



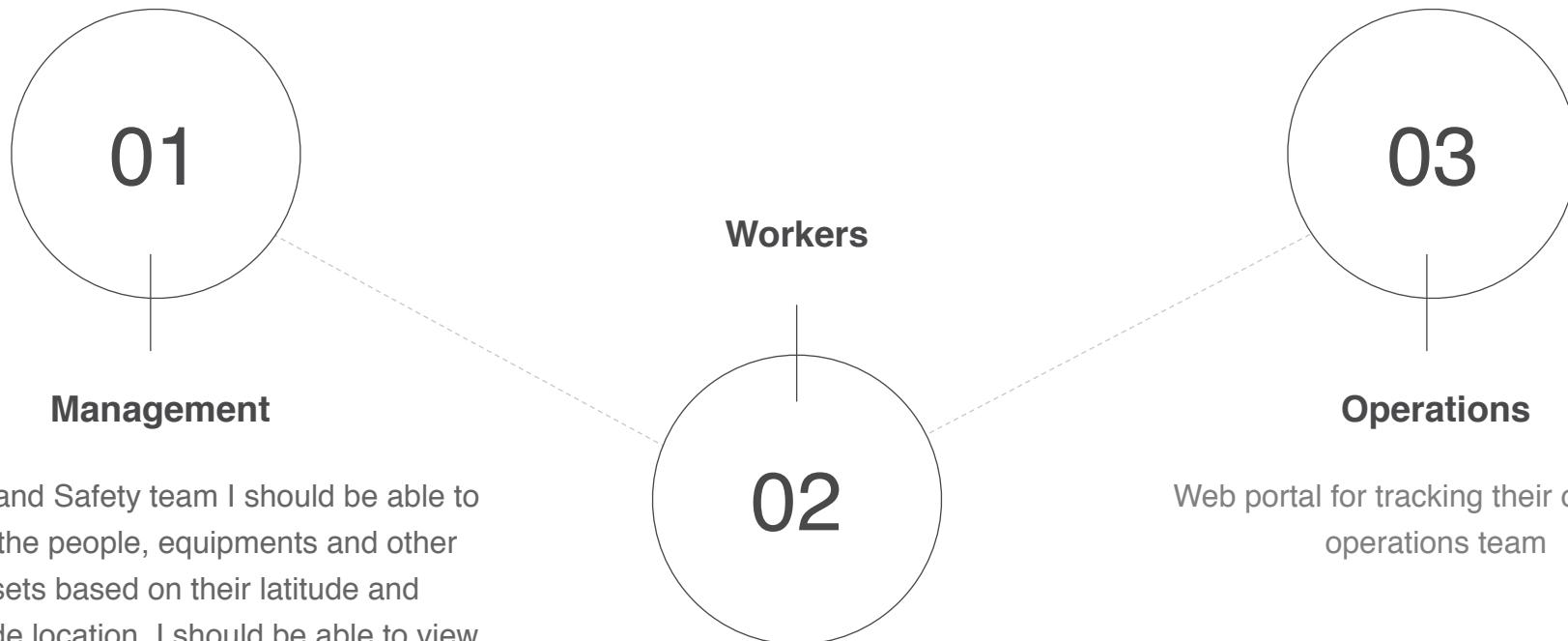
# User Experience

**Mine management from the scratch**

A study about the ecosystem, understanding the pain points and define the approach. A lean UX approach to the system.

# The Problem

Sirius Minerals Location Tracking is a web portal for tracking their on ground operations team. This can be achieved through tagging radios with each entities that can be people, equipments and other assets. Application has to display the entities location on map with history. Administrator can update the location or allocation of any entity through app.



# Our Thinking Process

Defining the experience from scratch, especially for the mining industry was a challenge. We have done the end to end research about requirement, industry and competitors. The consolidated data made us to create a roadmap and made a progressive plan.

## 01

### Analysing the requirements

Design solves a problem. In order to provide a solution, you first need to understand the problem. To analyse requirements, follow industry standard user research methods including contextual and individual interviews, while observing the users in real environment. But we adopt the lean methods by trusting the realtime data and factors from the investors and define our target goals.



### OUTCOMES

A bunch of ideas and material on which you can build your actual design work

## 02

### Doing the research

Research is the basic key step to design user experience. Design team does their research work to explore how the outer world is working on such features. Keep an eye on the latest UI trends, design principles and your existing user experience guidelines.

#### Activities

- Study of competitors' approaches
- Research on similar features in the world
- Analysis of latest UI/UX trends, design principles and rules
- Keep an eye on your own UX guidelines

## 03

### Defining the User Experience

Designing is not something that you just create and start using it. Draw and draft and redraw and redraft, thus creating an unmatched experience.

Testing and evaluation of wireframes is part of this stage. Design team builds initial mockups and share with stakeholders to get their input.

Throughout the process, it is important to keep your goal in mind—make a usable design to achieve end user satisfaction.

# Our Goals

Designers goal is to create product that is:

**1**

**Useful**

Does it do something people need done?

**2**

**Learnable**

Can people figure out how to use it?

**3**

**Memorable**

Do they have to relearn it each time they use it?

**4**

**Effective**

Does it get the job done?

**5**

**Efficient**

Does it do it with a reasonable amount of time and effort?

**6**

**Desirable**

Do people want it?

**7**

**Delightful**

Is using it enjoyable, or even fun?

**8**

**Scalable**

Can the software scale up to 10X?

**9**

**Intractable**

Does the user have an interaction?

# Persona & Objective

Personas and scenarios work together to accomplish a single goal: for the team to understand how the design should adapt to the needs of different users.

## John Tueger

Field manager WOODSMITH MINE , Sirius Minerals



### Description

Mr John is the in-charge of field operations of Sirius Minerals. He need to check the positions and movement of each object in the field to understand risk, disasters and tracking of things. He need to understand where the workers and machineries are and how long they stand in the position. He need a live tracking view of the field and look into the data and take necessary actions. The same criteria is applicable for all his fields.

### Objectives

- ❖ View all live entities in field
- ❖ Track entities and know the history vs time
- ❖ Switch to multiple fields and do the above actions
- ❖ Analyse movement and avoid risks

# Day 1 : Analysis

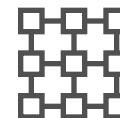
Mining is a new term of is digital space despite from our experience. We took all the data from web research had a clear cut of model and domain. We had collected all possible data from experts and internet.

Our focus was on



## Domain Understanding

Lean research to understand the domain and define common rules



## Information Architecture

IA is a blueprint of the design structure which can be generated into wireframes and sitemaps of the project.



## User Flows

Journey Maps try to capture the experience of a user during the interaction with the products.



## Task Flows

Task flow is a single flow completed similarly by all users for a specific action.



## Q&A Question

To understand more about the product, domain and understand the requirement completely



## Persona

Create mock user stories and scenarios to get into the shoes of users



Day 1

Day 2

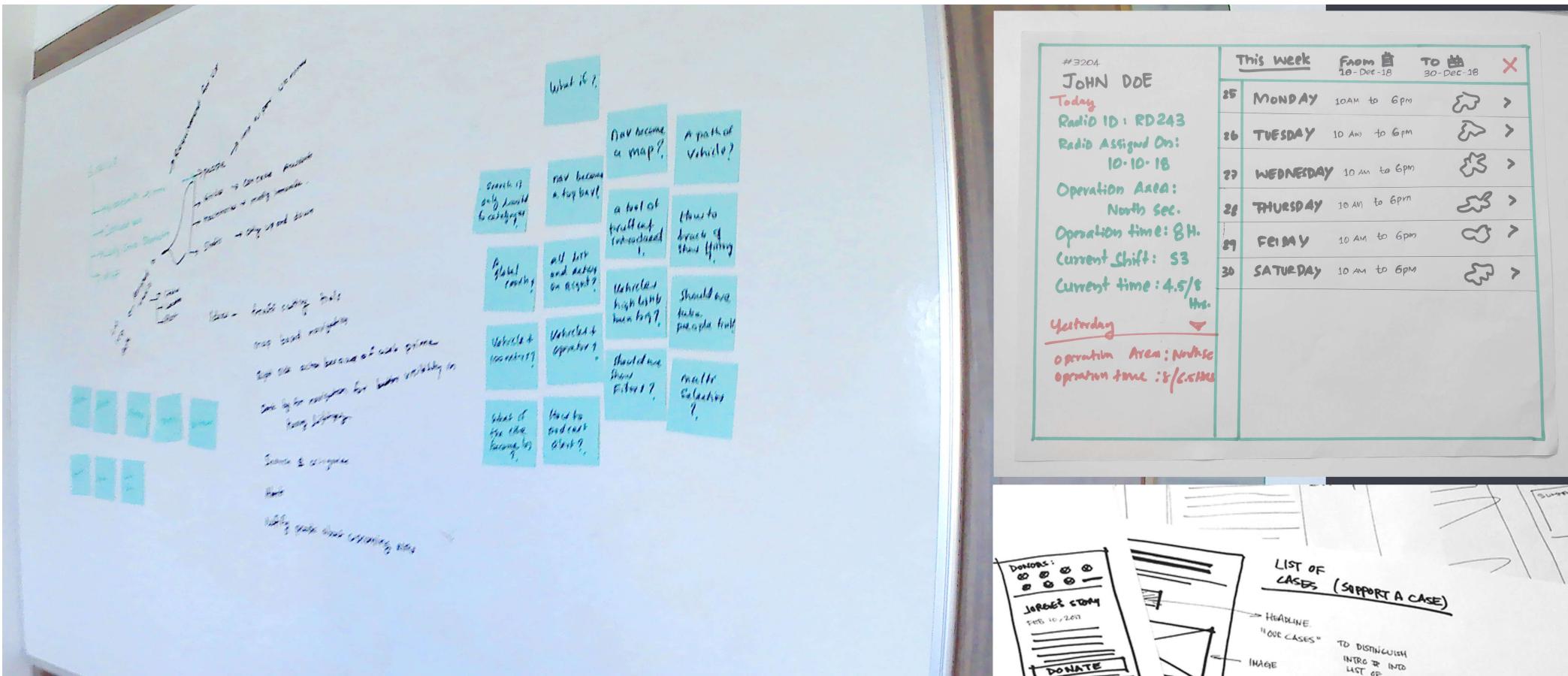
Day 3

Day 2

Day 3

# Day 2 : Workshop & Sketch

We believe in team work. User experience is a team work. We ideate, discuss and sketch. I have done card sorting for identify the relevance of information. Draw paper sketches, white board flows and wireframes to share your ideas with stakeholders.



Day 1

Day 2

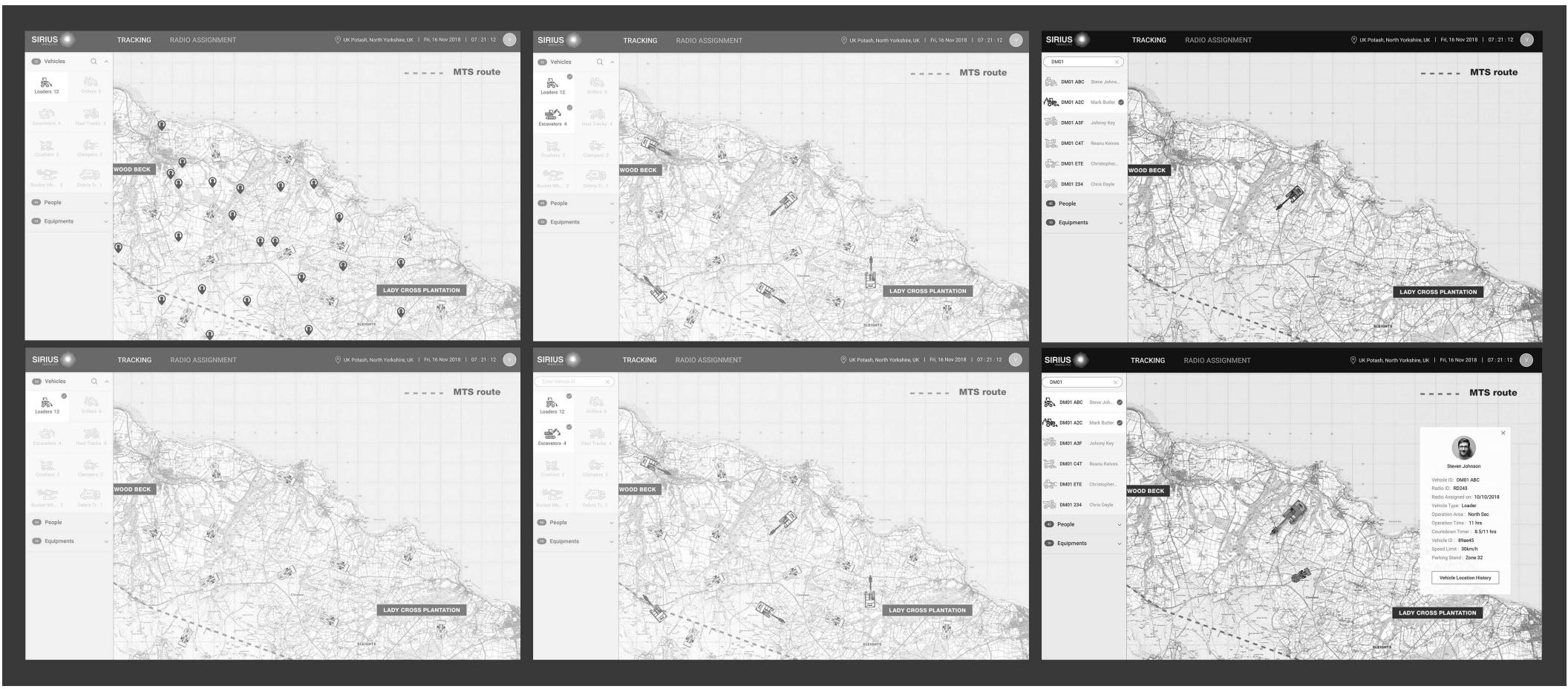
Day 3

Day 4

Day 5

# Day 3 : Wireframes

Now you have finalised layout and flow of the required interface with you, the next step is to work on wireframes. Turn the initial ideas into wireframes to get the basic layout and capturing the function elements. The wireframes shared with customer and that helped them to apply their imagination about the software and aligned with the business goals.



# Day 4 : Visual Designs: Colours & Iconography

User experience design involves many processes which need to be done thoughtfully so that an interface would meet the needs of the target audience. Each step requires deep attention to details, even if it doesn't seem too complicated.

## Colors

Brand Logo ➔ 

COLOR PALETTE

Elementary

			
#201C4C	#2D2D70	#35479C	#4F5CA9

Secondary

			
#969ECF	#E1E5F2	#000000	#EBEBEB

## Icons



Worker



Vehicles



Machines



Shafts

Day 1

Day 2

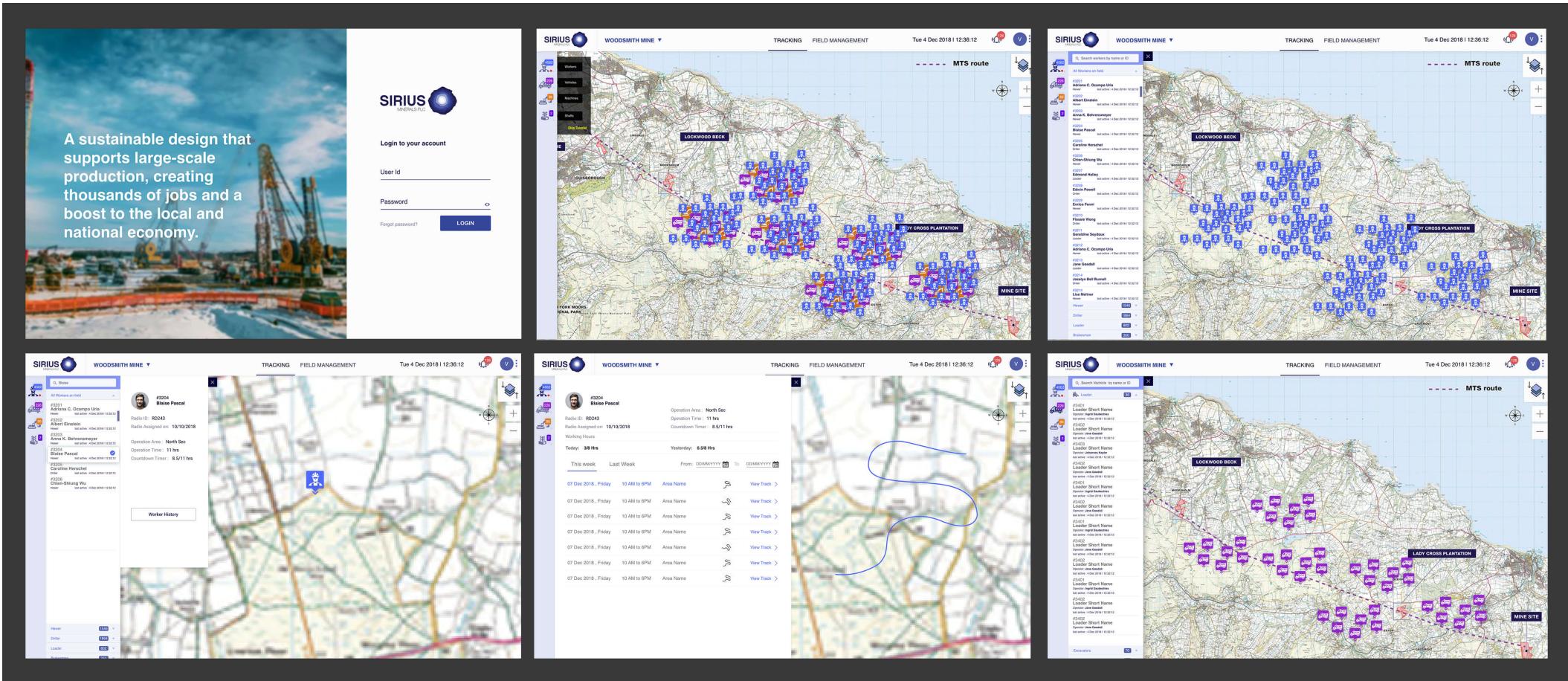
Day 3

Day 4

Day 5

# Day 4 : Visual Designs: Screens

Visual design is overlooked by UX designers. Either designers think it's someone else's role, or they simply think it's beneath them to care about it because they are worried about the "big picture stuff."



## Day 1

## Day 2

## Day 3

## Day 4

## Day 5

# UX Design Concepts

We just don't do design. It's a series of steps goes until the release of the product. We will present our design infant of the stakeholders, developers and designers. We have 3 major steps in delivery.

## Design Considerations



### User centric & not business

usability vs time is the key



### Graphics oriented

Providing summary in a snap is the focus



### Eagle eye approach to give the top view

Reduces time for managing operations



### Funnelled operations

Ease of finding information.

## Design Goals



### Map view approach

For the first view 80% of the viewport is map with trackers.



### Show live not a table

A modern approach for getting tracking from UI



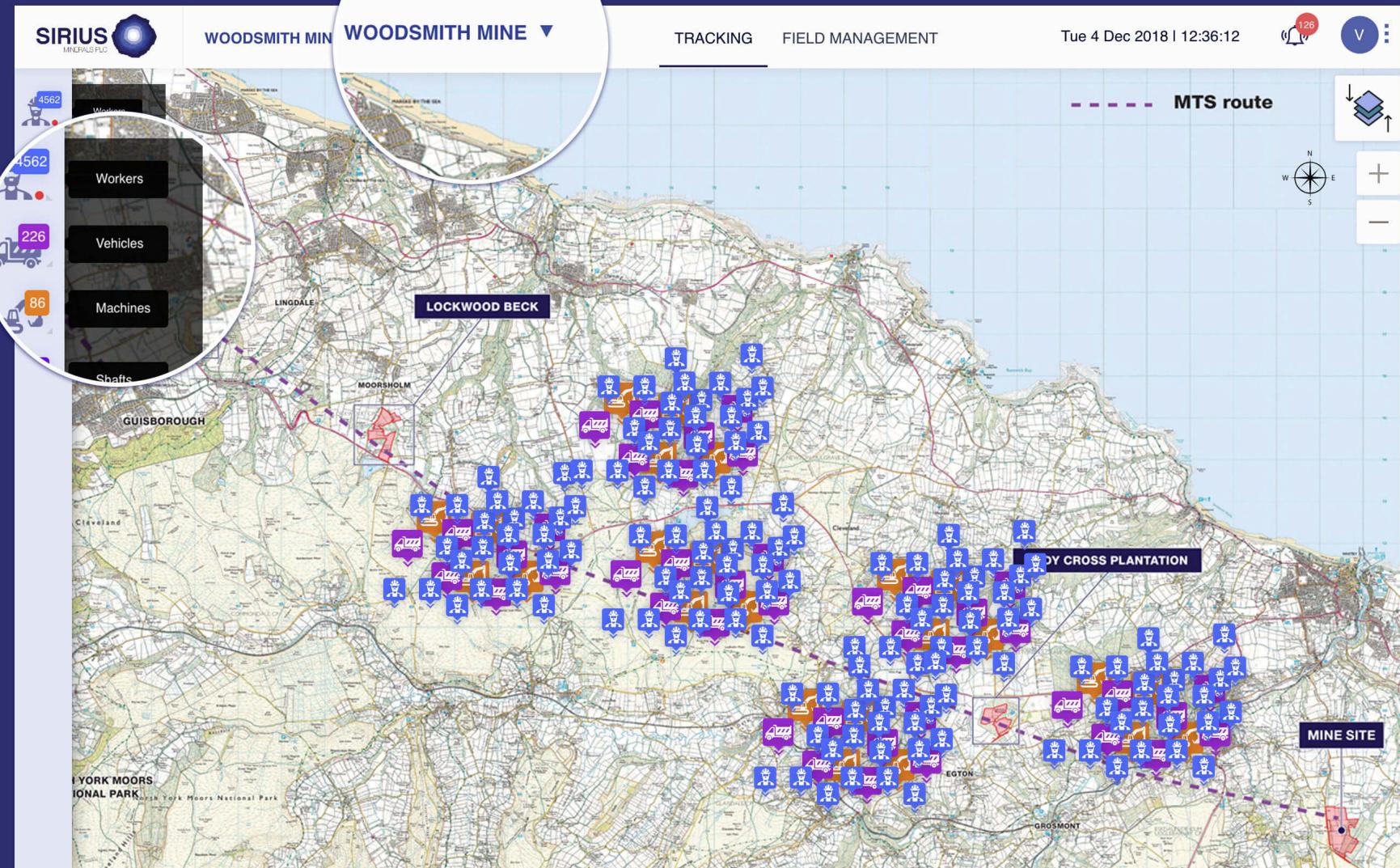
### Progressive disclosure

Funnel view towards the data makes easy to find



### Keep in the same page

Keeping the user in the same page and managing load by interactions.



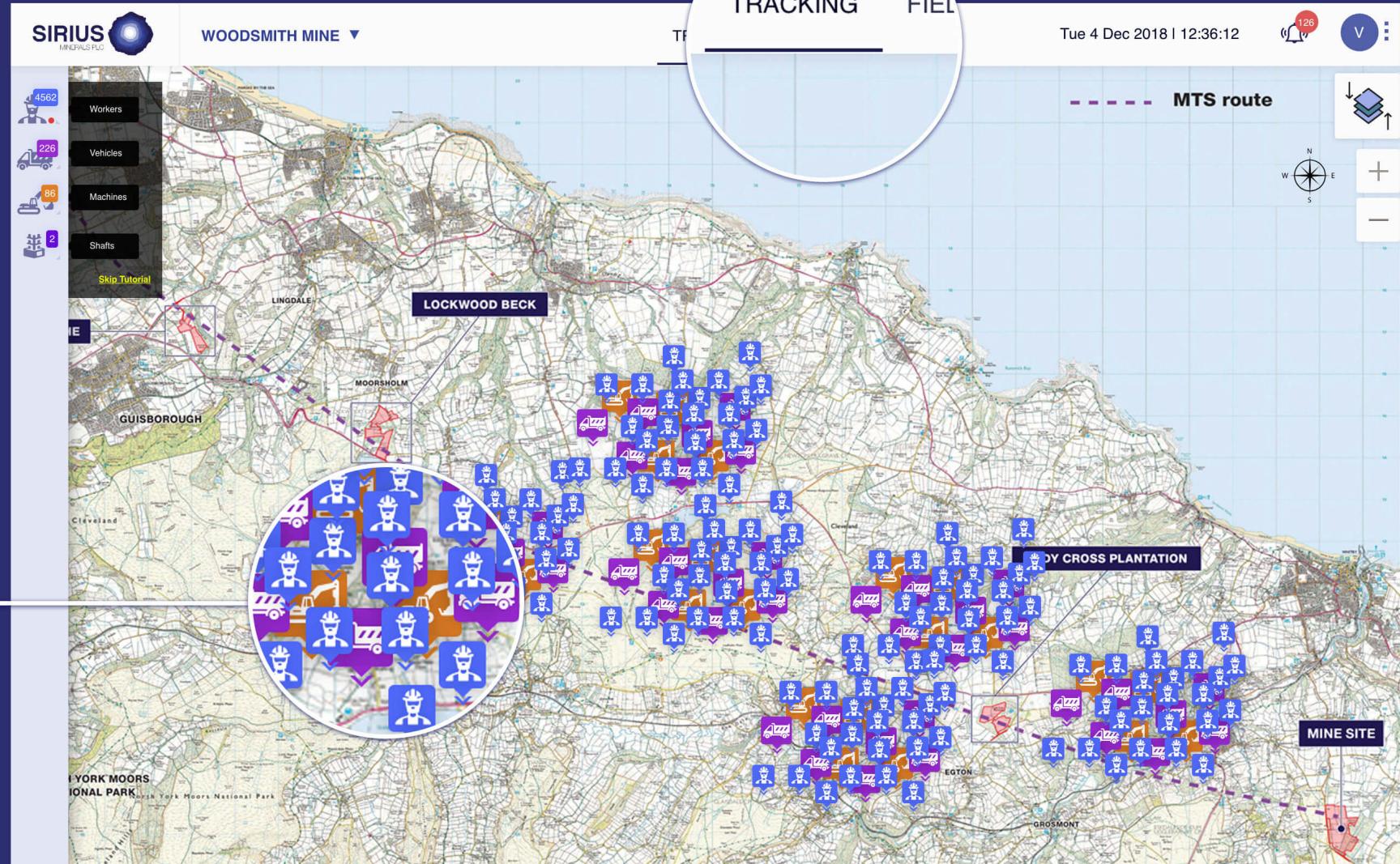
TRACKING

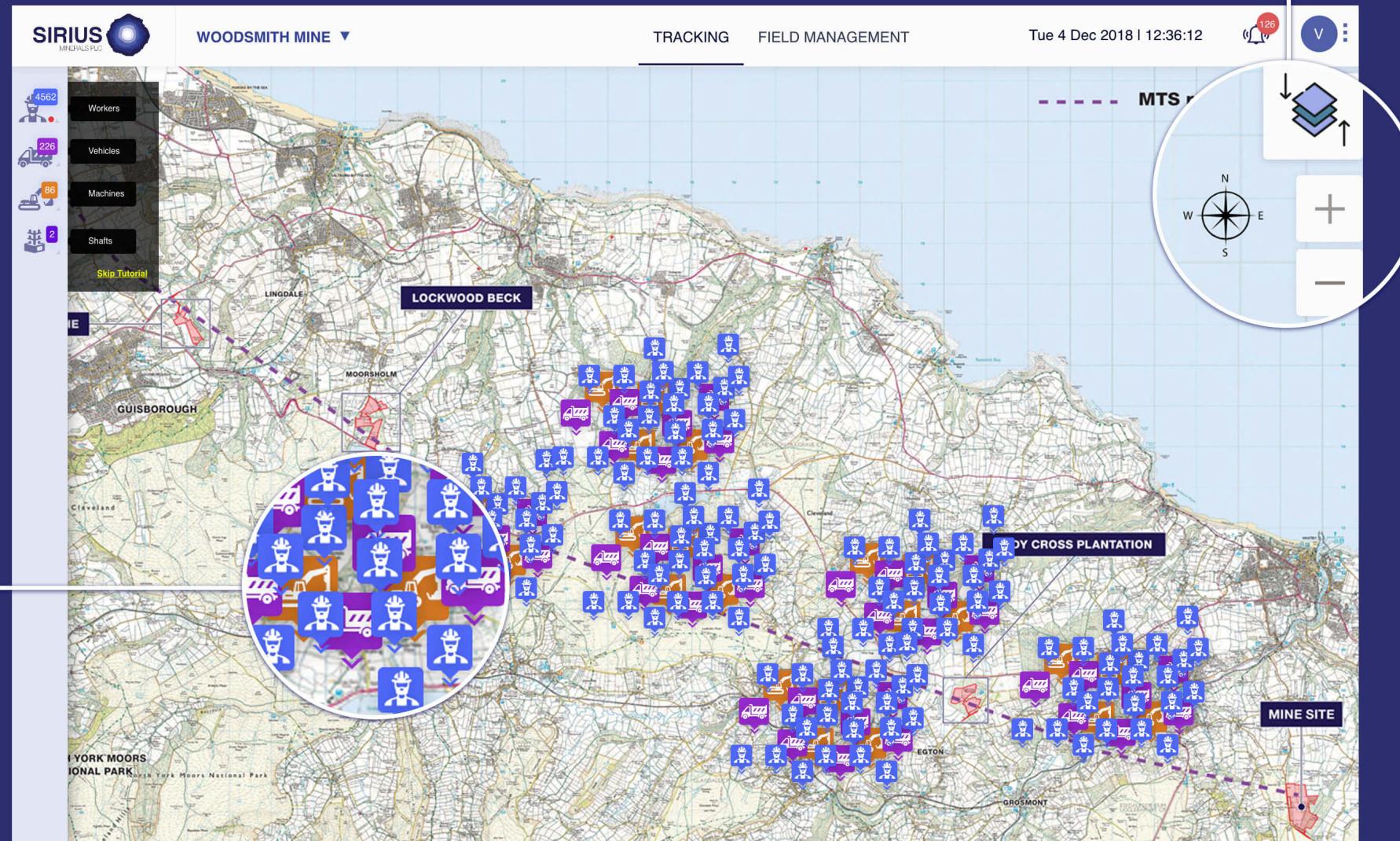
FIELD

Tue 4 Dec 2018 | 12:36:12



V





The screenshot shows the SIRIUS MINING software interface. At the top, there is a header with the SIRIUS logo, a search bar, and navigation buttons for 'TRACKING' and 'FIELD MANAGEMENT'. The date and time 'Tue 4 Dec 2018 | 12:36:12' are also displayed. A red circular badge in the top right corner indicates 126 notifications.

The main area is a map of a mining region with several locations labeled: 'LOCKWOOD BECK', 'MOORSHOLM', 'JOY CROSS PLANTATION', 'EGTON', 'GROSMONT', and 'MINE SITE'. A dashed purple line labeled 'MTS route' is shown. The map is overlaid with a grid and includes a compass rose and zoom controls.

A detailed list of workers is displayed on the left side of the map, categorized by role. The list includes:

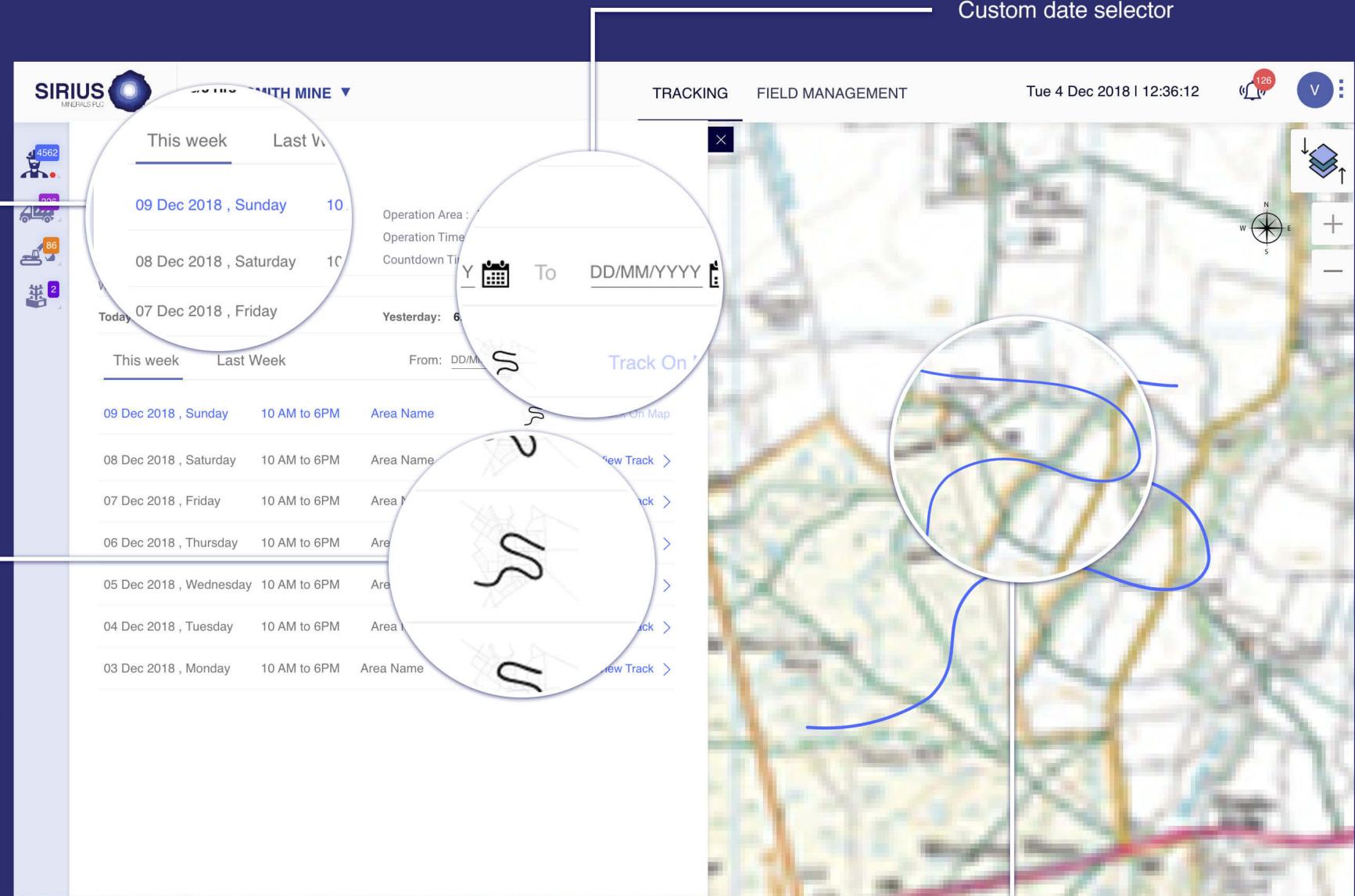
- #3201 Anna C. Ocampo Uria (Hewer, last active: 4 Dec 2018)
- #3204 Blaise Pascal (Hewer, last active: 4 Dec 2018)
- #3205 Caroline Herschel (Driller, last active: 4 Dec 2018)
- #3206 Chien-Shiung Wu (Hewer, last active: 4 Dec 2018)
- #3207 Edmond Halley (Loader, last active: 4 Dec 2018)
- #3208 Edwin Powell (Driller, last active: 4 Dec 2018)
- #3209 Enrico Fermi (Hewer, last active: 4 Dec 2018)
- #3210 Flossie Wong (Driller, last active: 4 Dec 2018)
- #3211 Geraldine Seydoux (Loader, last active: 4 Dec 2018)
- #3212 Adriana C. Ocampo Uria (Hewer, last active: 4 Dec 2018)
- #3213 Jane Goodall (Loader, last active: 4 Dec 2018)
- #3214 Joe Meitner (Hewer, last active: 4 Dec 2018)

Below this list, there is a summary of worker counts by category:

Category	Count
Hewer	1546
Driller	1864
Loader	802
Brakesman	350

Second level search & sort by sub category

Categories view for making meaningful information & giving a summary by count



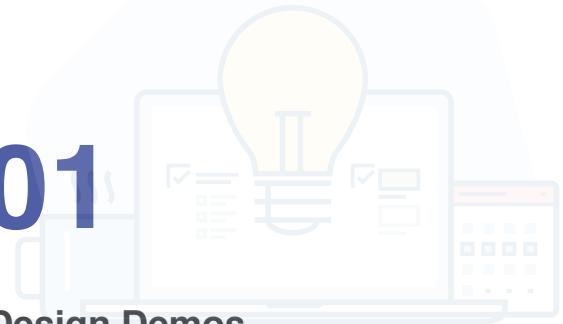
## Weekly view for tracking-history

Minimal map view for each day according with time frame.

## Footpath tracking on map

# Design Delivery

We just don't do design. It's a series of steps goes until the release of the product. We will present our design infant of the stakeholders, developers and designers. We have 3 major steps in delivery.



## 01

### Design Demos

Once we are ready with the designs, we undergoes with a series of design demos with stake holders for aligning the lean UX towards the cost and business goals. The same style of walkthrough happens with developers to understand the technical possibilities and aligning with the delivery sprints. The suggestions from both ends will be validated and added in the next iteration. We follow Agile methods so that the risk factor reduced to 80% in future.

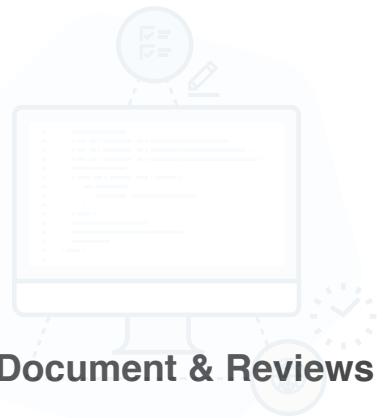


## 02

### User Journey, Assets & Style Guides

Once the designs are approved, we share the user journeys and give a walkthrough about human interactions in software. We cover all edge cases and manage the features based on behaviour and user centric interactions.

Developer need the elements to create User Interface as perfect in as design. We create SVG elements and other icons and images and use Zeplin as a collaborative tools for style guide.



## 03

### Design Document & Reviews

Once the developers are started or the design phase is over, we create a document about the design philosophy and shared with the stake holder to keep them as a reference for the future scaling of the software.

The reviews of UI after development will happen in regular intervals to ensure the quality of output from UI. We plan the intreats to reduce the user load for doing actions and test with the classified set of users and take a usability.

Thank You

