YN ON LA Real-Time Construction Data: Accurate. Reliable. Automated.

You Deserve Access to Reliable Construction Data

Why should construction teams have to rely on management by intuition because they don't have complete visibility on project status?

Construction projects are complex and decision-making is complicated further by the lack of real-time site status, incomplete information, and highly dynamic environments. The ability to manage project risk through the access to real-time movements of construction materials, equipment and assets should be the standard for every project team.

Ynomia Captures Real-Time Data to Manage Critical Path Activities

Ynomia is an Australian based IoT technology company developing a hardware enabled software platform delivering real-time location services for indoor environments lacking traditional data networks. Incorporated in early 2018, our product applications focus on productivity and safety improvement for large construction sites (projects >\$150million) where teams often struggle to manage and track the day-to-day changes of complex projects.

Ynomia's Technology is Developed with a World-Class Research Organisation

CSIRO is Australia's leading innovation catalyst, injecting state-of-the-art technologies into Australian industry to increase productivity.

Ynomia has collaborated with CSIRO to develop proprietary IoT localisation and smart device algorithms; sensor hardware designed specifically for the disconnected and extreme environment of construction sites. The resulting product, Bluetooth Low Energy Aware Tracking (or BLEAT), will leverage the long-term experience of CSIRO's Data61 Distributed Sensing Systems group to design and develop large-scale, robust sensing networks built for ultra low-power consumption and large work areas.



Solution

Confidently control project cost and timing delivery through access to accurate, real-time insights and notifications to alert of deviations

Ynomia's BLEAT provides a holistic and flexible system that allows team to scale a location services network from proximity to precise position reporting of resources (people, materials, machines) across any size job. Our embedded sensors are optimised for short and long-range communications and harness the global, low power communications standards of Bluetooth Low Energy and LoRaWAN.

This technology combination, along with NFC, allows users to easily deploy and manage sensor networks using Ynomia's mobile phone application interface to build a connected jobsite. For the first time, construction teams from contractor to supplier have a system to provide reliable, accurate, and time-saving data to inform decision-making.

Some of the Things We Localise





Plant &

Equipment



People & Safety



*Future capability to be integrated



Materials &

Supply Chain



Assets & Site Logistics

Connected Jobsite

How It Works

The Components That Deliver Real-Time Data

Components			Function
1	Beacon	\bigcirc	A fixed position geolocation point that communicates its position to tags.
2	Тад		A low power sensor tag that is designed to be attached to various dynamic objects.
3	Gateway	\/ ===	An aggregator of network data signals (from sensor tags and beacons) that connects the local worksite with Yno- mia's IoT cloud software and analytics.
4	Mobile Phone (Ynomia App)	ò	An Android and iOS app that helps visualise data and locali- se worksite assets.
5	Web App		Visualization, control and Ynomia system management.



How We Differentiate Ourselves

Feature	The Benefit to You	Ynomia Advantage	
Smart IoT Devices	Capture and save a digital project history.	 With Ynomia's patented object monitoring system. Device-to-device smart communication. 	
Precision Location	See the real-time location of all critical resources.	 Offline localisation without Wi-Fi/3G/4G. Scalable accuracy - up to <2m. Proximity to positional location flexibility. 	
Ecosystem of Flexible Devices	Capture data where cellular connections are absent.	 Data capture through QR codes, BLE sensors, and mobile application. BLE/LoRA for short and long range backhaul. Battery powered sensors designed for lifetime and environment of construction projects. 	
Easy to Learn and Deploy	Simple to use technology for entire project team.	 Simple to deploy and connect to sensors through mobile app. Hardware and software designed for the construction environment. Update and deploy devices during normal work processes. 	
Real-Time Information	Reduce time wasted se- arching for information and making reports.	 Real-time, event-triggered notifications to stakeholders. Simple to manage project, layout, and process interfaces. 	
Easy to Main- tain and Moni- tor Hardware	Receive alerts and notifications of deviations from plan.	 Network management designed for everyday user. Device management for easy provisioning and control. Secure and encrypted data transmission. 	

The Benefits of Ynomia



