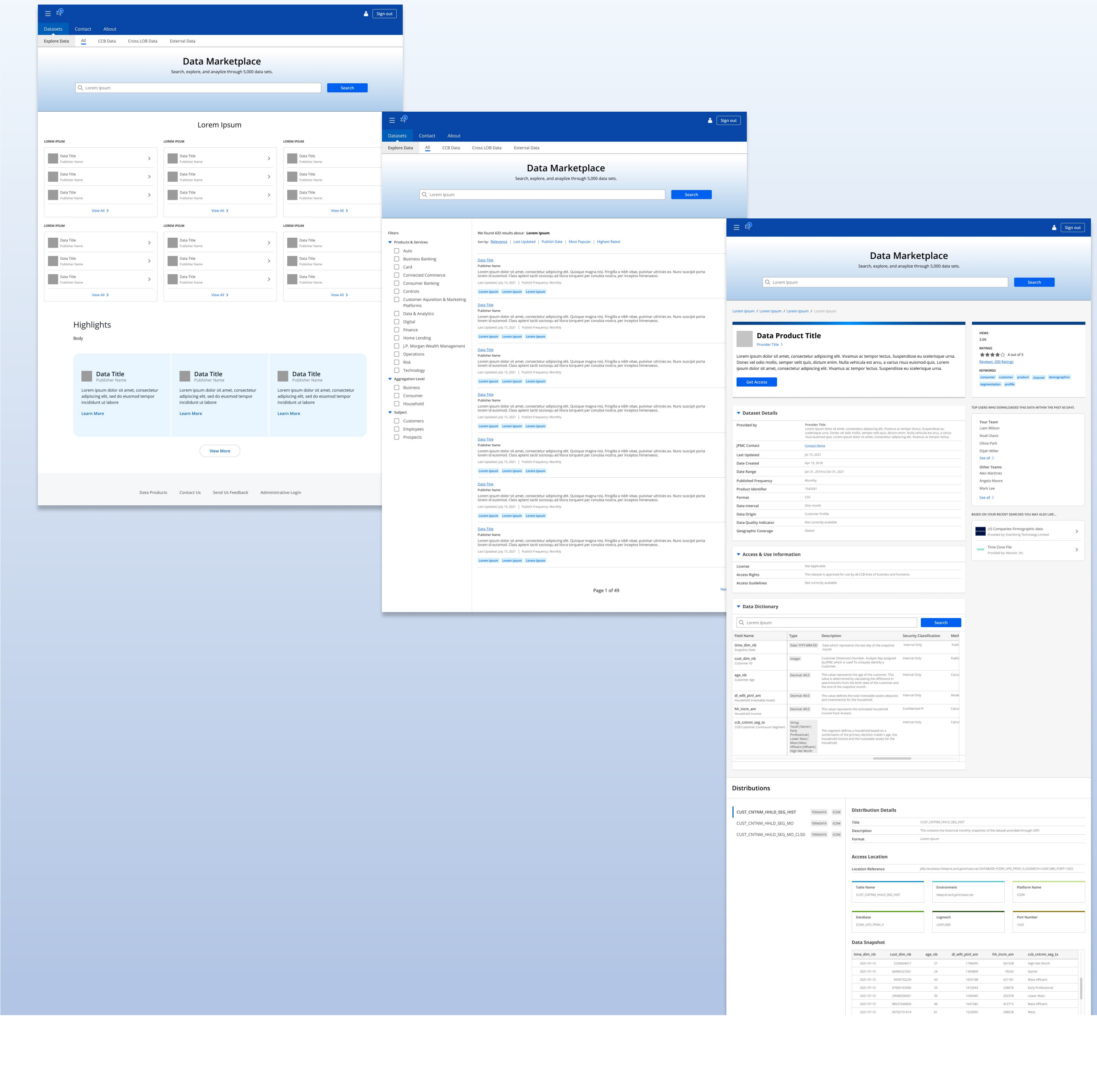


Data Marketplace

A platform to search, explore, and access data.

The Data Marketplace will provide a centralized platform to create a unified experience for the analysts to search, explore, and access data products.

- Discoverable**
 - Analysts have a central place to search and explore all of the firm's internal and external data products.
- Easy to access**
 - Analysts can immediately access the data they have permissioned or initiate an access request.
- Trusted data**
 - Analysts can see other user feedback and data quality indicators.



Understanding the Data Discovery Journey

How do analysts and data scientists search for new data?

I conducted 1 on 1 interviews with users to gain a better understanding of their current state data discovery process.

Research Objectives:

- Define the current state user journey of searching for new data products.
- Discover possible touchpoints for the Data Marketplace to alleviate pain points.
- Understand the user's mental model when it comes to categorizing and filtering data products.
- Discover what sort of metadata aspects users want to see about a data product.

The Challenge:

The data estate within the firm is large and very difficult to navigate due to a lack of cohesive information about any given data asset. Currently analysts rely upon social networks and highly fragmented processes to find, explore, and access data to use in their analytical activities. Analysts need a simple way to find data products so that they can increase their productivity and reduce data discovery time.

Phases	1 Utilize existing knowledge to acquire a first point of reference.	2 Track down the correct contact for my data discovery needs.	3 Acquire knowledge from my contact and identify if it relates to my use case.	4 Utilize my contact's knowledge and resources to obtain the data I need.
Tasks	- Consult my immediate team and peers to see if they are familiar with the data I am searching for. - Tap into my existing knowledge of the firm's organization chart to brainstorm potential SME's to reach out to. - Brainstorm what teams and individuals may already be working with the data I'm searching for.	- Email the contacts and potential SME's I've been referred to and see if they have previously worked with the data I'm searching for. - Look at MAP data dictionaries to trace and track down the owners of the data. - Ask the data domain owner where I can find the data table I'm looking for. - Follow up and obtain new connections until I find the correct person with the information I need.	- See if my contact can point me to a data source or provide a walkthrough. - Evaluate whether the information my contact has given me fits my data discovery needs.	- Acquire sample code from my contact. - Consult my contact for things like querying guidance, dataset logic, and data dictionary resources.
Thoughts & Emotions	"Right now I don't know who exactly works with the data that I need, but I have a hunch on where I could start looking."	"The process feels so tedious and I am reliant on getting information through word of mouth."	"Once I get in contact with someone, it's then a matter of finding out whether or not they are the right person who can point me in the right direction."	"It would be nice not to have to jump through so many hoops to finally find the data I need."

Refining Data Details

Addressing feedback & incorporating design system:

I was given a grayscale wireframe of the Data Details screen and the user research results conducted by the team's previous designer. One of my first tasks was to make design iterations based on the user feedback and to update the wireframe to a hi-fi design utilizing the firm's design system.

User feedback to address from previous research:

Insight #1: The need to define attributes and preview data

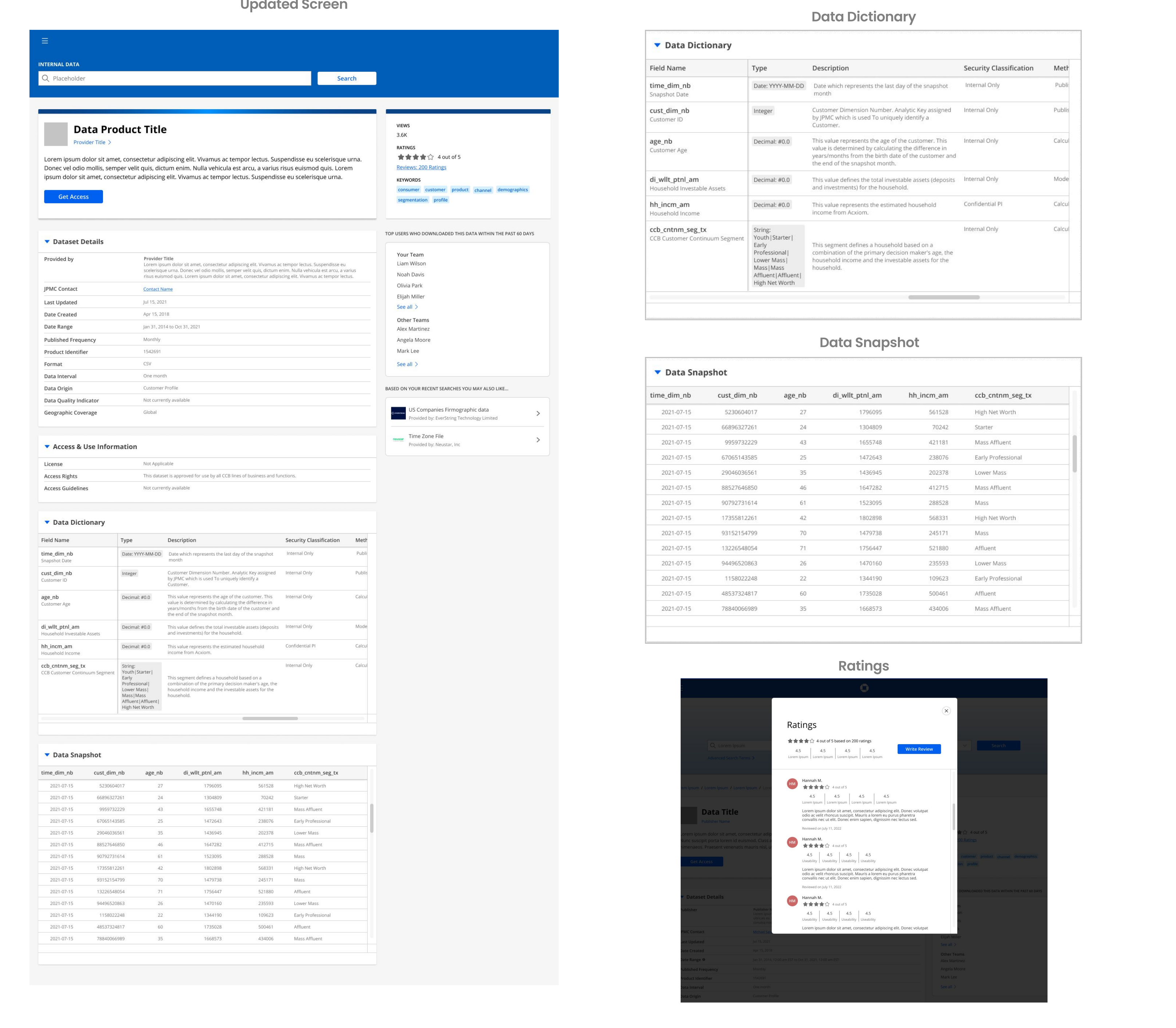
Users need a way to easily define a dataset's attributes and preview sample data inside the product so that they can quickly determine if that data product will fit their analytical needs.

- Solution:** Design a data dictionary feature that provides simple descriptions of each attribute and as well as a data snapshot feature that displays sample data.

Insight #2: The need to clarify what a data product's star rating means

Users need more context about what the data product's star rating was based on to be a reliable indicator of the data's quality.

- Solution:** Design a ratings system with descriptive metrics that outline the criteria for what a data product's star rating is based on.



Data Details User Research

Concept validation for new features:

After updating the design I then conducted 1 on 1 interviews with 10 different data analysts at the firm to gain feedback on the new data dictionary, data snapshot, and updated ratings features.

Research Objectives:

- Understand if the new data dictionary, data snapshot, and updated ratings features satisfy user needs.
- Re-test user feature priorities.
- Gain feedback on content hierarchy and utilization of new design system componentry.
- Discover how users access and choose data.

Research Findings:

Insight #1: The need for a data dictionary search

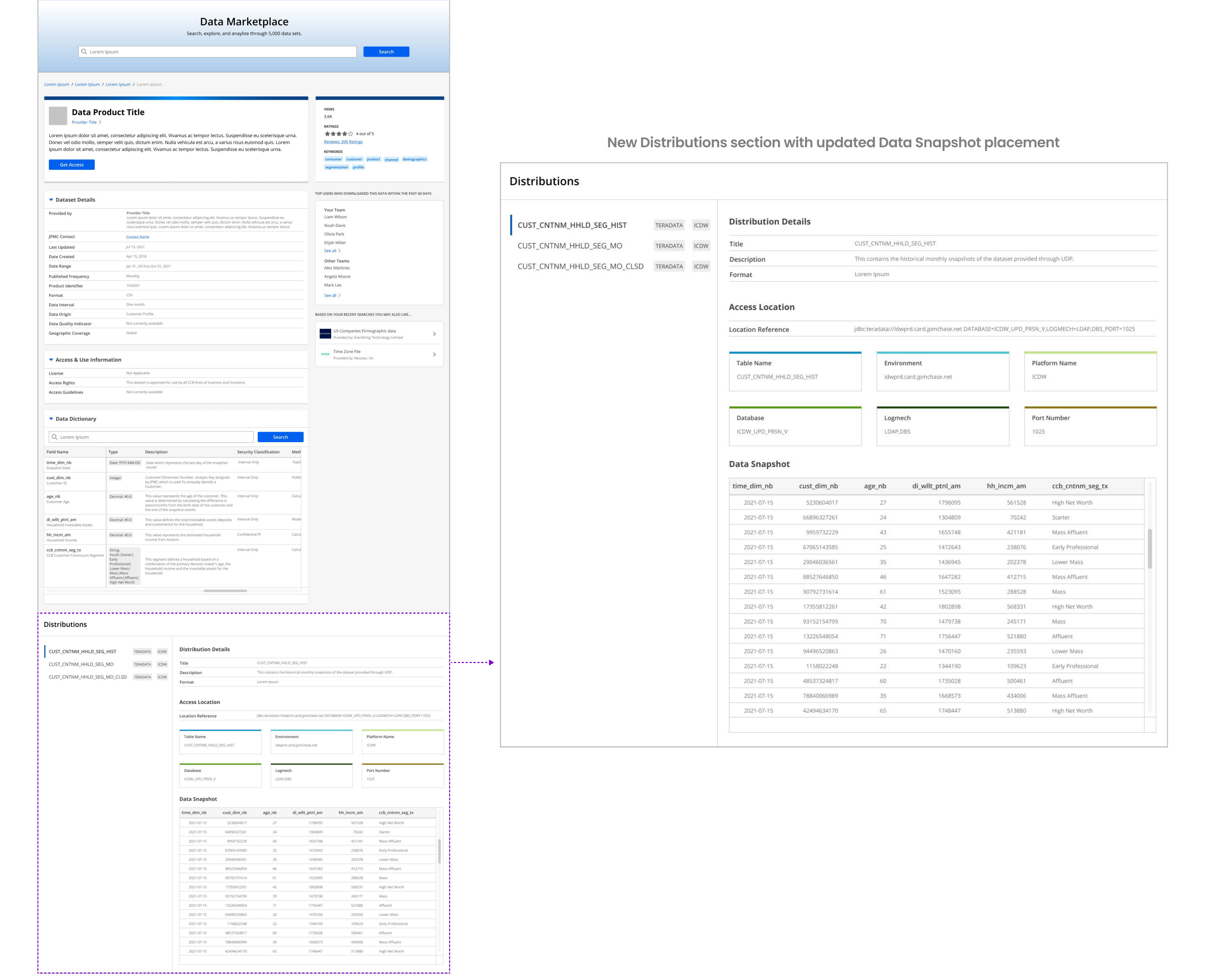
Although users found the data dictionary to be extremely valuable in helping them understand what the dataset represents, users still must go through a tedious process to locate the correct dataset that contains the specific attributes and fields they need.

- Solution:** Incorporate a search feature within the data dictionary for users to search the table by attributes and keywords.

Insight #2: The need to display multiple distributions

A data product might have multiple distributions each with its own unique table values and details so having one singular data snapshot wouldn't be representative of all distribution values.

- Solution:** Incorporate a new distributions section for users to browse through the data product's different distribution options along with their own individual details and data snapshots.



Navigation Categories & Filters

Determining how data is categorized and filtered:

The next step was taking the feedback I received from the initial search journey interviews and making a first pass at possible categories and filters to help accommodate users in their search experience.

Category & Filtering Feedback:

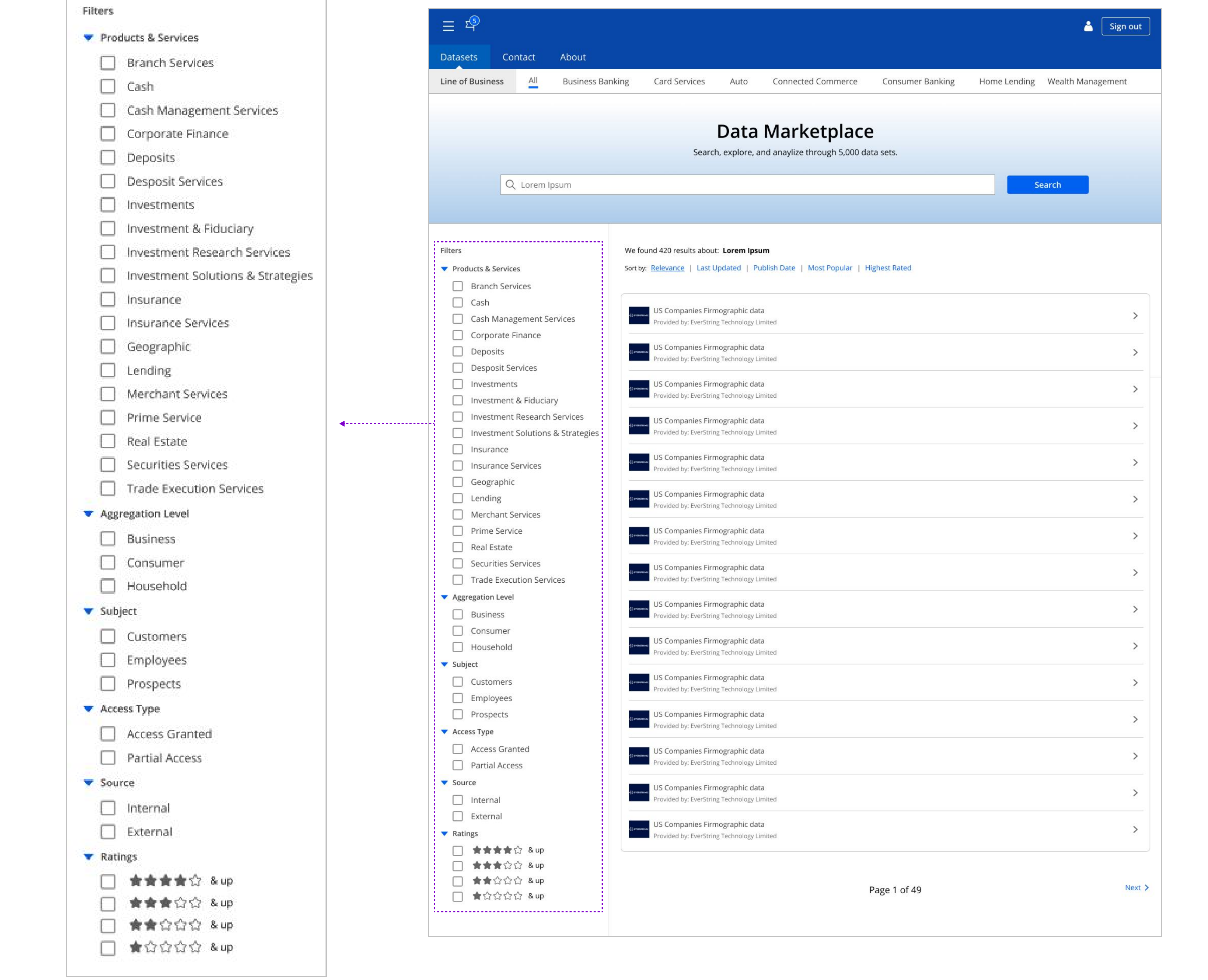
- Users receive data requests with varying levels of specificity which influences their starting point.
- 9 out of 10 users wanted to see data classified by line of business as in the first categories to begin their search.
- Users said that they would want to filter by things like "Products & Services", "Aggregation Levels", "Subject", and "Access Type".

How do users respond to proposed filter group options?

After creating the search screen with my proposed filter categories I spoke with the 10 analysts and data scientists again to get their input.

Research Objectives:

- Discover what sort of items users want to see in each filter group.
- Understand what level of granularity is needed for filter group item options.
- See which filter groups users prioritize the most.



Filter Feedback

Research Findings:

Overall Feedback:

- Users ranked "Products & Services", "Aggregation Levels", and "Subject" as their top priority filter groups.
- Users wanted to see more descriptive metrics about the data product in the search results.
- There are datasets that are not specific to certain LOBs or span across multiple LOBs.
- Users expressed that they wanted more of a distinction between internal, external, and cross LOB data products.

"Products & Services" Insights:

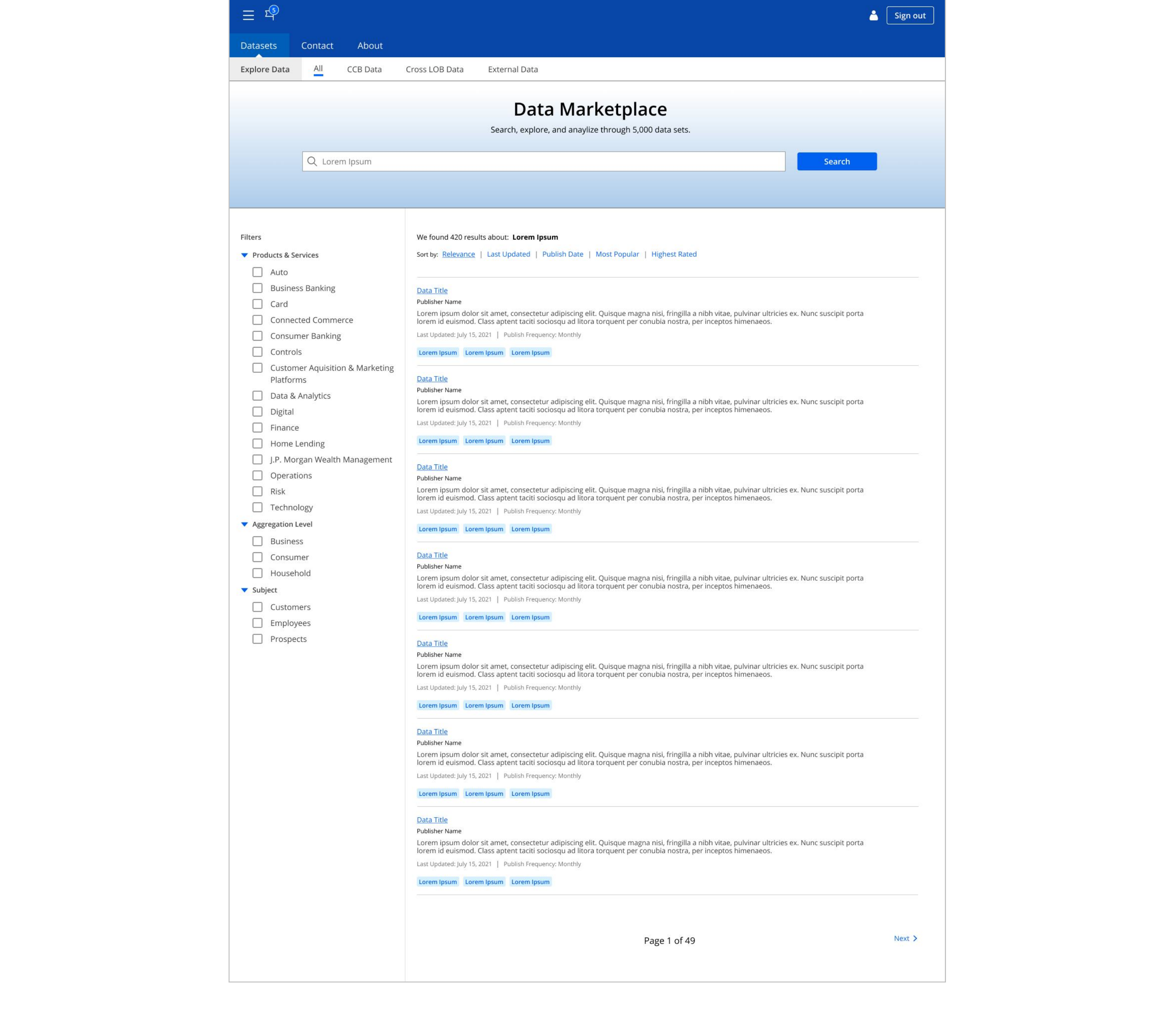
- All users expressed some level of uncertainty about the differences between at least two of the filter items listed and thought some of the filter items seemed redundant.
- 5 out of 5 users said they weren't familiar with all of the filter items listed.
- All users expressed wanting to filter Products & Services at a more high-level view.

- Solution:** Base the filter items on the firm's level 1 product groups instead of listing all of the specific products and services within each group.

Search Results & Filter Iterations

Design Changes:

- Simplified the "Products & Services" filter group taxonomy by basing it on level 1 product groups.
- Updated the level 1 navigation categories to make a distinction between internal, external, and cross LOB data products.
- Eliminated the unnecessary filter groups of "Access Type", "Source", and "Ratings"
- Provide more descriptive metrics in the individual search results.



Next Steps

- Define and design the data access flow.
- Conduct user testing to gain insight on the external data discovery process.
- Work with engineers to implement screens.
- Collaborate with product to create admin login.

