

ISS Deploys Multi-Device Facilities Management Application within Weeks, Producing Immediate ROI

Challenge

In the labor-intensive facilities services business, worker productivity is a linchpin of success. And at ISS – recently named No. 1 on the Global Outsourcing 100 – the costs of unnecessary work represented an opportunity to generate meaningful savings that could directly improve their bottom line. Not surprisingly, the backend of this multi-billion-dollar global leader has a heavy IT component associated with accounting, human resources, and other traditional business functions.

But out at client sites – where ISS workers help clients manage everything from pest control, office cleaning, and soap dispensers to copy centers and building security – IT hasn't had a prominent role in the business model. However, these typically labor-intensive tasks represent enormous costs to ISS. Given the scale of the organization – which employs more than 500,000 people worldwide – any opportunity to improve the productivity of these front-line workers could translate into significant savings.

According to Martijn Jansen, Manager Business Technology for ISS, the company wanted innovative ways to apply IT principles and technology to streamline service delivery. “We approached the challenge from a traditional IT perspective,” he said. “What business processes did we want to improve and what data was missing that we could collect, process, and communicate to create appropriate automation? And one of the first places we felt we could generate immediate value was in pest control.”

In serving its clients, ISS deploys tens of thousands of mousetraps. And the only way to check and maintain those traps is for employees to regularly inspect each trap in person to see if a mouse had been caught. “Previously, our people were driving to

all of these locations and walking around buildings and peeking in the traps. In more than 70 percent of the cases, our people were simply checking empty traps – which was an incredible waste of productivity – and the basis of our first business case.”

Solution

Of course, ISS had other similar status-checking activities that its employees were performing – everything from checking coffee machines and food supplies to soap dispensers, plants needing water, or paper-towel inventory. The solution? Deployment of inexpensive, long-life wireless sensors in those locations, stations, and devices. For instance, a sensor in a mousetrap can transmit a notification that it has been tripped and needs emptying. A coffee station sensor can alert an ISS worker that refills of supplies are needed. Or a soap-dispenser station can alert staff when a refill is needed.

“When you consider that a sensor costs about \$40-50 with a three-year life – and that it would otherwise cost our company \$10-15 to inspect one station – the payback model becomes clear and compelling,” Jansen said. “However, we needed more than smart sensors. We also needed an application to bring that data together and use it to communicate with our distributed workforce so that they can act on it faster and be where they need to be. We decided to use the Mendix platform to create our ‘ISIFM’ app for facilities management.”

The Mendix platform is the agile development solution that lets business experts collaborate every step of the way. With Mendix, developers start with high-level requirements, share results immediately, get the app in the hands of key users quickly, and iterate until optimal results are achieved.

Alongside Magnus, one of Mendix's most experienced system integration partners, ISS conducted extensive up-front analyses to learn the business cases of its workers: What do you need for better pest control? What information would help you work more productively? How can we combine the right information to ensure the right employee completes a task in a timely manner?

"With just two developers and a business analyst, we had our first version in about two weeks and in just one sprint," said Jansen. "Mendix has tremendous flexibility, so even though our requirements evolved, our development evolved with them as well. That's just not possible with other development tools."

Another module of the application named ISIFM aggregates sensor data in a local gateway in each building that ISS manages. That data gets passed over the mobile network to the centralized ISIFM application. From there, ISIFM assesses tasks and matches them to ISS workers, whose locations it determines using GPS data from each employee's smartphone.

Results

Today, the ability for ISS to quickly and efficiently identify where assistance is needed, and parse out tasks to the nearest/best workers, has improved service levels and decreased costs. "This is a real change for our industry," Jansen noted. "We're using technology to improve our service. For instance, we can accelerate our SLAs – which clients appreciate. Now, that mousetrap is emptied and reset within the agreed time frame. We also created a Web interface so that our clients can submit requests for service. Those, too, go out to our closest workers via smartphones."

Not surprisingly, ISIFM has racked up some impressive ROI metrics. "We deployed this application first in the Netherlands – as a SaaS solution – and quickly found that it increased our service levels, improved customer satisfaction. In our first year, in one country alone, we have generated

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**Manager Business Technology
ISS**

significant savings, bolstered our existing client relations, and won new clients – just by optimizing the way our people do their jobs each day. When you consider that we operate in dozens of countries, you can see that this app could have a tremendously positive impact on our business. We have one major Fortune 100 client that wants us to deploy this for them worldwide. And we have also found that demonstrating ISIFM to prospective clients is actually helping us win new business. Moving forward, we hope to broaden the solution to include multiple countries, languages and more device profiles.

About ISS

With 532,000 employees serving thousands of public and private-sector organizations in more than 50 countries, ISS is a leader in business services outsourcing and facility management. The company offers world-class companies with efficient infrastructure for facilities operations, security, catering, cleaning, and more. Serving thousands of both public and private sector. Global revenue in 2012 was over \$14 billion.

For more information, visit www.issworld.com.



Mendix helps enterprises achieve their digital goals. Our digital innovation platform empowers customers to bring new products to market, digitize customer engagement, and automate unique business processes. Facilitating an iterative, collaborative approach, the platform brings business and IT together to build and deploy innovative applications at the speed of ideas.

A recognized market leader, Mendix is helping hundreds of customers across dozens of industries achieve exceptional results. For more information, visit www.mendix.com and follow us on Twitter [@Mendix](https://twitter.com/Mendix).