Improving stock procurement

Kingspan's Watchman Anywhere Pro helps customers manage fuel levels and improve stock management, with Vodafone IoT.

The future is exciting.

Ready?

vodafone

No more stock shocks with Vodafone Internet of Things

You're a business with 50 fuel tanks spread across the country. The best industry analysts are predicting a rise in oil prices. You can't be certain how much fuel you currently hold, and at what point you'll run out.

Kingspan Sensor, the world's leading supplier of measure and monitoring solutions, is ahead of the problem. It has created a remote tank monitoring system capable of monitoring liquid and material levels that also assists in energy usage and carbon emission reporting. It generates the data a business needs, 24/7, to accurately manage fuel stocks.

The challenge

A smart solution for stock management

Kingspan Sensor has a 20-year history in supporting the fuel storage sector through its range of Watchman Oil monitoring devices. It supplies measuring and monitoring solutions to customers in the commercial, industrial, agriculture and domestic markets.

It has not achieved this success by standing still. The business, based in Northern Ireland, has always kept ahead of strict environmental and regulatory requirements. Its most recent innovation is the Watchman Anywhere Pro (WAP). A one-piece monitoring solution that checks levels and provides in-depth data that assists with stock management, health & safety compliance and CRC reporting. It moves Kingspan beyond fuel and oil: the solution can also monitor AdBlue, lubricants, liquids, water, LPG, materials and cold storage environments.

"It comes from a customer need," says David Anderson, Business Unit Director, Kingspan Environmental. "No one was doing a good enough job of monitoring usage – whether a tank was running low, or if there was any suspicious activity – thieves siphoning off oil, for example. We saw that as an opportunity. We could offer this service to our customers, domestic and commercial."

The monitoring aspect was a challenge tackled by the Kingspan technical team, but to work effectively the monitoring devices would need to connect to an outside source – to send regular information to customers.

> We're seeing growth in France and Germany, and growth in domestic and commercial. We're currently looking at sales operations in South America, Australia and the United States. Vodafone allows us to take this international growth in our stride. We have predictable pricing and global coverage, all managed from one platform.

**David Anderson,
Business Unit Director,
Kingspan Environmental**

With Kingspan having global ambitions for its monitoring service, the connectivity would need to work anywhere in the world.

The solution

A global solution to open up new markets

Kingspan has been a Vodafone customer since May 2010. "When we started on the technical aspect of the solution, it was natural to speak to Vodafone," says Anderson.

The solution is the Vodafone Managed IoT Connectivity Platform. This enables Kingspan to install the same SIM in every monitoring device, activating the device once it is 'live' with a customer – wherever in the world. It answers Kingspan's manufacturing process needs and customer service expectations.

At the point of manufacture the factory captures data from the units, recording the device's identity code, model and other important data from the modem. The device (with SIMs installed) is then imported electronically to the Kingspan database. Kingspan engineers can identify any device through the given barcode.

The application programming interface (API) into the Vodafone Managed IoT Connectivity Platform is Kingspan's lifeline. For the WAP product, it changes the SIM to active whenever a device is scanned by the installer. This means Kingspan only activates a SIM when it knows who to charge and avoids charging a SIM when it is not in use.

Kingspan sits at the centre of this data through its advanced and intuitive web-based reporting platform - Connect Sensor. This central and secure database enables individual reporting and alerts as required by customers.

Scheduled, customised and exportable reports provide in-depth data on current levels, projected run out dates, usage, fill requirements all of which can assist in calculating energy usage and carbon emissions.

> "It doesn't matter if you're a business with 50 tanks around the country or an individual with an oil tank in the back garden, you want to know if you're running out of oil or fuel. Same with AdBlue, lubricants or LPG. Our solution will send an alert if you're past a set level, or show consumption rates so you can check usage. Overnight it raises your customer experience.

David Anderson, Business Unit Director, Kingspan Environmental

To date Kingspan has activated 23,000 Vodafone SIMs on its WAP product. Anderson says he expects to see 20% growth in 2016, the majority of which will come from commercial customers. He estimates an additional 15,000 SIMs in the next three years.

"We're seeing growth in France and Germany, and growth in domestic and commercial," says Anderson. "We're currently looking at sales operations in South America, Australia and the United States. The technology has also been developed into our new Asset Servicing and Condition Monitoring Platform - Sensor SmartServ - which enables businesses to track their assets along with providing a preventative maintenance solution so as to avoid costly overflows. Vodafone allows us to take this international growth in our stride. We have predictable pricing and global coverage, all managed from one platform."

Anderson says the benefits to customers are self-evident: "It doesn't matter if you're a business with 50 tanks around the country or an individual with an oil tank in the back garden, you want to know if you're running out of oil or fuel. Same with AdBlue, lubricants or LPG. Our solution will send an alert if you're past a set level, or show consumption rates so you can check usage. Overnight it raises your customer experience."

This has a knock-on effect on oil and fuel deliveries. "In the past, deliveries would visit every tank and fill up if needed. Now, suppliers can schedule visits as required and know exactly how much is needed.

"No more wasted trips to fill tanks means better planning of service visits. It's a huge contrast to the way things were. It's not viable to run your business any other way."

Anderson says the benefits of monitoring are evident to any business managing stock procurement, from fuel tanks to wastewater and refrigeration: "You can now find our solution on fridges, monitoring the temperature of blood banks. Monitoring has quickly matured from being innovative to essential."

The bottom line

- 23,000 Vodafone global SIMs installed to date, expect to install a further 15,000 over next three years
- Expects 20% growth in monitoring solutions in 2016
- Enabled expansion into wastewater management and refrigeration sectors
- Starting sales operations in South America, Australia and the U.S., a first for the business

About Kingspan Sensor

- Kingspan Sensor is a global leader in measure and monitoring solutions and provides a monitoring system to measure cost, energy usage, carbon emissions and temperature, liquid and material levels
- Kingspan Sensor is part of Kingspan Environmental
- Kingspan Environmental offer premium and sustainable ways of sourcing, storing and protecting energy and water. It is an expert and innovator in; environmentally responsible Energy Storage Solutions, Wastewater Treatment and Rainwater Harvesting, Wind and Solar Energy Generation and Hotwater Energy Storage. It also offers affordable Monitoring and Service packages for all the products it supplies, powering homes and businesses on a global scale
- www.kingspansensor.com

vodafone.com/business/IoT