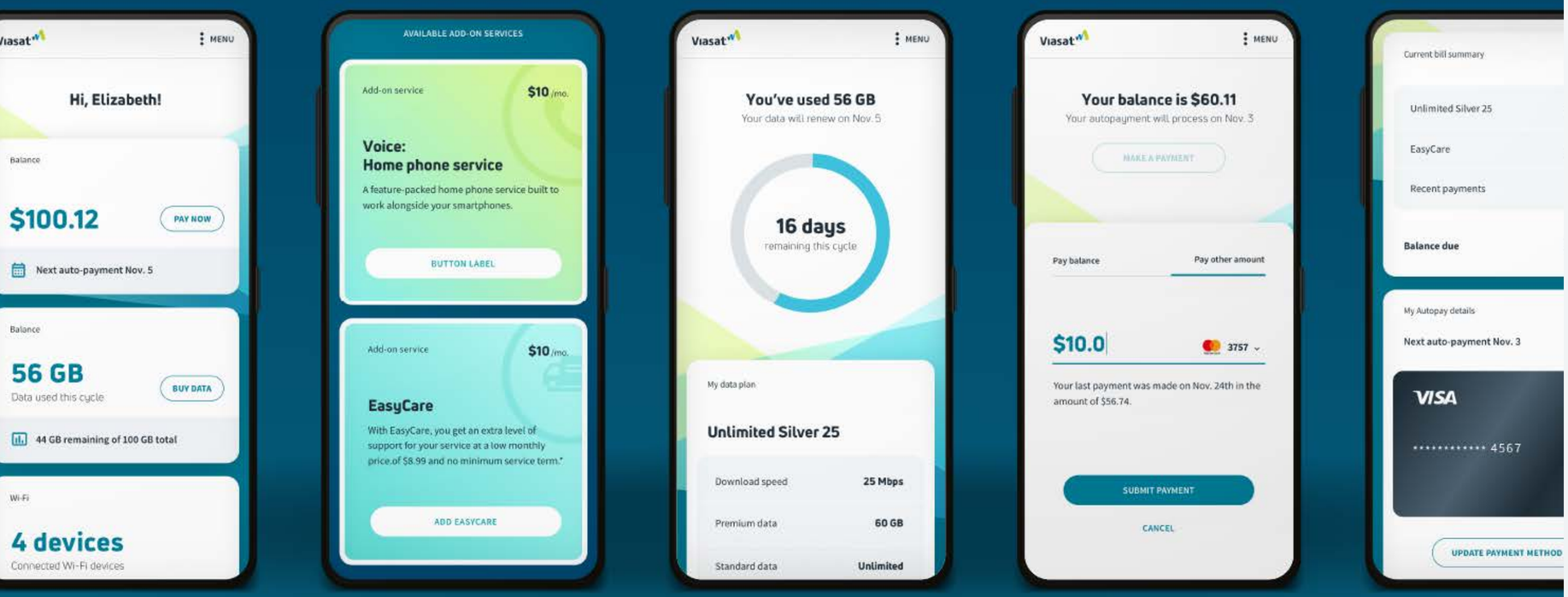
Project Hornet

ROLE : DESIGN LEAD
Research, design roadmap, Information architecture, ideation, prototyping, testing, visual and interaction design

TEAM
3 product designers, 1 UX strategist, 5 engineers, 2 product managers

DURATION
November 2020—present

TOOLS
Sketch, Abstract, InVision, Figma, Miro, UserZoom



Overview

The purpose of the MyViasat app is to empower users to manage their residential internet service through the use of self-help features like data usage monitoring, billing, troubleshooting, and FAQs. By supporting self-help, the app should deflect customer care calls, resulting in reduced operational costs for the company, however, recent data suggests that users are still enlisting agent suppport to understand and manage their data, pay their bill, and troubleshoot network issues.

The first release of the MyViasat mobile app was deployed in December 2019. Following quickly after that, the MyViasat responsive web app was released in April 2020. The goal of migrating these products to a new React code base was achieved with these early releases, however, due to time and technical constraints, many user experience issues were not addressed.

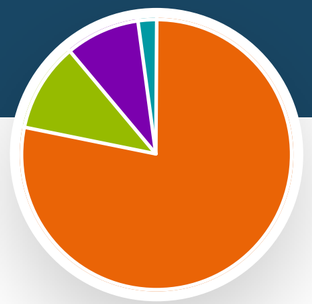
With improved access to customer feedback, updated technology platforms, and an increased timeline for testing and research, project Hornet is focused on improving the current MyViasat mobile and web experiences to reach a targeted goal of reduced CCPU (care cost per unit).

“The posted monthly statements do not show an itemized billing”

“I would like to see what the average data usage is in my household.”

“How is my service unlimited if you slow my data down at a certain point?”





Billing

28% of total contact volume

- **Payments/collections (21%)**
  - Make a payment
  - Change or update a payment method
  - Stop an [auto] payment
- **Bill Cycle (9%)**
  - Change bill cycle/autopay date
  - Questions about first-months bill
  - Request a credit/refund
  - Advanced notice (amount billed, proration, price transitions)

Data usage

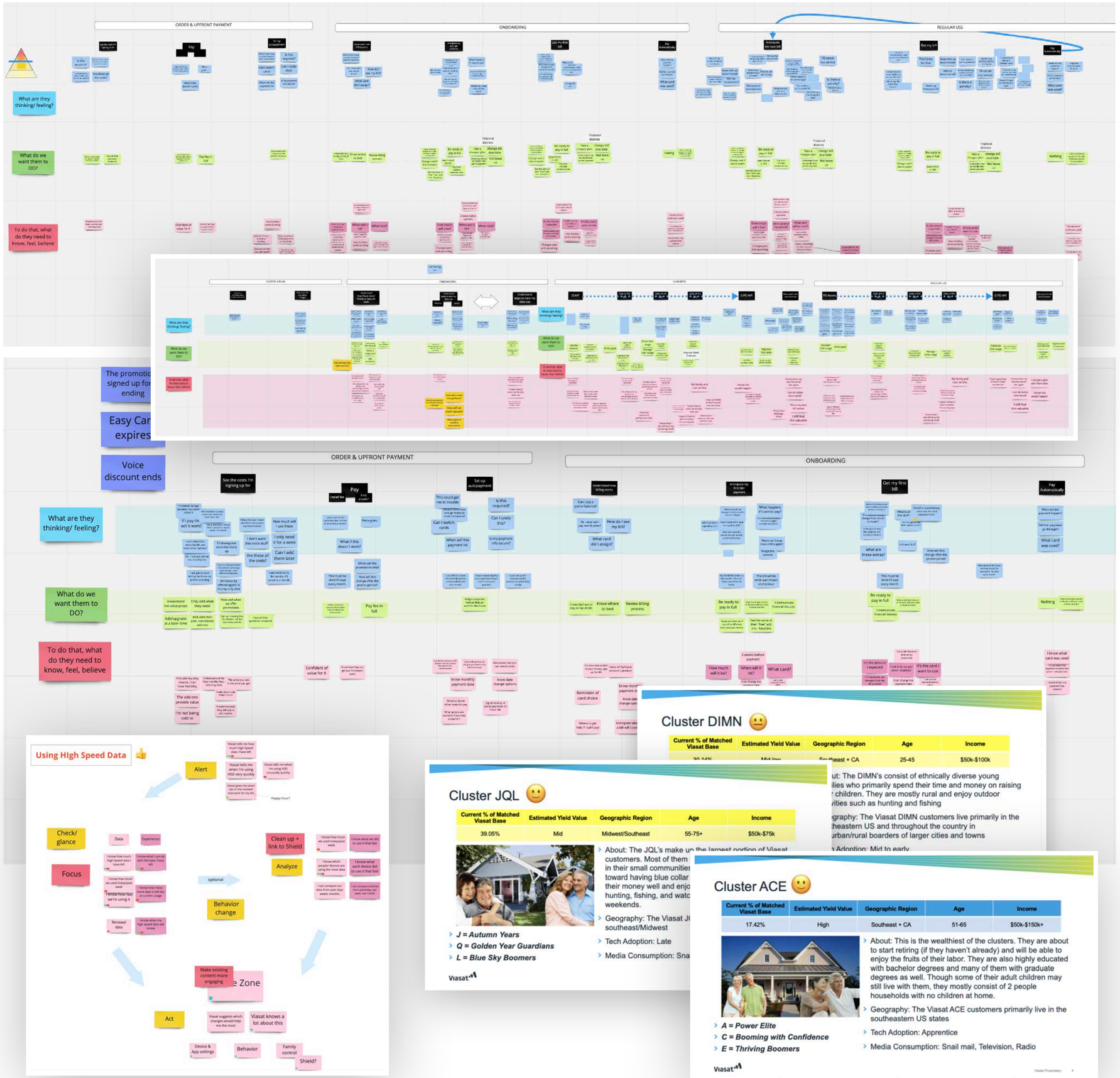
23% of total contact volume

- **Troubleshooting connectivity** (78.33%)
  - Remote diagnosis
  - Guidance on resolution; reboot-truck roll
- **Speed of service** (10.67%)
  - Slow speeds (over inflection point) can appear as a connectivity issue
  - Video quality/buffering
- **Data allowance** (8.93%)
  - Throttling, priority data, etc.
- **Other** (2.07%)

The Problem

To date, call volume to Viasat’s customer care center remains high as customers are still requiring agent assistance to understand and resolve issues with their account. Data collected from agent chat logs and direct customer feedback reveals that the current self-service experience is not providing users with the content or tools they need to complete high-priority tasks, such as changing their payment date, updating a payment method, switching/adding services, and monitoring data usage.

The first release of project Hornet will focus on improvements to the MyViasat billing and data experiences. Since the majority of customer calls stem from issues related to billing and data usage, improving these two features will have a significant impact on the overall user experience.



Discovery

In the discovery phase, we analyzed customer personas and customer-agent communications to fully understand the breadth of MyViasat user needs. We documented use cases and customer insights, mapping them to user personas and plotting pain points along detailed user journeymaps.

With improved insights into the user journey, we re-evaluated the current information architecture and tested our hypotheses in card sorting and tree test exercises. We used this data to propose a new information architecture that addressed user needs by improving discoverability and wayfinding.

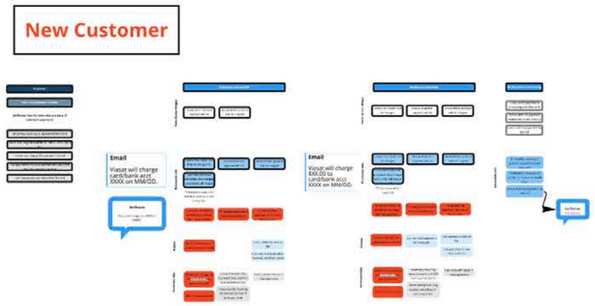
Activities

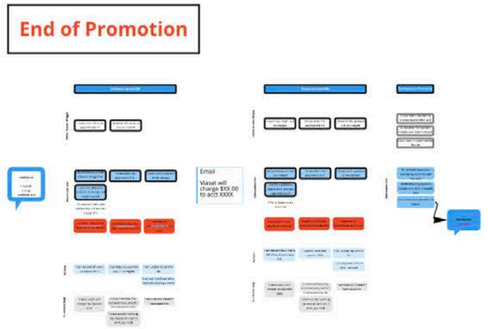
User research/personas

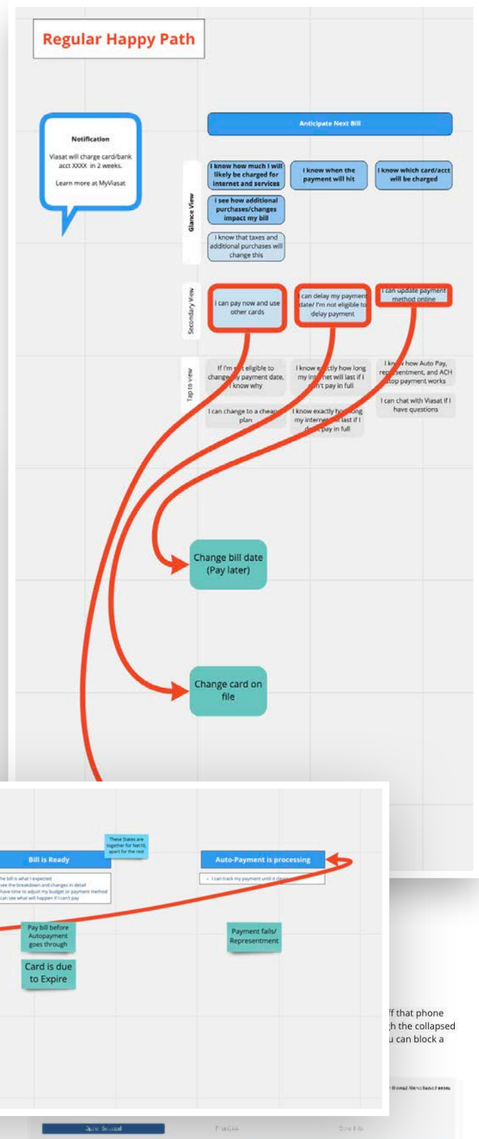
MLP definition

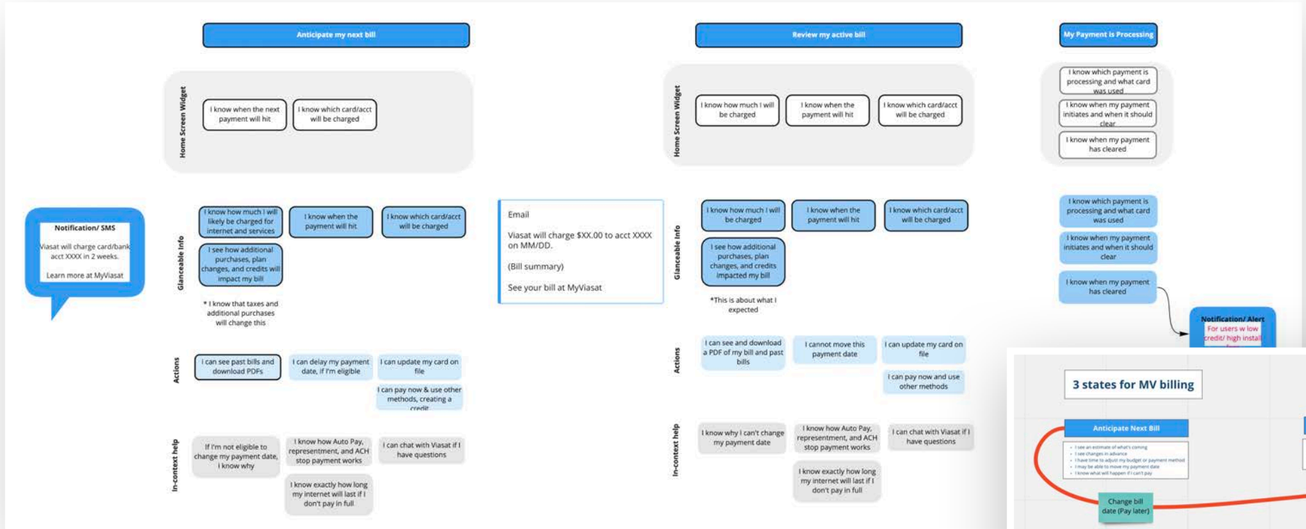
Empathy mapping

Journey mapping









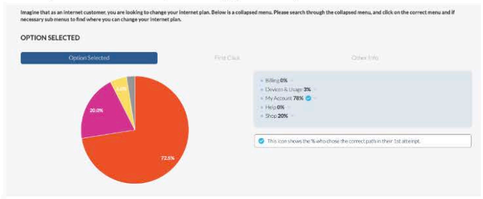
Test details

- 40 participants from userlytics panel
- 30 min unmoderated sessions
- Recorded screen, voice, audio

Devices on Network

Scenario 1

Imagine that as an internet customer, you are looking to change your internet plan. Below is a collapsed menu. Please search through the collapsed menu, and click on the correct menu and if necessary sub menus to find where you can change your internet plan.

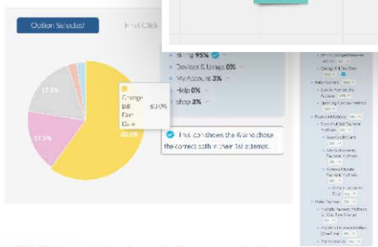


~5% of users who got to My account, didn't think to go to plan details. As long as this option is clearly accessible in the prototype, this shouldn't be an issue

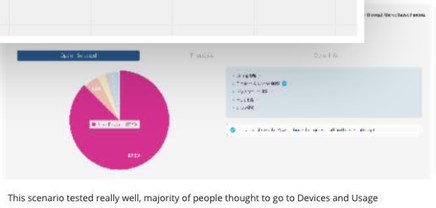


Scenario 2

Imagine that you are getting paid o… If that phone pay for your internet from the 15th… h the collapsed collapsed menu. Please search thro… u can block a necessary sub menus to find where…

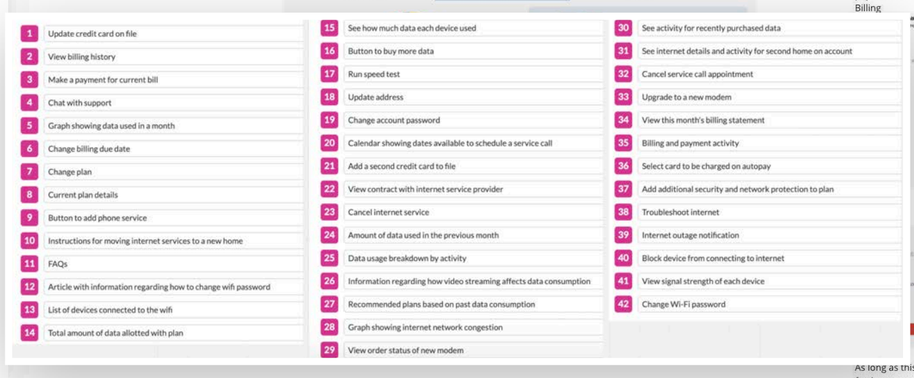


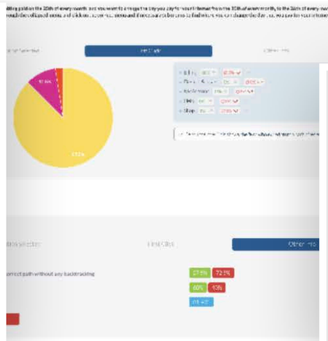
~35% of users expected to change the bill due date in the "Autopay" section (specify payment for autopay, or update autopay method). 95% of users knew this would be in Billing

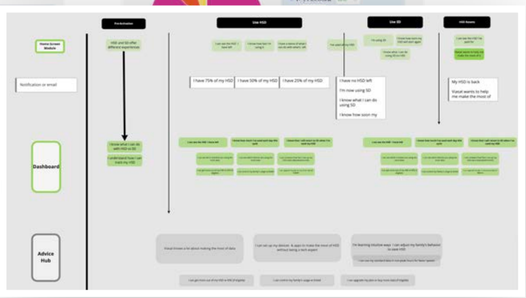


This scenario tested really well, majority of people thought to go to Devices and Usage









As long as this option is clearly present in the Billing page, and you don't need to drill further to see the change bill due date option, this should not be an issue in the prototype

Discovery (contd.)

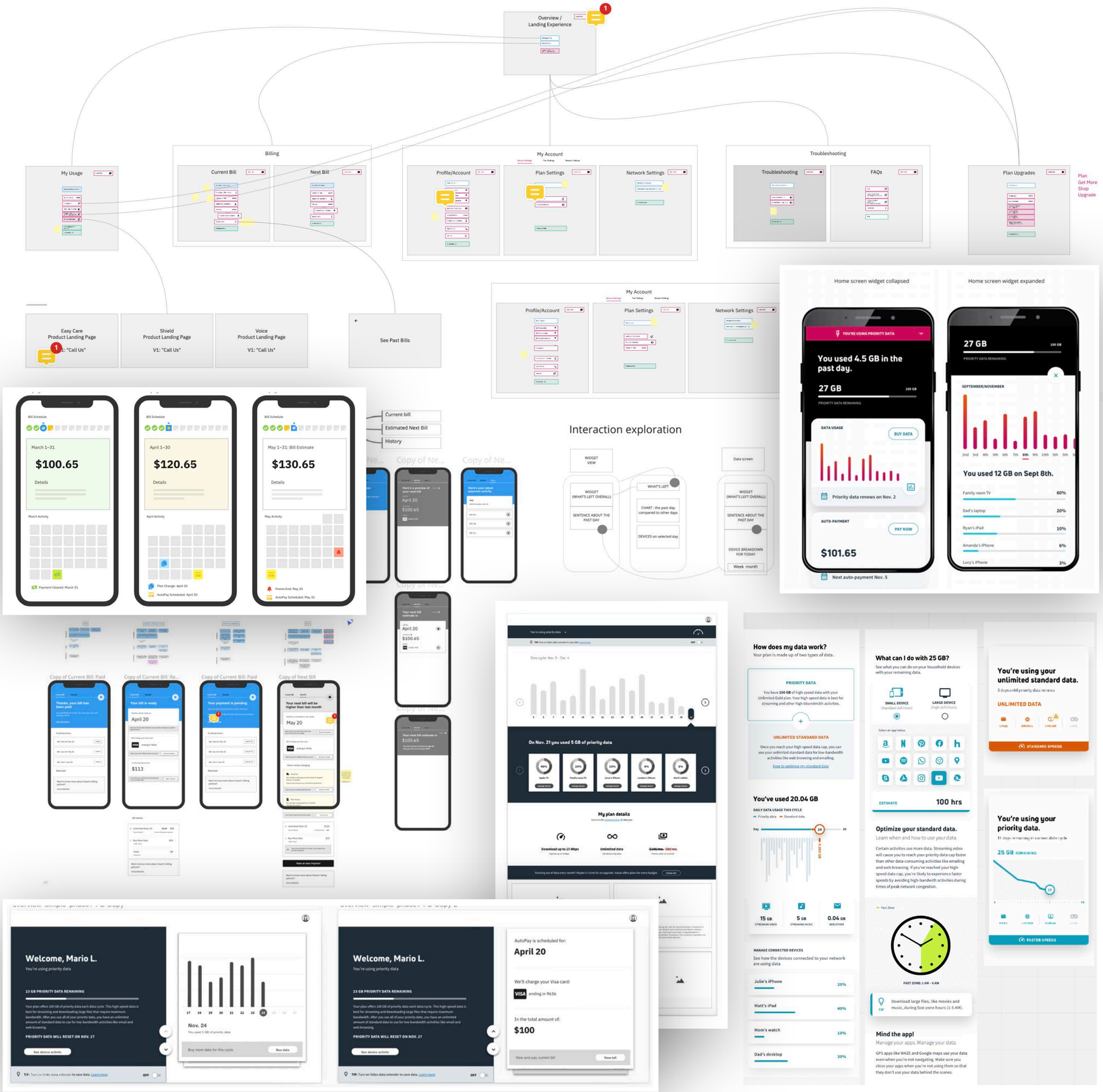
Activities

User flows

Tree tests

Card sorting

Information architecture



Ideation

We synthesized all of our data and artifacts from our discovery exercises into detailed userflows for both the billing and data usage experiences. We then tested our design hypotheses with current Viasat customers using low-fidelity clickable prototypes.

Activities

Information architecture

User flows

Wireframing

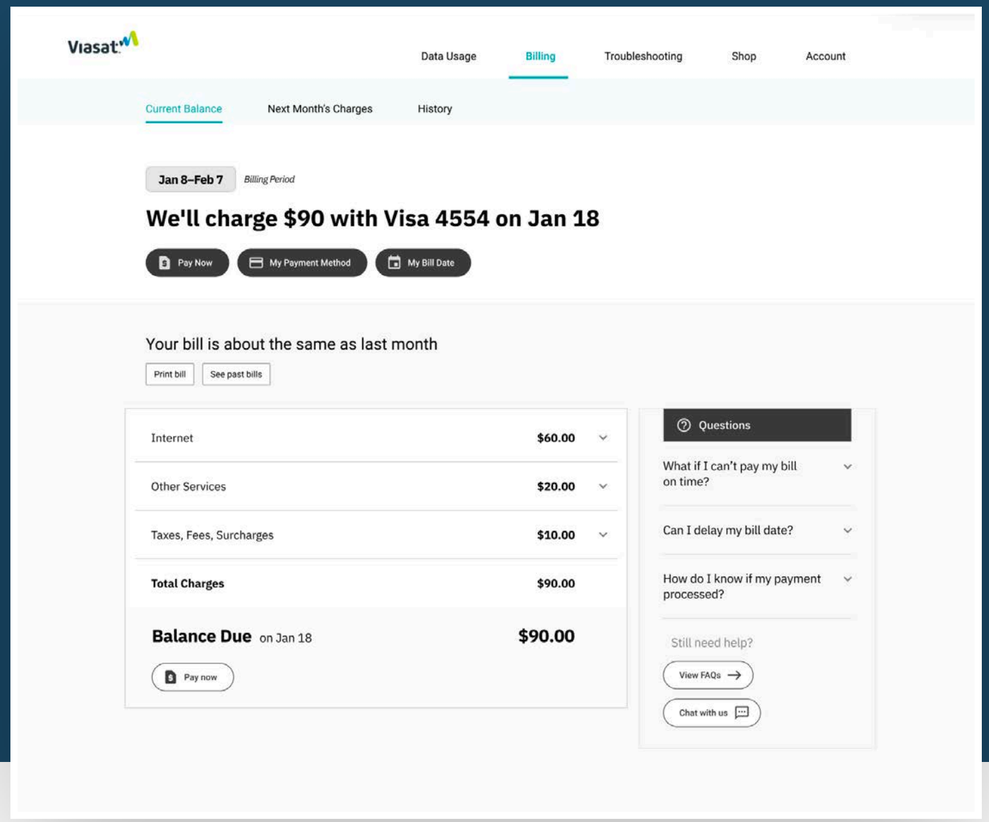
Prototyping

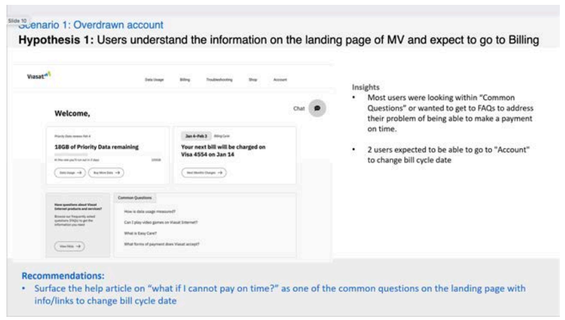
BILLING

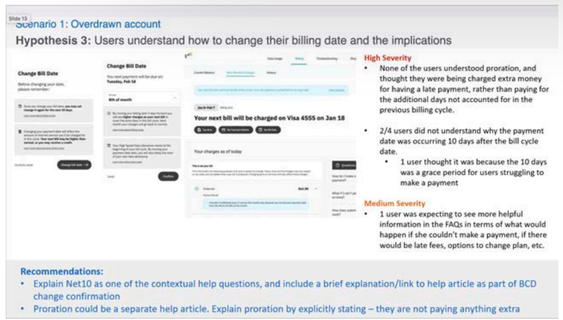
USABILITY TEST RESULTS

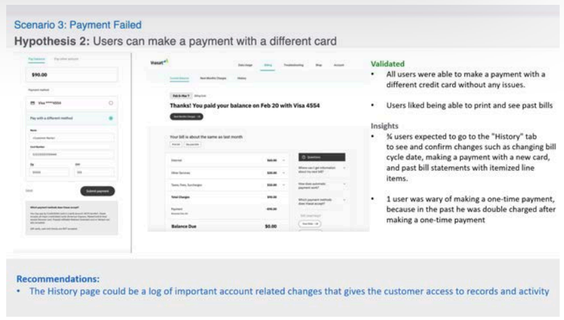
Our billing designs accurately targeted most of our users' main pain points around understanding their bill. Customers reacted positively to contextual help and found promo pricing and payment flows to be intuitive and straightforward.

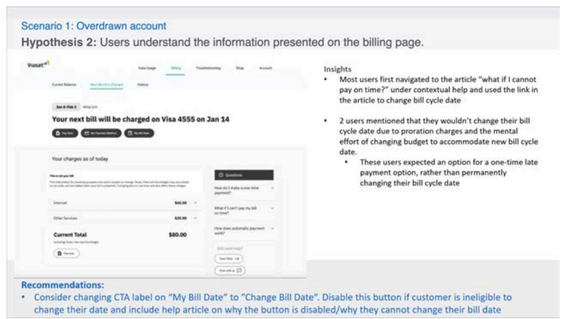
There is still more work to be done in educating users about how to use the new billing features (specifically, change bill due date and bill comparison) as the test results suggest, these experiences are not currently intuitive to our users.

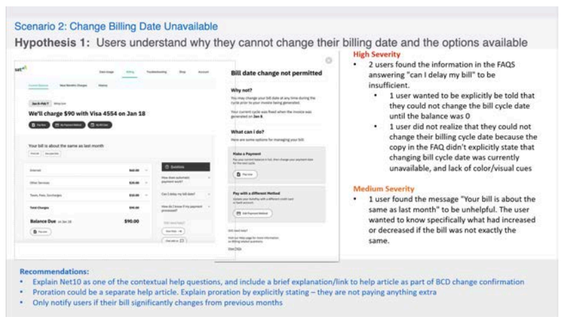


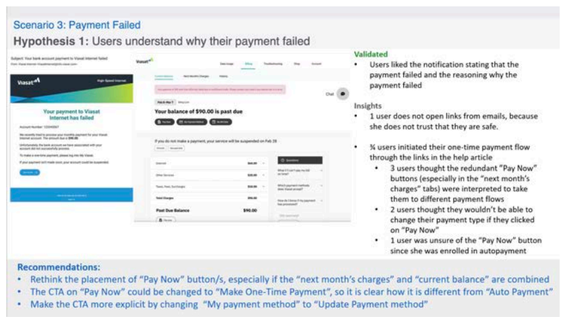












The Takeaways

We partnered with UX researchers to conduct seven 45-60 minute moderated usability tests with current Viasat residential internet customers (4 tests of billing designs and 3 tests of data usage designs). The goal of each test was to understand the following:

- Do these designs address real world billing/data needs?
- What information is most important to users
- What (if any) information is missing
- Usability/understandability in proposed designs

The data collected from these tests confirmed that some of our design hypotheses were accurate while others required more thought and exploration.

The Hornet design team is currently implementing usability feedback into new design iterations. These refined designs will be tested in mid-March 2021 prior to moving into the two week detailed designed phase in early April 2021.

Activities

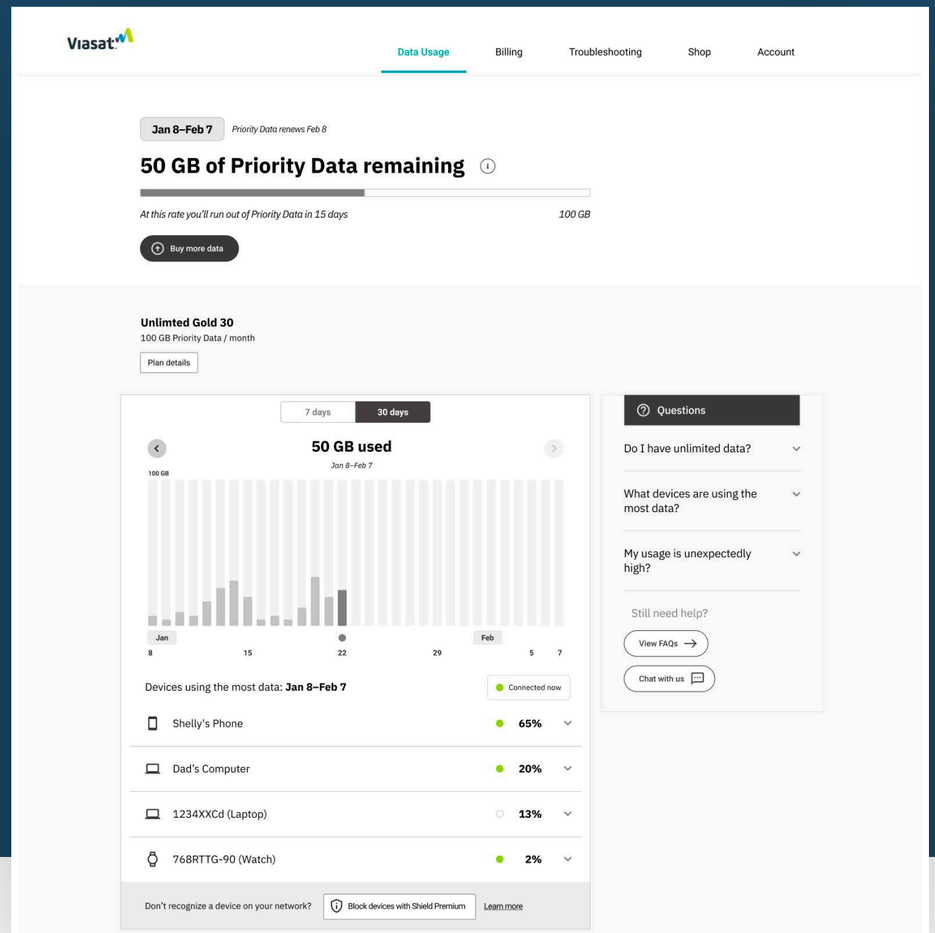
Usability testing

Data Usage

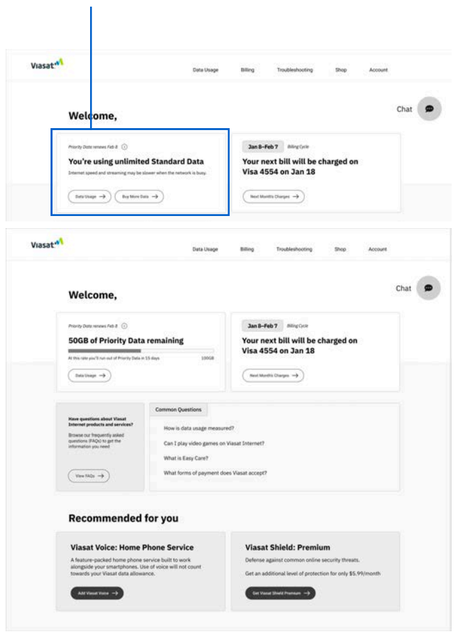
USABILITY TEST RESULTS

Users found the device usage breakdown to be very helpful and reported that they would frequently use the new device blocking feature.

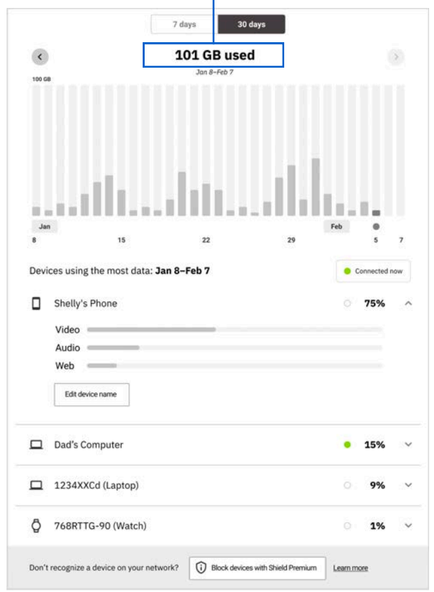
The concept of unlimited data proves to be a challenging paradigm to shift in our users. Testing confirmed that more discovery and research is needed in this area to successfully communicate the concept of priority data and the impact it has on internet speeds.



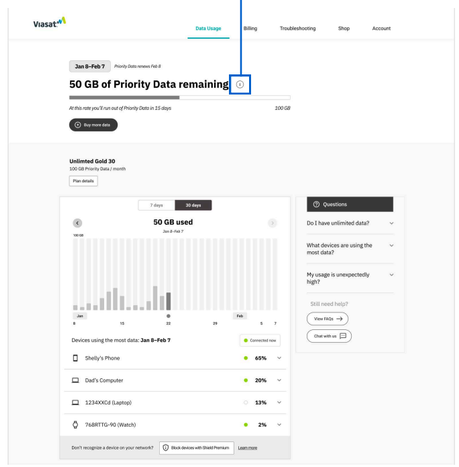
"Unlimited Standard Data" was not clear.
Recommendation: Explicitly state that high-speed data has run out



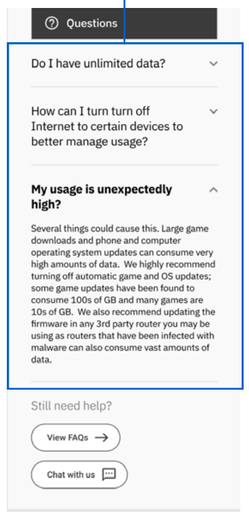
Not enough information.
Recommendation: Users would like to see an average of how much data is used each day.



Tooltip is not discoverable.
Recommendation: Use a different affordance or explore other ways of educating users on data differences.



Users reported that contextual help topics were relative and useful.



The Takeaways (contd.)