

Walmart

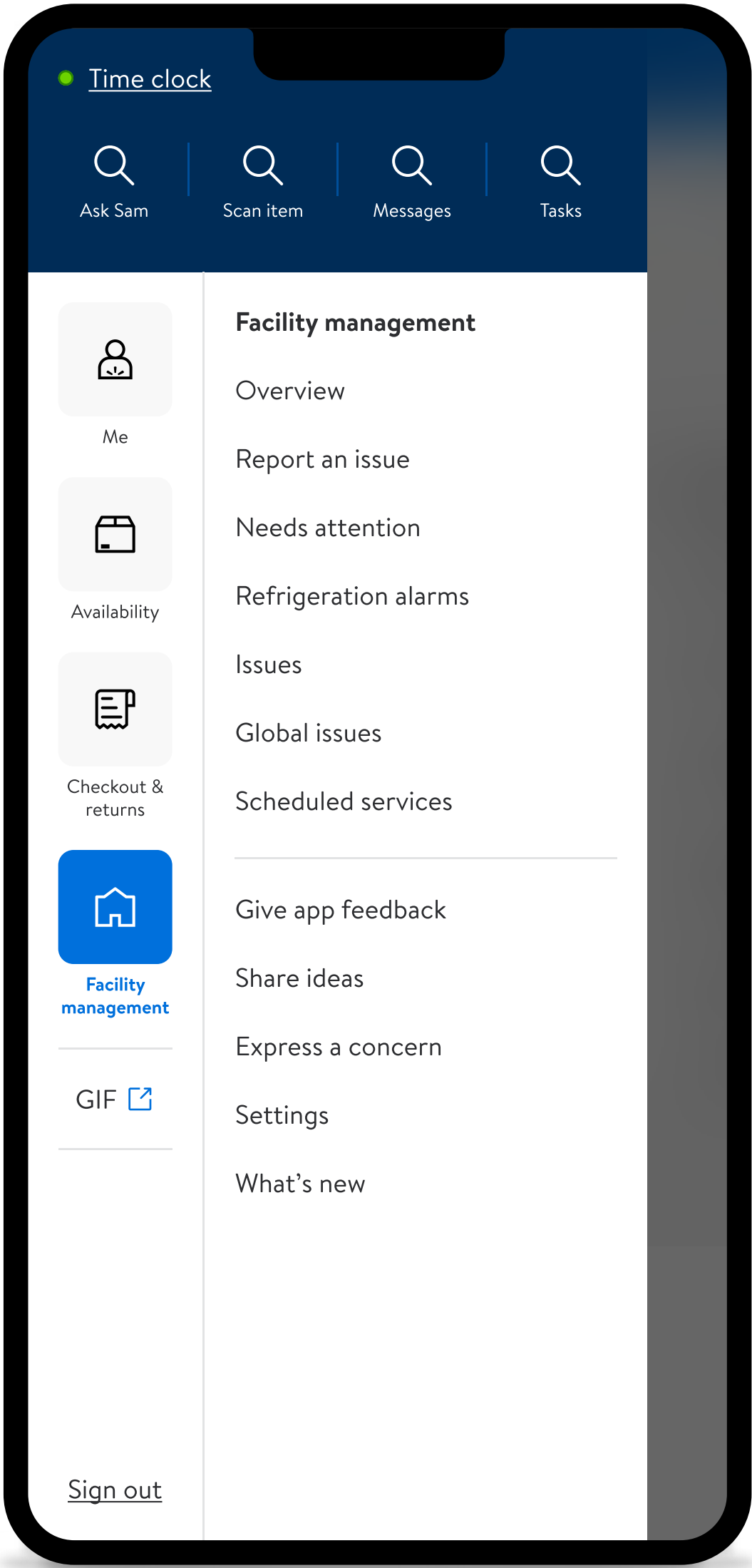
Facility Management

Report an Issue

My role:
UI/UX Design
User-Research
Prototyping

My team:
Design Manager
Principal Designer (Me)

- Result:**
- **Increased NPS by 15%**
 - **Positive impact to the user-rating score**
 - **Usage went up by 30%**



Problem Statement

Provide associates an easy, intuitive way to see all issues around their store and quickly take action when needed.

Mitigate a stringent process of logging issues which required specialized knowledge.



Guiding principles

Easier reporting of issues

Pre-population of fields based on an associate's team

Empower associates to take action

Make it easier, while showing associates clear steps in a digestible manner

Outcomes

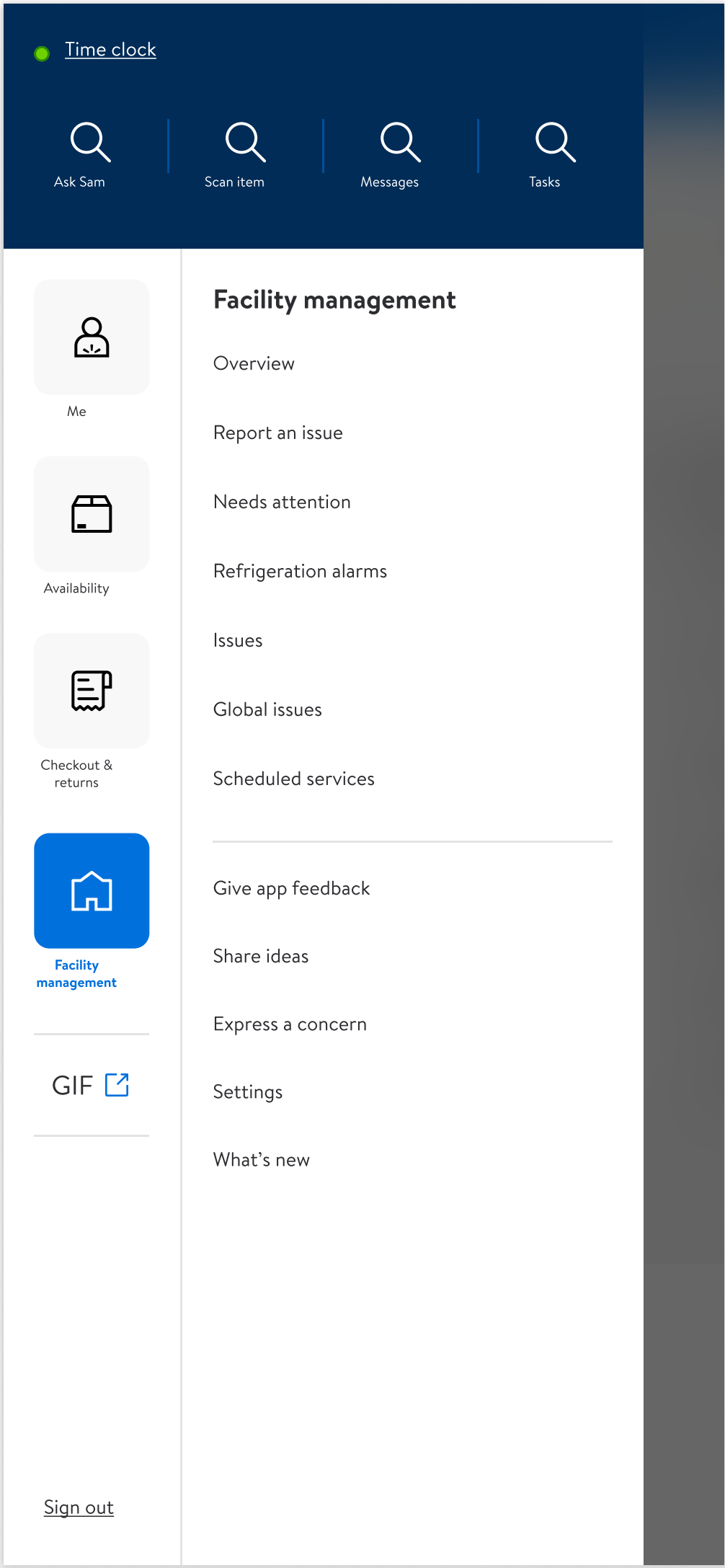
All associates can report issues immediately

Reduces the burden for store managers and leads

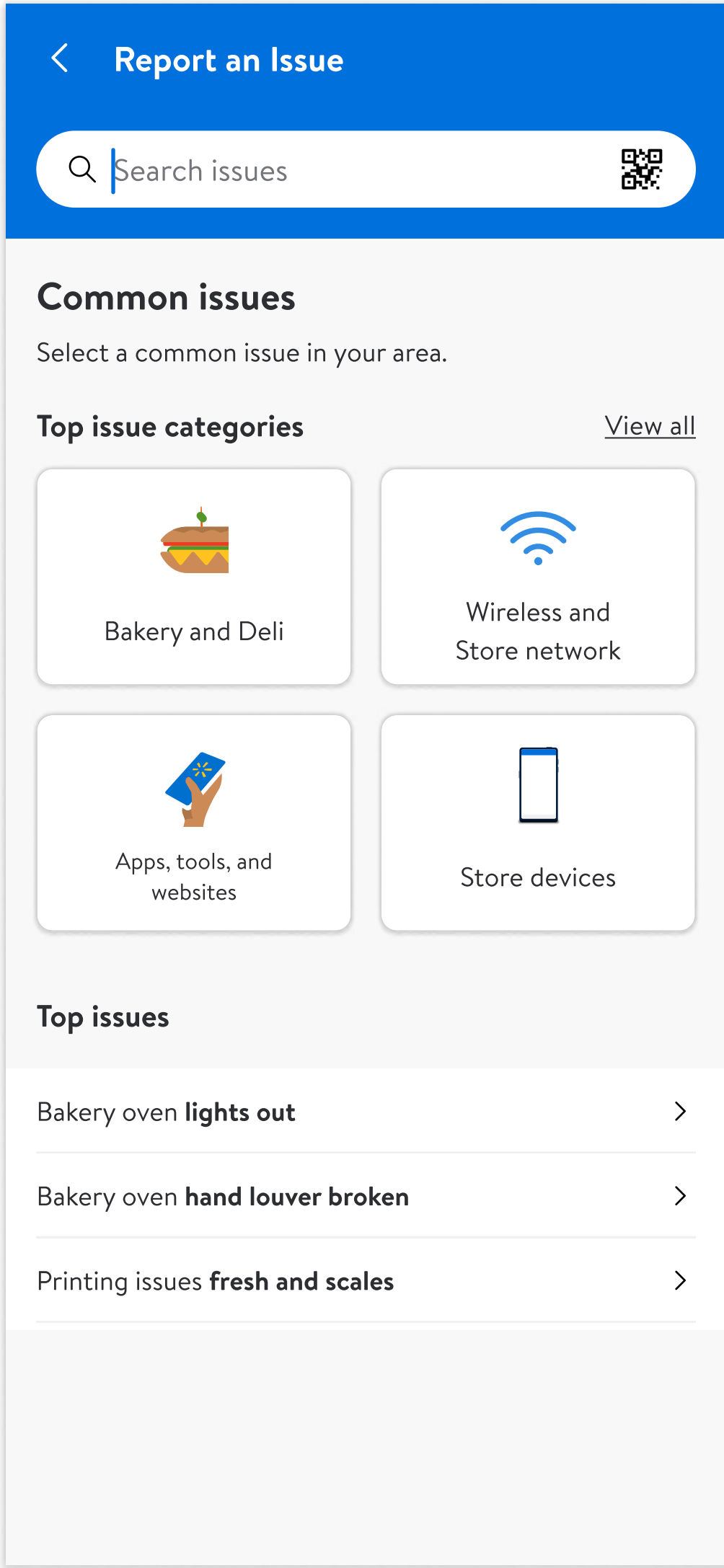
Better reported information

Technicians have more and better information, going into a repair

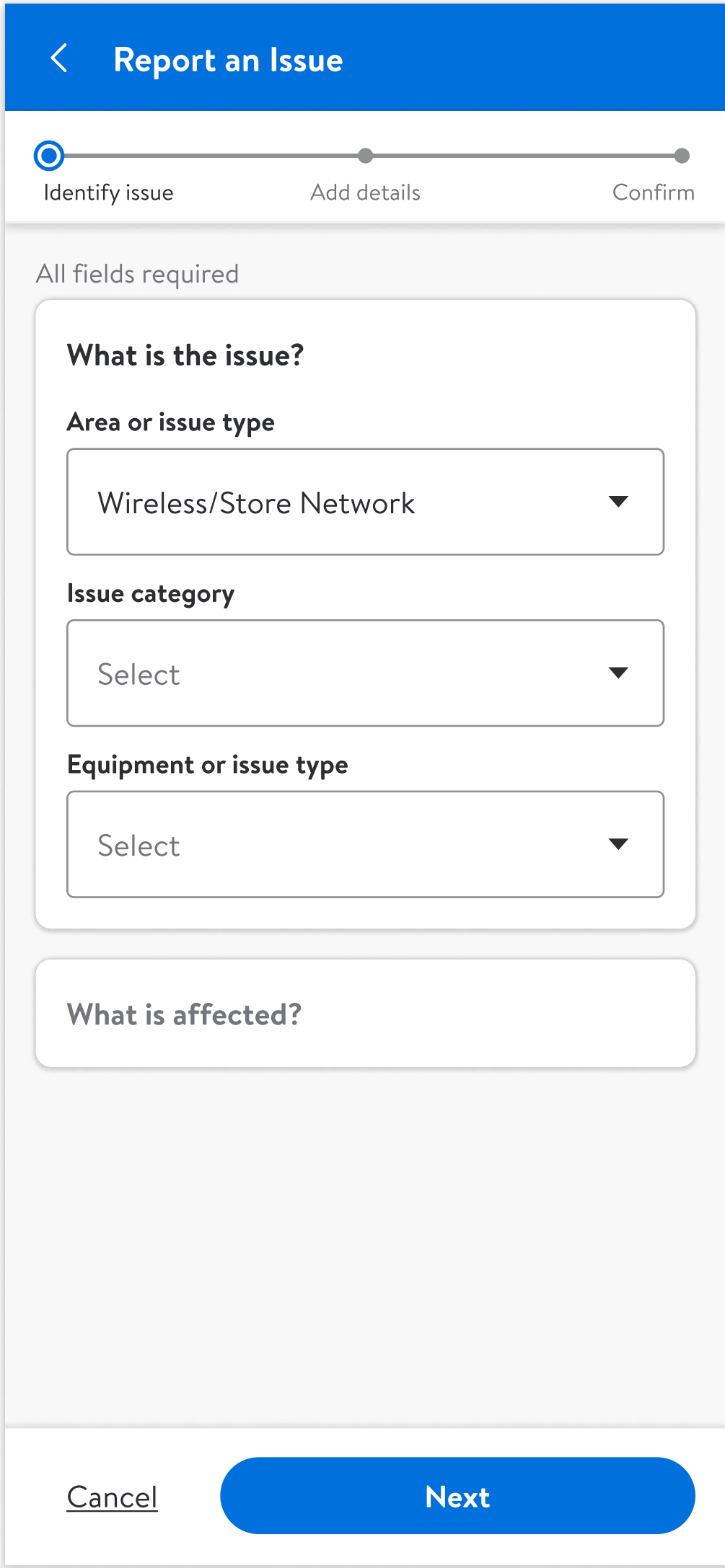
Final Designs



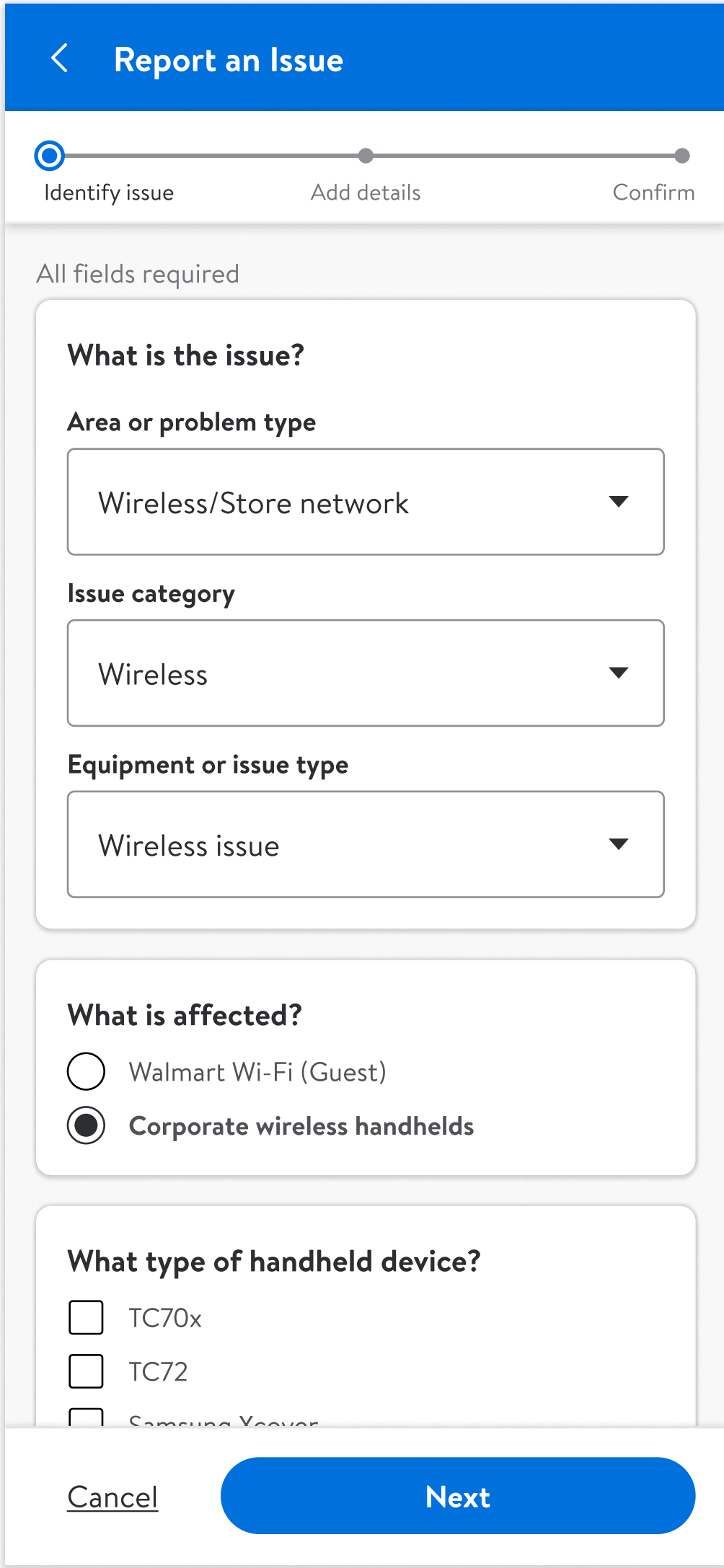
Main navigation



Report an Issue landing page



Identify the issue



Dynamic options

< Report an Issue

Identify issueAdd detailsConfirm

All fields required

Describe the issue

Enter the steps to recreate the issue

I open the app, tap on the gear icon, and I get an error message.

0/400

Handheld Mac address

23:35:57:78:23:12

You can find it by navigating to the Tools/Misc folder and selecting Diagnostics.

Who are the contacts for this issue?

Primary contact name

Matt Johnson

Contact phone number

555-224-5235

Cancel

Next

More details

< Report an Issue

Identify issueAdd detailsConfirm

Review and submit

Issue details

Area or problem type

Wireless/Store network

Wi-Fi Network

Corporate

Device

iPad

Description

I open the app, tap on the gear icon, and I get an error message.

Mac address

23:35:57:78:23:12

Sign-off contacts

Primary contact

Matt Johnson

555-224-5235

Sign-off contact

Larry Bird

Teams to notify

Confirm details and submit

Issue summary

< Report an Issue

Identify issueAdd detailsConfirm

Review and submit

Issue details

Area or problem type

Wireless/Store network

Wi-Fi Network

Corporate

Device

iPad

Issue received

We will schedule your repair as soon as possible and keep you updated on the progress.

Got it

Confirmation bottom sheet

Technician App Redesign

My role:
UI/UX Design
Strategy
User-Research
Prototyping

My team:
Design Manager
Principal Designer (Me)
Senior Designer
Product Manager

Result:
Positive prototype user feedback

Currently in development



Walmart technicians maintain and repair store equipment – including refrigeration, HVAC, facilities systems, and sometimes automation – by performing routine maintenance and fixing issues across multiple locations to keep operations running smoothly.



Problem Statement

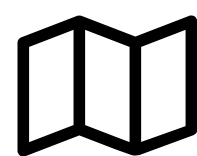
Walmart technicians currently face significant challenges with the tools they use, leading to a high **turnover rate of 70%**. The primary app, Field FM, suffers from latency issues, uses outdated legacy software that is difficult to update, and lacks the ability to integrate new features easily.

In addition, **work orders often get lost**, and technicians **struggle to find relevant information**, as evidenced by quotes from the field. This increases onboarding time and **causes delays** in managing work orders. Technicians are also required to use multiple apps – such as Zeus for ordering parts and ME@campus for tracking their time – further complicating their workflow.

Opportunity

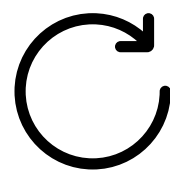
Empower technicians to carry out repairs with efficiency and satisfaction. Enable technicians to troubleshoot problems, but providing reference materials and a frictionless path to collaborating with their colleagues.

Goals & Objectives



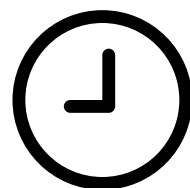
Guided work

The app aims to be a companion to their day to day activities. Guiding them efficiently to stores via Google Maps, showing them where assets are with in-store maps and provide technicians with contextual help content.



Reduce turnover

Provide a more intuitive, efficient tool that reduces frustration and errors, ultimately improving job satisfaction and lowering the 70% technician turnover rate.



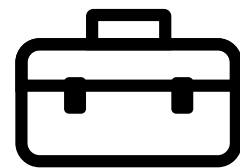
Increase efficiency

Improving the organization of details within each work order to minimize onboarding time, help technicians get aligned faster, and prevent orders from being overlooked.



Optimize performance

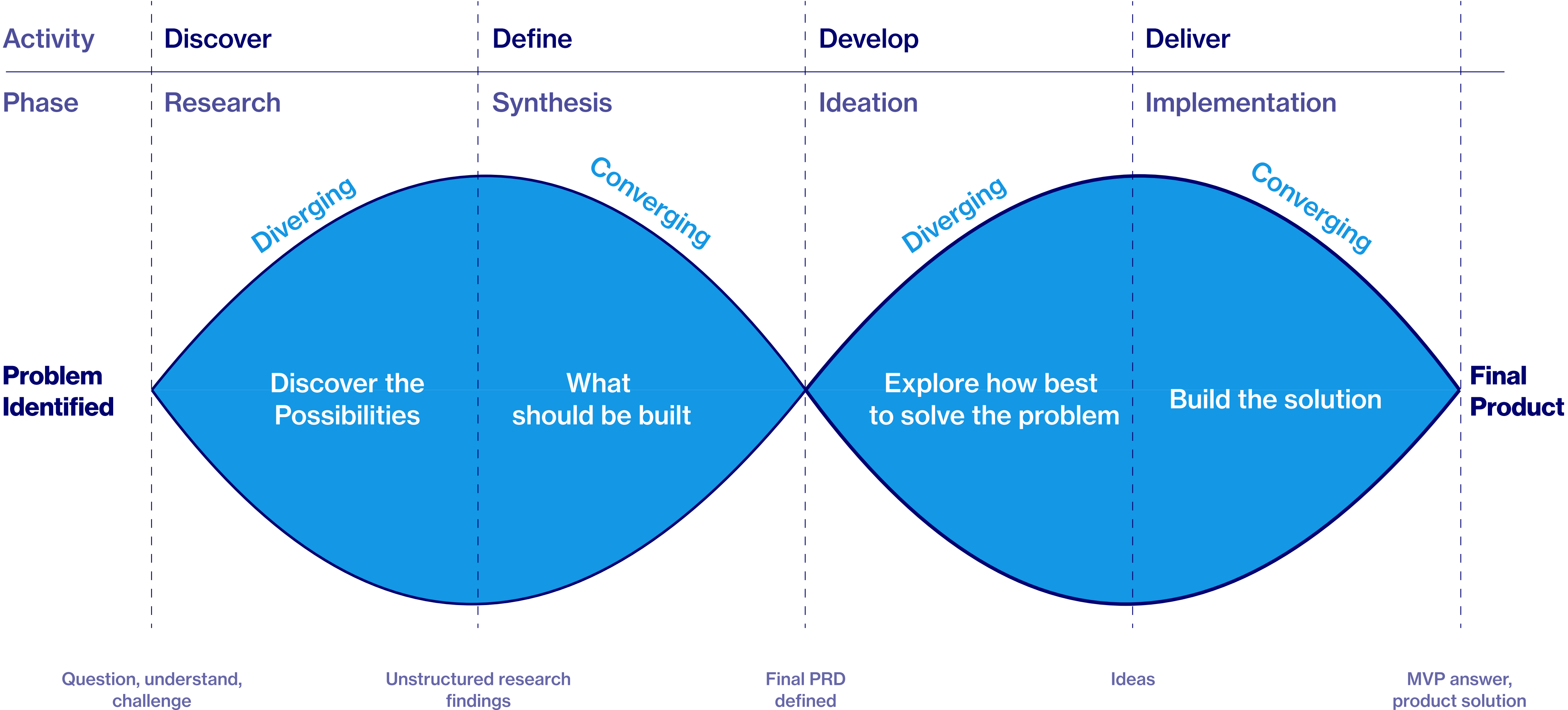
Address latency issues by migrating from legacy software to a modern, easily upgradable system, ensuring faster response times and the ability to implement new features without delay.



Consolidate tools

Combine multiple tools (Field FM, Zeus, navigation, timeclock) into a single, app to streamline workflows and reduce the complexity of managing tasks across different platforms.

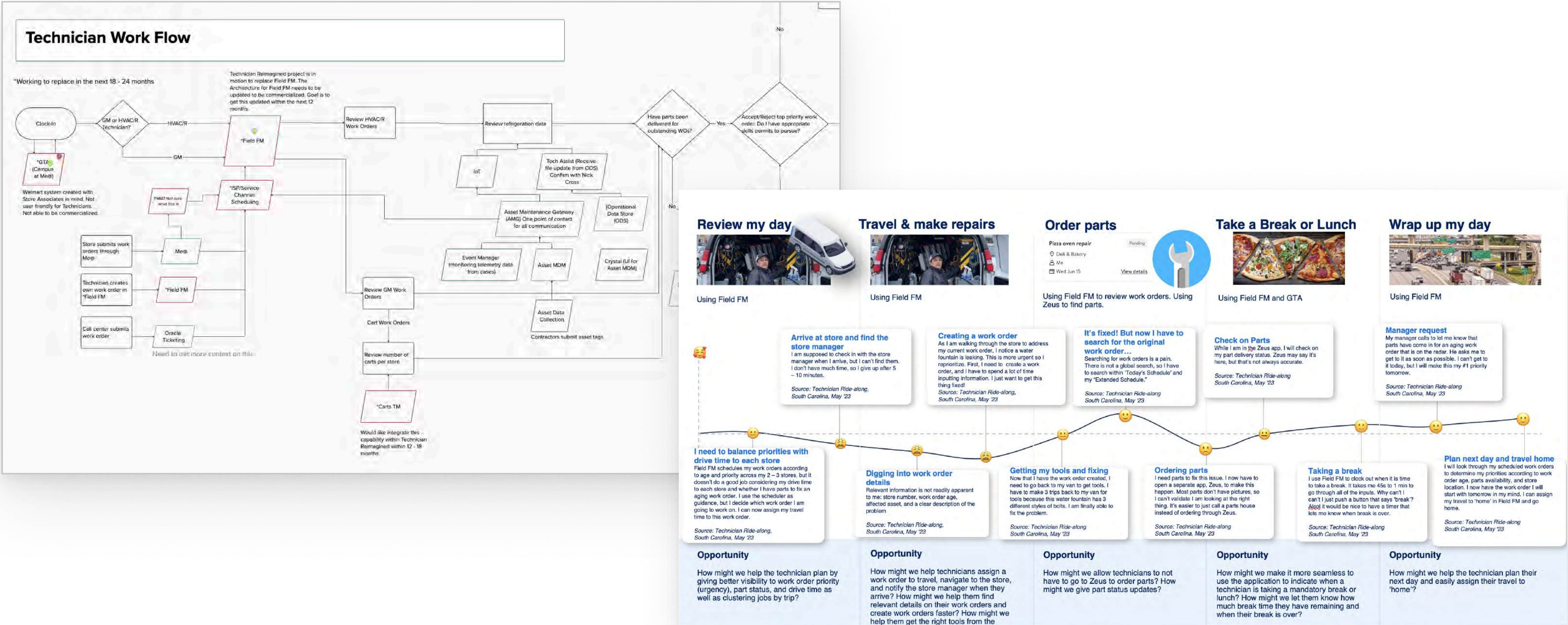
Approach



Discover

Understanding the current user journey experience

As a designer, in order to get to the ‘How’ we need to understand the ‘Why’.



User interviews

Alongside stakeholder interviews I led user interviews with new and experienced technicians alike.

E2E Technician: Search User Testing Notes

Dustin Hicks and Jeremy Bach, GM Technician

11.8.23

Work Order Filtering

- Like to see total number of work orders after searching/filtering
- Stores: Would like to be able to add favorite stores
 - He primarily uses the stores filter
- "I never touch Distance." - Dustin
- In service channel, stores are listed in order
- All stores in the US are shown in the Field FM experience
- It would be nice to have the 27 stores that are within my area
 - I **help** out throughout the whole region, so I love to see what's going on in other people's stores
 - It would be helpful to have quick access to recently searched stores
 - "I check in with 4 – 5 other Technicians on my team every week." - Jeremy

Creating a Work Order

- Even if I am in the store, it doesn't know where I'm at
- "Speed is most important to me." - Dustin

Picking an area

- There is a bunch of animation within FM, and I am not crazy about this
 - There are several areas in which to choose, and I can only see 6 at a time in FM
- In SC, the store in which I'm located appears at the top
 - Row height is **reduced** and he can see 17 options on a single screen
 - I like to touch one area and have the maximum number of options available to me
 - **Bottom sheet seems to be giving them trouble because it will not allow as many search results to be displayed**
 - **"Let me see as much of the screen as I can."** - Dustin
- I have accidentally sent a work order to the wrong store because the system did not recognize where I am

"There are so many options to fill out the work order. Not sure if there is a way to throttle this down, but if we can display maximum options this helps." - Jeremy

Me@ pre-fills dropdowns based on a search result, and this really helps Dustin out.

Closing a Work Order

- Personally, we have menus that **say** 'what is the initial cause?' **what** is the resolution?
- There are random options within these dropdowns that don't relate to the problem
- I would rather have a line with open text because I constantly just add the resolution manually

- "It is very cumbersome to look through resolution codes." - Jeremy
- Not sure why we have to input **all** of this information, but he did ask and was told that HO uses this information
- New people get worked up because they scroll through 30 answers and still don't find what they're looking for
- If management wants us to fill out this information, it would be helpful to put 'add' at the top so that we can input the information manually
- "Looking through the resolutions is a waste of time on our side." - Jeremy
- "Honestly, I don't put a lot of thought into these sections." - Jeremy
- I have seen 'replace the ballast' when I have trimmed trees." - Dustin
- **There is no confidence in the pre-filled resolution codes being accurate**
- Don't believe the same resolution codes exist for every trade

Work with the Business on the following:

- **We need to clean up the resolutions for closing a work order**

Work Order Card

- **Would love to be able to see work order age**
- **"I would like to see the work order age stay."** - Dustin

Looking back at a work order

- Can see this by going to notifications, but it is not accessible elsewhere

FM Home Screen

- What gives me a hard time is that we are in our busy season right now
 - I could be looking at 12 – 20 WOs
- **Jeremy would like to see Today and Extended schedules combined**
 - The new experience should capture this
- He has a system in which he **is able to** take most of his stuff in and will not have to go back to the van until lunch

Scheduled Services

- Would like to have a tab for scheduled services
 - For example, right now Managers want PMs done toward the first of the month
- Right now, he **has to** perform much filtering in both Today and Extended

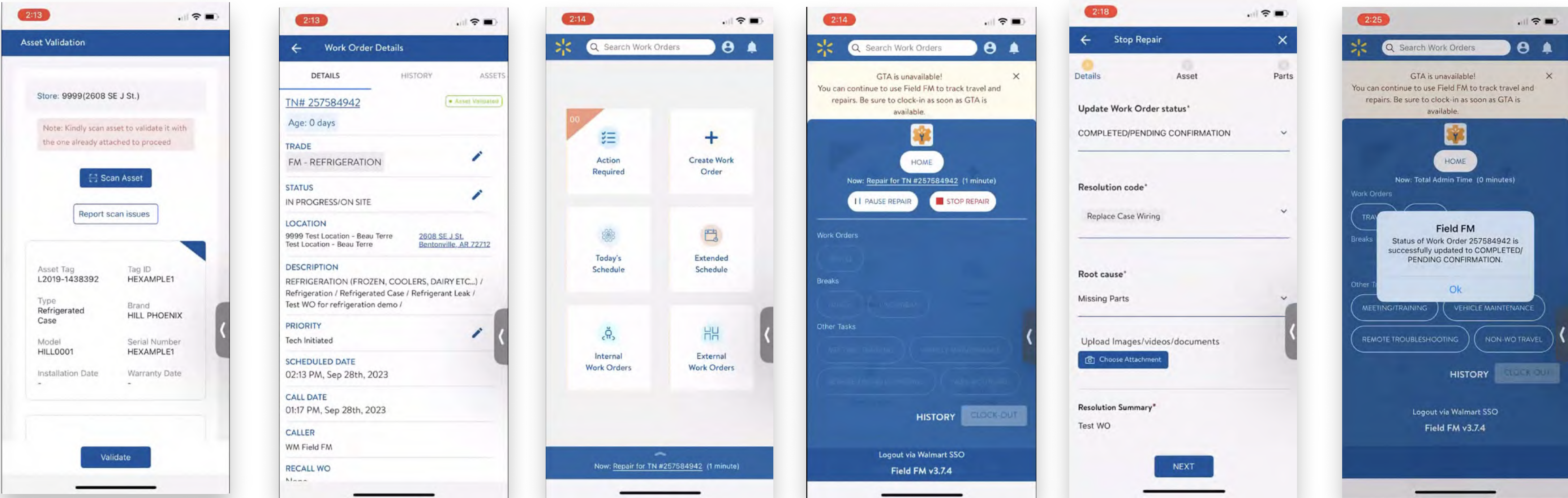
“I get worried about aging work orders. Sometimes they get lost and you don’t have them available.”

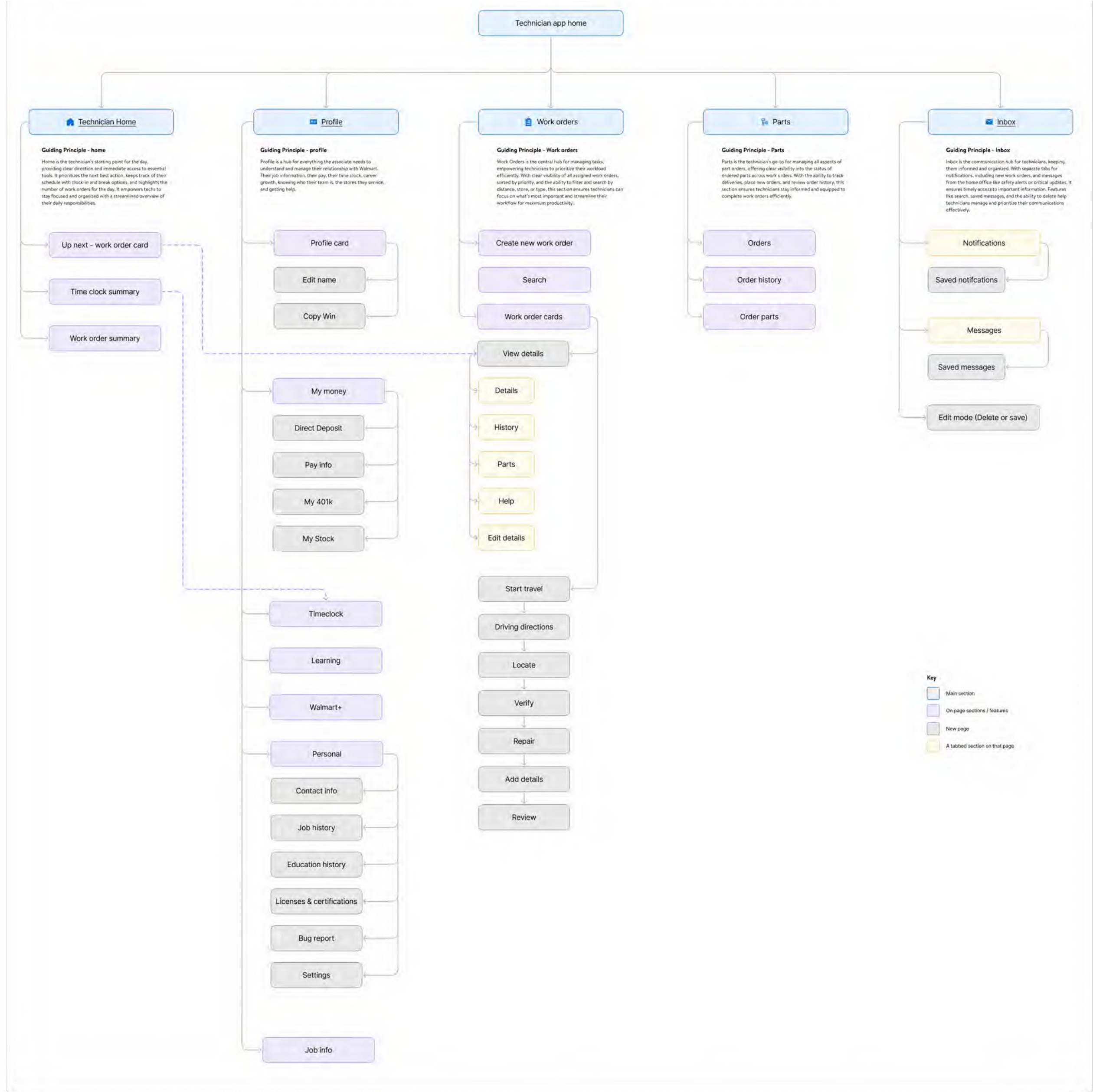
“I didn’t know what I was looking at. It takes a good month to get use to this (Field FM app).”

Develop

Existing app

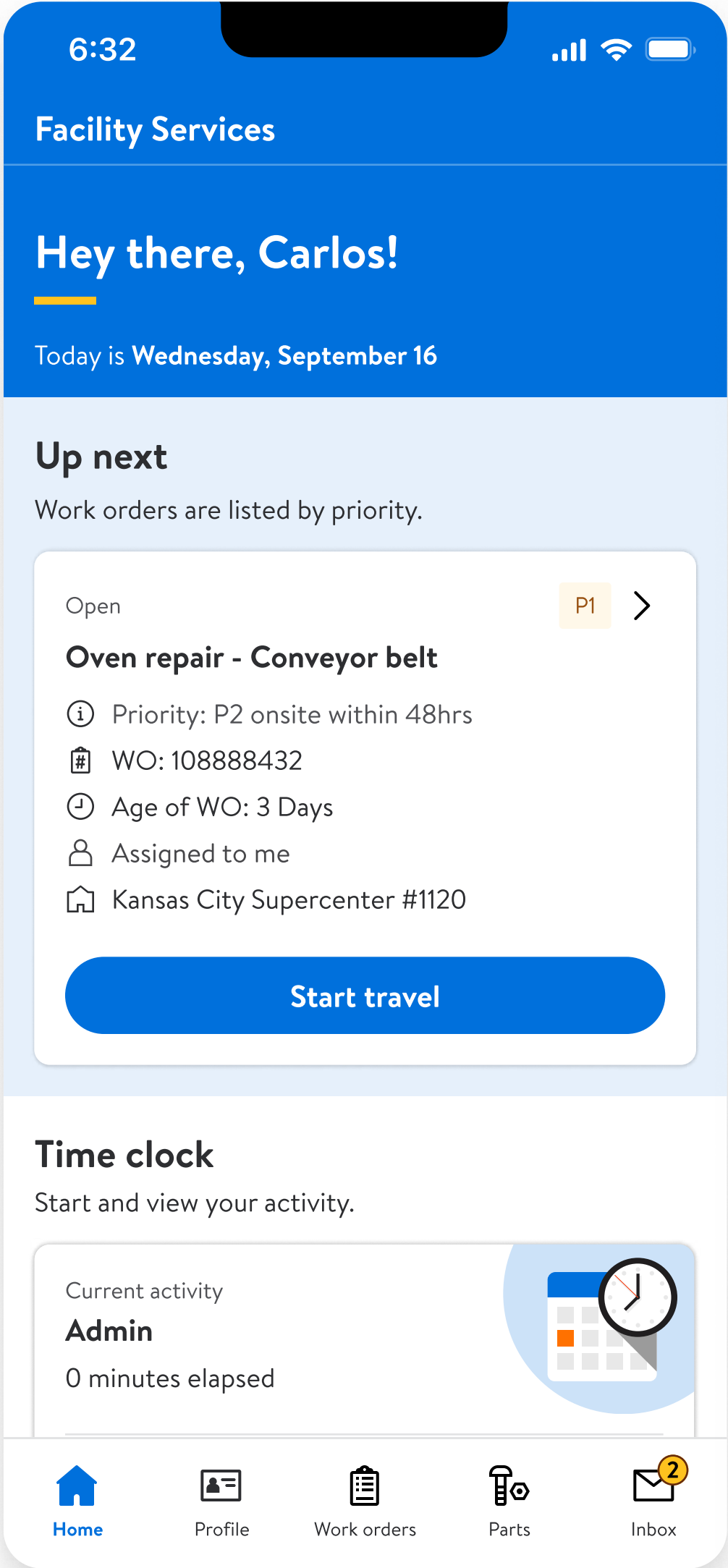
Clunky, outdated visual design system and unintuitive to the average technician.



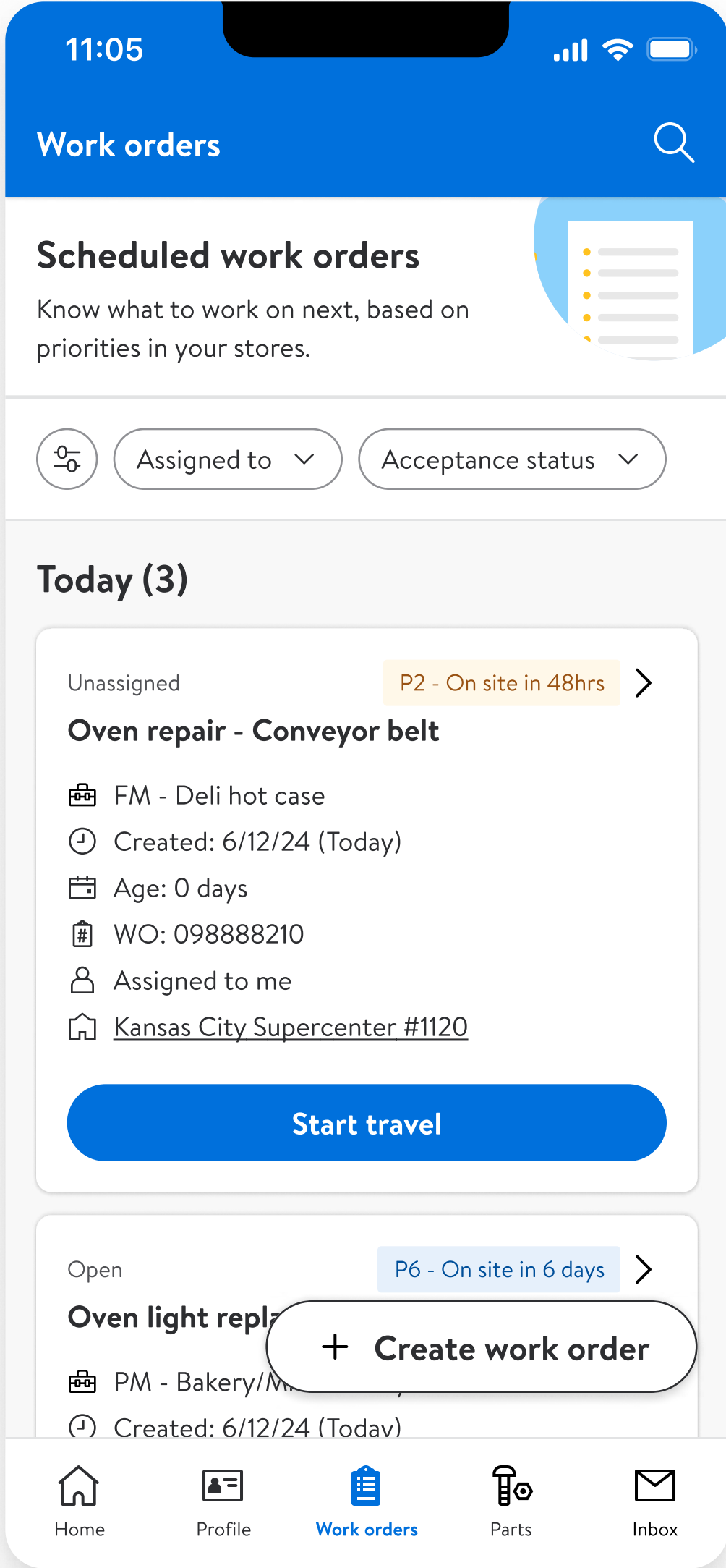
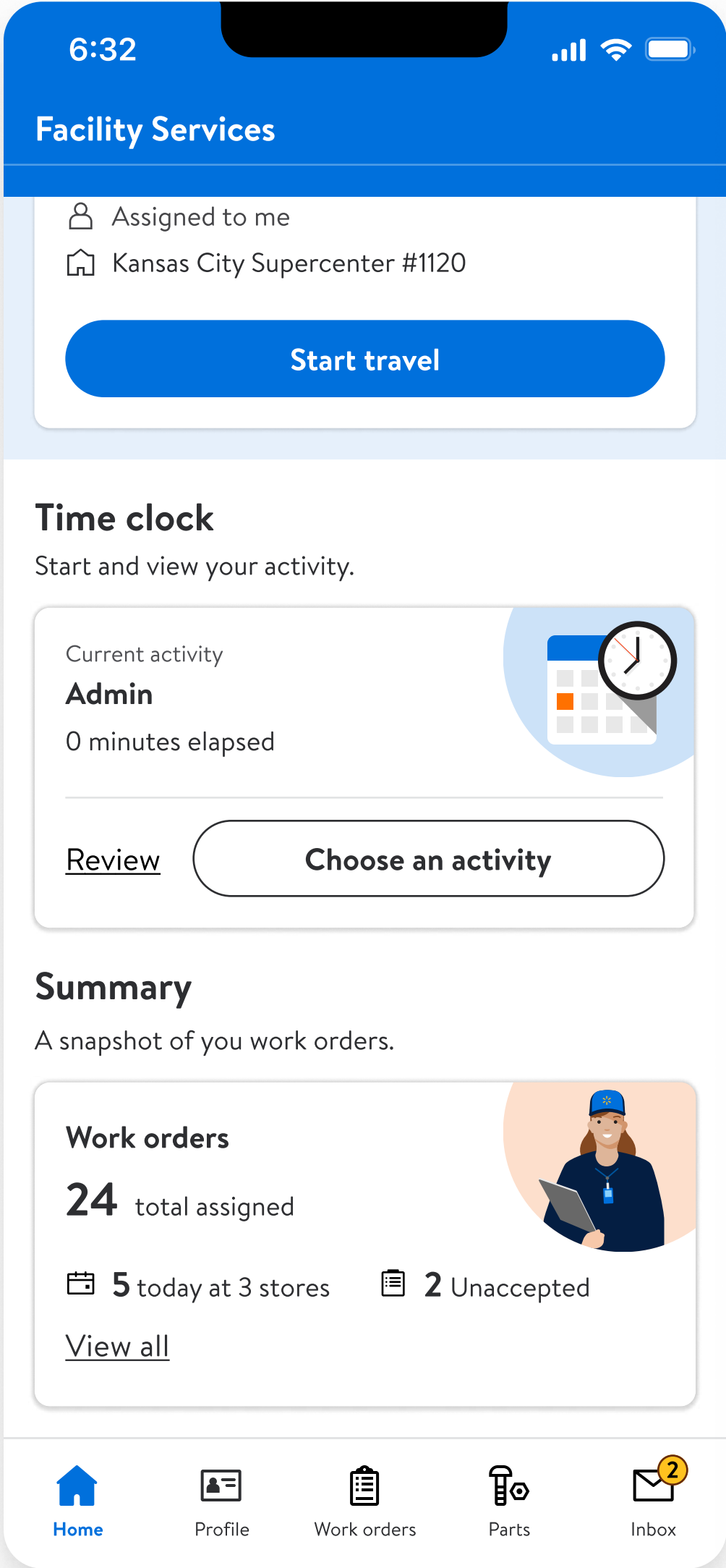


Site map

This map helped team and I visualize how the IA looked like, it also enabled us to map out how tackle this huge project, influencing the road map.



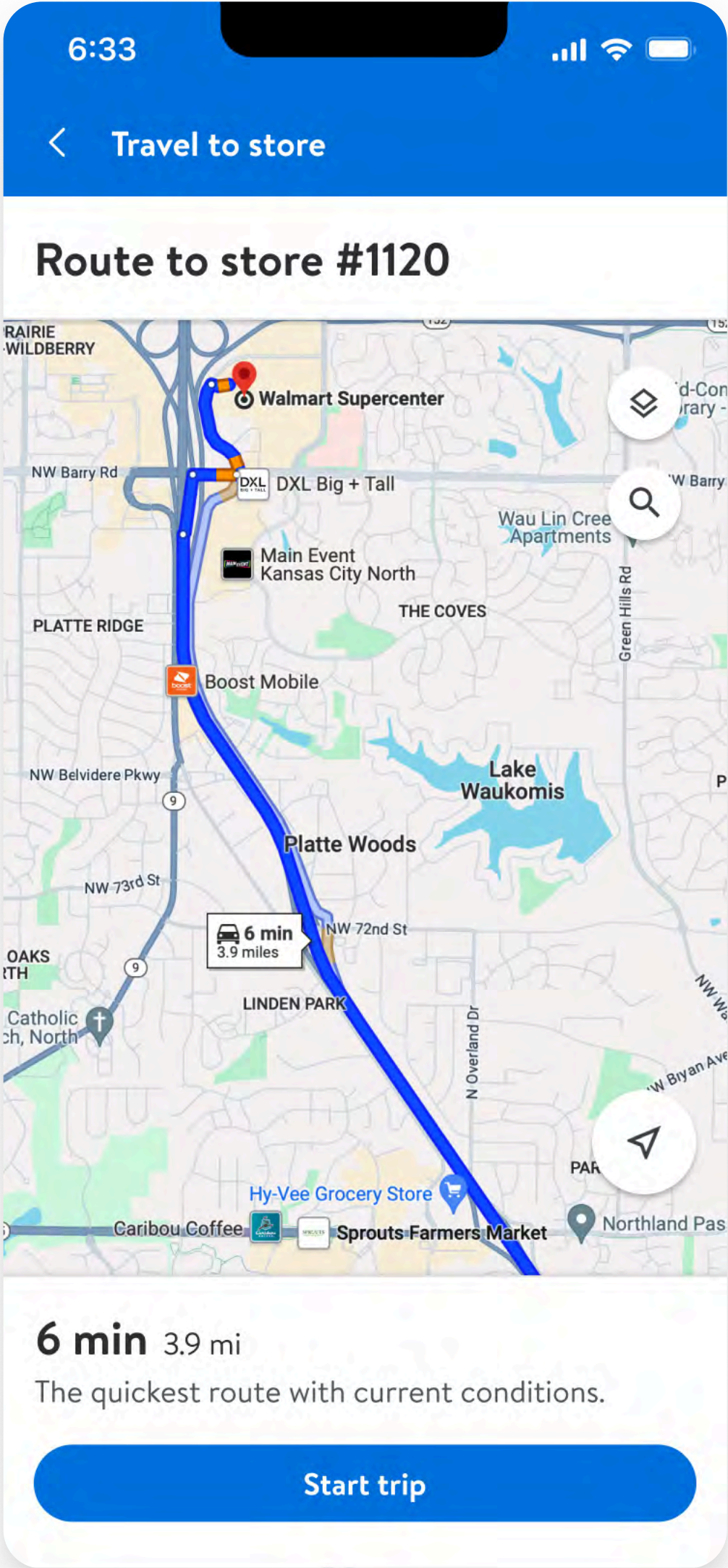
Home screen



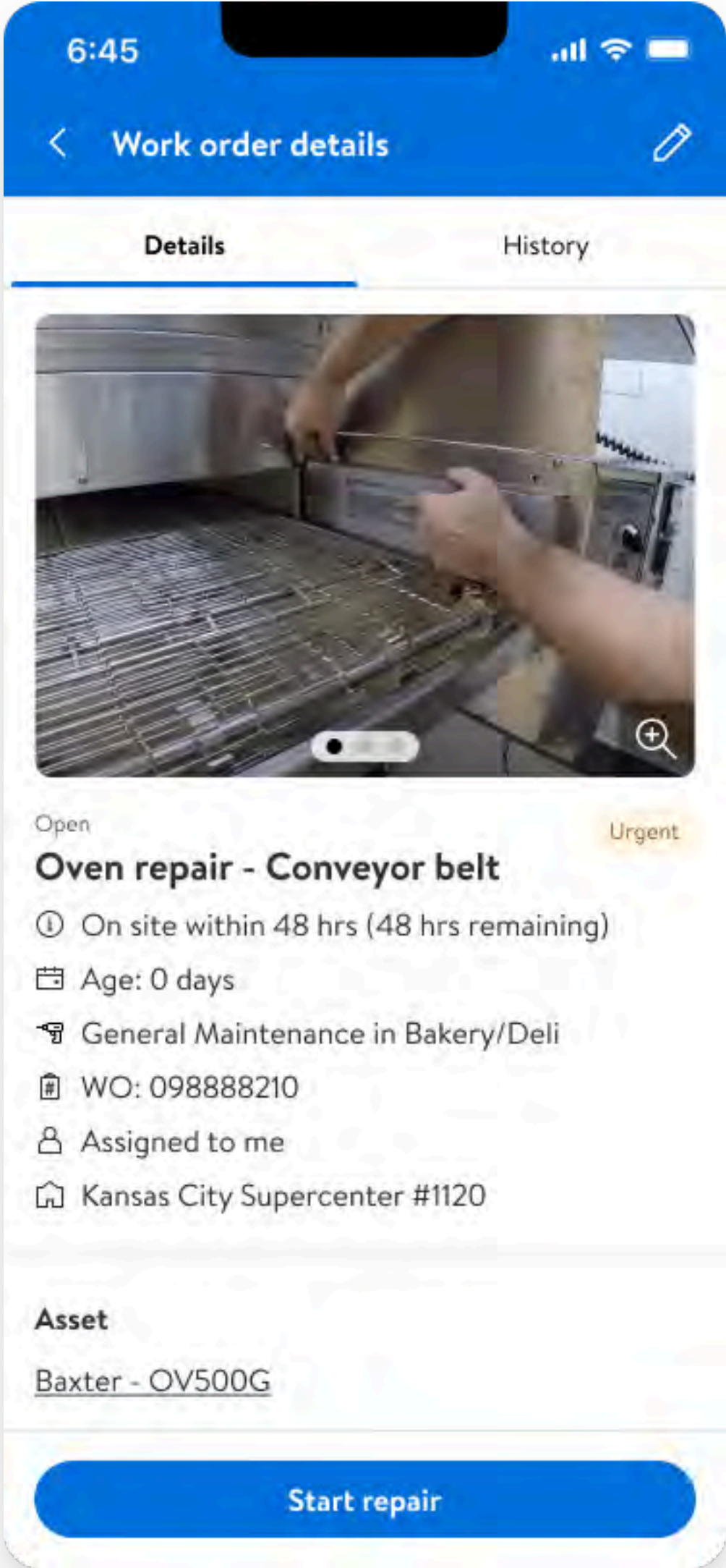
Work orders

Initial designs
These screens show the ‘home screen’, when Carlos is starting his day at home.

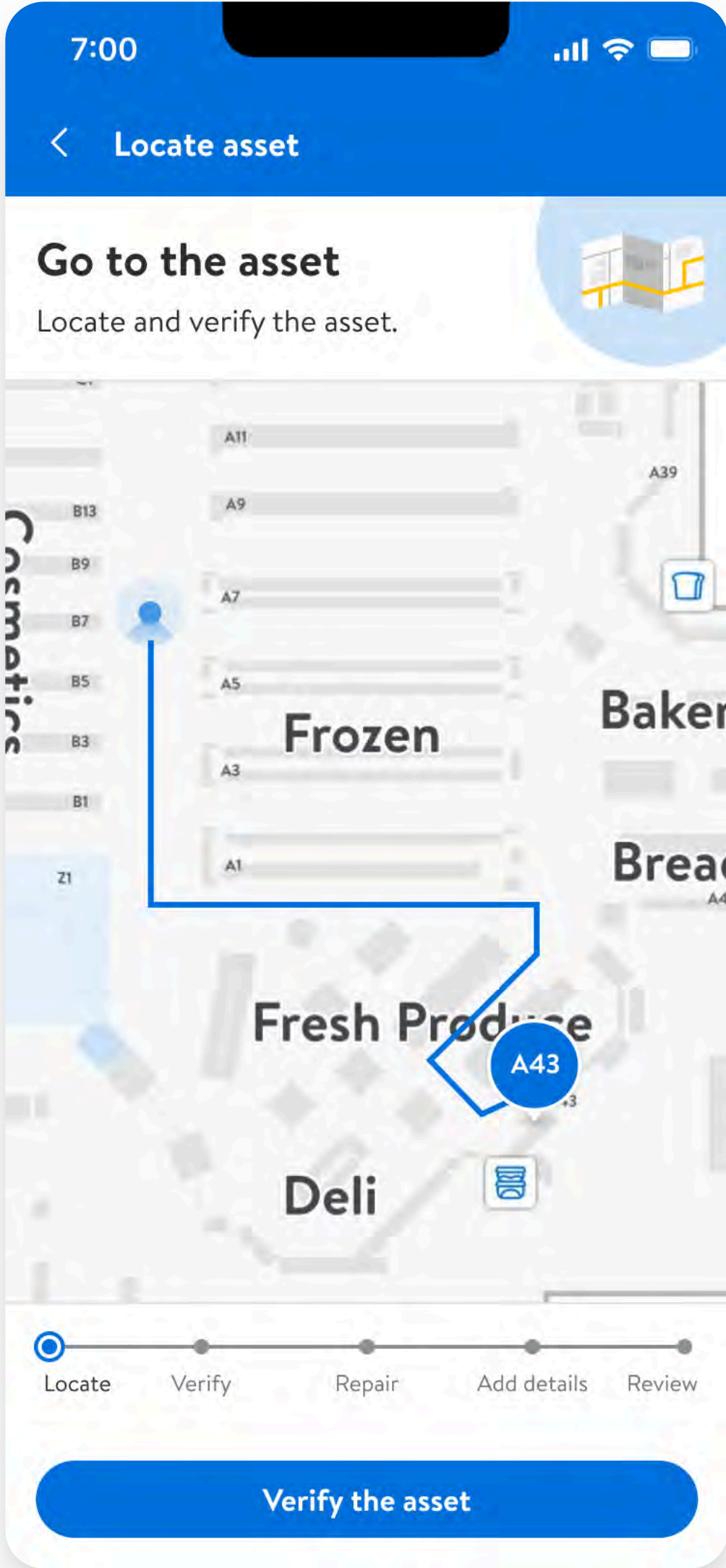
And also the ‘work orders’ screen where Carlos can see all his accepted automated queued work orders.



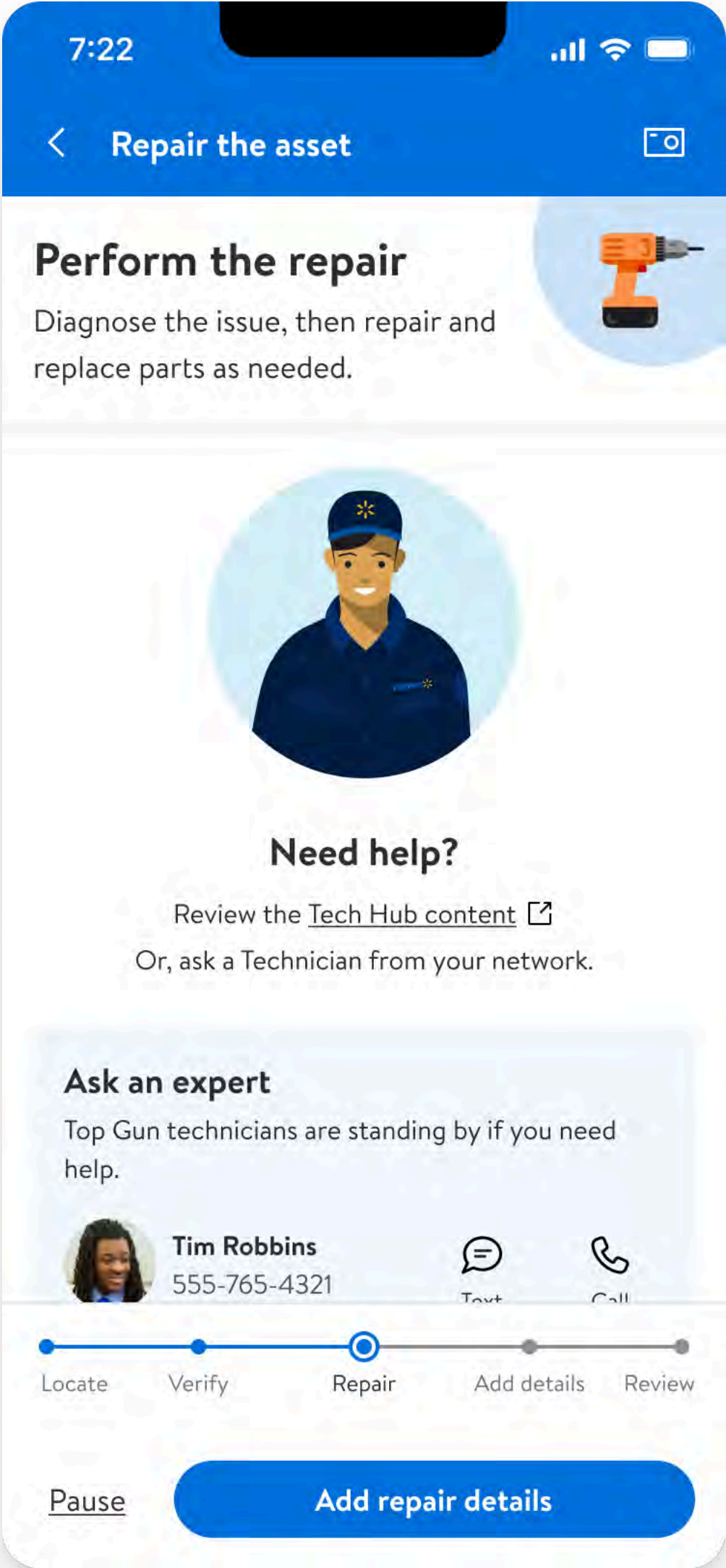
Traveling to the store



Work orders

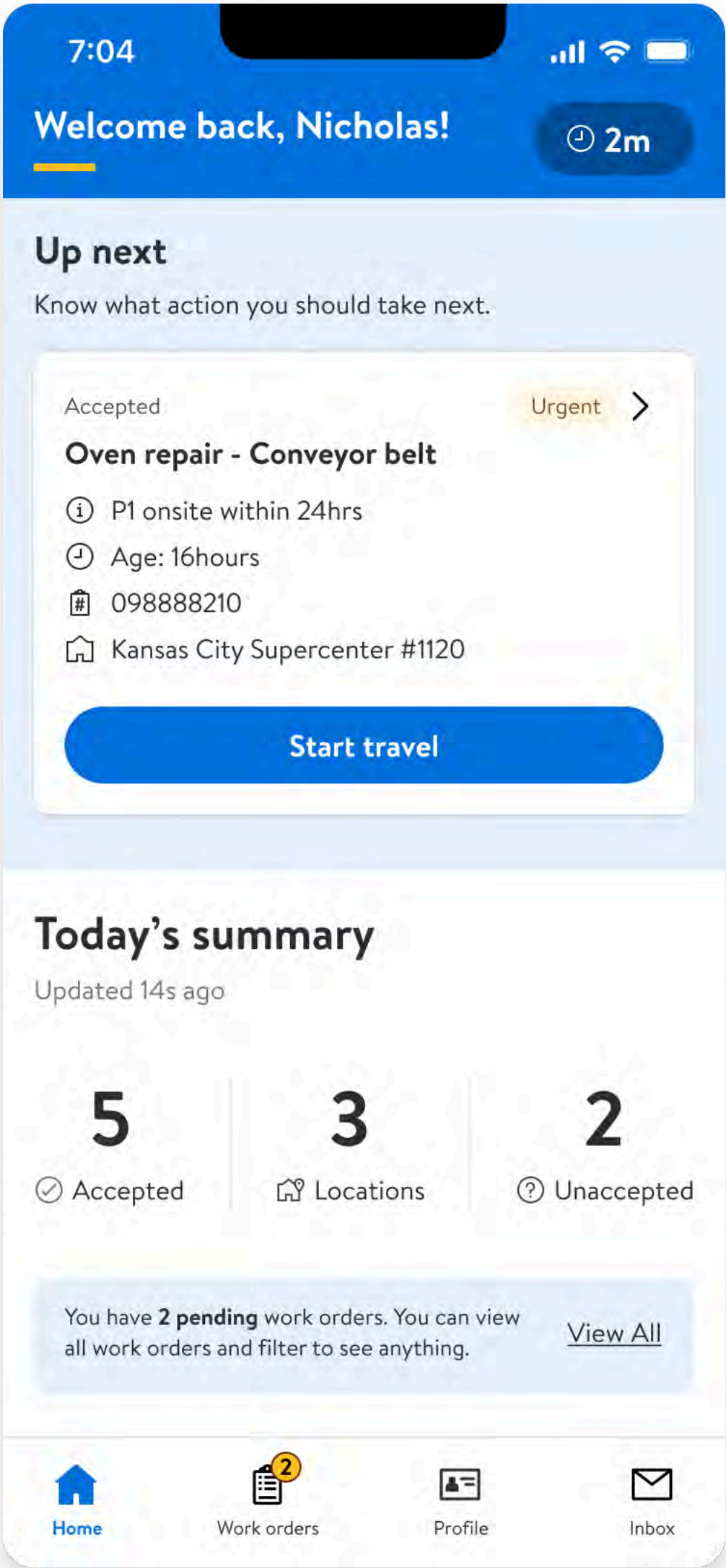


Locating the asset, need attention

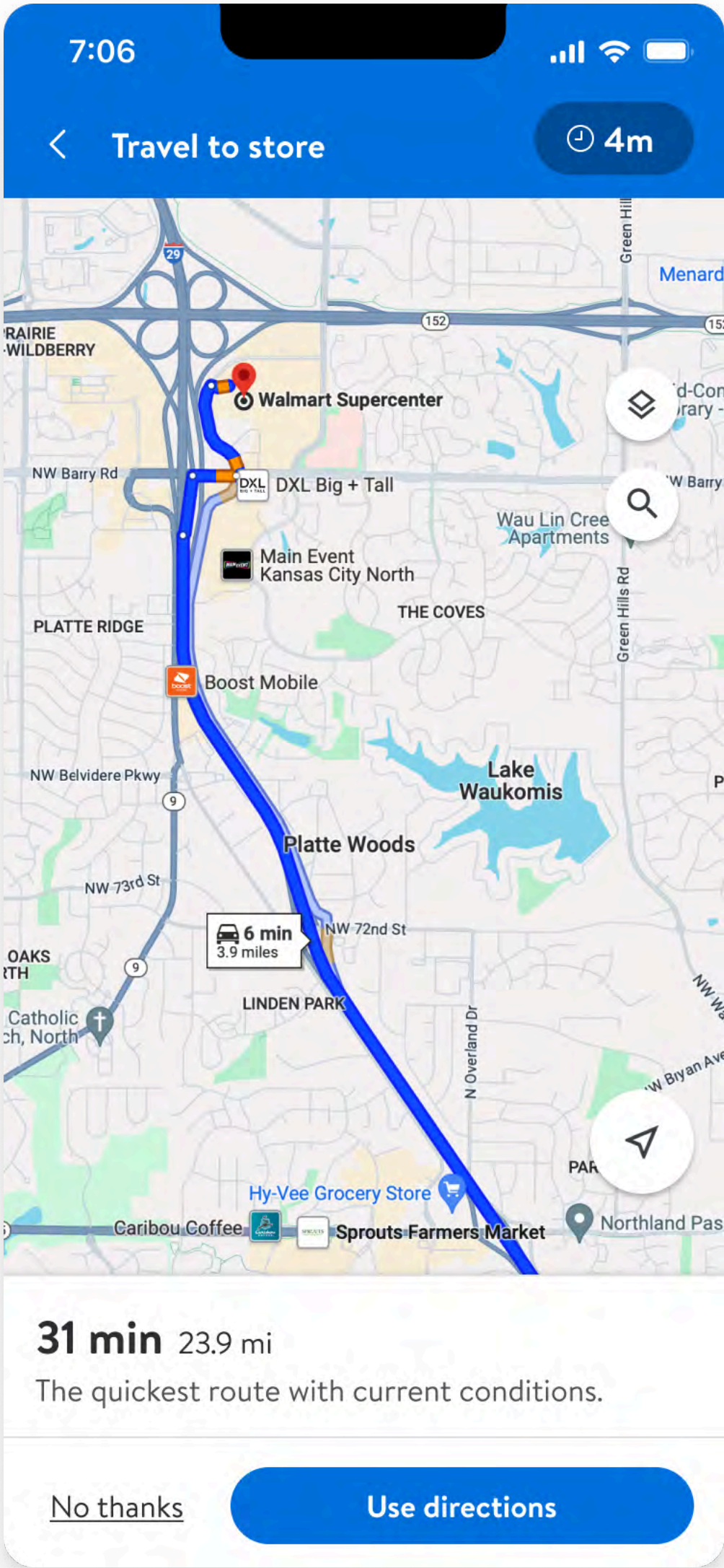


Performing the repair

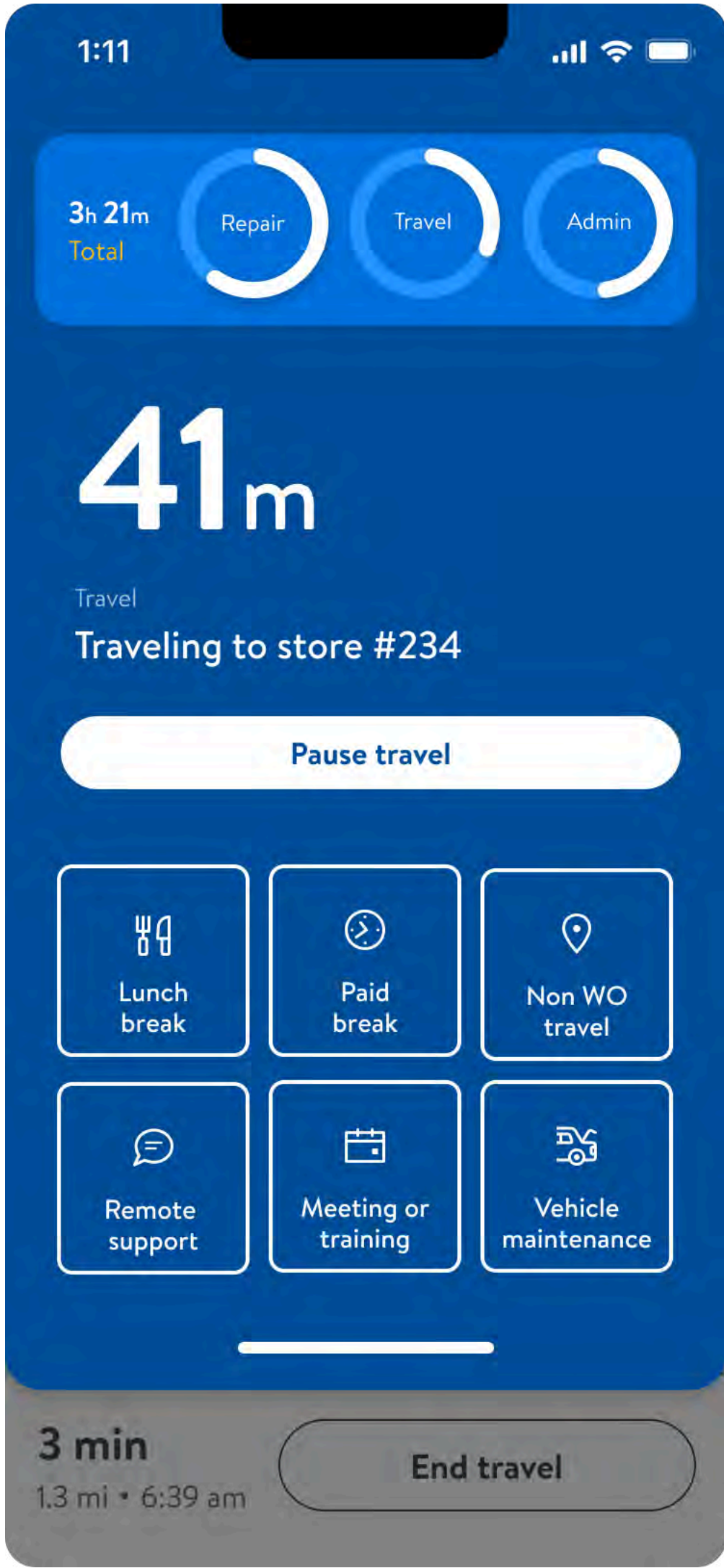
Final Designs



Home screen

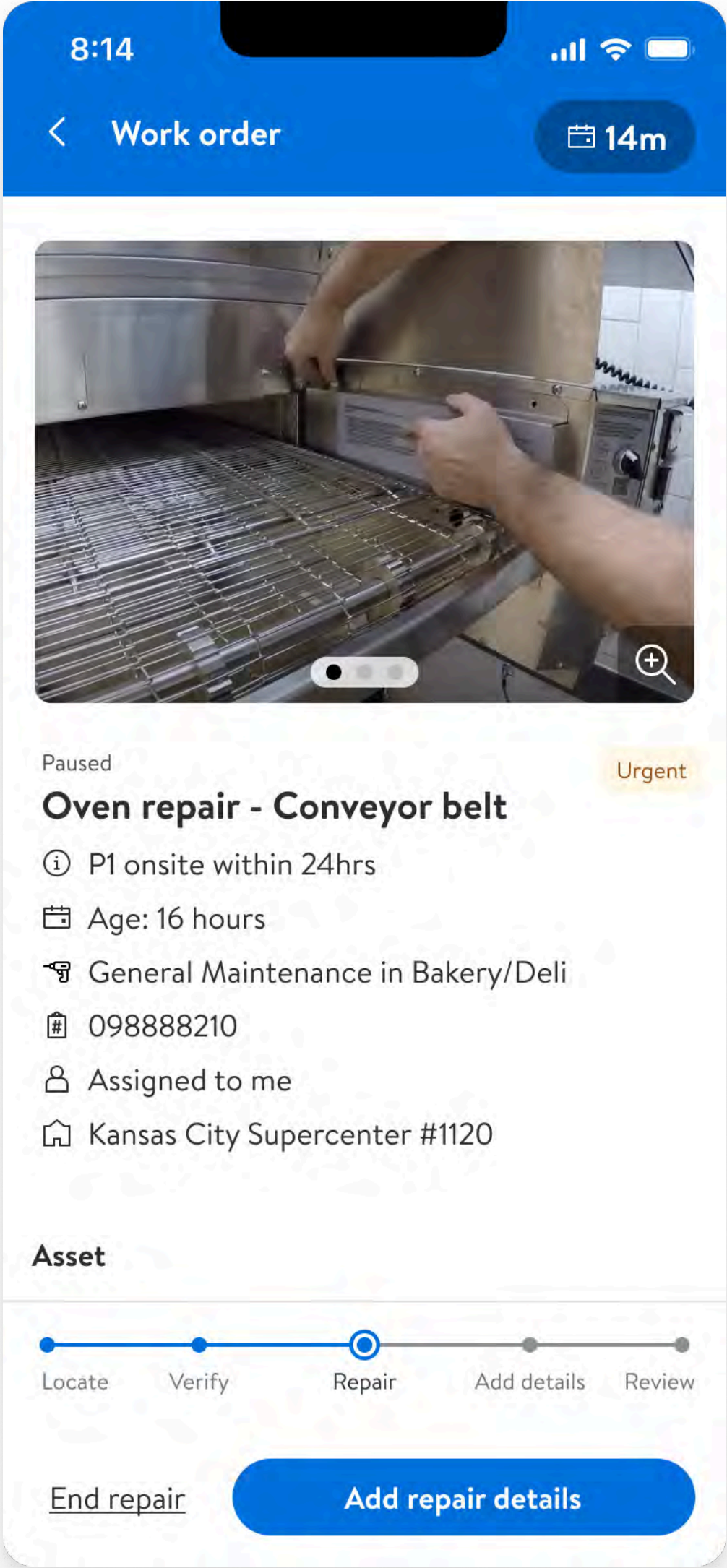


Trsvel to repair

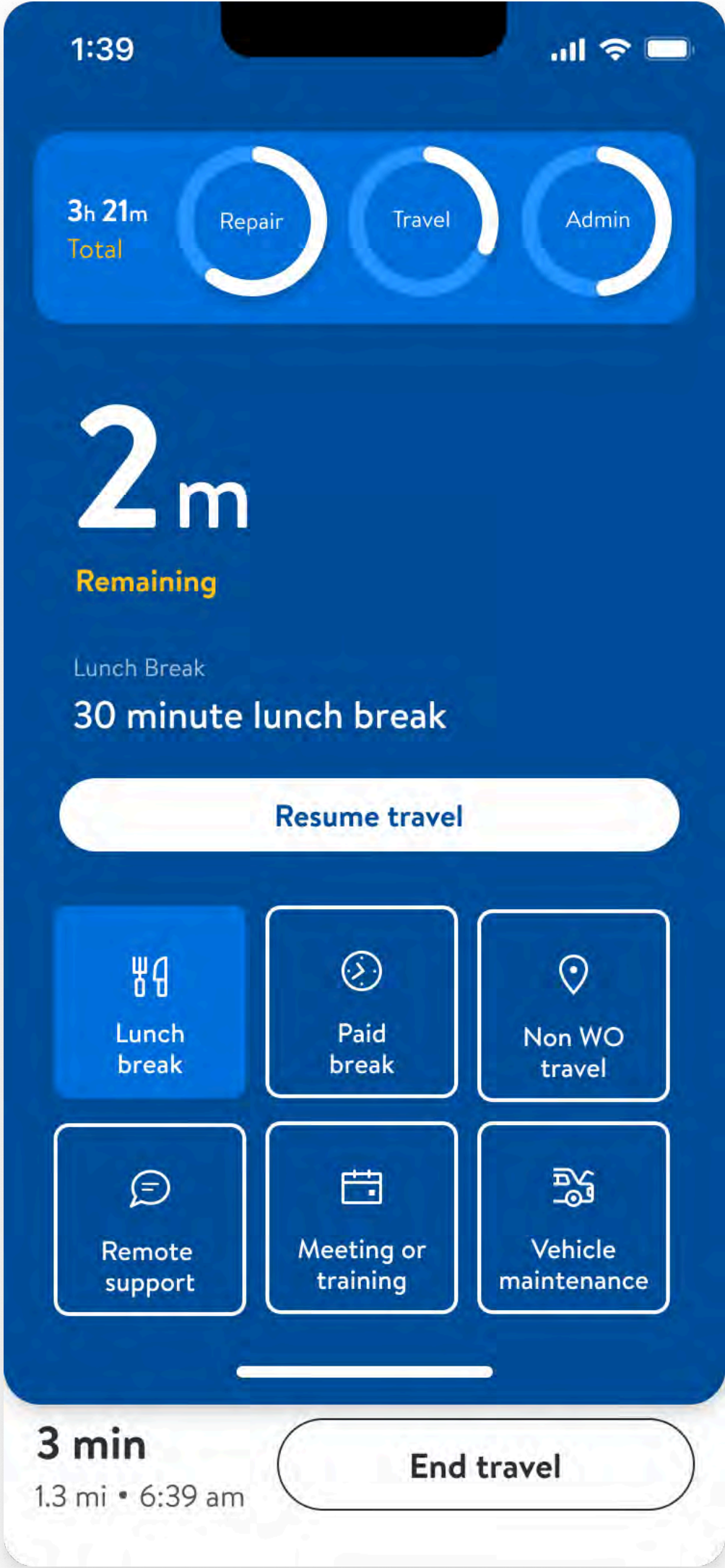


Lunch

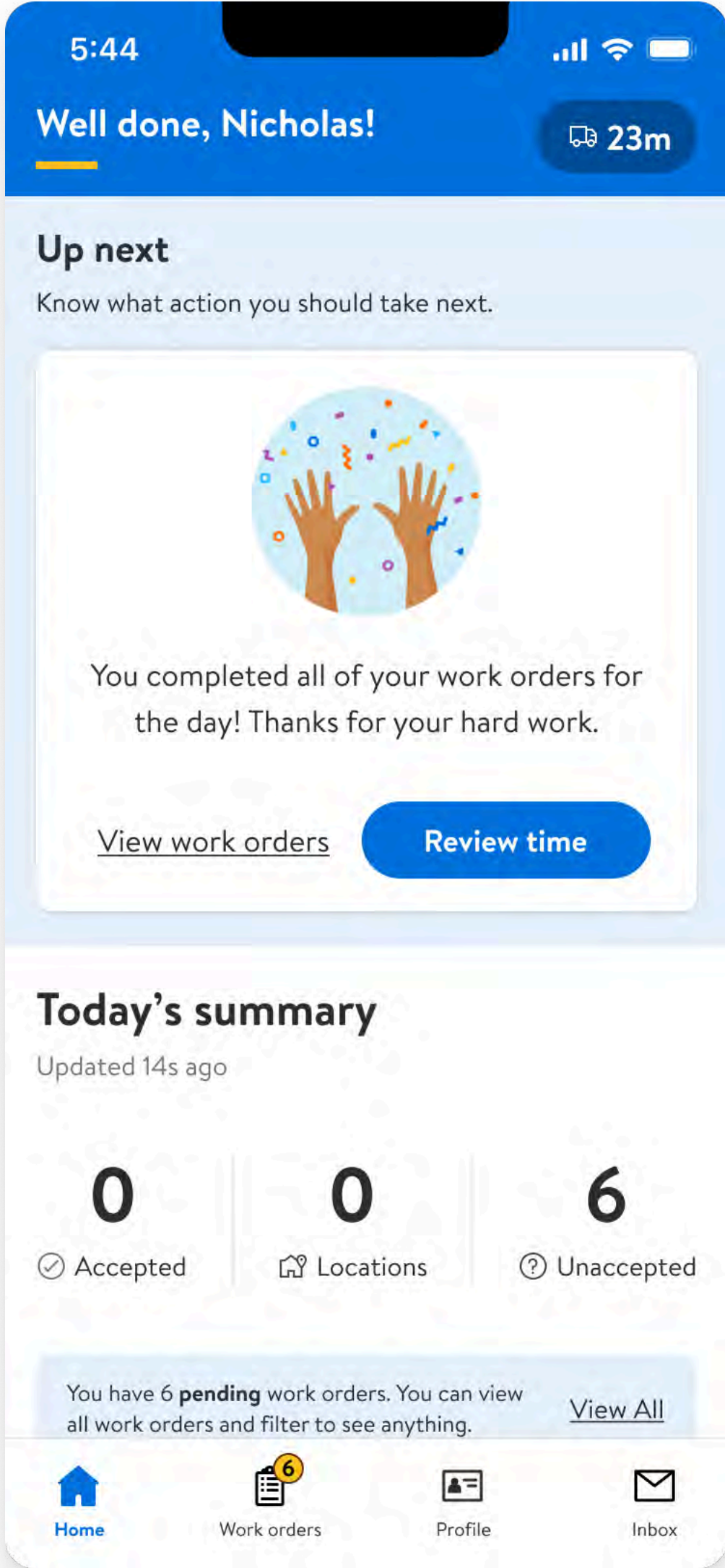
Final designs
After prototype testing with another round of technicians. We made iterations and finalized our designs



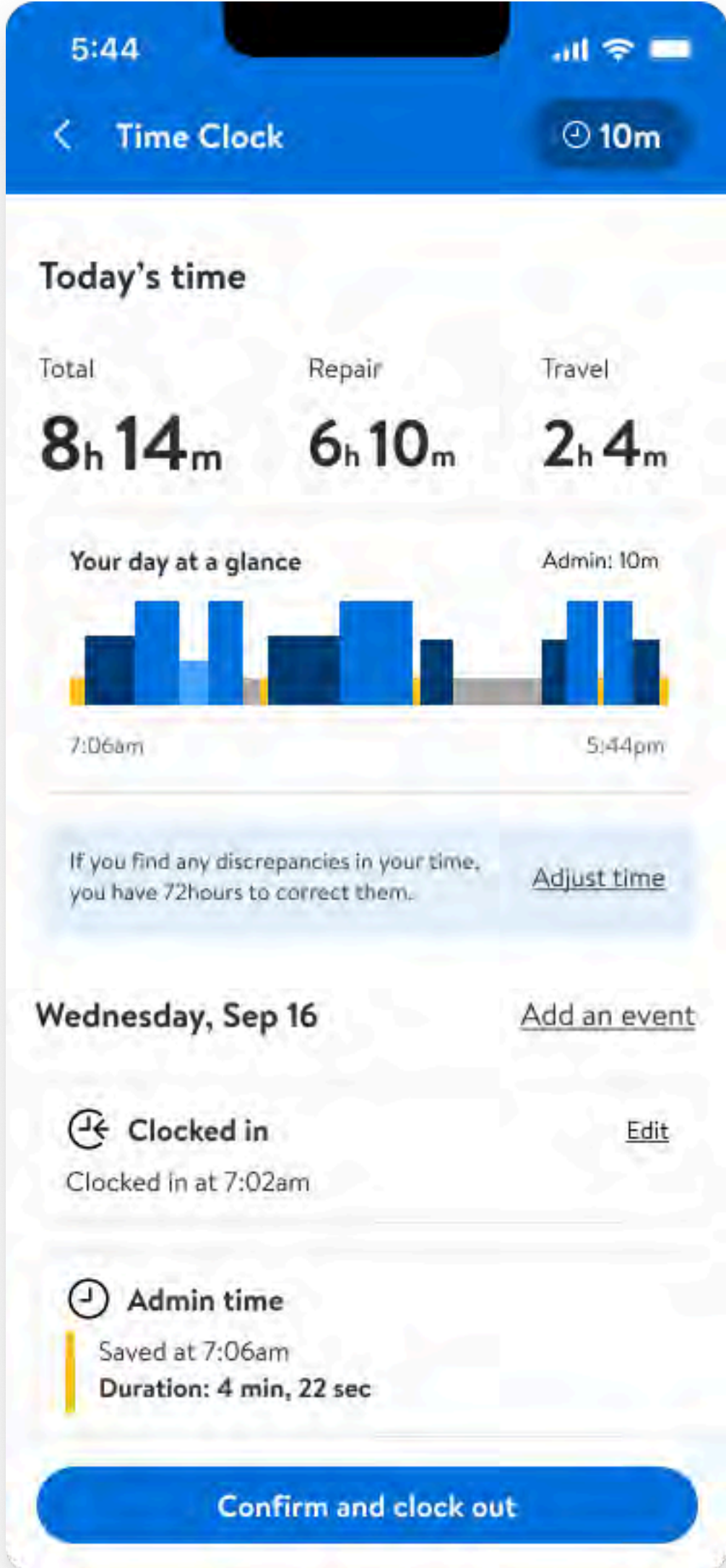
Repair



Lunch break



End of the day



Time clock

Conclusion

I left this team and project after delivering Engineering ready files. But I'm proud of where we improved the tool, all our partners from senior leadership to technicians were thrilled and believed this updated tool, would help streamline store facility management from a technician's perspective.

What I learned

This project really put into perspective the importance of research. Understanding the current tool and listening to technicians, unlocked my thinking allowing me to design a improved experience.

There were many challenges with a large project. Mostly, coming to a solid understanding with our partners, and robust roadmap that indicated on the moving parts.

Cheers!