

Management Supertool

Jonathan Chang | Virtual Facility | 2024

Quick disclaimer

This case study focuses on one aspect of a broader, multifaceted initiative that I led. As a result, you may notice some overlap between this case study and the Reconceptualizing Navigation study.

Create work

Workspace

Inbox

Views

Analytics

Your Teams

Area C - Electrical Team

Inbox

Views

Inbox

All

Spaces

Equipment

New Issues (7)

● Building 1 AHU-KP-6-7 4h 30m

Service failure
0 of 35 spaces affected

● Building 4 Chiller 1h 26m

Non-service failure
0 of 35 spaces affected

● Jonsson - CWT 6 58m

Non-service failure
0 of 35 spaces affected

● Building 8 Operating Room 805.3 43m

Non-service failure
1 of 35 spaces affected

● HBC CHW 10-3 26m

Service Failure
10 of 35 spaces affected

● Saint Marks AHU-SM-10-4 22m

Non-service failure
0 of 35 spaces affected

● Jonsson - Chiller 4 17m

Non-service failure
0 of 35 spaces affected

Pending (3)

● Saint Marks Flr 6 Operating Room 104 1h 4m

W03843 40m
Service failure
1 of 35 spaces affected

● Saint Marks AHU-SM-6-5 50m

W03844 32m
Service failure
7 of 35 spaces affected

● Building 3 VAV-3-5 44m

W03845 5m
Non-service failure
0 of 35 spaces affected

In Progress (4)

🔧 Building 4 - AHU-AS-2-2 3h 19m

W03842 3h 12m
Bill Collider 1h 20m

🔧 Jonsson Flr 3 Patient Room 304 2h 49m

W03842 1h 33m
Amy Urban 58m

🔧 Building 1 Heat Exchanger 1038 1h 20m

W03842 1h 18m
Joel Huynh 1h 10m

🔧 Building 4 Flr 12 Operating Room 304 50m

W03842 45m
Tim Terroni 32m

Automations

Today

4:55 pm W4773 created for Building 3 AHU-6-7

4:43 pm W4768 created for Chiller 3

3:39 pm A10644 added to W4053

3:30 pm A13558 added to W4450

3:18 pm W4724 created for HBS AC-5-34

3:12 pm W4613 created for Operating Rm 194.4

2:45 pm W4585 created for Basement 10.05

2:15 pm A10611 added to W4467

Yesterday

11:42 pm W4217 created for Jonsson VAV-19-3

11:40 pm A11953 added to W4104

11:38 pm W4123 created for Condenser 3-4

11:21 pm A11865 added to W4334

10:54 pm A11200 added to W4090

8:57 pm W4085 created for AHU-5-105

7:57 pm W4079 created for Building 1 HE-4-5A

7:22 pm A10749 added to W4208

7:01 pm W4064 created for Building 9 VAV-6-7

6:21 pm W4047 created for Building 2 VAV-1-4

4:22 pm A12060 added to W4064

3:51 pm W4017 created for Operating Rm 105.4

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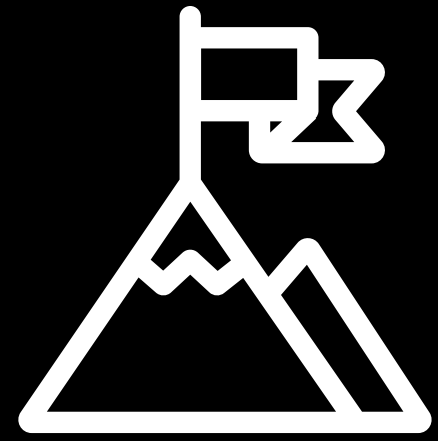
Overview

Virtual Facility (VF) had a Series A fundraise planned within the next year. One important aspect that was required was to increase our ARR.

Unfortunately, the customer success team reported that many customers weren't utilizing the product and was leaning towards not renewing.

The team wanted to understand why customers weren't engaging in the product and utilizing various features as expected. The final goal was to ensure renewals by increasing engagement and support over varying processes.

As Lead Designer, I focused on leading the discovery and design initiative.



Business Goals

①

Reduce customer time to value

Reduce the time customers wait to experience value after purchasing the product.

②

Boost the engagement

Increase the number of users using Virtual Facility to triage alarms and increase actions taken.

③

Maintain customer satisfaction

Ensure the product fulfills the customer's primary reason for purchasing.

01

Insights

Building insight

Internal conversations

I organized knowledge-sharing sessions with various internal team, discovering reported issues and aligning mindsets.

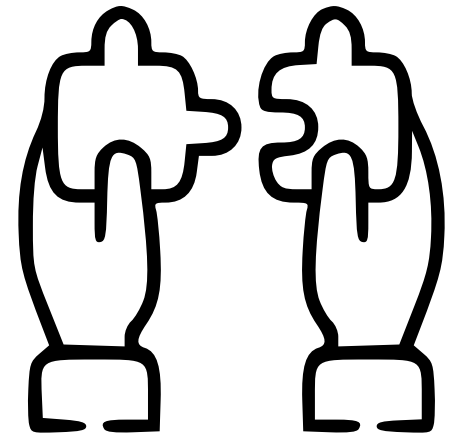
Shadowing & user interviews

Shadowing customers provided context on their workflows. Interviews were conducted when shadowing wasn't possible.

Metrics

I leveraged metrics from Pendo and the Engineering team to gain insight on user behaviors.



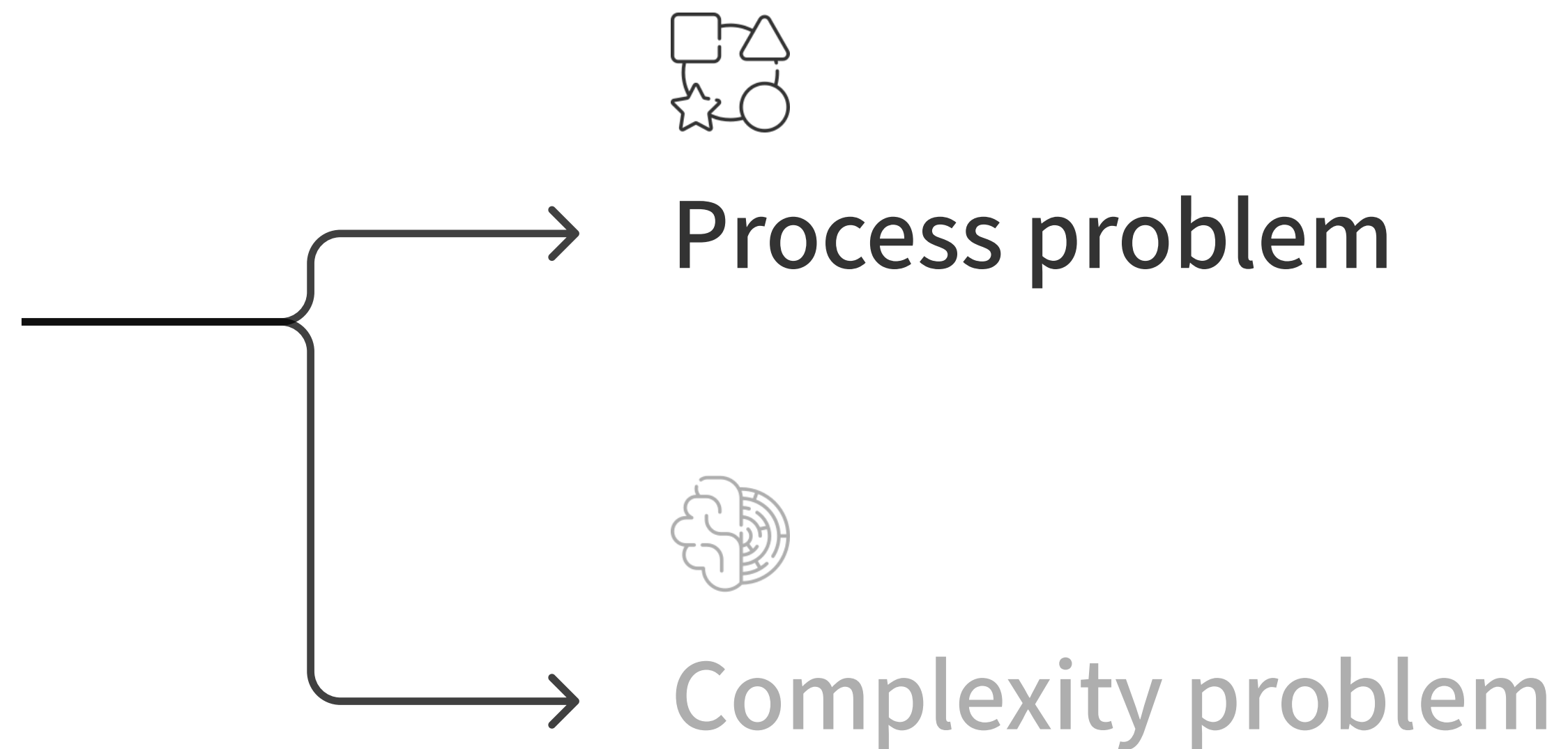


Recognizing the problem



Internal troubles

Internal misalignments and misfocus at VF contributed to worsening the problem.



Process problem

Complexity problem

02

Internal troubles

Internal troubles

Limited perspectives

The champions Customer Success and Leadership had cadences with focused only on the managerial aspect of the product.

Roadmapping for champions

Due to constant communications between Leadership and customer champions, our roadmap was heavily influenced by champion requests.

Ambiguous personas

Due to the varying customer structures, the persona definitions would changed based on who was speaking.

Internal troubles

Limited perspectives

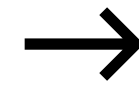
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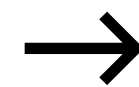
Ambiguous personas

Due to the varying customer structures, the persona definitions would changed based on who was speaking.



False sense of positivity

Aging champions valued leaving a legacy and focused on short term achievements, constantly praising our efforts.



Pressuring Customer Success

Focusing on champion requests didn't allow for improvement in other aspects of the product, increasing support requests.



Increased miscommunications

Cross-functional communication suffered resulting in unclear directions and mistakes.



Champion feedback

Re-evaluating feedback value

A quick change we made was to how much the company would value requests coming from these champions.

User panel and questionnaires

Due to the difficulty of meeting with end users, I started an initiative to find and create a user panel. Additionally, I pushed to include in-app questionnaires.



Realigning personas

Focusing on workflow

With a short turnaround and the wide breadth of responsibilities of each role, I proposed thinking about our users through workflows.

North Star

In transitioning to the user problems, this crucial shaped how I thought to simplify the product.

Results & Prioritization

Support and bandwidth

The reassessment in the value of champion feedback helped reorganize our roadmap, freeing up bandwidth to tackle larger initiatives.

Prioritizing customer problems

With the change, I worked with my PM to prioritize the identified issues based on size and potential business impact.

03

Process problem

The process problem

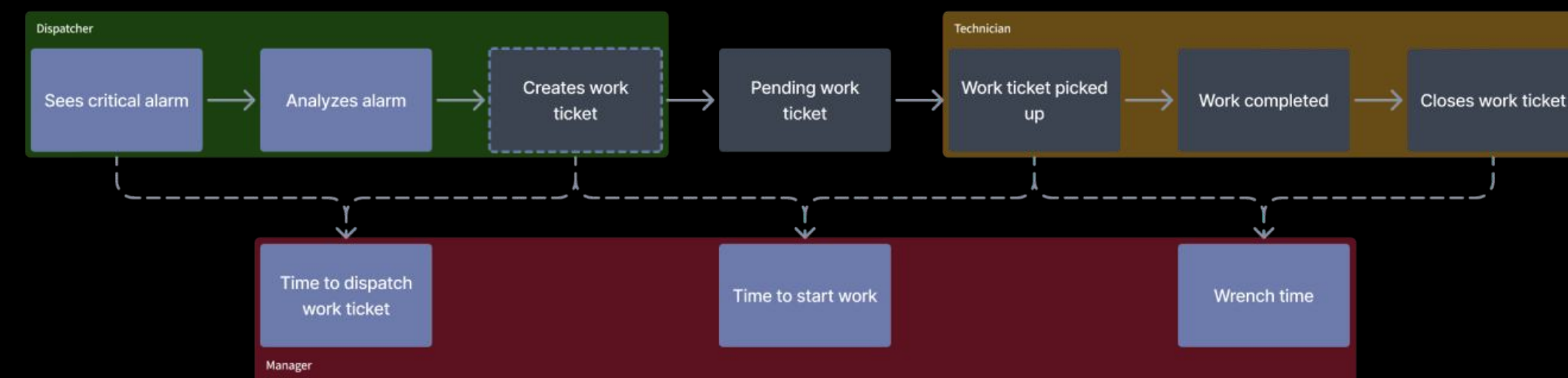
Varying processes

The rigid solution VF delivered did not fit many customer's processes, complicating their workflows instead.

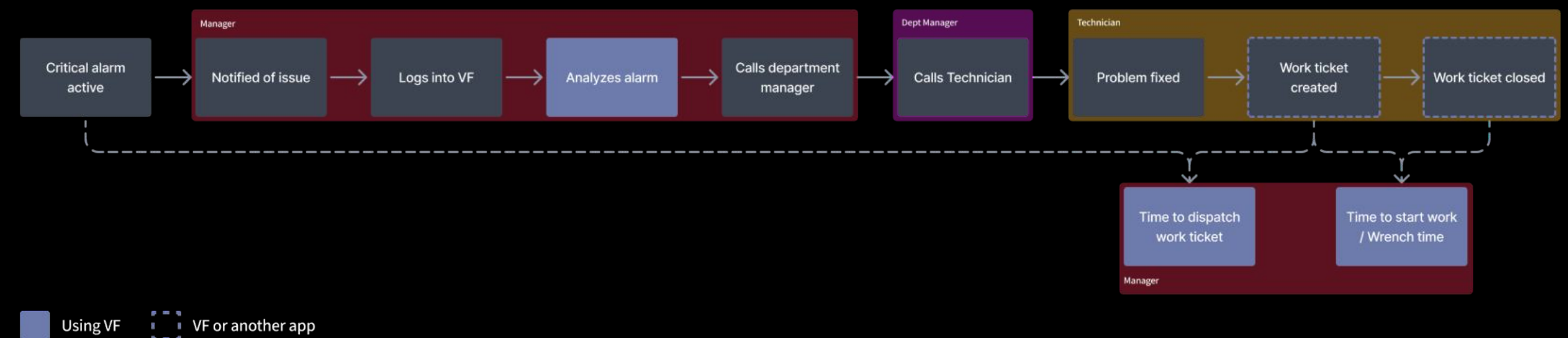
Little to no benefit

End users found the solution too similar to their current tools while offering little upside.

Ideal VF process



Customer process



■ Using VF □ VF or another app

Finding direction

Avoid replacing tools

Designing a solution that helps users replace their antiquated tools would require extensive work with little benefit.

A common thread

I wanted the solution to be flexible in order to support a wide variety of users.

Creating a holistic vision

I saw various opportunities for VF to grow its product. My goal was to connect different ideas with my design vision to create a cohesive experience.



The Kanban solution

Issue name replaces the need to remember alarm and work ticket names.

Thousands of alarms consolidated down to a few 'issues.'

Contextual information shown based on what step an issue was in.

The screenshot displays a Kanban board for a Virtual Facility. The board is organized into columns representing different stages of issue resolution: 'New Issues (7)', 'Pending (3)', 'In Progress (4)', and 'Automations'. Each card in the 'New Issues' column provides contextual information such as the issue name, status (e.g., 'Service failure'), and the number of spaces affected. The 'Automations' column shows a timeline of events with timestamps and associated work ticket IDs. A sidebar on the left contains navigation options like 'Workspace', 'Views', and 'Your Teams'. Red lines connect the text boxes on the left to specific elements on the board: the first line points to the issue name 'Building 4 Chiller', the second line points to the 'New Issues' column header, and the third line points to the 'In Progress' column header.

Looking towards the future

Legacy Tower / 5F / AHU-5-2

AHU-5-2

Create work

Alarms Recent History Relationships Details

Service Failure & Warning Alarms

- Temperature Supply High 23m

Show inactive alarms

Non-Service Failure Alarms

Potential Cause

- AHU-5-2 Temperature, Relative Humidity

Related Equipment

No related equipment issues found

Related Spaces

5th Floor

- Operating Rooms 4 of 20
- Pharmacy 2 of 4
- Exam Rooms 0 of 20

6th Floor

- Patient Rooms 0 of 20
- Treatment Rooms 0 of 44
- Libraries 0 of 32

W10493 Resolve AHU-5-2 Temperature and Relative Humidity

6 of 120 Temperature Relative Humidity

Overview Recent History

Potential Cause

- AHU-5-2 Temperature
 - Supply Temperature High 24m
 - Supply Relative Humidity High 32m
 - Cold Deck Temperature High 1h 50m

Related Equipment

No related equipment issues found

Related Spaces

5th Floor

- Operating Rooms 4 of 20
- Pharmacy 2 of 4
- Exam Rooms 0 of 20

6th Floor

- Patient Rooms 0 of 20
- Treatment Rooms 0 of 44
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Details

Work ID: W10493

Objective: Resolve AHU-5-2 Temperature and...

Problem Details: High humidity is being detected in v...

Assigned To: Rick Sanchez

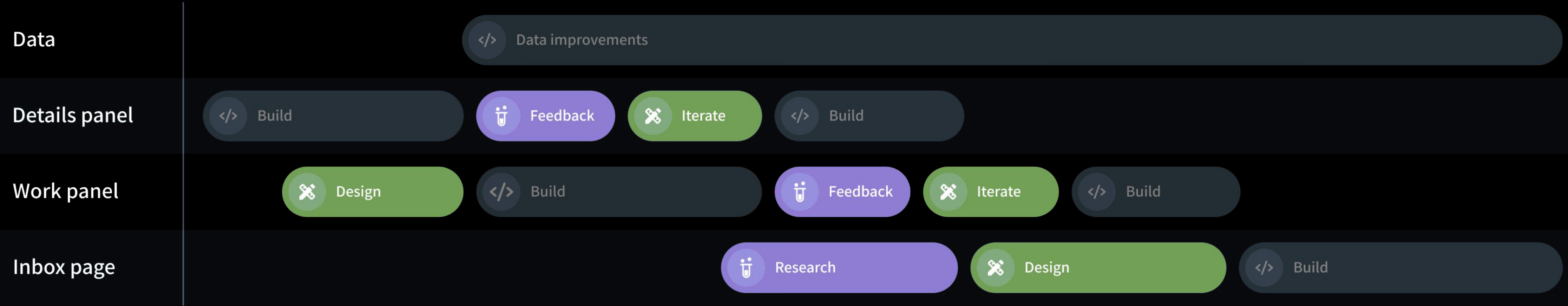
Due Date: 04/02/2024 12:00 pm

Created By: Alfonse Hayes

Created On: 04/01/2024 4:34 pm

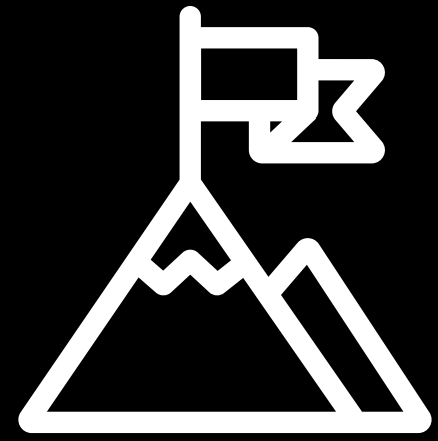
Planning the execution

I worked with the PM and Engineering team to separate the solution into manageable increments.



04

Conclusion



The solution marked a new direction for Virtual Facility

+74%

Increase in critical alarms being actioned

+34%

Increase in customer engagement

-11%

Reduction in time to value for customers



Thinking forward

1

Explore ways for users to improve relationship data

In order to support new solutions, we needed to focus on improving relational data.

2

Expand the workflow concept and rebuild personas

The workflow concept was only an intermediate step.

3

Stay true to the new design principles

I wanted to ensure teams would use the new design principles as a guide for future projects.

Reflection

The collaborative effort and the teams willingness to adapt, allowed us to significantly improve key metrics and create a long-term impact on Virtual Facility.

The launch of the new features helped stabilize most of the negative sentiment customers had towards the product, with most customers extending their contracts.

A key takeaway from this project is the importance of having a good and trusting relationship with cross-functional teams. That relationship is crucial in getting excitement and support for your solutions.

Thank you!

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