Innominds
Powering the Digital Next

Asset-tracking solution with engaging user experience helping construction professionals to easily find, track and manage assets

CASE STUDY

Client

The client, is a billion-dollar company servicing various industries like agriculture, building, construction, geospatial, natural resources and utilities, government, transportation, etc. It is also an IoT-asset tracking company offering solutions for real-time location and condition tracking of assets at construction sites.

The Client Need

Initially, the company wanted an asset-tracking solution to help its end-clients utilize the tools better and prevent unnecessary purchases or inventory build up, prevent the theft, misuse or loss of tools. Their end-clients also spent a lot of time searching for tools at building sites and often did not maintain the assets well.

SaaS-based model

The client therefore wanted to be able to not only track its assets in use at sites and in warehouses but also ensure proper maintenance to extend the life of the assets.

Eventually, the asset-tracking solution would be instrumental in helping the company switch to a SaaS-based business model. Such a move would require connecting the assets and tracking their usage.

Connecting and tracking assets

With more than a million assets (from small drills to extremely large and heavy machines such as cranes and earthmovers) to track around the globe, the company needed a comprehensive solution that could track not only the location, but also their use and condition of these assets when these are leased out. This would also mean fitting each piece of equipment with a sensor for tracking. The solution would need to allow multi-tenancy (allocation, provisioning and de-provisioning of assets). The company also wanted to help their clients locate the right tool at the right time to improve operational efficiency.

The company turned to Innominds for our expertise in connected devices, analytics, software engineering, and design and experience engineering to help build a solution.

What We Did

Understanding client goals

We build the solution from the ground up, starting the journey with a **design process workshop** to understand the client's business goals and product vision, target users and goals, create the user journeys, define the design strategy and the information architecture, finalize the visual concepts and specs, create detailed designs and conduct feedback sessions with end users and iterate the designs.
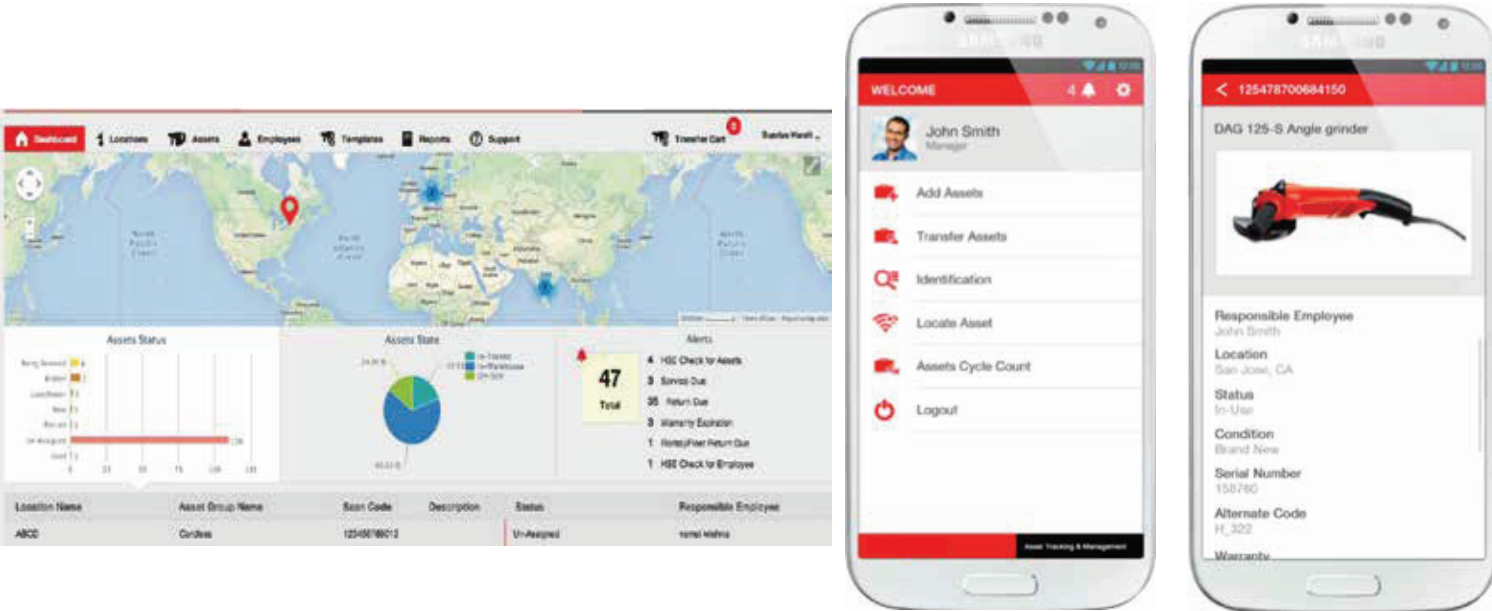
Mock-ups and wireframes for superior user experience

Based on mobile form factor, detailed wireframes were designed to achieve best possible user experience, keeping in mind the OS platform patterns and capabilities.
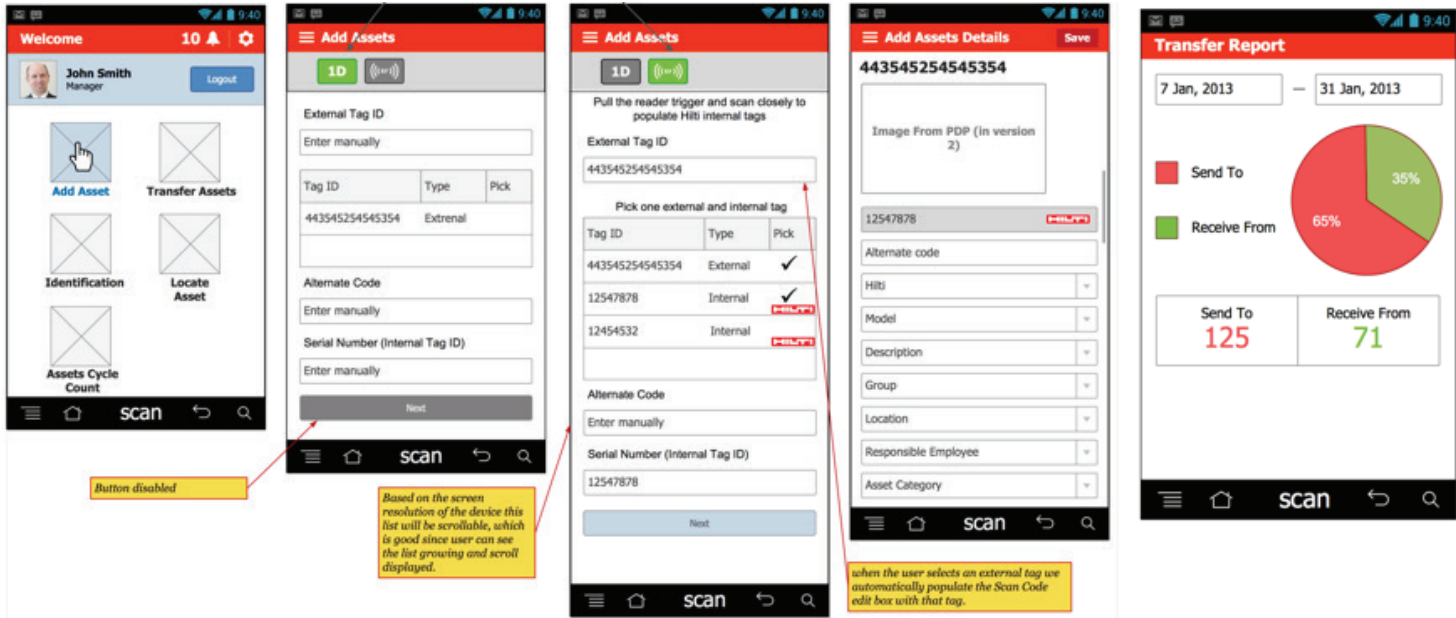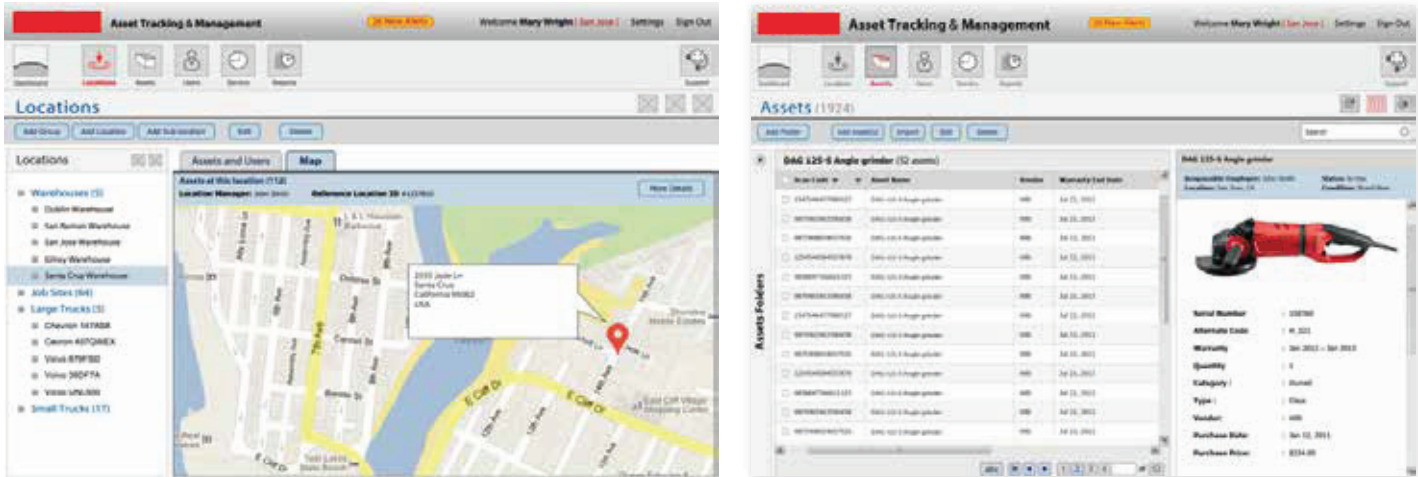
Designed the finished product look and feel applying the client's brand guidelines.

We developed **solutions for web, mobile and smart phone reader** and built single responsive page applications with **modern web application frameworks.** We leveraged resuable components and library to provide a unified UI across the applications, **HTML, JavaScript, AngularJS, Bootstrap, D3-High Charts.**

We also built **Bluetooth tags** (Bluetooth Low Energy) for all the assets for tracking purposes.

Solution Highlights

Manages the assets through modern, feature-rich digital asset-tracking system	**Views and locates assets** on a map in real time to check its availability	**Plans, allocates and manages** movement of the assets to optimize the usage
Accesses the asset utilization, certifications, location and other such details	**Provides an analytics-driven dashboard** view of assets with various metrics like wear and tear, fuel consumption, battery condition, electrical systems, etc	**Generates detailed reports** with charts as per requirements
Easily tracks assets and manages assets anywhere with mobile app	**Increased staff efficiency** and accountability with minimal training	Quickly onboards and scans assets using 2D barcode to get the details on the field

Key Services

Design and technology strategy, UX design and UI engineering, product conception and management, digital product development, quality engineering, cloud and DevOps mobile apps development, IoT solutions engineering

Technologies - Java, WSO2 (app server), AngularJS, Spring Framework, Oracle database, Android, iOS

About Innominds

Innominds is an AI-first platform-led digital transformation and full-cycle software product engineering services company headquartered in San Jose, CA. Innominds powers the digital next initiatives of global enterprises and software product companies with an integrated expertise in devices and embedded engineering, software apps and product engineering, cloud, analytics, DevOps, data, security and quality engineering.