

PROJECT SCOPE

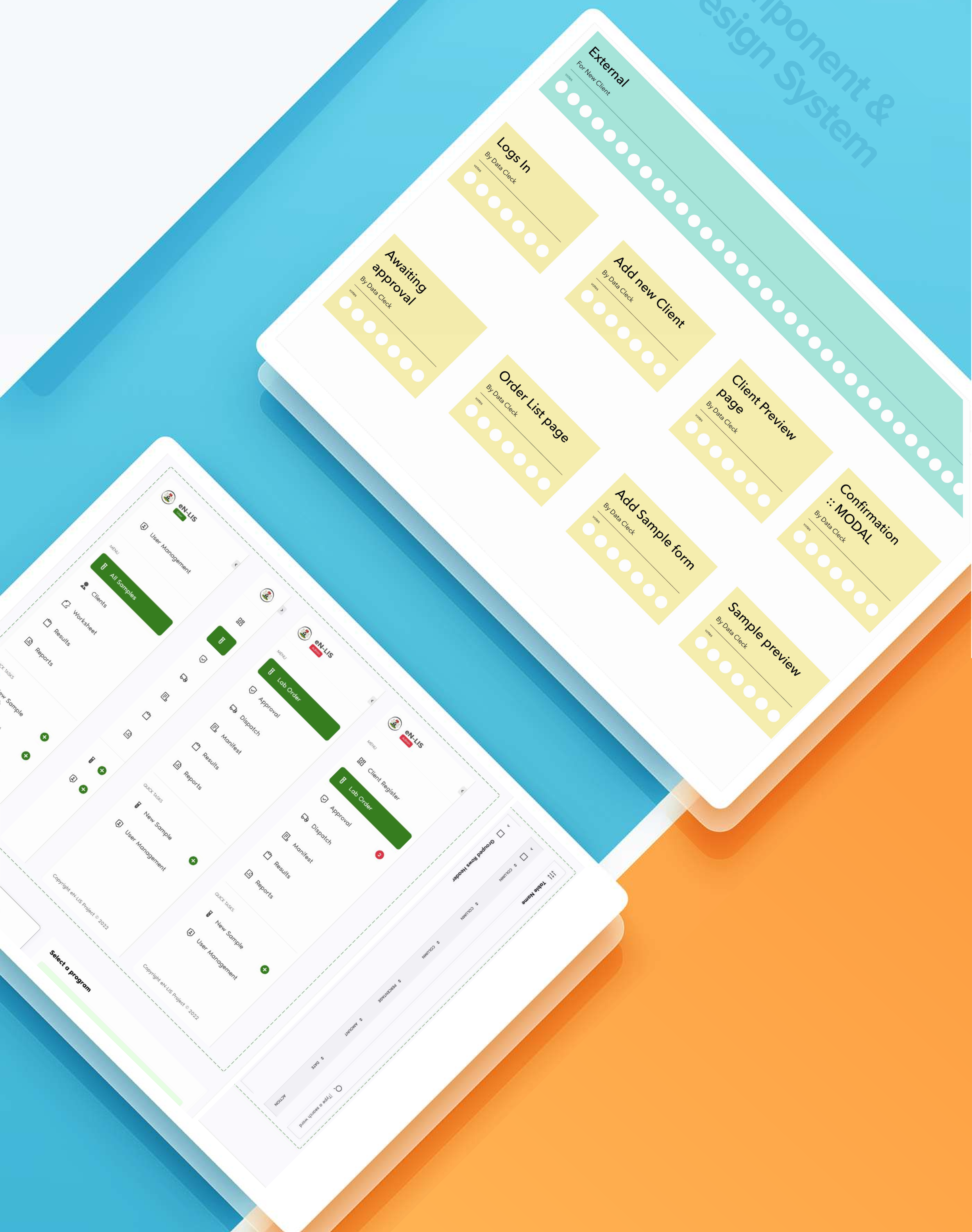
eN-LIS Dashboard Visualization Project

The Eletronic National Laboratory Inventory System (eN-LIS) project is a web application that provides stakeholders in the health sector with high-level statistics on how hospitals and laboratories interact with patients while monitoring the status of high-alert disease types such as COVID-19, Small Pox, Malaria, and others in Nigeria. We had to create a web application with features based on the user goals identified by the research team.

My Role

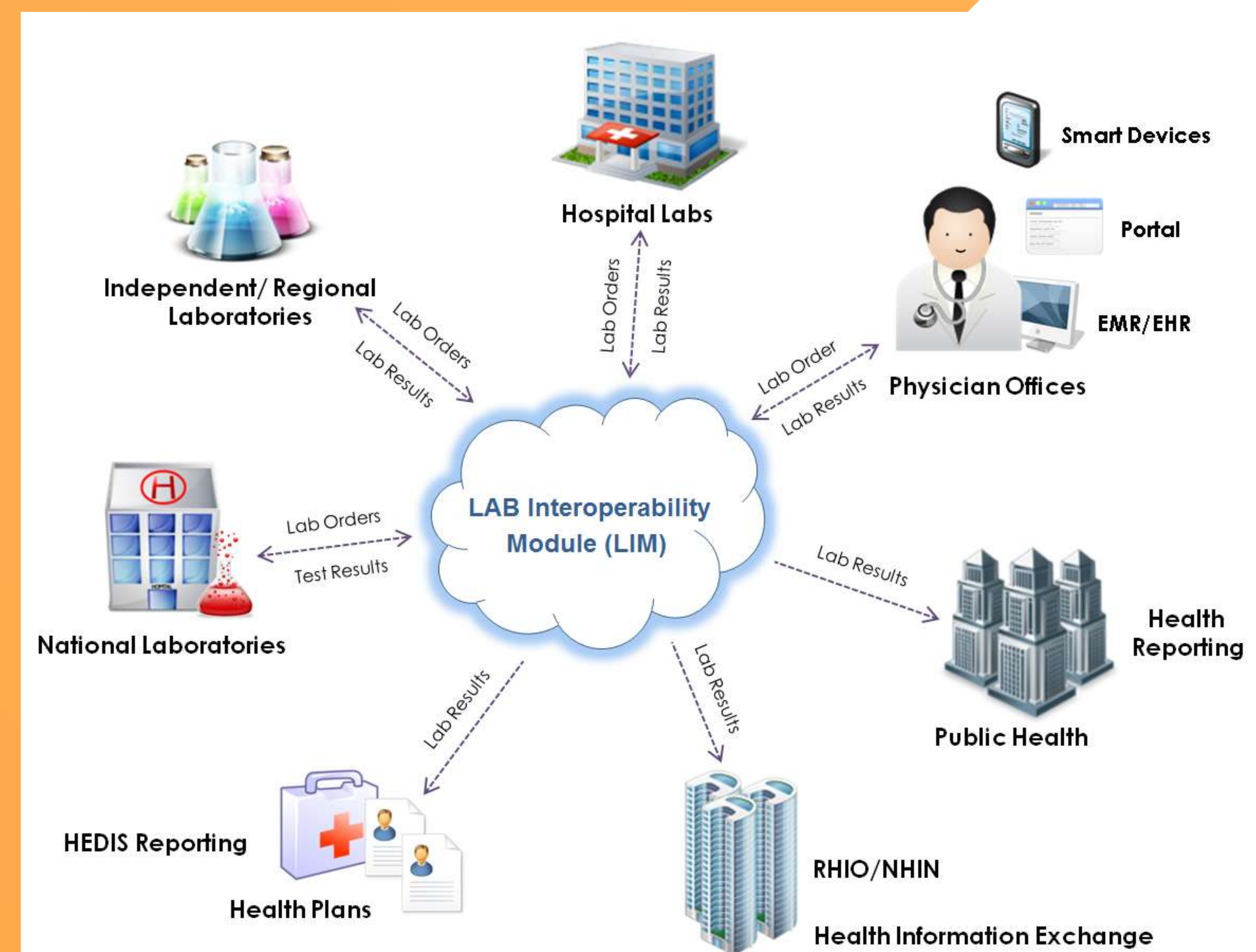
- UI/UX Design
- Product Management
- User Research
- Journey Mapping
- Wireframing
- Interaction Design
- Design Systems

Component & Design System



Context

Through data-driven visualisation, the eN-LIS project assists laboratories and hospitals in developing relationships with their stakeholders. Statistics create distinctive samples using data and logic, powered by a private cloud database. Depending on the patient's disease type, the medical team in each laboratory processes the test "sample" collected from each patient until a positive or negative result is obtained. The demographics of the disease type are then provided to stakeholders, who are then updated with these information as well as other contextually pertinent materials.



The Problem

The interoperability of other systems across other laboratories in the nation is not clearly represented in Nigeria's entire medical eco-system. This means that for data collection and sharing, their team used fragmented tools, tailored reports, and lengthy PowerPoint presentations. In an effort to pull off a collusion magic, there is also the manual process of having to visit each of these institutions separately and request that they gather sample summary reports by disease type (such as Yellow Pox, HIV, and Covid-19). The procedure wasted time, moved slowly, caused strategic deadlines to be missed, and left stakeholders feeling unempowered to take certain decisions

Goals

The primary goal was to design a streamlined dashboard experience for the eN-LIS platform to view video content, data, and important insights across various disease types. The dashboard would serve as the MVP (Minimum Viable Product) and would be implemented in collaboration with the eN-LIS development team.

The MVP solution would define the framework and visual style for an evolving suite of tools called eN-LIS ecosystem Cloud™, so it was essential to establish a flexible design system and component library which would allow for scalability. As part of the engagement, I would also maintain a backlog of post-MVP design tasks and provide eN-LIS with feature enhancement suggestions.

Users

The dashboard would initially be used internally by the eN-LIS "decision makers" team. This team collaborates with laboratory directors and managers to devise new approaches to handle "disease types" and to educate them on new approaches to foster more collaborative interaction among patients.

Defining the process

Working with my strategic team at Savannah Innovations, we broke the project down into four key phases, each comprised of important steps. This approach helped plan out the project roadmap and determine key milestones and deliverable dates.

With the tight timeline to MVP, working with an agile, sprint-based process allowed me to iterate on and validate potential solutions early and often. The concepting phase repeated as a series of week-long sprints to work through different features.

Discovery

Client Workshops
Workflow Evaluations
Whiteboarding
User Interviews

Analysis

Persona Development
User Journey Mapping
Business Flows
MVP Scope Prioritization

Concepting

Wireframes
Atomic Design Development
High Fidelity Iteration
Client Feedback Cycles

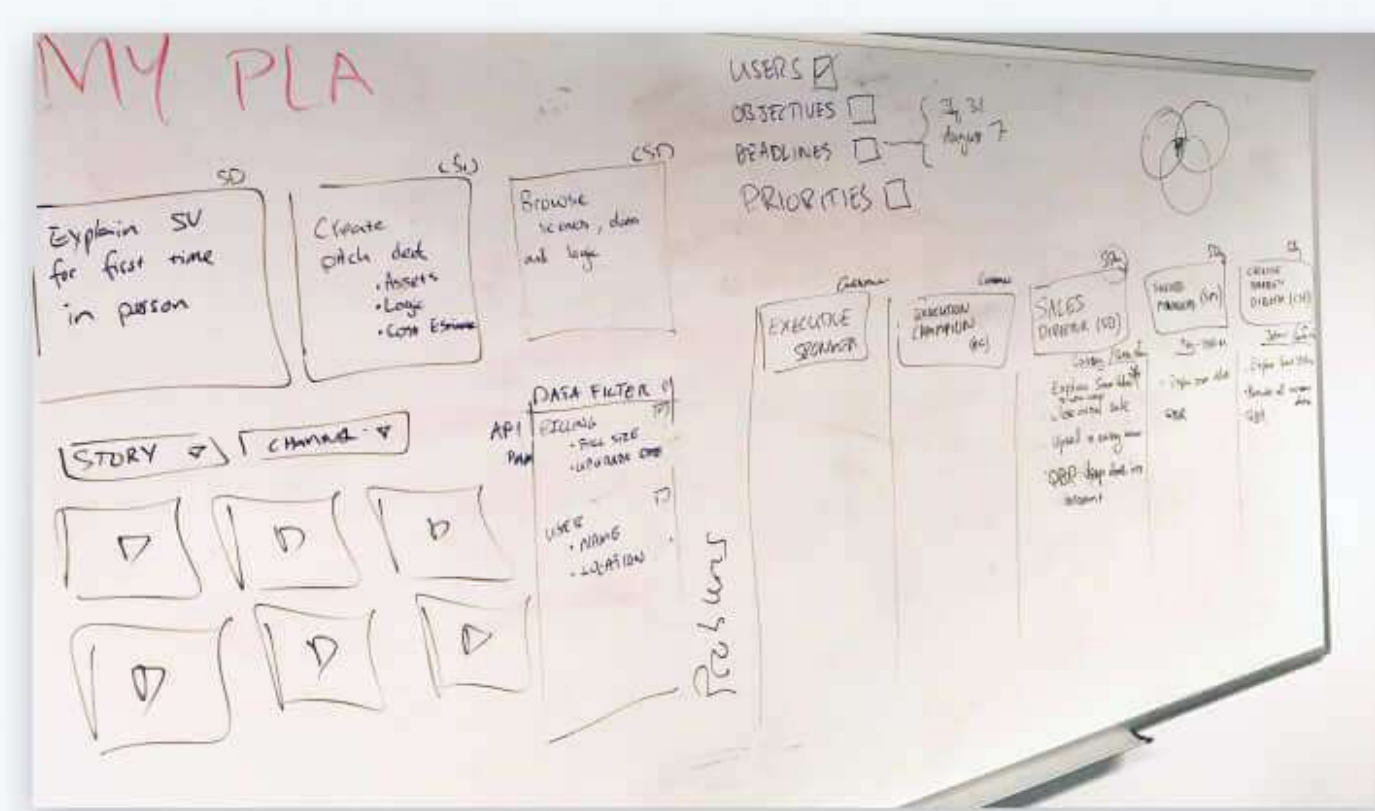
Outcome

Final High Fidelity Designs
Development & Usability Feedback
Styles & Component Guidelines
Post MVP Recommendations

Discovery & Analysis

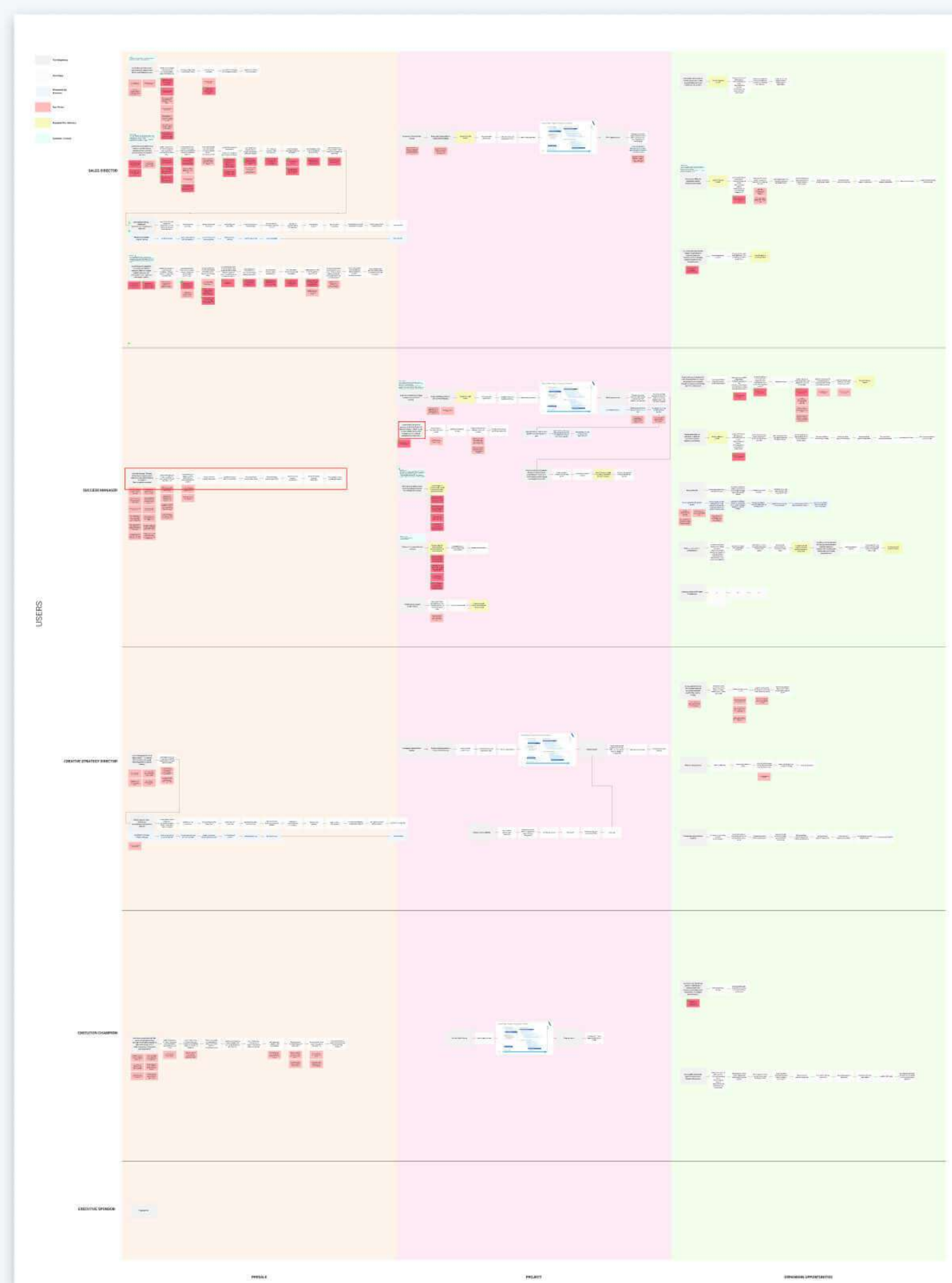
To kick off discovery, I met with eN-LIS stakeholders for a series of workshops to learn about their current workflow, set project goals, define the project roadmap, and whiteboard sketch high-level concepts. Then I conducted interviews with different user types across the company to understand their challenges and learn about their individual goals for optimizing their workflow.

Using the insights I gathered, I began to synthesize common themes. I developed persona profiles highlighting each unique user's tasks and goals, then created journey maps to understand relationships between different user types of the platform. These steps guided the development of low fidelity business flows to work out screen-to-screen interactions.

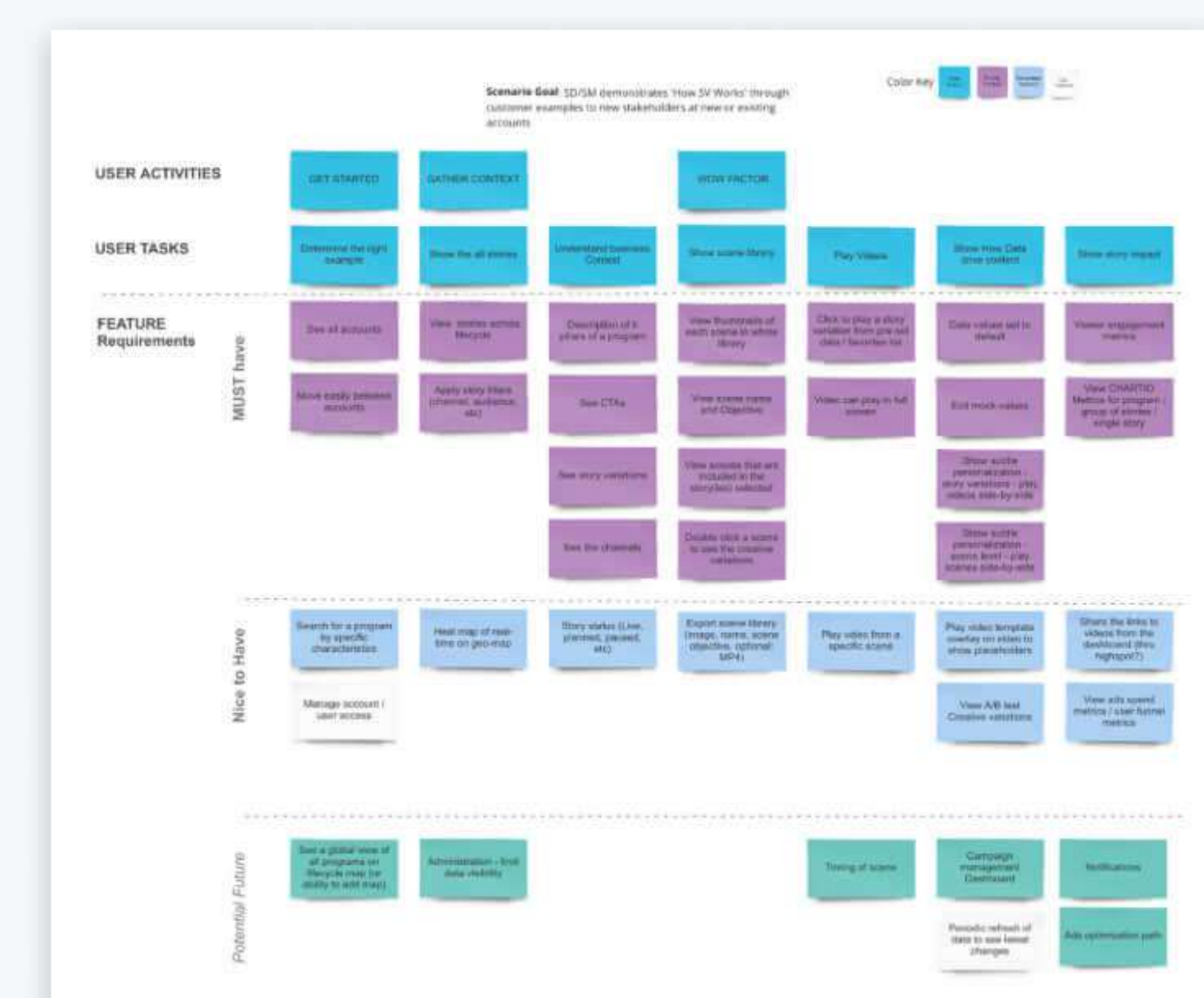


WHITEBOARDING

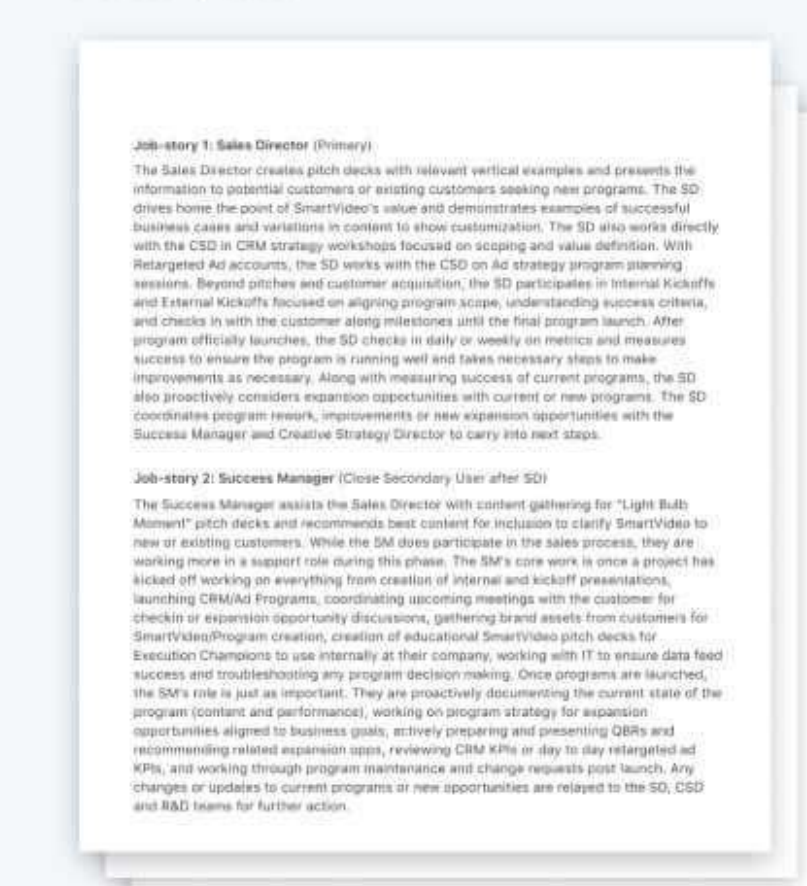
USER JOURNEY MAPPING



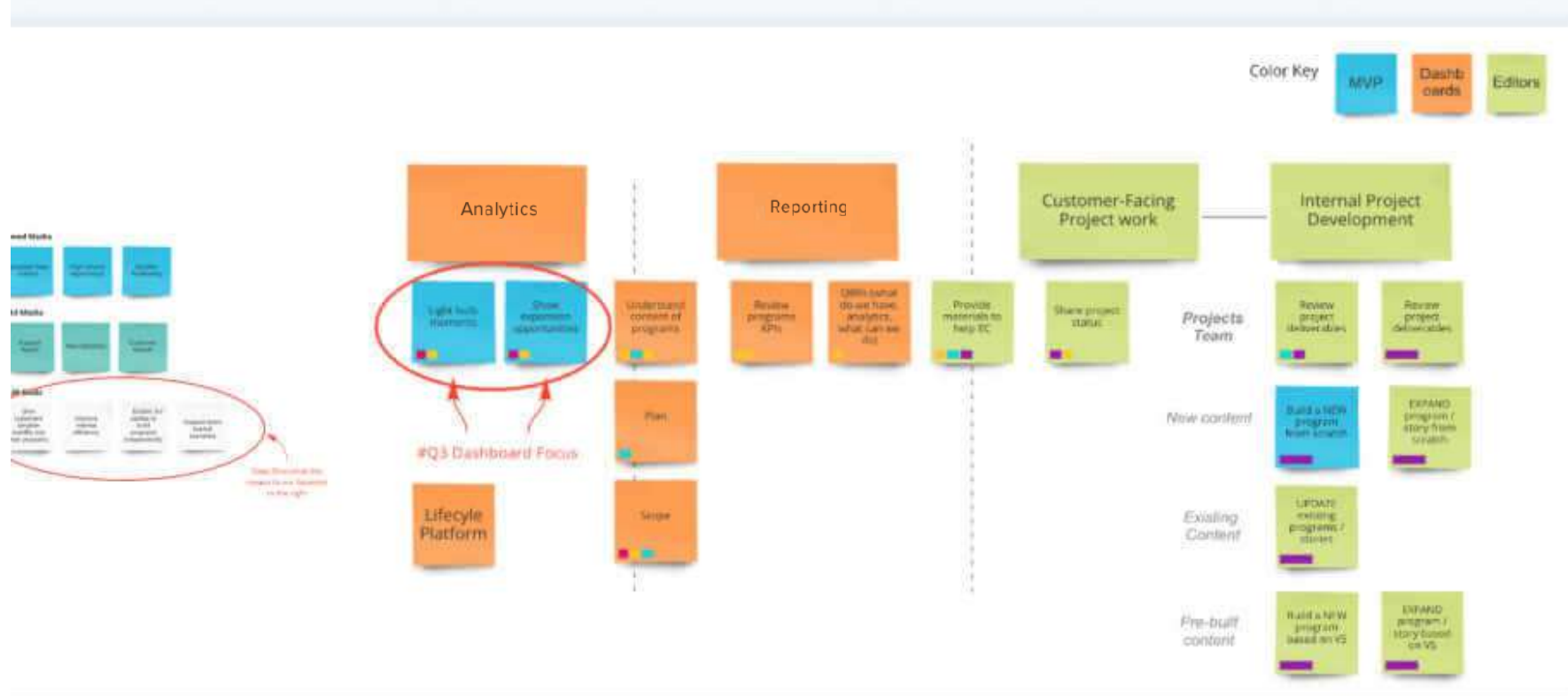
USER STORIES



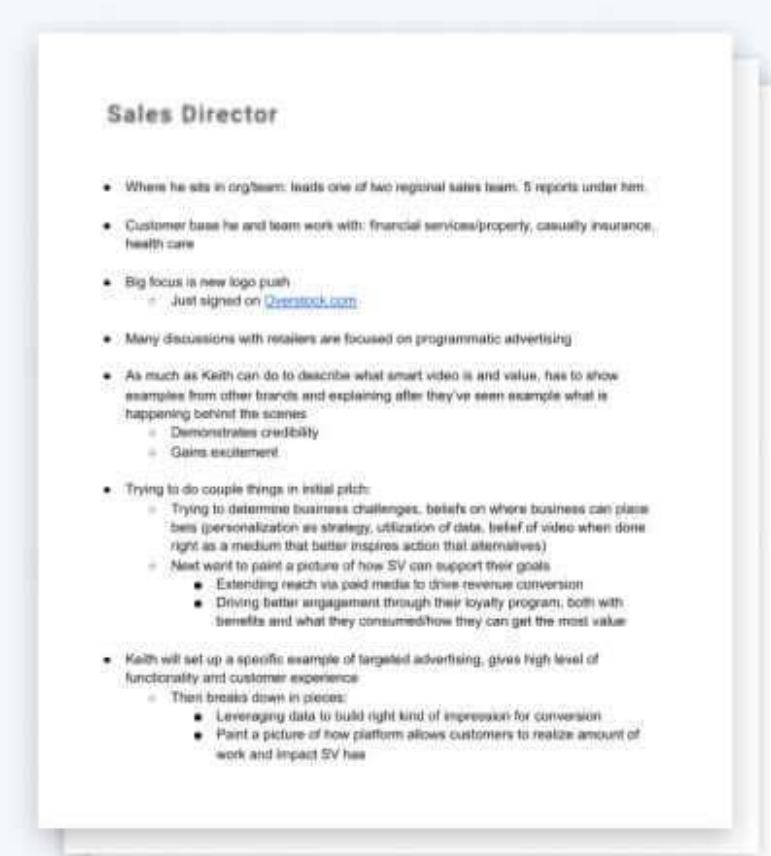
PERSONAS



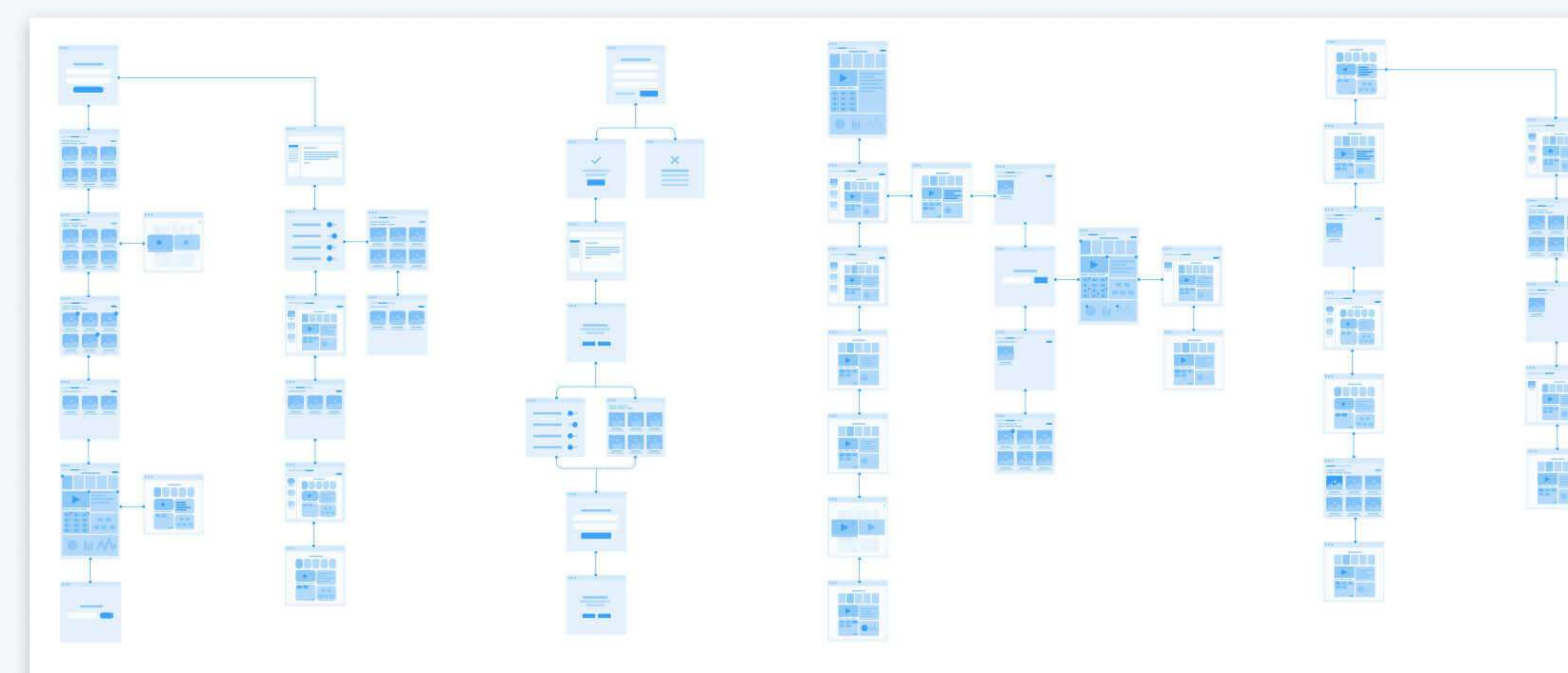
MVP SCOPING



USER INTERVIEWS



BUSINESS FLOWS



Concepting

I wireframed iteratively to define the information architecture of screens. I also explored various navigation approaches to determine the best experience for the user.

I collaborated with eN-LIS stakeholders and users along the way to validate concepts and gather feedback to continue improving the experience.

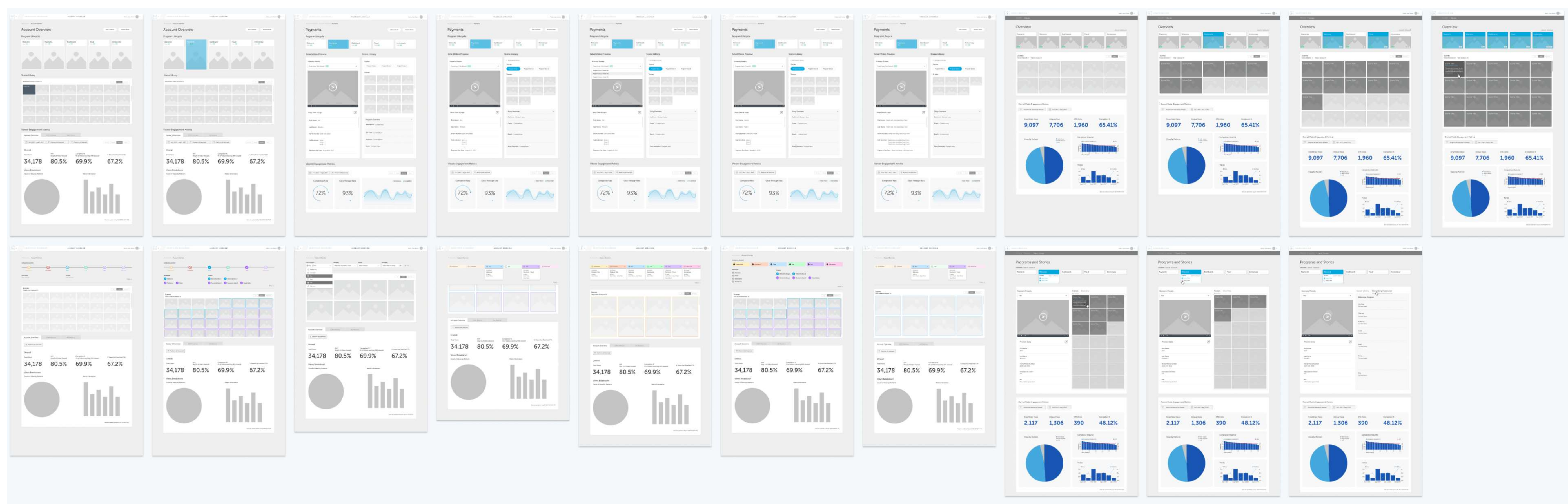


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Table Preferences:

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- Show/Hide Column >
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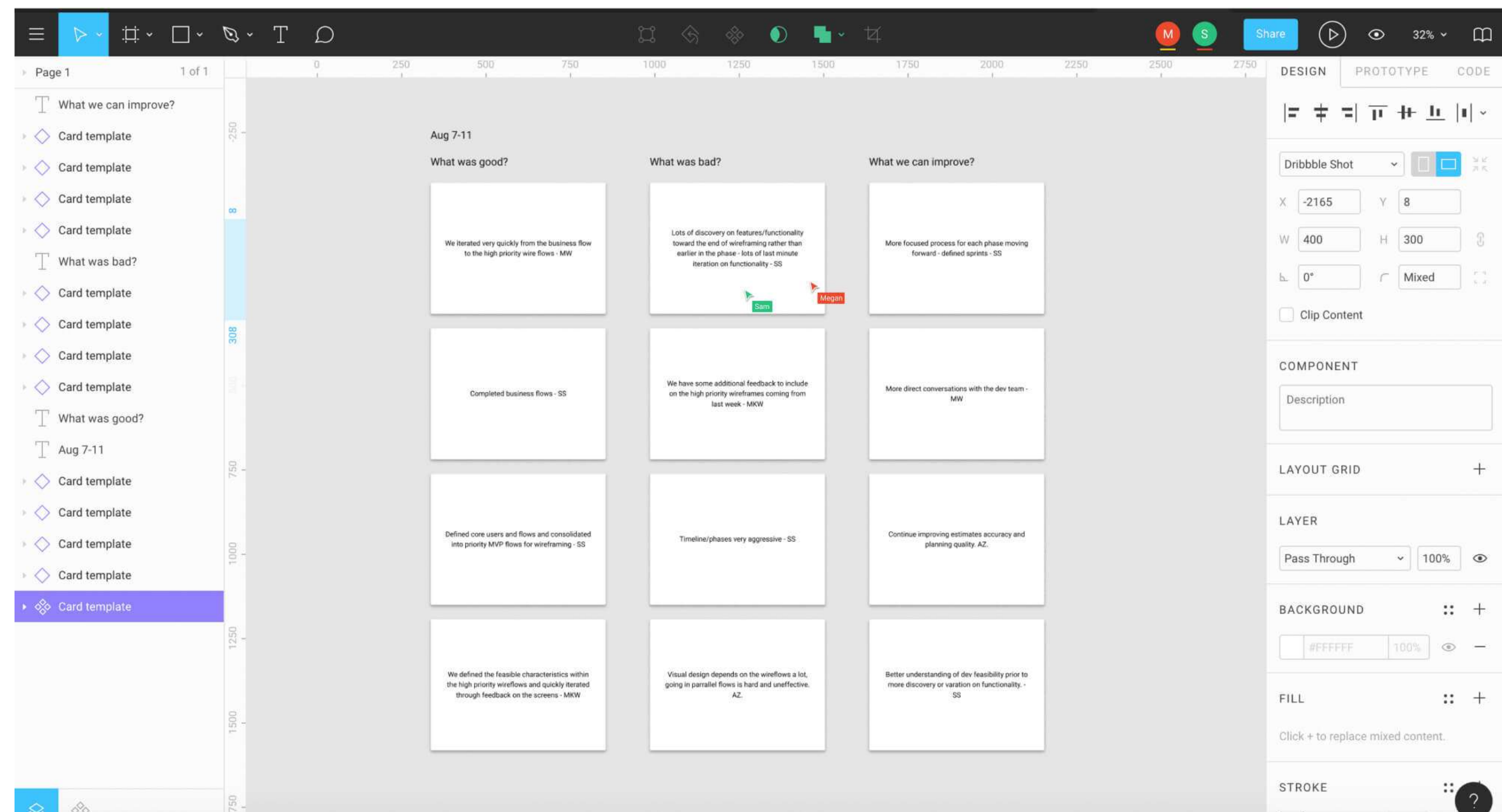
20 per Page

50 per Page

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Sprint Retros

After each week-long sprint, I held retro meetings with eN-LIS stakeholders to reflect on achievements from the previous sprint and identify areas for improvement. We jotted down points on cards in Figma, then collaboratively categorized and discussed our thoughts. Retros were especially important because I was working remotely with eN-LIS teams in New York City and Nigeria, and I wanted to make sure everyone had the opportunity to share their perspective.



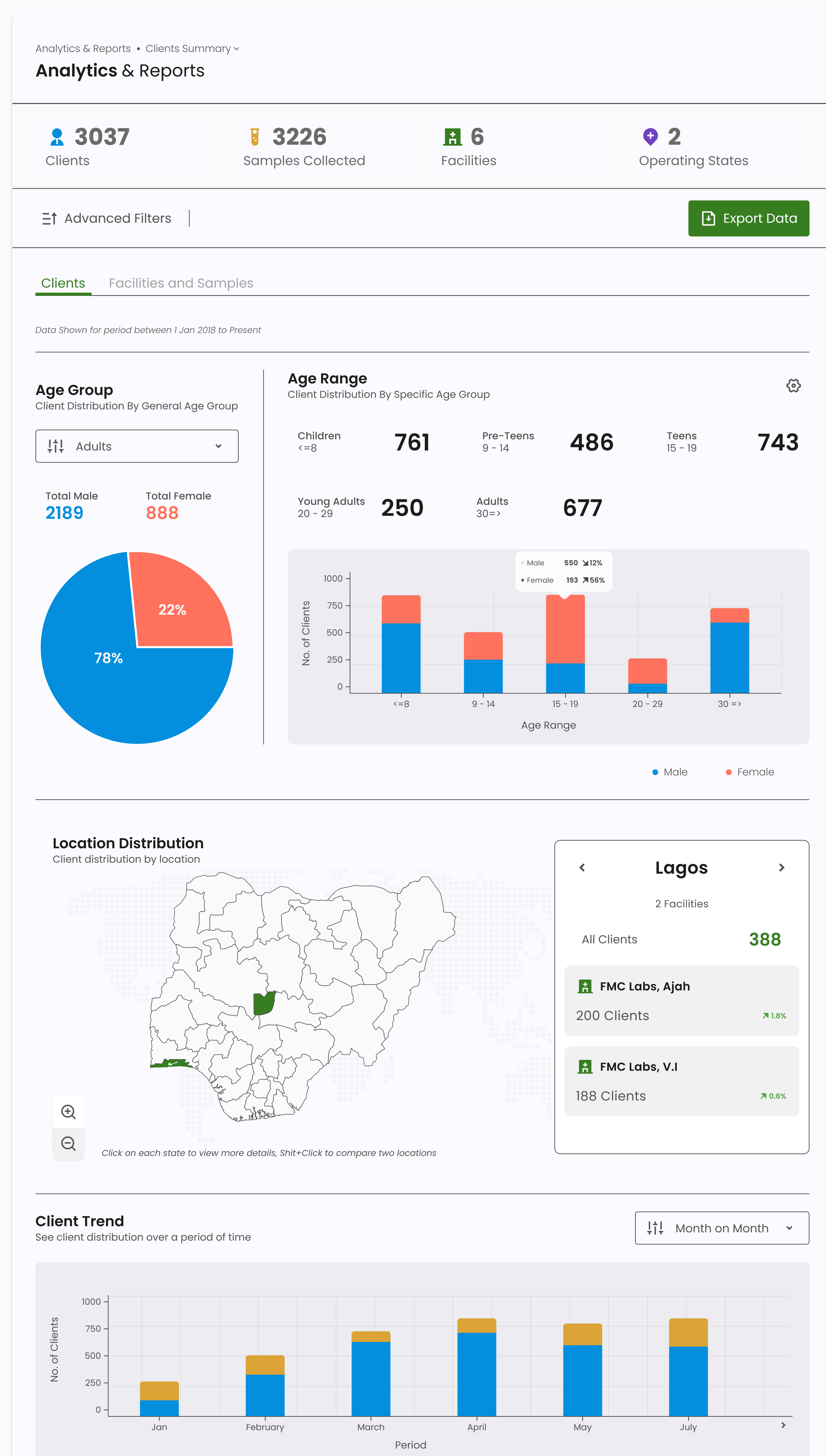
Design Solutions

The MVP solution is a secure web platform consisting of two primary dashboards and a side-application for the eN-LIS app. Given the nature of the content, the UI is designed to be very visual and offer the user snapshots into realtime activities in the various diseases areas. The solution would finally enable stakeholders and decision makers the power to instantly surface information which could have previously taken days or even weeks.

Client's Dashboard

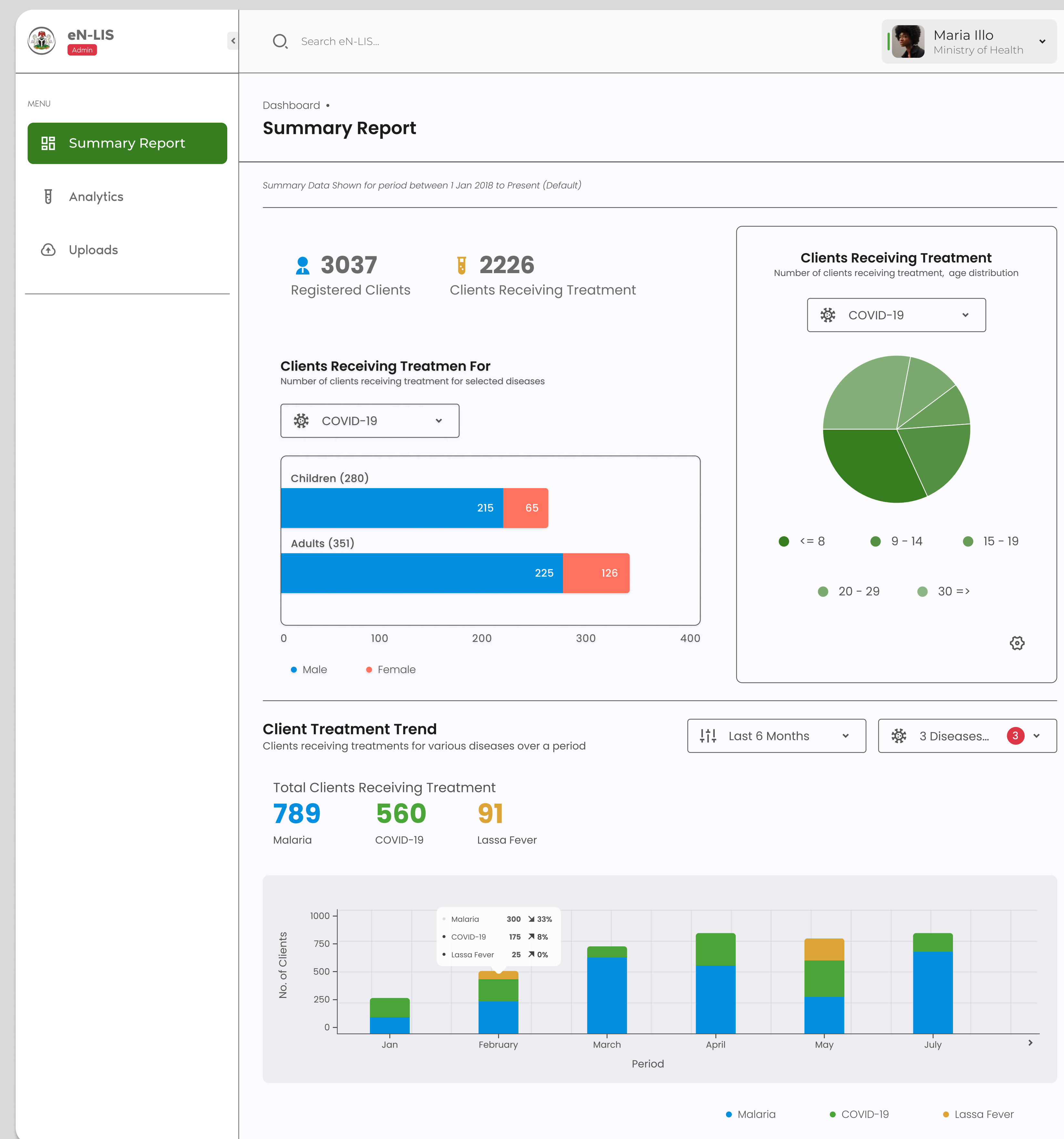
The Client Dashboard offers a high-level view of a patient/customer account and all of their laboratory and hospital visitation history. The navigation is card-based, allowing the user to select a program and view associated information in the tab below.

Program and tabs are critical components for navigating the Client Dashboard. They are designed to be flexible and offer various states for selection, and hovering reveals pertinent information. Upon scroll, Program cards collapse to display more on-screen content above the fold.



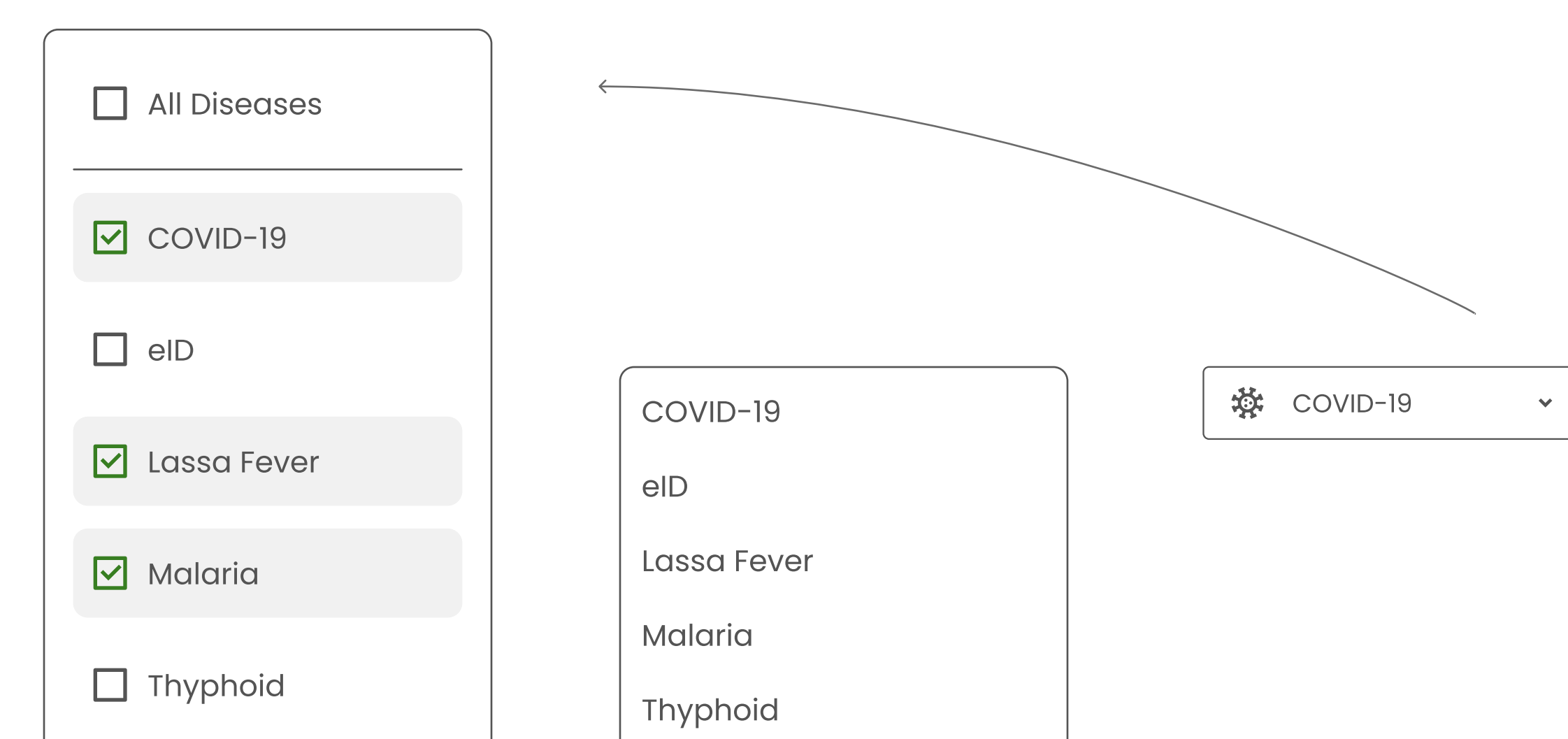
Summary Report's Dashboard

Even though a summary report based on the performance of various disease areas is necessary, it's also critical to demonstrate how the efforts to treat patients with these diseases are progressing. In order to learn about the targeted number of clients receiving treatment based on age distribution and other demographics, the stakeholder users are able to select a disease area on the summary dashboard to see a more detailed visual representation of the trend



Client treatment selection filter

Also, in developing this view in the summary report dashboard, the client treatment selection filter (sub-navigation area) had to be introduced to allow the user to switch between report content. Charts in the treatment selection preview and data component provide the user with various views of valuable information, such as a percentage increase or a downward trend.



Partner Upload Dashboard

With multiple facilities able to push their laboratory and disease area data to the eN-LIS system, their was a need to create an interface that offers the user the flexibility to upload files in batches and specify appropriate tags for an easier accessibility in the future.

The upload table list is an important feature for stakeholder regular reviews because it allows administrators to visually explain the status of each upload attempt, the number of files uploaded, and whether or not they succeeded.

Uploads

54 Uploaded Files | 51 Processed Uploads | 2 Processing Uploads | 8 Queued Uploads

Partner Uploads

FILE NAME	BATCH ID	DATE UPLOADED	STATUS
file_name_here.zip	PPL-308820280GHX	23-04-2022	Queued
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processing
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed

Sample List

FILE NAME	BATCH ID	DATE UPLOADED	STATUS
file_name_here.zip	PPL-308820280GHX	23-04-2022	Queued
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processing
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed
file_name_here.zip	PPL-308820280GHX	23-04-2022	Processed

Facility: FMC Laboratory, Enugu.

UPLOADED BY: Jonathan Ihekwe

XML FILE SIZE: 12 MB, 78 Files

PROCESSED - PASSED: 72 Files

PROCESSED - FAILED: 1 File

PROCESSED - PENDING: 5 Files, 87%

TAGS: health, accordion, government

[Download Batch](#)

Upload File Close

Drag and drop files here or click to browse your device files:

[Browse Files](#)

Supported File Type: .zip, .png, .jpg, .csv, .xls, .docx Max. 2MB Each

File_type.pdf
3.3MB of 5.0MB ... 65%

File_type.pdf
5.3MB of 5.3MB ... 100%

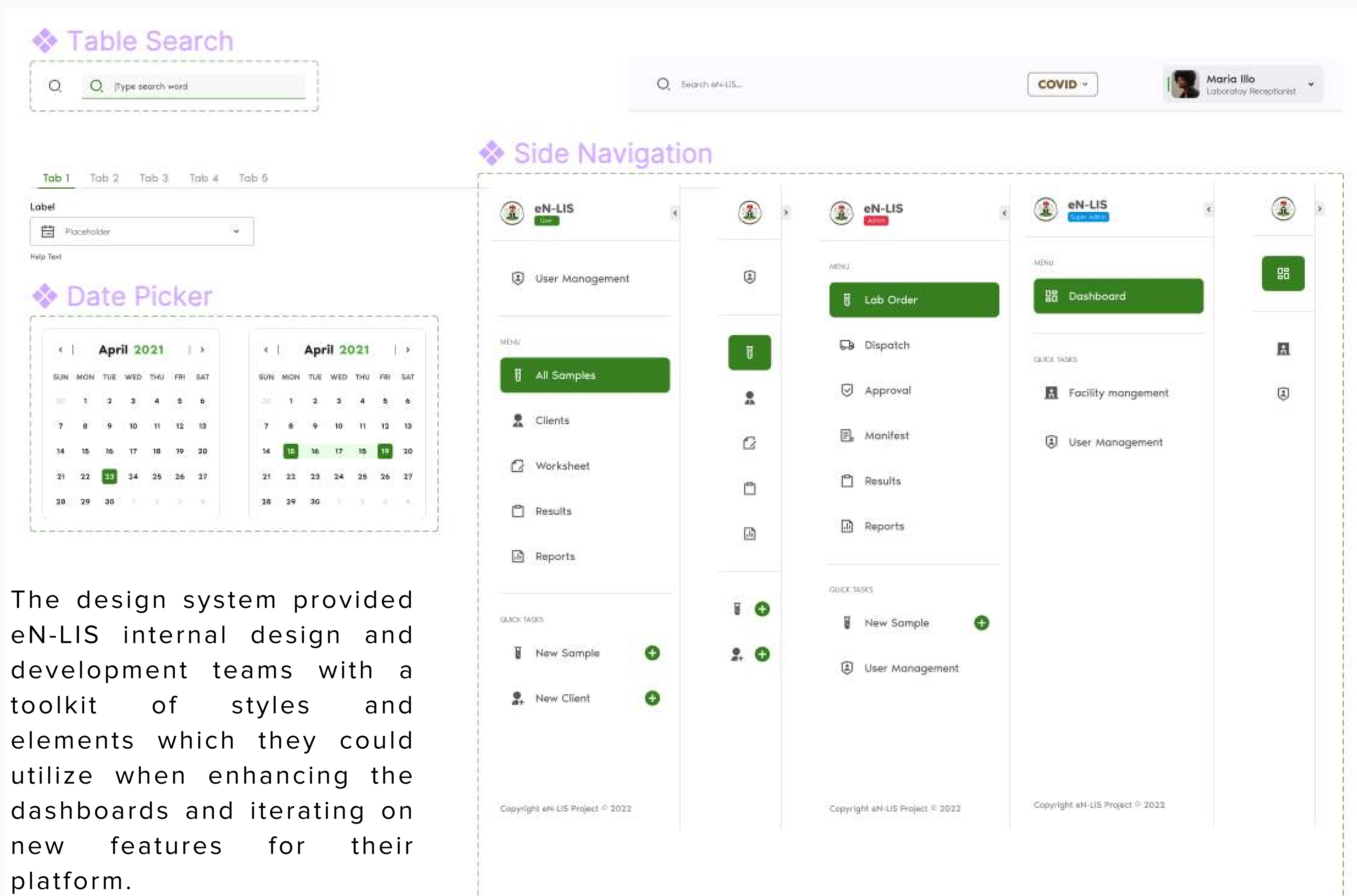
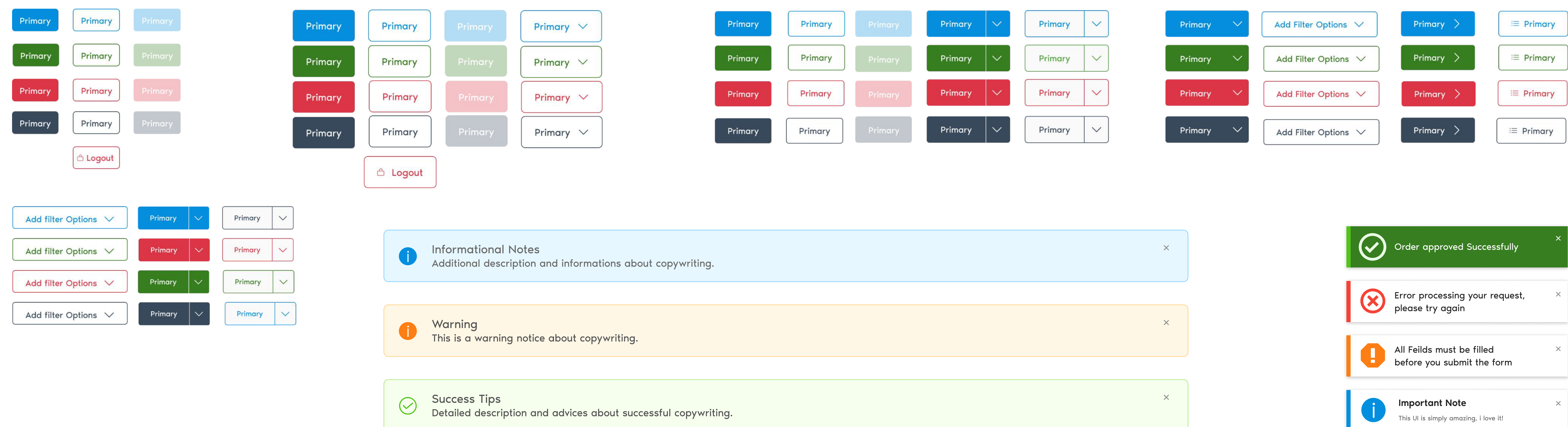
Tags

Finance Government Expertise Management SOPs

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Design System & Usage

I established a flexible design system that includes visual styles, components, and a comprehensive set of guidelines and best practices for usage. The design system not only improved efficiency during the design process but also ensured the platform could continue to evolve and maintain visual consistency.



The design system provided eN-LIS internal design and development teams with a toolkit of styles and elements which they could utilize when enhancing the dashboards and iterating on new features for their platform.

Some Challenges I Faced

As many victories as there were, there were major stumbling blocks I encountered during the course of this project. Due to time constraints, the research was heavily focused on internal team members, as we experienced a lot of burnouts trying to meet with the decision makers of various key organizations and NGO(s) directly connected to the project.

Success And Evolution

The launch of the MVP to the internal users was a success, and the stakeholders were excited about the solution. The Reporting dashboards became an integral piece of their team's workflow when engaging with laboratories and explaining the value of their eN-LIS system to prospective investors

The MVP dashboards laid the groundwork for the eN-LIS team platform's evolution. The design system and framework provided their team with the tools they needed to continue developing features to improve the other modules of the partner system so that they could benefit from the interoperability technology.

Next Steps

- ◆ Touch base with key stakeholders of the project to agree on execution plan, communication channel, review cadence among other modalities.
- ◆ Developer hand-off with zepline and work closely with developers to ensure a polished output.
- ◆ While the developers are starting to develop this flow, continue designing other outstanding interactions, covering all possible scenarios. Agile.
- ◆ A/B test before any full blast release. Making sure the success metrics are accomplished. If reading or purchase rate is going down, stop, analyse, iterate and test again.
- ◆ Setup tools like Hotjar to trully understand what users are doing. Make the necessary changes accordingly to what was observed and noticed as a problem.