

Customer Case Studies

Medical Devices





Sysmex is a global leader in the design and development of highquality, reliable, and innovative clinical diagnostic equipment and information systems (blood and urinalysis equipment). They generate 10% of their overall revenue through services offerings.

Business Challenge

- The intense competition in the medical device market, especially in the US, is demanding a higher level of customer service at lower costs.
- With the current technology, Sysmex had an inability to scale as their business scaled and deliver the value-add services that they need to stay ahead in their market.

Solution

- ThingWorx Platform is enabling Sysmex to expand their service offering dramatically while significantly lowering costs.
 - Direct, real-time connections for delivering next-generation support applications.
 - Rapid problem resolution using enhanced collaboration and use of remote and systems data
 - Ability to quickly iterate their valueadd applications to take advantage of changing market and customer demands.

Results

- 5-10x improvement in internal application development team utilization.
- Improved equipment uptime (through faster decision response time)
- improved labor utilization through collaborative information exchange

"ThingWorx enabled us to build our Next Generation Remote Service Application 3-5x faster than previous tools, allowing us to gain competitive advantage in the market." - Steve Postma, Director, Remote Service at Sysmex





Joy Mining is a worldwide leader in high-productivity mining – solutions that manufactures and markets original equipment and aftermarket parts and services for the mining industries.

Business Challenge

 Joy Mining's existing business process required people to manage through the instability of collecting mass volumes of data and resulted in an inability to do field level analytics.

Solution

- ThingWorx stabilizes the data collection process while providing the ability to innovate with new applications for their customers.
 - Capture field-level data that was once unavailable, providing greater visibility into the complex mining process.
 - Enables Joy Mining to reliably collect, store and analyze the real-time data from 15 global mine sites, representing ~1000 machines and 1000 real-time data points at sub second intervals.

Results

- Optimized their remote monitoring and analytics processes allowing them to
 - Anticipate failures
 - Efficiently respond to equipment problems reducing equipment downtime
 - Reduce the cost of mining resources
 - Improve the safety of the site and human capital
 - Optimize mining production

Smart Agriculture





On Farm is a highly specialized integrator of agriculture field asset and information systems for the farming industry.

Business Challenge

- As technology adoption in agriculture has grown, growers have been forced to manage information from several unrelated systems.
- OnFarm sensed an opportunity to deliver a SaaS offering to growers that provides for smart decisions in farm management and production.
- Goal was to get to market quickly with an integrated offering, and needed a technology platform that would scale as their business grew over time.

Solution

- OnFarm utilizes the ThingWorx technology platform to take on the challenge of integrating information across multiple unrelated companies.
- The OnFarm solution combines real-time sensor data from soil moisture, weather, pesticide usage, alerts and notices, and growing conditions from farming sites into a consolidated web-based dashboard designed specifically for growers. Growers can also take advantage of advanced imaging and GIS mapping information to spot crop issues and visualize where farming assets are located.

Results

 OnFarm's customers experience a 10% improvement in water usage, reduced fertilizer usage, avoid crop stress, and can now determine ideal crop locations based on sensor data.

"Using **ThingWorx enabled us to get to market at least a year faster** than otherwise possible and with functionality that far exceeded what would have been possible otherwise. Because we choose ThingWorx we were able to focus on developing functionality that provided significant advantages, essentially redefining the market." - **Lance Donny, CEO, OnFarm Systems**

Smart Traffic Monitoring & Public Safety





All Traffic Solutions is the leader in radar speed displays and variable message signs designed to improve traffic safety outcomes.

Business Challenge

- Increased customer demand for new features and an overall increase in application sophistication.
- Provide more comprehensive business system integration
- Need to offer advanced data mining for customers requesting predictive analytics for traffic control

Solution

- SmartApps web-based traffic control suite.
- All Traffic's SmartApps solution suite allows law enforcement professionals, as well as state and local agencies, to remotely monitor, manage, and interact with traffic safety signs using a web-based application and virtual map.
- With ThingWorx, All Traffic is able to rapidly develop mobile interfaces using the ThingWorx Mashup Builder, provide more comprehensive business system integration, and offer advanced data mining for customers requesting predictive analytics for traffic control.

Results

- Faster time to market
- Rapid development of mobile user interfaces
- Advanced data mining that All Traffic can now offer its customers
- Improved scalability over previous technology, allowing All Traffic to extend their solution and deliver new services to customers in ways that were previously impossible.

[&]quot;ThingWorx's rapid application development environment and scalable platform allow us to extend our solution and deliver new services to our customers in ways that were previously impossible."

Manufacturing





ATI Allvac is a world leader in the production of nickel-based and cobalt-based superalloys, titanium-based alloys, and specialty steels for the aerospace, oil & gas, and medical industries.

Business Challenge

- Driving a culture of continuous innovation.
- ATI Allvac needed to drive increased efficiency through innovative new applications.
- New applications, created on the ThingWorx platform, leverage and incrementally supplement, existing packaged applications and known, automated business processes.

Solution

- ATI Allvac selected ThingWorx as the manufacturing enterprise platform for rapidly delivering innovative applications to drive disruptive operational intelligence and decision support.
- ThingWorx provides a real-time layer that lives between their manufacturing, quality, maintenance, and ERP systems and allows them to rapidly create role based decision support "dashboards" and interactive applications.

Results

- Faster time-to-value with integrating ERP with factory floor infrastructure and systems
- Improved manufacturing operations
- System interoperability

ThingWorx was validated by the Allvac Manufacturing and IT teams as an integral part of their manufacturing IT stack moving forward to uniquely enable real-time operational intelligence applications. ThingWorx was compared to the incumbent manufacturing integration and intelligence systems, which is being replaced by the fresh technology an broader capabilities of ThingWorx.

Water Monitoring





Aquamatix is a software and services company providing – specialist integration of real-time systems and data for water and wastewater operations and asset management.

Business Challenge

- Lack of monitoring and control system for domestic water and sewage service providers.
- Limited alarming and notifications of real-time conditions.

Solution

- Cloud-based WaterWorX[™] software, a realtime solution that integrates operational and fixed asset data.
- WaterWorx includes an SMS and voice alarm facility for out-of-hours alerts, creating a virtual control center.

Results

- Faster time to market
- Reduced development costs for software company Aquamatix
- Lower technology investment
- Continuous, incremental value through new applications for Aquamatix customers which include Veolia

"WaterWorX, powered by ThingWorx, delivers real-time performance and improves efficiency of water assets."

- Laurie Reynolds, Managing Director, Aquamatix

Smart Agriculture





Dirt Road Data is a highly specialized supplier of distributed -automation systems for the energy, agriculture, and water management markets.

Business Challenge

- Smart flock management, production, and financial results are critical aspects of the farming industry.
- Previously, capturing key operational farming data was a manual and time-consuming process.
- This resulted in lack of operational insight, poor performance, lower financial results, and inefficient farm management.

Solution

- Verif-Eye[™] The first cloud-based solution for remote farming command and control.
- Dirt Road Data's Verif-Eye product line utilizes the ThingWorx technology platform to power its cloud-based solution for smart poultry farming, providing an end-to-end application to wirelessly collect, store, and visualize critical poultry operational data, including bird counts, egg metrics, and feed usage

Results

 Enables farmers to analyze realtime metrics, helping them drive smarter decisions in farm management and production.

"We are pleased to be working with ThingWorx to deliver the first-of-its-kind application for smart agriculture," stated Daniel Goss, President of Dirt Road Data. "Poultry farmers are concerned about protecting their flock and managing their performance. Our solution, powered by ThingWorx, provides these farmers with a comprehensive online dashboard of their farms, giving them the ability to analyze data and key performance indicators from flock to flock, and allowing them to readily spot trends and act on the information to increase their feed conversion rates, and productivity."

Connected Vehicles





Our client is one of the world's largest providers of wireless

— network equipment, and operates telecommunications networks, television and video systems, and related services.

Business Challenge

 Challenge of getting to market quickly with an integrated solution and online application that integrates real-time sensor data from on-board vehicle telematics into a unified and interactive user interface that is mobile-friendly

Solution

 Connected Vehicle Cloud - Delivers significant opportunity for stakeholders in the automotive ecosystem to reach drivers and passengers in new ways.

Results

- Rapid time-to-market
- Ease of building mobile-friendly user interfaces
- Ease of integration
- Enabling innovative new applications and services for multiple different consumers

Structural Monitoring





Smart Structures is a global leader in wireless solutions for smart infrastructure monitoring, delivering solutions to improve the quality of bridge pilings, foundations, and other concrete structures, while reducing construction costs and improving safety.

Business Challenge

 With their current technology, Smart Structures hit the wall on the value curve and need to upgrade to a more scalable robust platform to deliver the next generation of their service offering.

Solution

Smart Structures SmartPile® Embedded
Data Collector (EDC) technology uses
software to process data from wireless
embedded sensors embedded within
concrete piles used in foundations. The
ThingWorx platform provides the critical
software and AlwaysOn communications
infrastructure for the SmartPile system,
allowing Smart Structures to securely
connect its remote workstations to a
centralized, cloud-based information
database and Internet portal where sensor
data is stored.

Results

- Faster Time-to-Market for cloudbased information database and Internet portal
- Rapid scaling
- Allows their customers to be better prepared to react and respond to deficiencies in strength and integrity while minimizing costs and risk.

"We chose ThingWorx because we were able to extend our current on-line system dramatically faster than with previous generation tools. These new technologies are changing the way we interact with our physical world, and by allowing objects and machines to send us data about their performance, our customers will be better prepared to react and respond to deficiencies in strength and integrity while minimizing costs and risk."

Medical Devices





Biocartis is a leading molecular diagnostics company. Biocartis' innovative research and diagnostic systems are characterized by multiplex detection and simplified workflows, which require less hands-on time and minimize sample requirements.

Opportunity

- Biocartis selected ThingWorx as the M2M application platform to power its next generation remote service offering.
- Biocartis intends to use the ThingWorx application platform to provide remote instrument connectivity and innovative M2M applications, extending its molecular diagnostics solution with high-value remote service and value-added offerings for its customers and partners.

Solution

- Remote Service Management
- Biocartis is working with ThingWorx to develop remote instrument connectivity and innovative M2M applications, extending its molecular diagnostics solution with highvalue remote service and value-add offerings for its customers and partners.

Results

- Improved customer experience and customer support
- Improved equipment reliability, service performance.

"We are entering the 'connected age', an age that brings people, systems, and the '50 billion things'—sensors, devices, machines—together to provide the opportunity for a step change in operational innovation and resource efficiency," said Rudi Pauwels, CEO of Biocartis. "ThingWorx uniquely enables organizations to rapidly build and run connected applications to capture the business opportunities offered by the emerging pervasiveness of smart things."

Medical Devices





Iris International is a worldwide leader in automated urinalysis technology.

Business Challenge

- Iris Diagnostics currently supports

 a large installed base of urinalysis
 instrumentation products at major
 medical institutions throughout the
 world.
- Their existing manual service management processes presented an opportunity for improved efficiency by introducing automation and remote service and support capabilities.

Solution

- iCARE™ Customer Support Program
- Powered by ThingWorx with high value remote service, monitoring, and automation

Results

 With ThingWorx, Iris was able to quickly get to market, and remotely monitor and manage their growing installed base, to reduce service costs, improve service efficiency, and design remote support into the next generation of products.

"ThingWorx, with its rapid application development tools and core remote management capabilities, allows us to quickly bring to market a differentiated remote service application that enhances our innovative iCARE support program. With ThingWorx, we are able to cost-effectively build our remote offering as an integral piece of our service business. We are enthusiastic that this will translate to improved service efficiency, allowing us to further enhance our world-class support for our customers."

- Dave Baker, VP Global Service, IRIS



Powering the Connected World™