Francisco Motta Kohlmann

CASE - DEMETRA COMMERCIALIZATION MODULE

Hello there, call me Chico!

Francisco Motta Kohlmann. Or Chico.

Flowing **between people, technology, and business.** I believe proximity to the user, active listening, and attention to detail are essential for an **efficient user-centric product.**

I'm fascinated by understanding how things work (or should work).

I consider myself a **Jack-of-all-trades.**

Father of two dogs, into vinyl music, cooking, piano. I started sailing this year and I'm passionate about nature traveling and camping.

Demetra: Commercialization Module

Feature focused on inventory management, purchases and sales of products batches for farmers and distributors in the agricultural supply chain.

My Role:

Product Designer, from end-to-end on the process

Platform:

Webapp, IOs and Android

Tech team:

frontend (Web),

frontend (Mobile),

backend (Web),

backend (Mobile),

Product Manager

Product Designer

Timeline:

6 months

- Lots of talking, interviewing, and visiting farmers, merchants and agroindustries
- Multiple design sprints

Agenda

1 - Context and Problem

2 - Research and Ideation

3 - Wireframe, Prototype and Design Critique

4 - User testing and Delivery

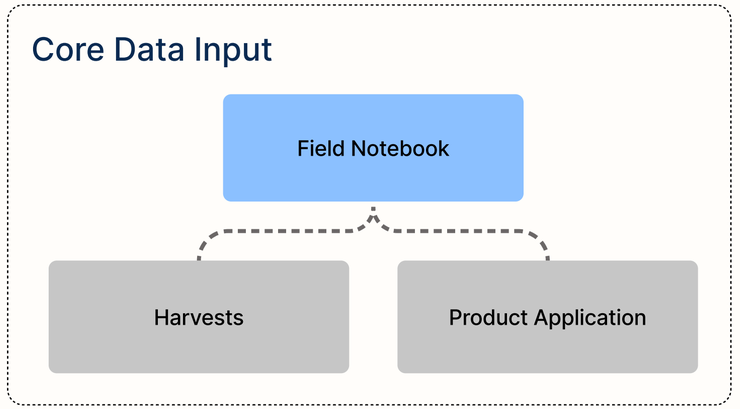
5 - Outcomes and Learnings

CONTEXT

The Company

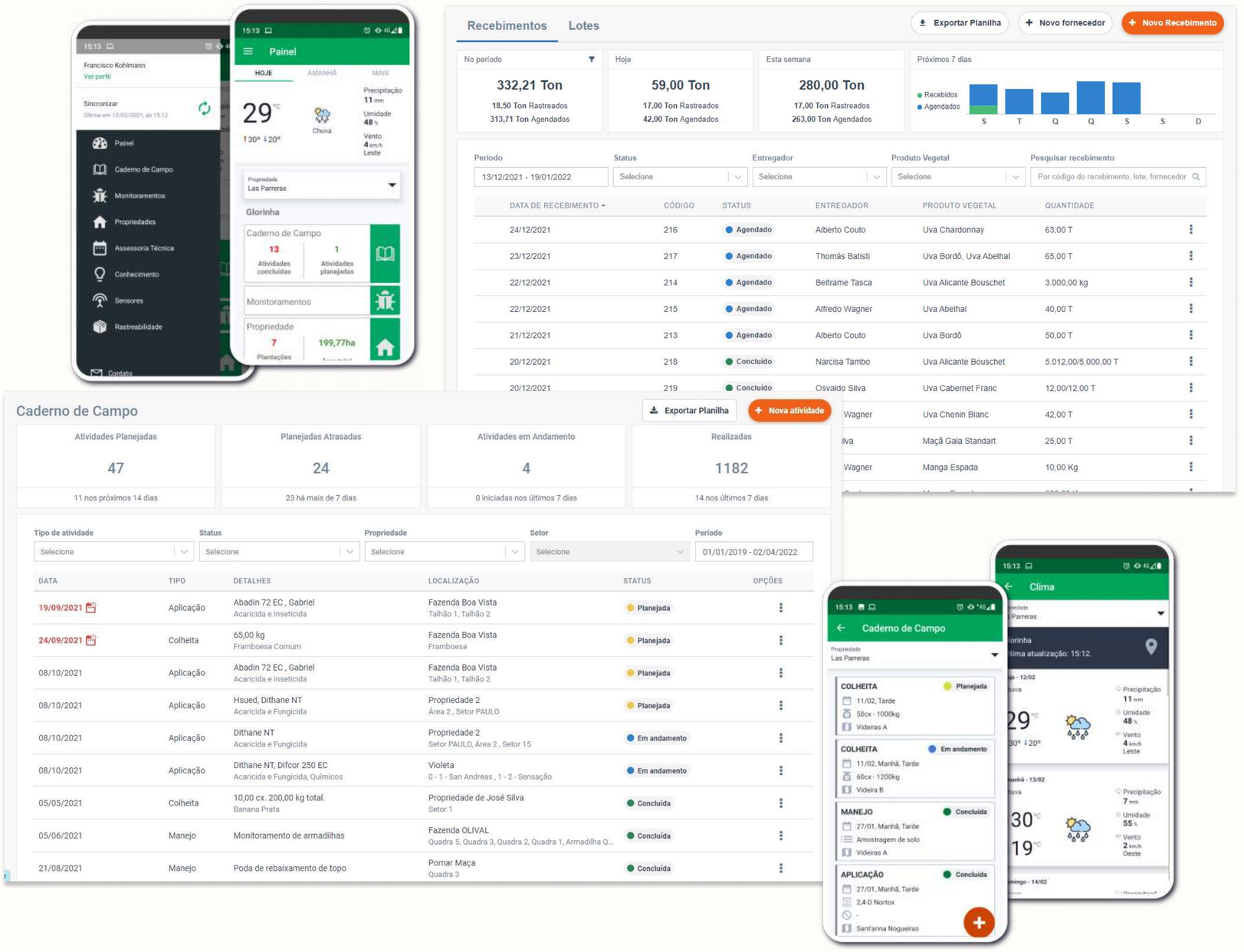
In 2019, searching for product market fit, we found a **comprehensive, scalable and viable solution** that came to be called **Caderno de Campo Digital (Field Notebook).**

From 25 users in 1 Brazilian state in 2019
To **3000 users in 20 Brazilian states in 2022, serving companies and farmers of the most varied types of crops.**



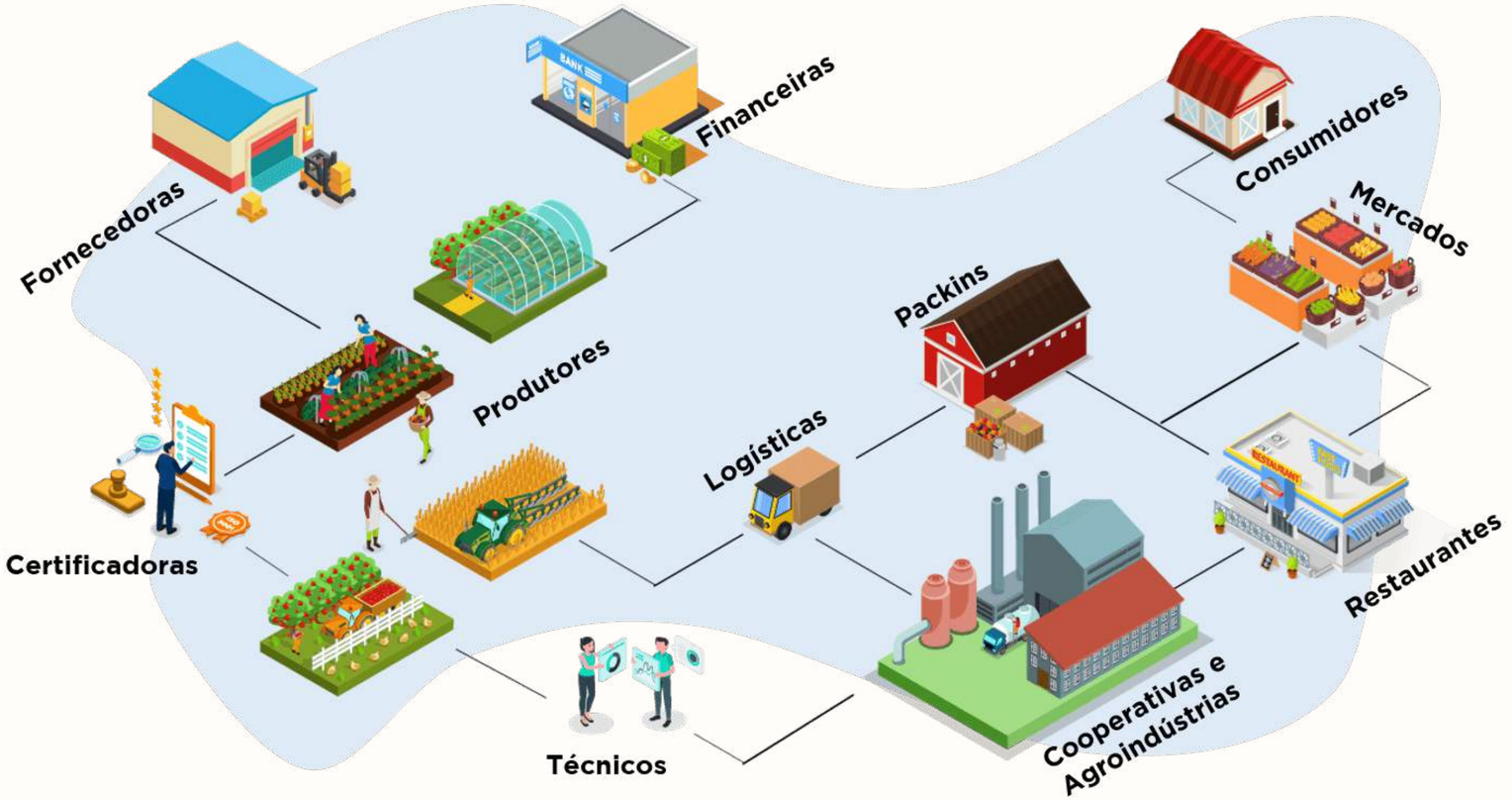
CONTEXT

Demetra Software



CONTEXT

The Supply Chain



CONTEXT

INC 02

The traceability rule (INC nº 02/2018) **made several entities in the agricultural production chain** start looking for solutions to comply with the law.

- Packings, Distributors and traders are those who buy from the farmers to sell to the market.

It is the **set of procedures** that make it possible **to identify what the product is, where it came from and where it is going.**

Problem Statement

While distributors do everything in their power to comply with traceability norms, they have no option to do so digitally.

How can we serve middle-chain entities in our users agricultural supply chain?

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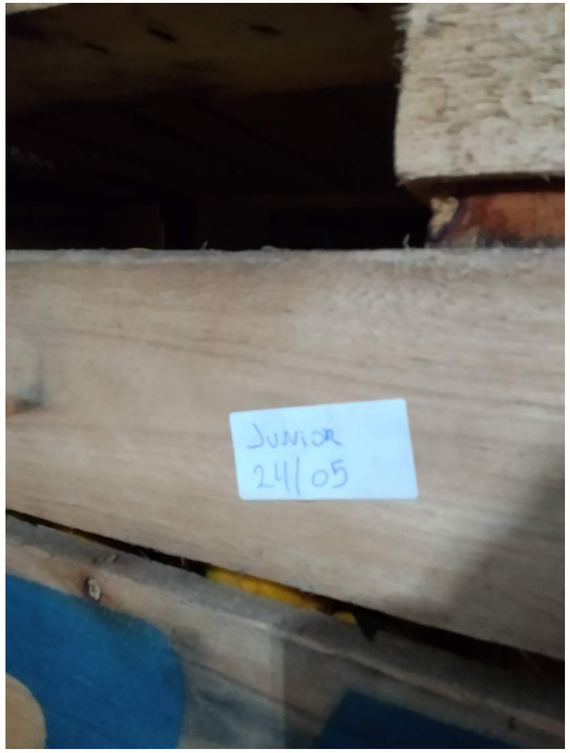
RESEARCH

Interviews and Field Visits

With the aim of serving intermediate entities in the agricultural chain between our users and the consumer market, we carried out a **series of remote interviews** and **field visits** to **understand the scenario, problems and opportunities** for improvement.

RESEARCH

Interviews and Field Visits



Inventory management is essential

INSIGHTS & OPPORTUNITIES

- Incoming and outgoing notes are **mostly controlled with notebook annotations**;

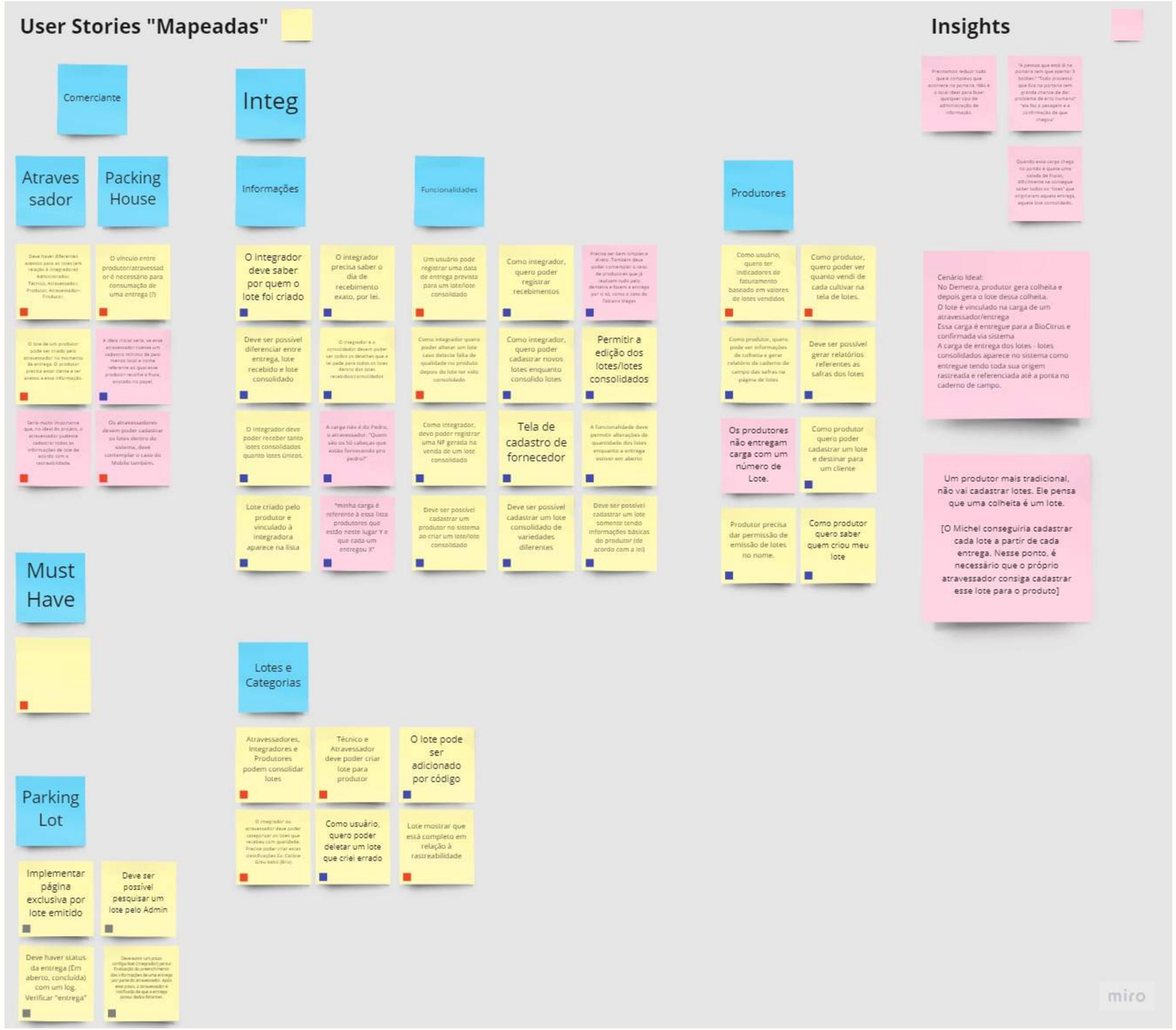
- Inventory control lacks clear standards and organization. **It's all in the "head" of the responsible person.**

- The **identification of the agricultural lot** is done only with the entry date and name of the supplier, **not complying with traceability.**

- There are **secondary processes** that are not important for traceability but **that generate business opportunities**. Processing, Classification, Mixing and Consolidation.

IDEATION

Affinity Mapping



What are the main problems?

INSIGHTS & OPPORTUNITIES

• Most producers involved in the process do not have access to a computer. **It needs to work on mobile and offline.**

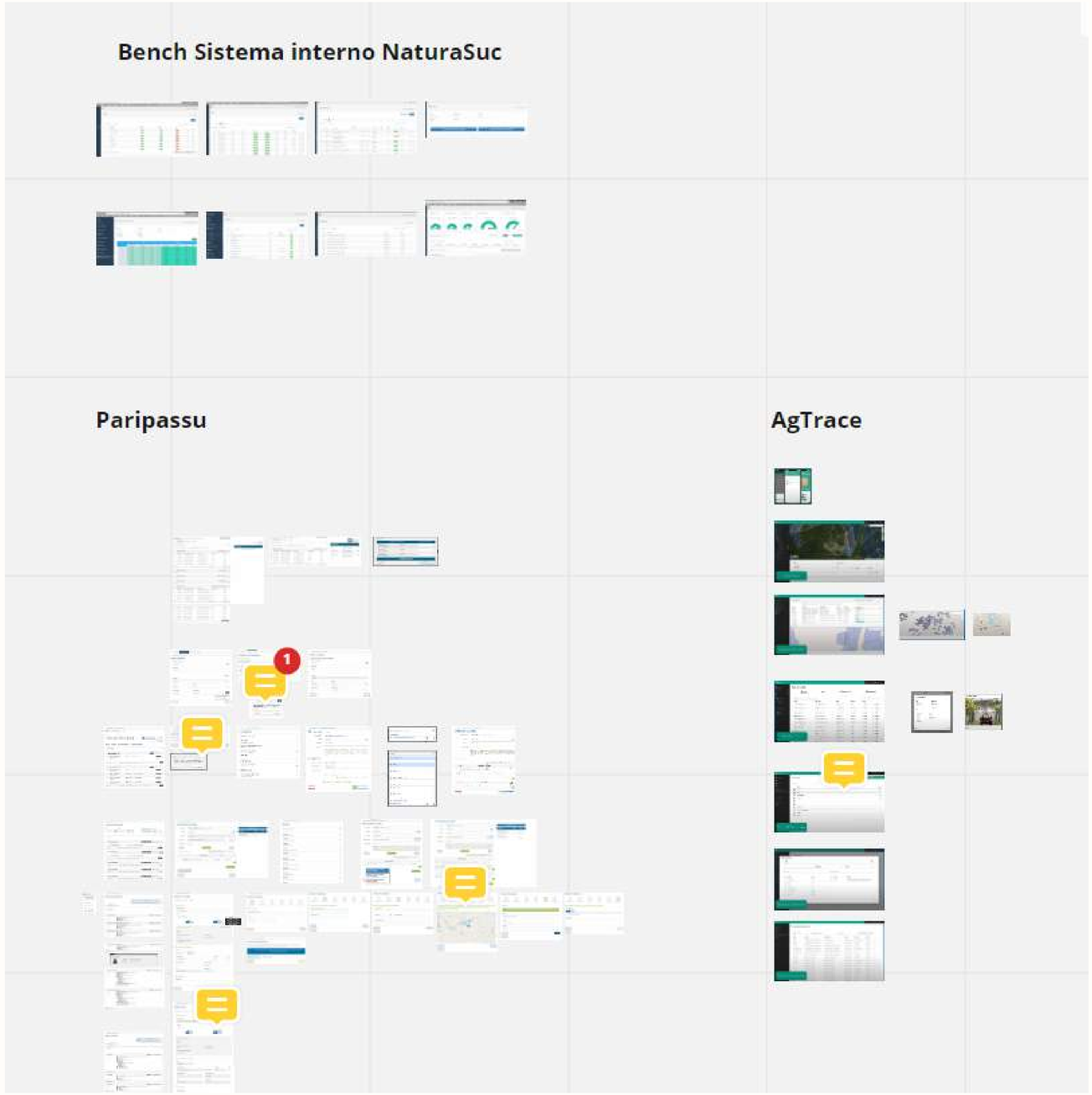
• Packing, Distributors and Markets have a range of suppliers that do not use the system. **It cannot depend on farmers for access to information.**

• Cooperatives and Agroindustries need to meet compliance requirements in addition to traceability. **The system needs to be reliable and secure.**

• Future need of Eletronic Invoice integration.

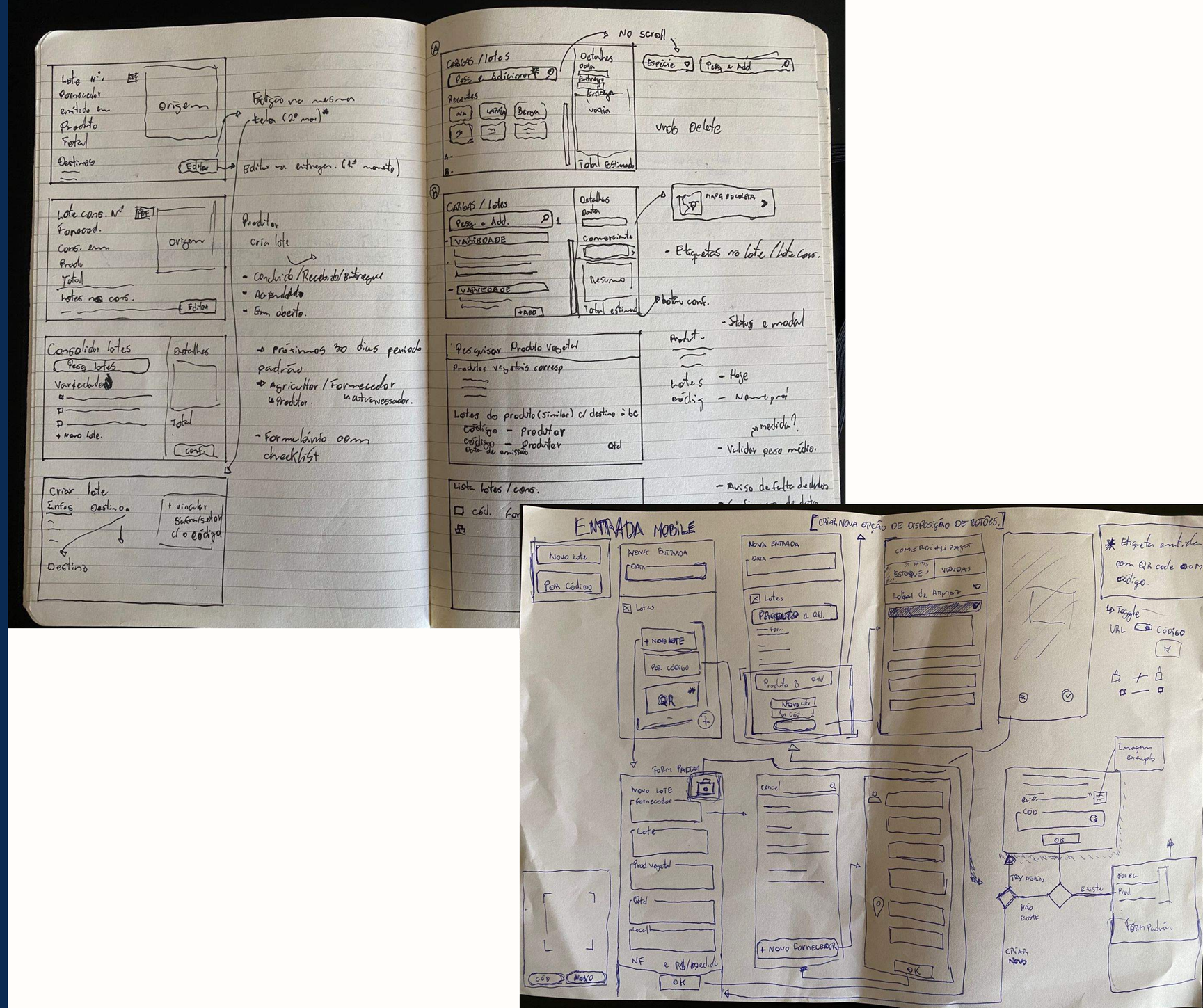
RESEARCH

Benchmarks



IDEATION

Sketching



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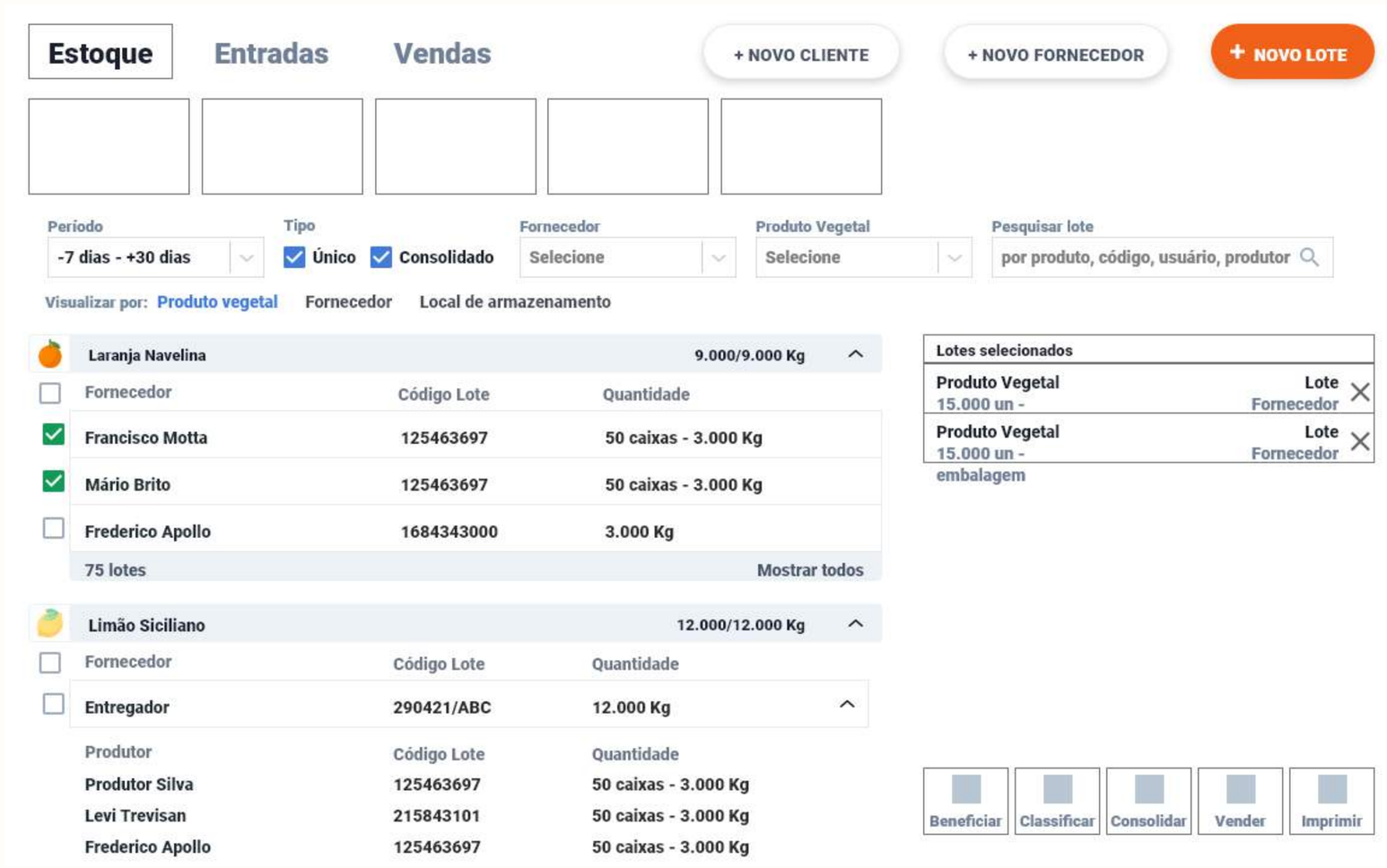
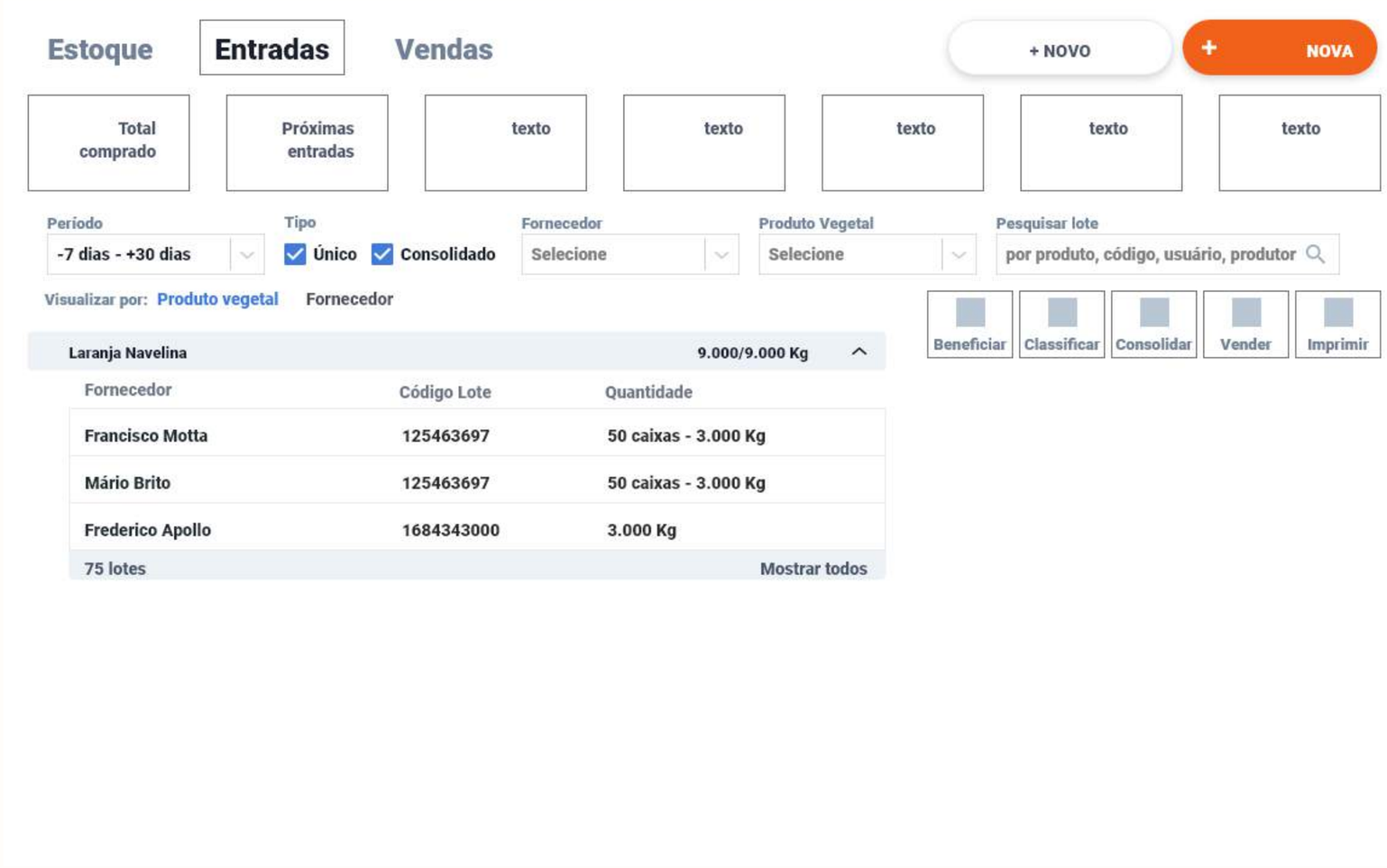
PROTOTYPING

Wireframe



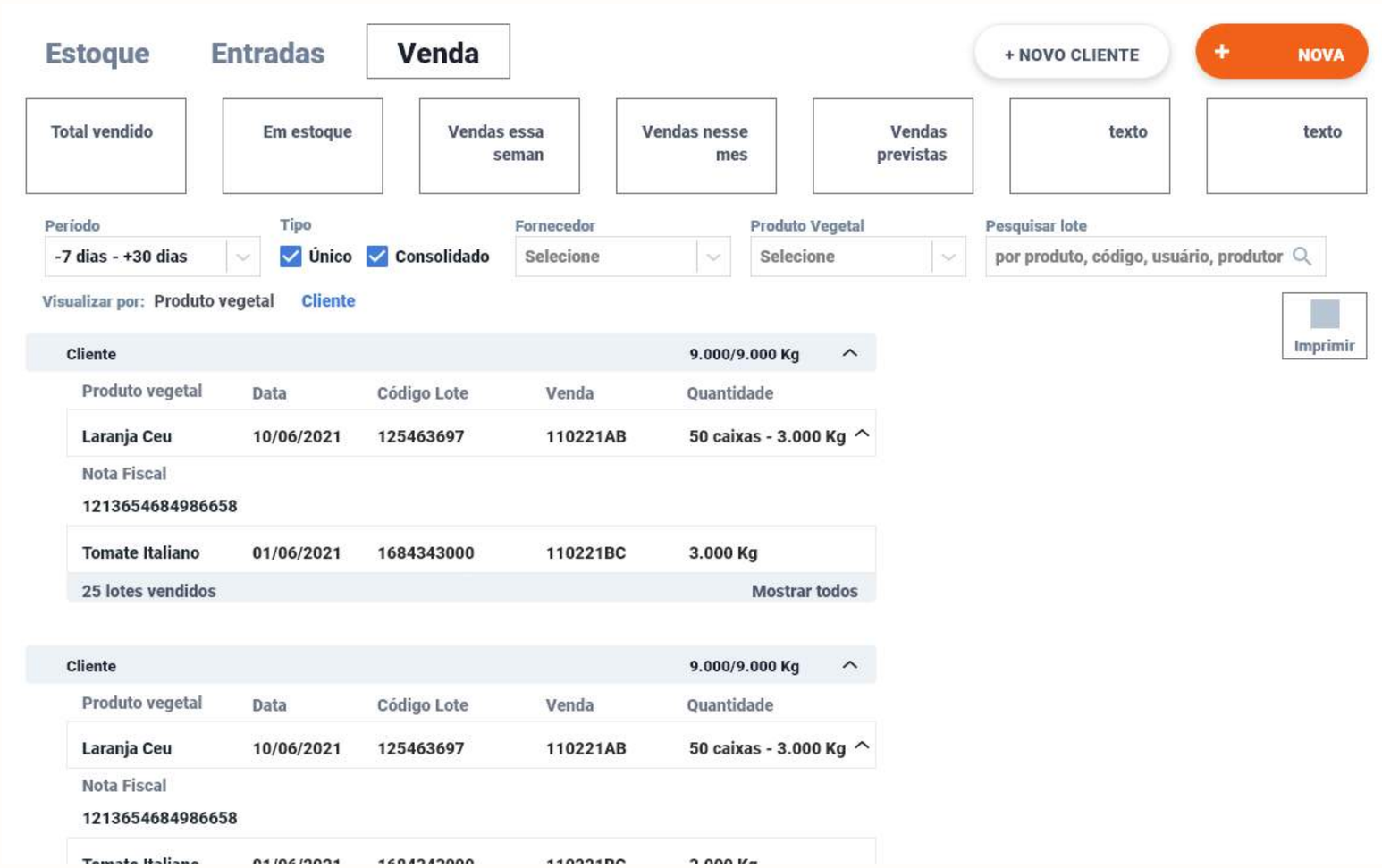
PROTOTYPING

Wireframe



PROTOTYPING

Wireframe

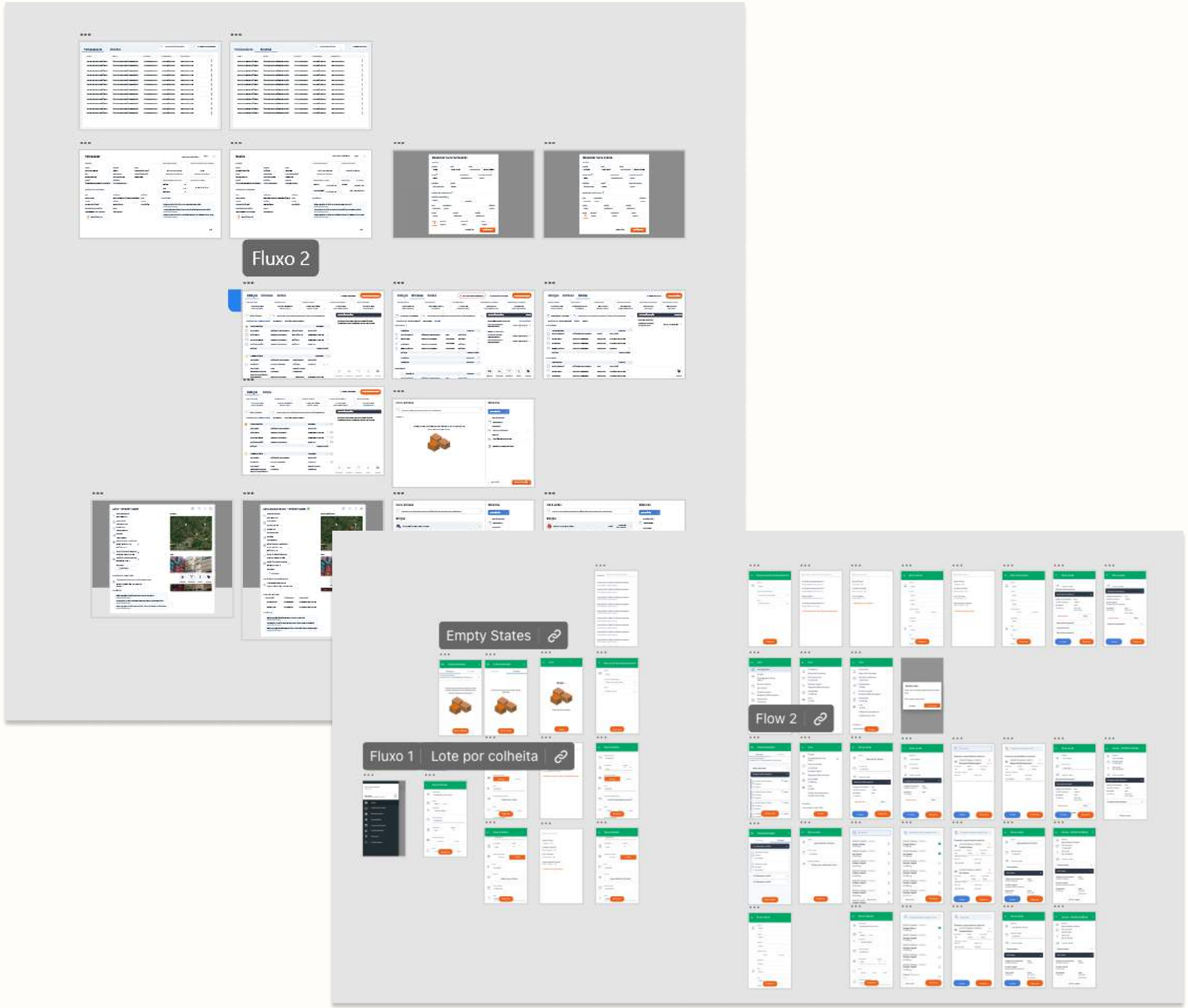


Involving the team

- Project with **description of entities, information architecture and business rules.**
- **Constant alignment** video calls to ensure the project feasibility
- **Tech requirements** into account

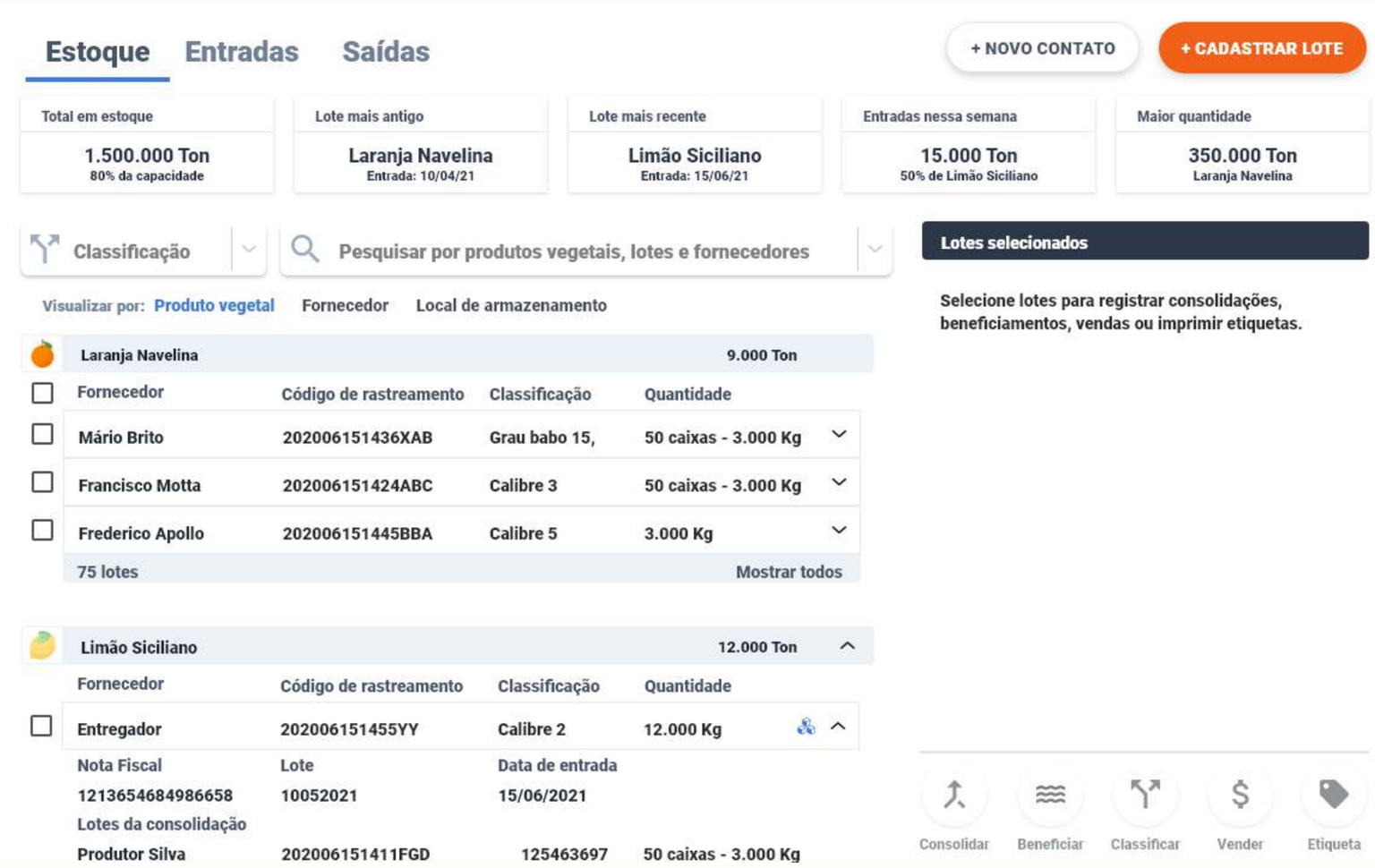
PROTOTYPING

Hi-FI Prototypes



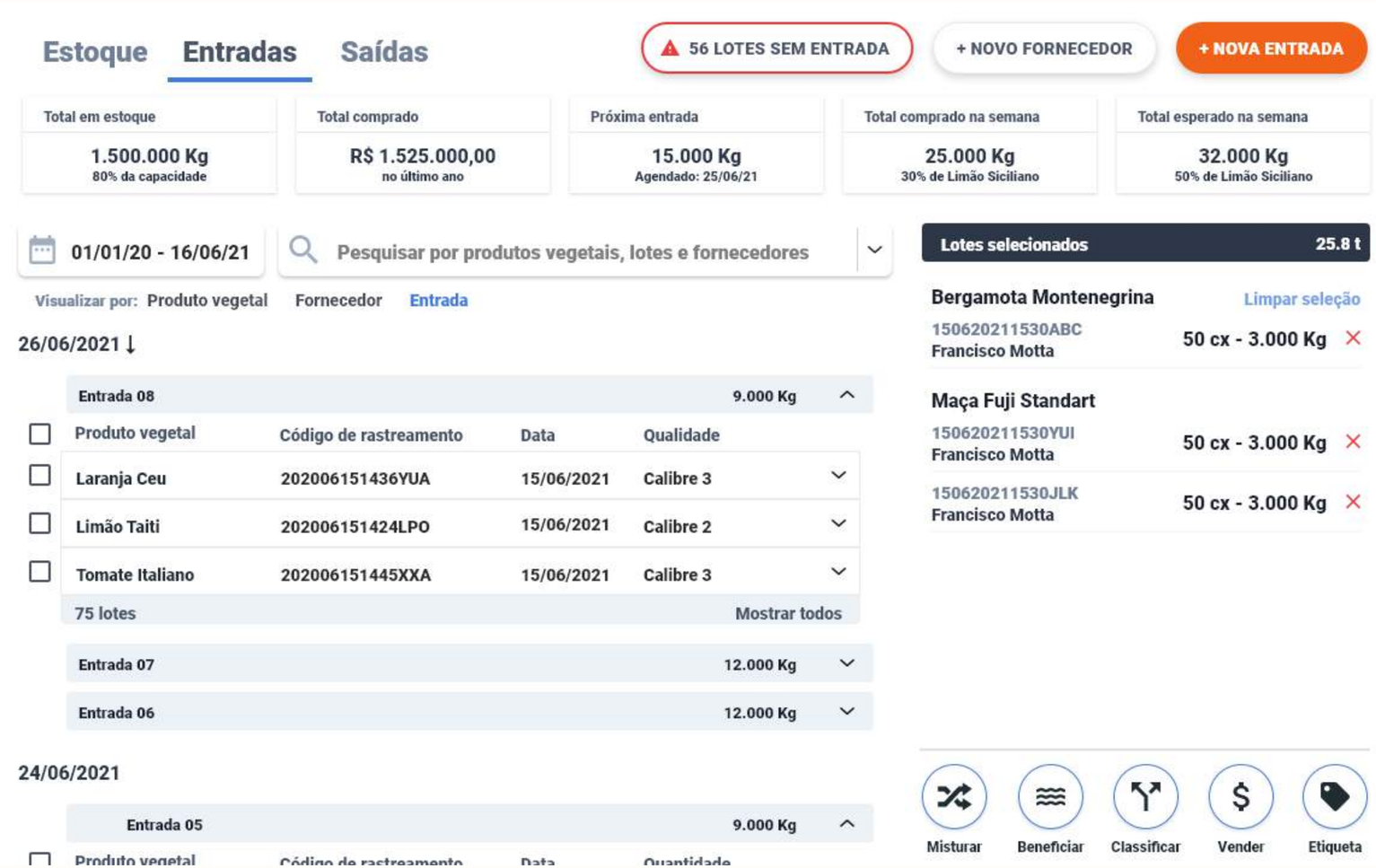
PROTOTYPING

Inventory



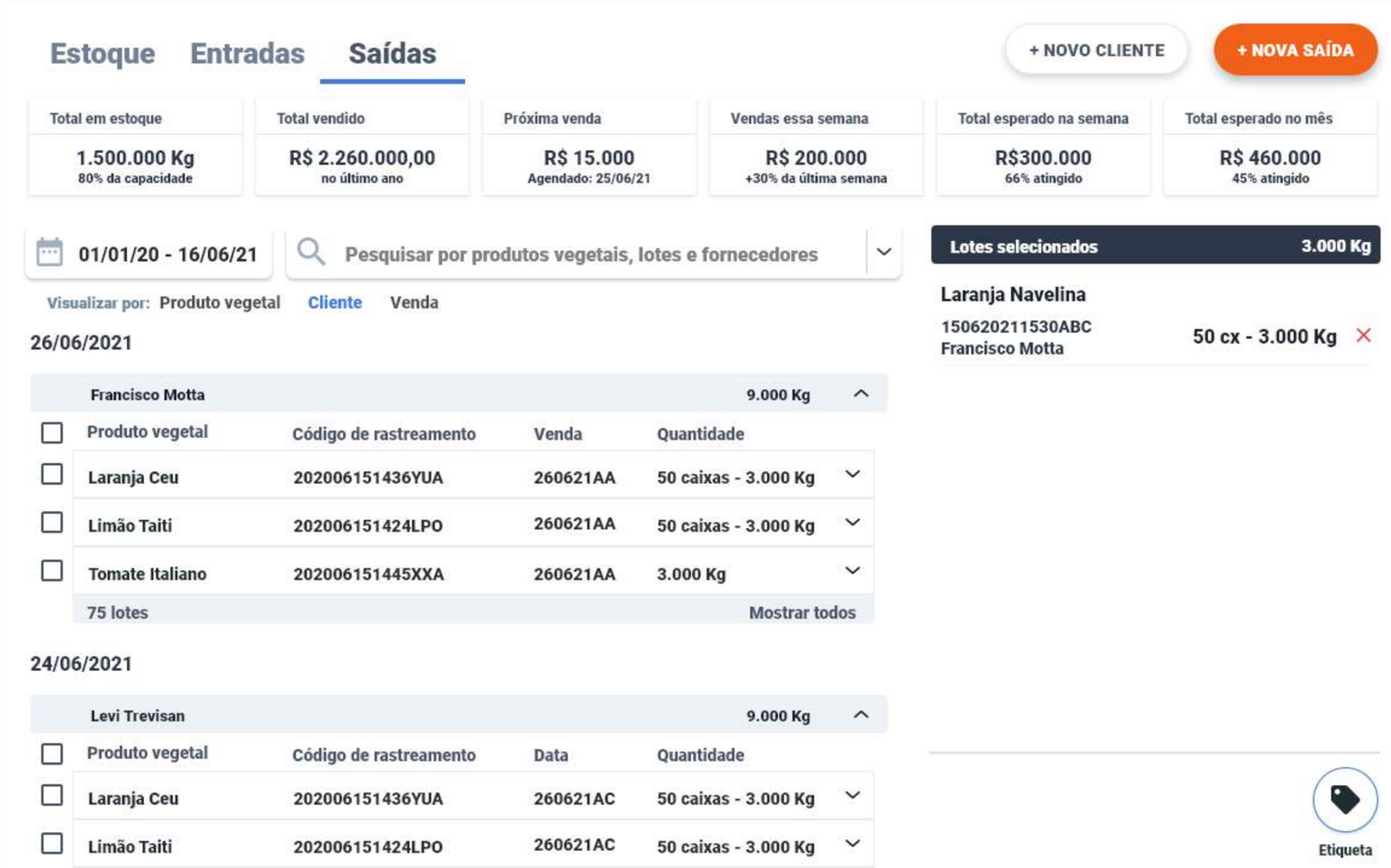
PROTOTYPING

Incomes



PROTOTYPING

Sales



PROTOTYPING

Design Critique

Design Critique session with representatives from the areas of **Mobile and Web Development, Customer Success, Commercial, Business and Design.**

How:

- Video call and Miro platform for dynamics
- Schedule:
  - 15 min - Miro platform setup
  - 15 min - Contextualization and presentation of the problem
  - 15 min - Collecting comments and feedback (in silence)
  - 15 min - Voting and Discussion

After the session, a new iteration was performed to prepare for usability tests with the user.

Fornecedor
Clientes
Cadastrar novo fornecedor
Cadastrar novo cliente
Cadastrar novo lote
Primeiro indicador
Como vão ser apresentados os "blocos"?
Tamanho e cores de fundo para os blocos, com mais espaçamentos em branco e sem bordas
Associar lotes
Classificar lotes
Lote - 2934271/002
Lote - 2934271/003
miro

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TESTING

Usability Test

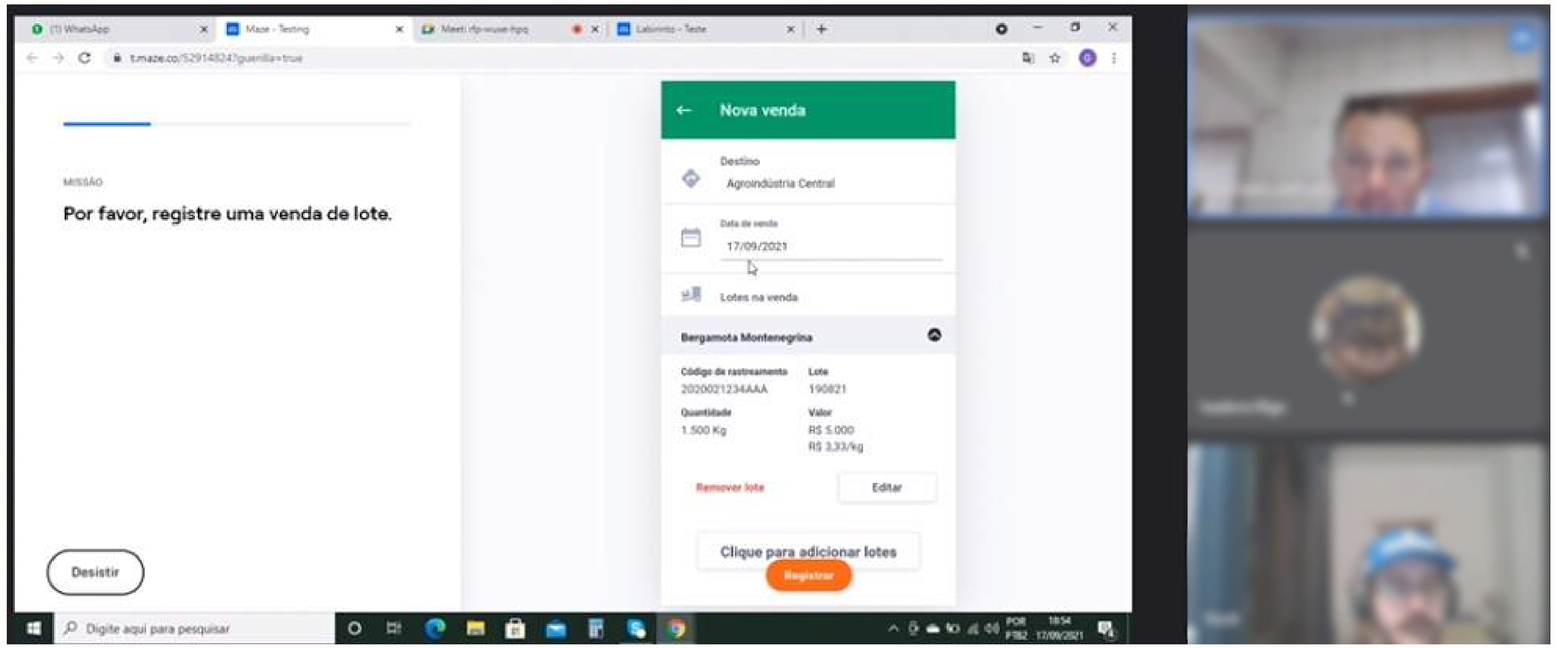
Usability tests a control group, formed by different entities different from the agricultural chain involved in the process.

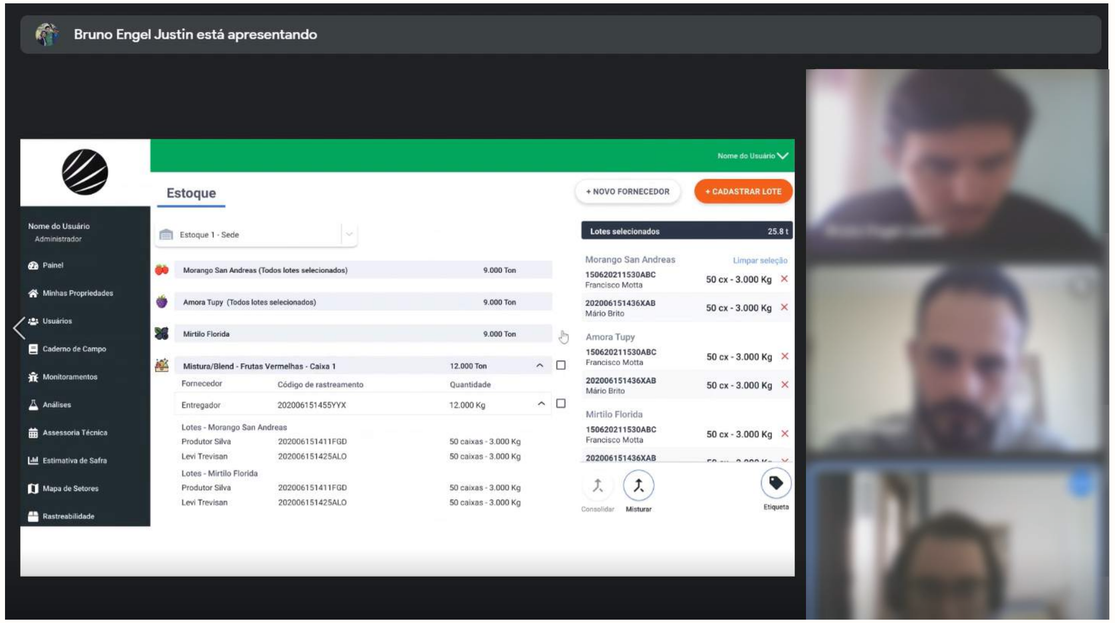
How:

- Video call mostly
  - During visits we often tested also
- Maze platform for remote testing
- Two interviewers
  - One taking notes and the other conducting

TESTING

Usability Test





What needs to improve?

INSIGHTS & OPPORTUNITIES

- There are many parts of the prototype that are not essential for common use in pursuit of traceability. **We can remove a large part and expedite delivery.**

- Make an improvement providing a link between the harvest record in the field notebook and the stock is essential for the complete journey in the system, **but should not be mandatory.**

- There are different treatment perspectives in terms of batches by identical entities in the chain. **The feature needs to be flexible, easy and complete at the same time.**

PROTOTYPING

New Iteration

With the feedback collected in the first usability tests, a **second major iteration was carried out.**

In addition, **together with the PM and the Business**, a roadmap for deliveries was defined, dividing the features mapped as secondary in order of priority

Thus, **the focus** was on the central skeleton of the feature, which consists of **buying and selling batches of plant products**.

DEVELOPMENT

Beta Group

For a quick and constant validation of the system, **users of the tests were selected to be part of a group of tests** and control of the effectiveness of the module.

An internal project KPI was created for this control: **A maximum 15-day break between an interview/conversation with the user.**

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REFLECTIONS
& LEARNINGS

Next Steps

A) To meet the objectives mapped and consolidated throughout the project, **KPIs would be introduced to measure the success of the feature:**

- **% of batches** generated destined
- **% of harvests** turned into batches
- **% of batches** with tags created
- **MAU e DAU:**
  - Monthly Active Users
  - Daily Active Users

B) Continue the delivery of solutions related, such as **Eletronic Invoice Generation** integration.

REFLECTIONS
& LEARNINGS

Main (practical) Learnings

- Flowing communication **between people, technology, and business** was well received and got good feedbacks, being crucial for project success
- **Contact with the tech team early** in the project **avoided later rework**.
- **Proximity to the general team** allowed the company to align its path **in the coming months.**
- **Producers/users selected** for tests and interviews like to participate and see **that their voice and opinion is taken into account.**
- Gather Data with interviews is crucial and a must. Major system changes **need to be validated with the user.**
- Acting on the **Lean UX model** allowed us to pivot quickly throughout the project. **Clear out the non-essentials and focus on what matters.**

Thank You

QUESTIONS?