

Manufacturing



Transforming the urban landscape

Gathered data from sensors and systems to create valuable business intelligence and shift from reactive to proactive maintenance.

[Click](#) to learn more



Optimizing the factory floor

Used IoT, machine learning, artificial intelligence, and CRM to optimize processes, planning, and predictive maintenance scheduling to avoid downtime.

[Click](#) to learn more



Filtering the signal from the noise

Used analytics to discover actionable insights around fuel usage, predictive maintenance and stop unscheduled delays.

[Click](#) to learn more

Manufacturing



BÜHLER

Food quality management reimaged

With the help of cutting-edge technologies, Bühler aims to reduce waste and energy consumption by 30% by 2020.

[Click](#) to learn more



Optimize factory performance

Using Azure IoT solution to reduce costs, increase productivity, and gain visibility into manufacturing processes.

[Click](#) to learn more



ABB

Keeping the lights on

Mobilizing maintenance, inspection, and outage work, and delivers greater worker efficiency, vast scalability, continuous innovation, and lower costs

[Click](#) to learn more

Smart Cities



**Schneider
Electric**

Proactive responses with edge analytics

Schneider Electric transformed their solution to better help customers protect their assets and the environment and boost workplace safety by leveraging edge intelligence

[Click to learn more](#)

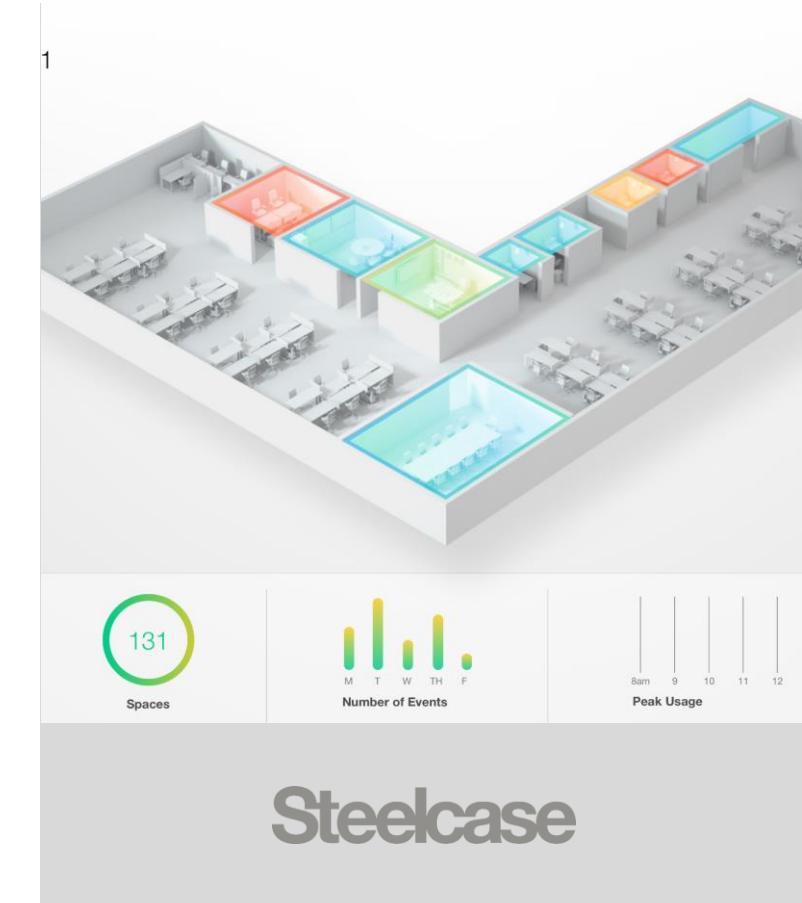


sagegreenlife

Keep living walls green

IoT enables Sagegreenlife to provide exceptional customer experience, deliver new insights across the organization, and scale its business on a highly secure, easy-to-use, customizable platform

[Click to learn more](#)



Increasing value with smart workspaces

A network of wireless infrared sensors on furniture allowed Steelcase to revolutionize the value their solutions bring to customers through real-time usage statistics and insights

[Click to learn more](#)

Smart Cities



Saving lives from earthquakes in Mexico

Utilizing IoT and analytics to predict disasters and send millions of notifications in less than two seconds - notifying citizens of earthquakes up to two minutes ahead of time.

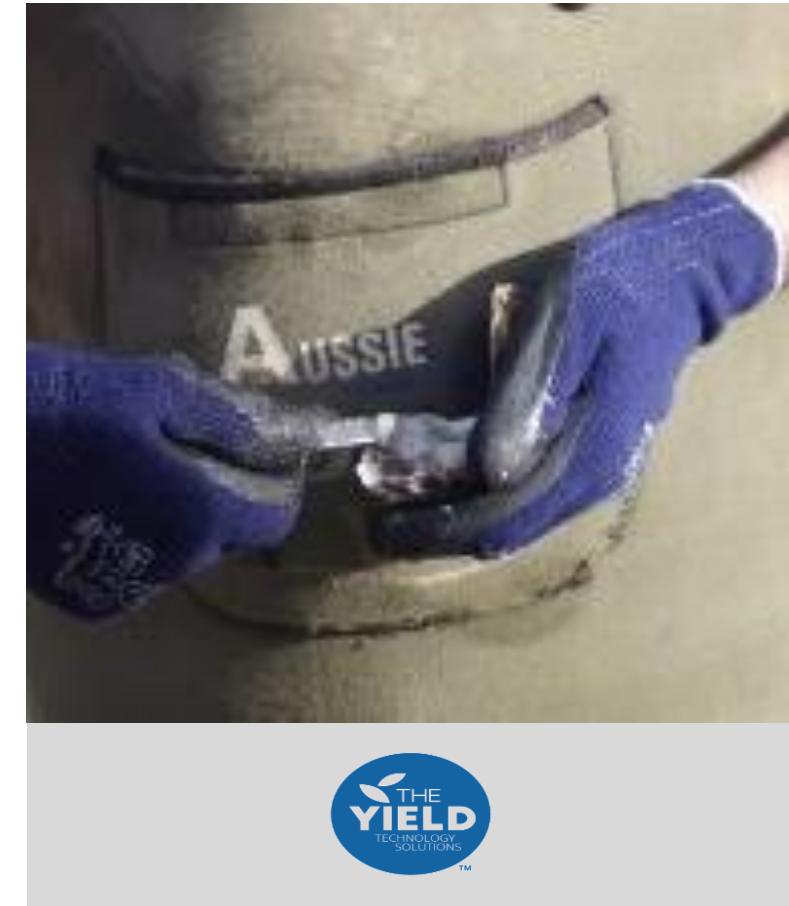
[Click to learn more](#)



Using the intelligent edge to save water

Farmers in New Zealand integrate weather predictions and sensor data to adjust irrigation, saving 50% of water usage.

[Watch to learn more](#)



Improving oyster yield in Tasmania

Connecting oyster beds promises to reduce unnecessary harvesting closures by 30%, saving \$5.3 million a year for Tasmania growers.

[Click to learn more](#)

Transportation



Enabling officials to keep drivers safe

Using highly localized road condition and weather data, Fathym keeps drivers safe by recommending reroutes, and avoiding unnecessary use of expensive assets.

[Click to learn more](#)



Creating efficiency and agility with IoT

Texa S.P.A saw product orders increase 100% after using IoT to enhance their product offering, support business growth, reduce costs, and increase mechanic efficiency and safety.

[Click to learn more](#)



Low cost connectivity for train sensors

Using Azure IoT and TV whitespaces, an infrastructure not built for connected devices now supports delivery of timely insights about traffic conditions and cable car equipment

[Click to learn more](#)

Transportation



DAIMLER

Connecting vehicles for the long haul

Daimler connects their fleets for predictive maintenance, optimized fleet management and routing, and to create better vehicles for the future.

[Click](#) to learn more



Revolutionizing air-traffic control

Rich streams of data sent in-flight increases safety, reduces aircraft separation standards, allows more flights at peak times, and greater utilization of efficient routes.

[Click](#) to learn more



Connected vessel program will differentiate

By adopting Azure, Maersk spends more time on innovation and value-added projects, resulting in savings on resource costs, faster solution delivery time, and ability to attract expert IT talent..

[Click](#) to learn more

Retail



Machine Learning + Twizzlers

Combining ML with data from licorice extruders allows Hershey to save on expensive ingredients and learn more about customer behavior.

[Click](#) to learn more



Smarter Snack Food

Using customer location and preference data allows Mondelez to provide highly personalized, informative customer snacking experiences.

[Click](#) to learn more



Personalized, efficient guest experiences

Using a wearable powered by Windows IoT and Azure IoT, hotel staff are able to execute up-to-the-minute service and provide an experience unique to each customer

[Click](#) to learn more

Retail



The supermarket of the future

Coop Italia uses IoT technology to track customer behaviors and create interactive, informative displays based on customer location.

[Click to learn more](#)

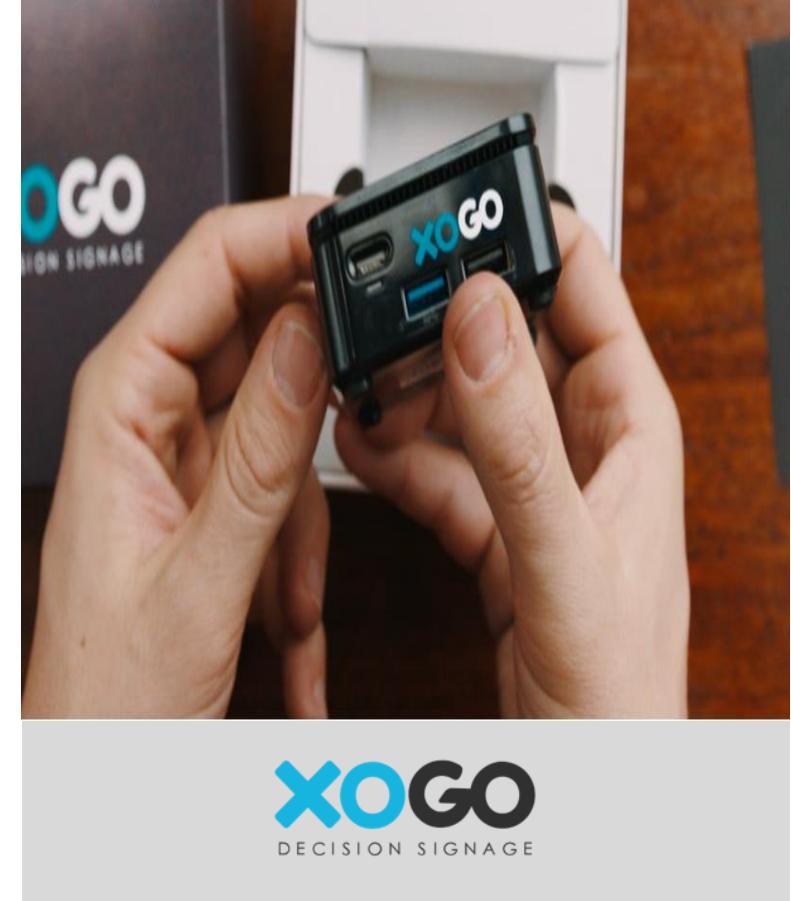


MARS

Enhancing workroom break times

Microsoft IoT and Advanced Analytics ensure snack machines are never out of stock and enable MARS to better understand customer behavior.

[Click to learn more](#)



XOGO
DECISION SIGNAGE

Making dynamic digital signage accessible

With IoT, any small business owner or marketing department can offer real-time, engaging content. For the first time, dynamic digital signage is accessible to any organization.

[Click to learn more](#)

Health



Uninterrupted treatment saves lives

Faster access to data from every device around the world improves uptime of every device. This alone can help save lives.

[Click to learn more](#)



Creating healthier hospitals

Using IoT to connect sanitization stations in hospitals, Gojo ensures hospital staff are properly and frequently sanitizing their hands to avoid spreading diseases.

[Watch to learn more](#)



Wearables providing life saving insights

Working with partner, ixto GmbH's digilog platform, Ruppiner is using wearable technology to give patients 'boundary-less' health care that is saving lives.

[Click to learn more](#)

Health



Optimizing diagnostic devices

IoT enabled remote monitoring of diagnostic devices, optimized device utilization via predictive maintenance, and enhanced device recommendations based on patient data.

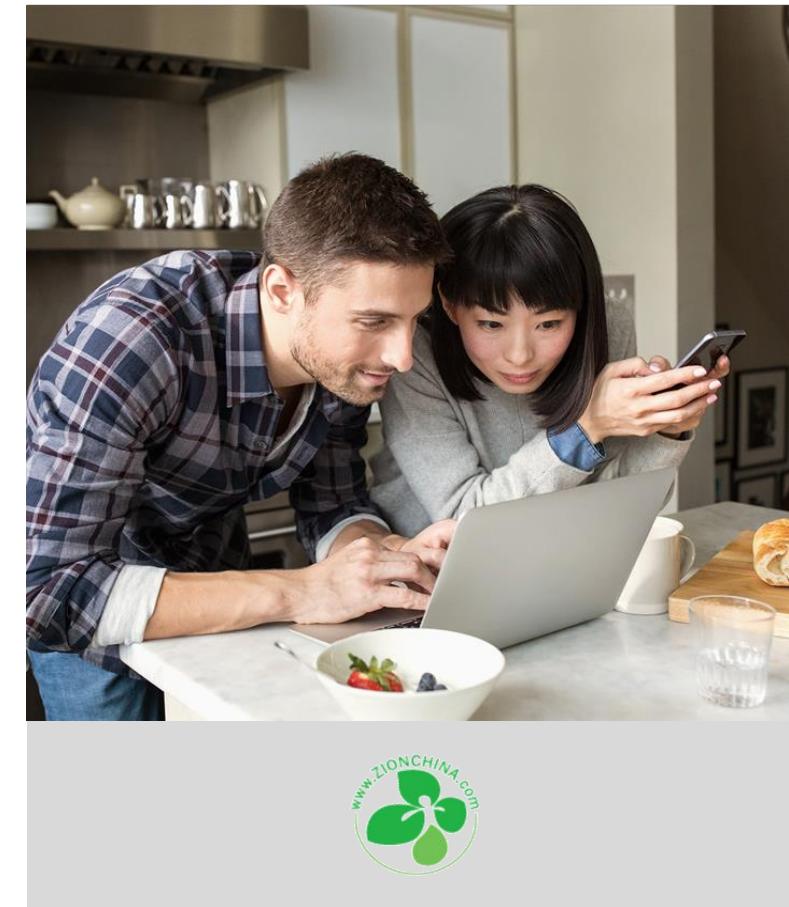
[Click to learn more](#)



Understanding brain disease

BTT Corp uses Microsoft IoT technology to detect, track, and analyze hyper-localized, minor changes in brain temperature to prevent and research brain diseases.

[Click to learn more](#)



Creating smarter diabetes management

Zion China uses personalized IoT solutions to help patients with diabetes manage their behavior and dietary habits to live healthier lives.

[Click to learn more](#)

Single slides by industry

- Manufacturing
- Smart Cities
- Transportation
- Retail
- Health
- Education



Creating a competitive edge, transforming maintenance operations, creating new efficiencies in workflow, cutting operating costs, and increasing elevator uptime

ThyssenKrupp brings a new vision to elevator maintenance

ThyssenKrupp created a connected, intelligent asset monitoring system that connects thousands of sensors and systems in its elevators to the cloud and draws this data into a dashboard available on numerous devices for a real-time view of KPIs. This downtime and cost reducing solution is now being expanded to include connected field service with HoloLens for their 1.1 million elevators.



Products and Services
Azure IoT Hub
Azure IoT solutions accelerator
Power BI
Windows Server 2012 Datacenter

Organization Size
Corporate

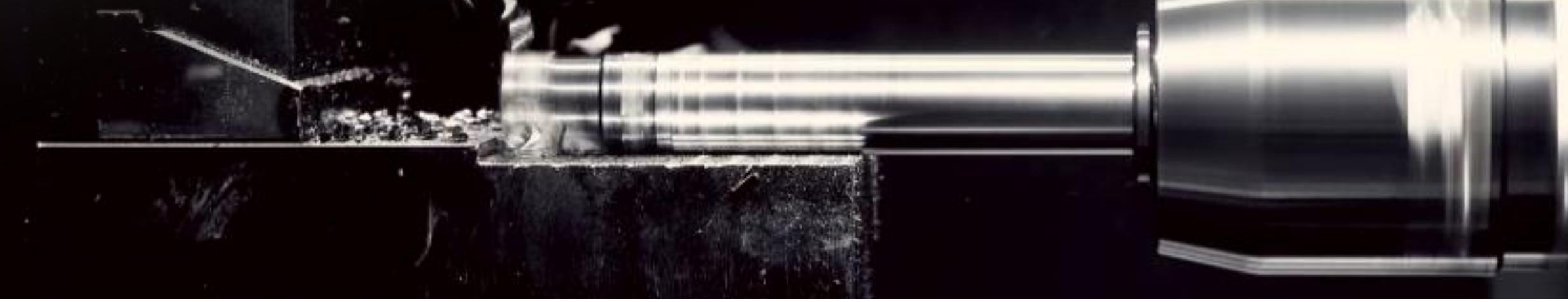
Industry
Manufacturing

Country
Germany

Partner
CGI

Business Need
Remote Monitoring
Predictive Maintenance
Connected Field Service





Improving processes, efficiency, and human decision making with predictive maintenance and tool-level data

Predictive maintenance brings Sandvik to the cutting edge of digital manufacturing

To help improve the scalability and global tooling solutions it delivers to its customers, Sandvik optimized its manufacturing process and created a predictive maintenance schedule using Azure IoT, Cortana Intelligence, and Dynamics 365. Sandvik is creating extremely powerful predictive maintenance models by integrating the deep knowledge of the machining process that sets Sandvik knowledge into the algorithms used to analyze the wealth of data their IoT solution collects.



Products and Services

Azure IoT Hub
Microsoft AI
Dynamics 365 for Field Service

Organization Size

Large

Industry

Chemicals

Country

Sweden

Business Need

Predictive Maintenance





Cutting fuel consumption and save up to \$250,000 per plane, per year

Optimizing engine performance and maintenance with predictive analytics

Rolls-Royce has more than 13,000 engines for commercial aircraft in service around the world, and for the past 20 years, it has offered customers comprehensive engine maintenance services that help keep aircraft available and efficient. As the rapidly increasing volume of data coming from many different types of aircraft equipment overtakes the airlines' ability to analyze and gain insight from it, Rolls-Royce is using the Microsoft Azure platform to fundamentally transform how it uses data to better serve its customers and better optimize its maintenance operations.



Rolls-Royce®

Products and Services

- Azure IoT Hub
- Azure IoT solution accelerators
- Azure Security Center
- Azure Traffic Manager
- Azure Cosmos DB
- Azure Active Directory

Organization Size
Corporate (10,000+)

Industry
Manufacturing

Country
United Kingdom

Partner
Ixto GmbH

Business Need
Predictive Maintenance
Remote Monitoring



Monitor machine performance and generate accurate records to help optimize safety, sustainability, and transparency.



Bühler Group brings food safety to the forefront with IoT

Bühler Insights, powered by Azure IoT Hub, is behind Bühler's groundbreaking microbial decontamination technology for dry foods. The solution generates vital data to help food producers optimize safety, sustainability, and transparency. By driving adoption of cutting-edge technologies, Bühler offers its customers access to machinery data that was previously unavailable, making it easier to prove food safety with consistent and automated records.

Products and Services

Azure
Azure IoT Hub

Organization Size

Corporate

Industry

Consumer Goods

Country

Switzerland

Business Need

Predictive Maintenance





Using IoT to transform products, optimize operations, empower employees, and interact with customers

Thread manufacturer spins its future in the cloud

The world's leading industrial thread company Coats has a history going back hundreds of years, but the company has its eye on the future. Its current digital transformation includes using Internet of Things (IoT) devices to optimize factory performance and enhance environmental monitoring. Coats chose to use Microsoft Azure IoT solutions to build its IoT systems, and this resulted in a quick deployment and tangible benefits—the company is right on track to hit its productivity and environmental stewardship goals.



Products and Services

Microsoft Azure
Azure IoT Edge
Azure Stream Analytics
Power BI

Organization Size

Corporate

Industry

Manufacturing—Durable consumer goods

Country

United Kingdom

Business Need

Business agility



ABB keeps the lights on with AI-based workforce management software

Utilities and other asset-based businesses rely on ABB software to efficiently manage their assets and field workforces at a time when asset infrastructures are aging and budgets are tight. ABB is transforming its workforce management applications into software as a service (SaaS) offerings using Microsoft Azure. The newest product, ABB Ability Ellipse Workforce Management (WFM), mobilizes maintenance, inspection, and outage work, which delivers greater worker efficiency, vast scalability, continuous innovation, and lower costs.



Products and Services

Microsoft Azure
Azure IoT solution accelerators
Azure Service Bus
Azure Service Fabric
Azure SQL Database

Organization Size

136,000 Employees

Industry

Manufacturing

Country

Switzerland





Preventing unnecessary farm closures costing \$120,000 per day

Taking the guess work out of Australian agriculture with the Internet of Oysters

Being filter animals oysters are highly susceptible to water quality, if there's been a lot of rain flooding into the estuaries where oysters grow, they can quickly pick up contaminants that could make people ill. Farmers and regulators want to avoid that at all costs – and so when there is a perceived risk, oyster farms have to close until conditions improve. To ensure successful outcomes for the Australian oyster industry, The Yield partnered with Microsoft to provide on-farm IoT sensors, intelligent digital solutions, and predictive analytics to help farmers make faster, more informed, data based decisions when it comes to the weather and improving their yields.



Products and Services

Azure
Azure IoT Hub
Azure Machine Learning

Organization Size

Small

Industry

Agriculture

Country

Australia

Partner

Bosch

Business Need

Operational Efficiency
Predictive Analytics
Increasing ROI





Harnessing data from vehicle computers to empower drivers, mechanics, and fleet managers to improve logistical operations

Revolutionary IoT solution for vehicle owners helps save time, money, gas—and possibly lives

TEXA S.p.A. is one of the first companies to give consumers, fleet managers, and mechanics mobile access to useful insights compiled from vehicles' computers. In a few seconds, customers can see data about engine health and fuel consumption as well as metrics ranking driving skills. Customers can also configure the solution to notify paramedics and police automatically if their vehicles are in an accident or vandalized. What made this kind of solution possible is TEXA's innovative use of technologies including the Internet of Things (IoT) and Microsoft Azure.

Products and Services

Microsoft Azure
Microsoft Visual Studio

Organization Size

Medium

Industry

Discrete Manufacturing

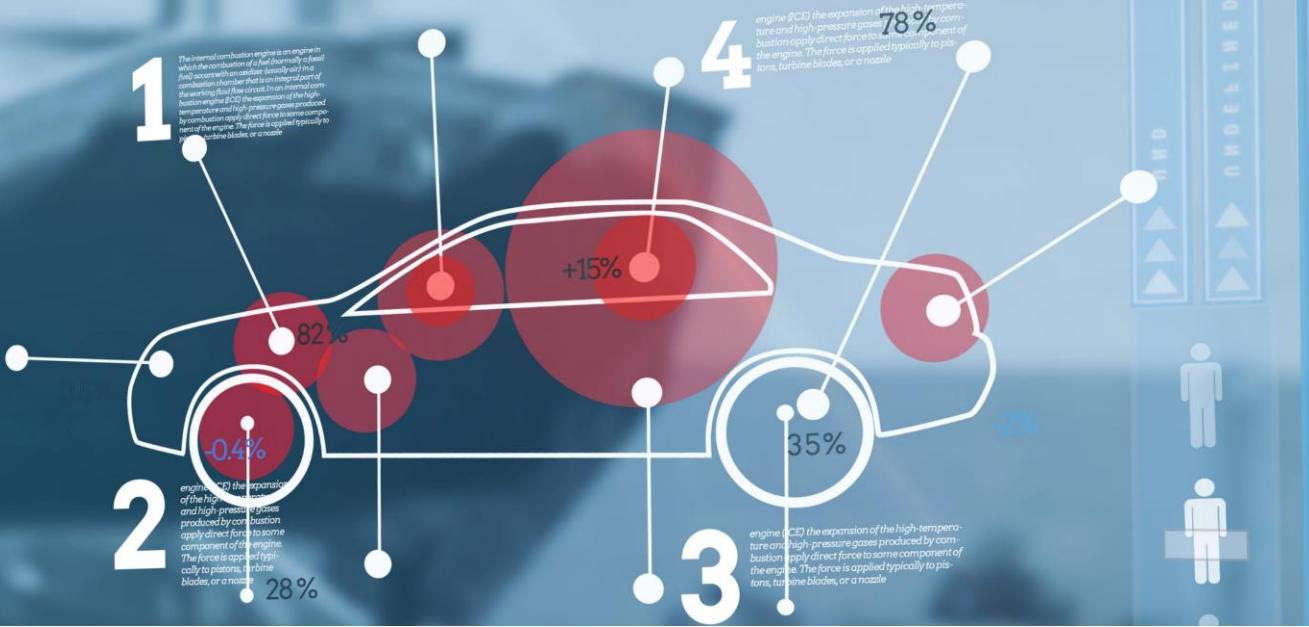
Country

Italy

Business Need

Business intelligence and mobility





Saving costs and time, and driving product improvement for the end-user

Automotive developers use cloud power to identify manufacturing defects

A development team working with global automotive parts maker Fagor Ederlan wanted to use manufacturing data to predict quality issues in molded aluminum parts. The flexibility of the Microsoft IoT solutions enabled them to create a prototype that identifies defective parts sooner and can be applied across different machines and locations. The solution uses the scalability delivered by Azure IoT Hub, Azure Functions, Azure Stream Analytics, and Azure Resource Manager and enables the integration of multiple Machine Learning models in the future. Ultimately this cloud-based solution will help Fagor Ederlan save money and time while enhancing the quality of their products.



Products and Services	Organization Size	Industry	Country	Partner	Business Need	
Gateway SDK Azure IoT Hub Azure Stream Analytics	Power BI Azure Functions Machine Learning	Corporate	Automotive	Spain	LKS ETIC	Data Management Analytics





Developed a new offering to reduce ownership costs and build long-lasting customer relationships

Connecting vehicles for the long haul

Daimler Trucks North America (DTNA) manufactures some of the most recognizable commercial vehicles on the road today. To help fleet managers increase the reliability and reduce the cost of owning its vehicles, DTNA built Detroit Connect, a pioneering data capture and analysis platform and suite of services that supports its state-of-the-art vehicles and helps build long-lasting relationships with its customers. Because it is built on the Azure platform, Detroit Connect is the most reliable and secure connected-vehicle solution on the market today.

DAIMLER

Products and Services

Microsoft Azure IaaS
Azure Event Hubs
Azure Traffic Manager

Organization Size

Corporate

Industry

Discrete Manufacturing

Country

United States

Business Need

Secure connectivity for remote data capture





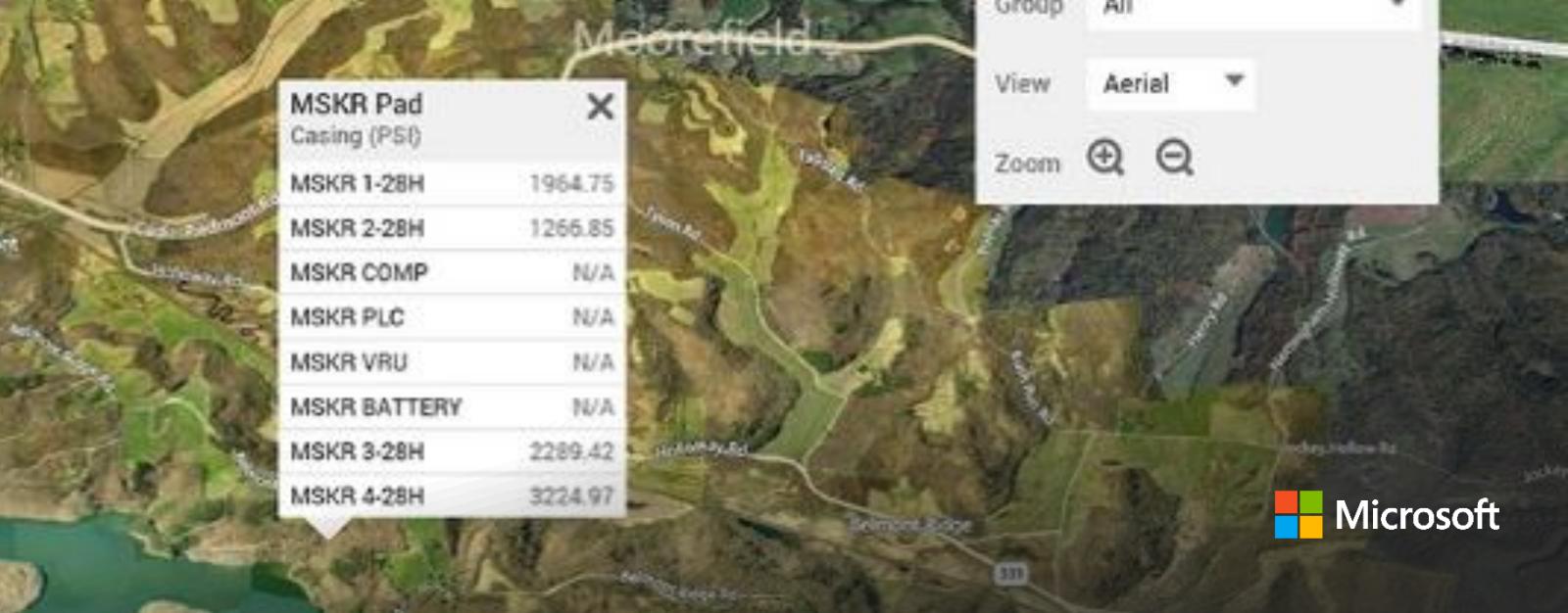
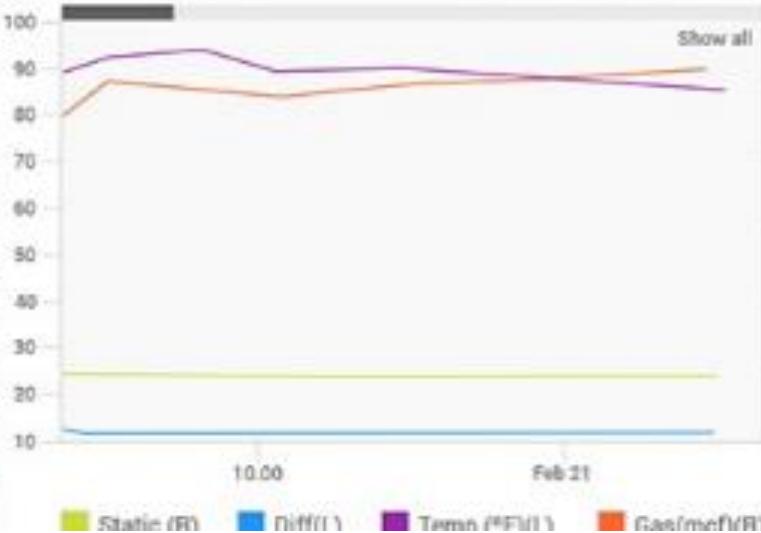
Creating new revenue streams, transforming business models, and offering new value to customers

Opportunity heats up as Honeywell connects with homeowners

Honeywell's transformation—from being a maker of products to being a maker of connected products—is happening on the Microsoft Azure cloud platform. Using a suite of Azure services, Honeywell and Microsoft have designed an Internet of Things solution to create new software-as-a-service-based revenue streams, accelerate time-to-market for its connected devices, and transform its business model for greater competitive advantage. The openness and scalability of the Azure platform allow Honeywell to offer new value to its customers, giving them flexibility and control over their investments, an increasingly important expectation in an increasingly connected world.



Production Trends



2x workload database processing with 70% less transaction units, avoiding a projected 400% increase in cloud service costs

Quorum avoids costs, fosters growth, and protects public health and safety with Azure

To help oil & gas companies expedite the detection of threats to public health and the environment, as well as operational inefficiencies, Quorum provides innovative software as a service (SaaS) solutions for field operations that are based on Microsoft Azure. When one of its key SQL Databases was in danger of not being able to ingest data fast enough, Quorum adopted In-Memory OLTP, a project that took just three days. As a result, Quorum was able to onboard new customers without having to re-architect its field operations software—or increase its cloud service costs by a projected 400 percent. And today, the database processes twice the workload while consuming 70 percent less database transaction units (DTU). Quorum's field operations software is ready for serious growth, and the company can now easily support rapid innovation in Internet of Things (IoT) technology for the oil and gas industry.



Products and Services

Microsoft Azure
Azure SQL Database
Azure IoT Hub

Organization Size

Medium

Industry

Oil and Gas

Country

United States

Partner

Business Need

Greater database scale to support rapid growth



Evolving from a supplier of water purification gear to a premium provider of water intelligence

Taking the worry out of water

Evoqua Water Technologies is a 100-plus-year-old company that has reinvented itself for the digital age. A provider of water purification solutions to 90 percent of the Fortune 500, Evoqua is using Microsoft Azure advanced analytics to transform field-equipment data into valuable insights for customers. This is helping Evoqua evolve from a supplier of water purification gear to a premium provider of water intelligence. Evoqua utilizes this same data intelligence throughout its organization; in particular, its field service team uses data-driven insights in combination with Microsoft Dynamics 365 to recommend new services while onsite with customers.

Products and Services

Microsoft Azure
Azure IoT Hub
Microsoft Dynamics 365
Microsoft Office 365

Organization Size

Large

Industry

Discrete Manufacturing

Country

United States

Partner

CEI Systems &
Technologies
Group
eLogic

Business Need

Data intelligence





Increasing the IQ of smart pumping solutions

Smart moves help save water, money ... and the planet

Grundfos, started in 1945, is a global leader in advanced pumping solutions and water technology, producing more than 16 million energy-efficient pumps a year that move water to where it should be, using as little energy as possible. Grundfos pumps provide drinking water, remove wastewater, and water crops all over the world. The company also contributes to global sustainability by pioneering technologies that improve citizens' quality of life and health. As part of these efforts, Grundfos continues to increase the IQ of its smart pumping solutions with the Microsoft IoT solutions and Microsoft Dynamics 365.



Products and Services

Microsoft IoT solutions
Azure IoT Hub
Dynamics 365

Organization Size

Corporate

Industry

Discrete Manufacturing

Country

Denmark

Business Need

Internet of Things
Machine Learning/
Predictive Analytics





*Increasing safety
and reducing data
costs with IoT edge*

Oil and gas experts use machine learning to deploy predictive analytics at the edge

For companies with connected assets distributed across a country or around the world, edge analytics makes remote asset management easier by putting application logic on-site. However, some businesses may have remote assets without easy access to the cloud, and they may be reluctant to send data outside their own networks. Schneider Electric is out to solve that challenge for the oil and gas industry. The company has pushed edge solutions into new, predictive realms with the help of Azure Machine Learning and Azure IoT Edge.





*Increasing security
for customers and
creating new
revenue
opportunities for
ABUS*

Leading security firm in Germany develops safeguards for IoT devices

"Learning so much is already available, this is the great thing about Azure. There are so many different features available; all you need to do is select the right ones, make them work for you, and combine them intelligently."

—Stuart Parris, Head of Product Management

As part of its digital transformation strategy, ABUS is expanding its portfolio with IoT devices. ABUS is currently shipping about 50,000 security cameras and several thousand-alarm systems a year, adding to an ever-growing installation base of security components. The standard method of connecting devices to update firmware—port forwarding through a customer's network firewall—could contribute to a security vulnerability.



Products and Services

Windows 10 IoT
Azure IoT Hub
Microsoft Azure

Organization Size

Medium

Industry

Security

Country

Germany

Business Need

Cybersecurity





Reducing product downtime and ensuring child inclusion

Avatarion Technology created a smart robot to connect kids in long-term hospital stays to their classes, family and friends

"I was in a cancer ward with 20 children. As they played with one of our robots, the children were able to forget about their problems. It's moments like those that keep me going."

—Jean Christophe Gostanian, CEO

Avatarion developers created Avatar Kids that connects children and teens with their home and classes during long-term hospital stays. Using IoT Hub, they collect telemetric data on their deployed robots to monitor activities and eventually perform predictive maintenance. Moving forward, the company is investigating Microsoft's Cognitive Services stack to enhance facial and speech recognition.

Products and Services

Microsoft Azure
IoT Hub
Machine Learning Studio

Organization Size

Small

Industry

Robotics

Country

Switzerland

Business Need

Predictive maintenance and remote monitoring



Increasing ROI by determining optimal shipping loads & improving navigation safety

Norwegian developers at Kongsberg Maritime map unpredictable harbor floor with IoT Hub

"I had no previous experience with Microsoft. I knew almost nothing about Azure, the cloud, or IoT. It only took a day or two to get into it, after which it wasn't that hard."

—Terje Nilsen, Manager of Disruptive Technology

Harbor bottoms are continually changing in unpredictable ways. Knowing the depth of the harbor is not only essential for safe port entry and docking, but can also prevent underloading vessels in berths that are actually deeper than believed. By connecting multiple berth depth monitoring systems to the Azure cloud, a lead developer at Kongsberg Gruppen is discovering a more intelligent solution for determining optimal shipping loads while improving navigation safety.



KONGSBERG

Products and Services

Azure IoT
Azure Advanced Analytics
Azure Machine Learning
IoT Hub

Organization Size

Corporate

Industry

Manufacturing

Country

Norway

Business Need

Real-time data collection





*Transforming
business with selling
insights*

Steelcase demonstrates the smart and connected workplace with new IoT-powered solutions

Steelcase, a company with a 105-year history of designing for workspaces, developed a cloud-enabled space-sensing network to help organizations create workplaces that respond to the needs of people while also optimizing real estate investments. Using a network of wireless infrared sensors built upon the Microsoft Azure IoT platform, Steelcase Workplace Advisor can deliver advanced analytics around the clock, making it possible to receive real-time statistics alongside enterprise reliability and security. Steelcase then takes this information and layers their own expertise on top of it, giving organizations the ability to see exactly how their spaces are being used.





Creating smarter heating and cooling systems with cloud-connected IoT solutions

Johnson Controls' GLAS, a smart thermostat based on the Windows 10 IoT Core operating system & connected to Azure IoT, gives building owners remote access through web and mobile apps to monitor and control features of the heating and cooling system. The solution can be intuitively managed through touch and voice commands.

Easy to use and implement, the solution enables commercial and residential property managers and owners a way to affordably make buildings more comfortable.

PRODUCTS AND SERVICES

Azure IoT solution accelerators
Cortana Intelligence Suite
Microsoft Visual Studio
Windows 10 IoT
Xamarin

ORGANIZATION SIZE

Corporate (10,000+ employees)

INDUSTRY

Manufacturing

COUNTRY

United States





Improving product offering and driving innovation

Drone Works uses Azure IoT Hub to build a safe flight platform for industrial drones

"I see a drone as an IoT device, so I'd already made the connection between Microsoft Azure solutions and what it could do for IoT concerns."

—Hironobu Imamura, CEO

Japanese company DroneWorks is supporting the expanding use of commercial and industrial drones with a management system that can predict maintenance needs and malfunctions to protect public safety. The secure, scalable solution combines Azure IoT Hub and Azure IoT Edge to collect and process flight data, with Azure Stream Analytics and Azure Machine Learning enabling predictive analysis.

Products and Services	Organization Size	Industry	Country	Business Need	
Azure IoT Hub Azure IoT Gateway SKK Azure Event Hubs Azure Stream Analytics	Azure Table storage Power BI Embedded Azure Machine Learning	Small	Industrial Drones	Japan	Data management Predictive analytics





*Improving efficiency
and cost structure,
and building
products at more
competitive prices*

Sagegreenlife keeps living walls green with an easy-to-use IoT solution

Sagegreenlife's living walls bring the benefits and beauty of nature into man-made spaces by leveraging Azure IoT Central and Cradlepoint LTE network solutions to detect and resolve issues before they affect plant health. With this IoT solution, Sagegreenlife can provide an exceptional customer experience, deliver new insights across the organization, and scale its business on a highly secure, easy-to-use, customizable platform.



The future of intelligent cities powered by Azure IoT

Enabling smart cities at metroplex-scale



DimOnOff is a pioneer in IoT for smart cities. Using Azure IoT, they have created the ultimate smart city management system based on a complete end-to-end wireless control and monitoring system.

Cities can now remotely control and monitor assets, access highly accurate and customizable built-in reports and improve the efficiency of operations in every aspect of urbanization.

PRODUCTS AND SERVICES

Azure IoT Hub

ORGANIZATION SIZE

Small (1 - 49 employees)

INDUSTRY

Power and Utilities

COUNTRY

Canada





*Saving money and
water for local
municipalities*

Developers digitize water with Azure IoT Hub and Azure Machine Learning

"The customers we are talking to will have many sensors, so we need something that scales... IoT Hub, for instance."

—Kevin Gjerstad, CTO Cloud Services

We usually think of the Internet of Things as a network of connected devices. Developers at the Norwegian software company Powel have discovered that IoT can also be extended to nondurable resources like water. Through the careful collection of sensor data, Powel's software engineers transform water currents into data streams. These streams are then analyzed using machine-learning algorithms to locate problems in municipal water supplies and alert the appropriate utilities, saving both money and a vital natural resource.

Norges vannverk teknologi

Avstengning
18.10.2016 kl.09.32

Spyling
18.10.2016 kl.09.32

Rørbrudd
18.10.2016 kl.09.32

Rørbrudd
18.10.2016 kl.09.32

Kundehenvendelser i sone

18.10.2016 kl.09.32
"Det er dårlig trykk i tappekrana"



Products and Services

Microsoft Azure
IoT Hub
Machine Learning Studio

Organization Size

Medium

Industry

Smart City

Country

Norway

Business Need

Predictive maintenance of
municipal water systems





Improving public transit with timely insights about traffic flow

Developers use IoT Hub to provide free Wi-Fi

"We rapidly built an end-to-end proof of concept that brings a variety of data into Azure via IoT Hub."

—Oliver Keyworth, *Development Manager*

Emirates Air Line cable car, owned by Transport for London, runs 1.5-kilometers across the Thames River in London, England. The developers at Microsoft partner TBS Services figured out a way to provide free Wi-Fi service to passengers, building a solution that combines Microsoft Azure, TV White Spaces, and other technologies. As a value added, the developers combined Azure IoT Hub with CCTV to gather accurate and timely insights about traffic flow in order to improve operations and perform predictive maintenance on the cable car equipment.



Improving flight safety and efficiency

NAV CANADA relies on Azure IoT to help keep an eye on every flight

NAV CANADA's entrepreneurial culture has fostered development of new technologies that have shaped global aviation. Relying on Microsoft Azure to help deliver the Internet of Things for airlines promises to vault the industry ahead again with greater safety, security and efficiency solutions for airlines and consumers.



Products and Services

Azure
Azure IoT
Azure IoT Hub

Organization Size

Large

Industry

Transportation & Logistics

Country

Canada

Business Need

Asset Tracking





*Optimizing
international flow of
cargo*

Port machinery manufacturer ZPMC transforms its business with Azure IoT

"IoT Hub... would make a solid foundation to build up our predictive maintenance capability."

—ZPMC

Shanghai-based ZPMC manufactures heavy-duty equipment that enables modern shipping. That equipment is a source of real-time data, which needs to be retrieved, monitored, and analyzed. ZPMC uses Microsoft IoT solutions, Stream Analytics, and Power BI to gather real-time data about their port equipment around the world, while providing valuable insight into the flow of cargo through these ports.



Products and Services

Microsoft Azure
Azure Blob storage
Azure IoT Hub
Power BI

Organization Size

Corporate

Industry

International Cargo

Country

China

Business Need

Predictive Analytics
Data Storage



*Savings on
resource costs,
faster solution
delivery time,
and attract
expert IT talent.*



Maersk uses cloud to spur development of containerized solutions

As part of its digital transformation efforts, shipping giant A.P. Moller - Maersk needed to streamline IT operations and optimize the value of its IT resources. Maersk adopted Microsoft Azure, migrated key workloads to the cloud, and modernized its open-source software, which included the adoption of Kubernetes on Azure. Maersk software engineers now spend less time on container software management and more time on innovation and value-added projects. The resulting business value is savings on resource costs, faster solution delivery time, and the ability to attract expert IT talent.

Products and Services

Azure
Azure IoT Hub

Organization Size

Corporate

Industry

Transportation

Country

Denmark

Business Need

Connected vessel





Putting intelligent digital signage within easy reach of businesses worldwide

Eliminated the need for IT personnel in digital marketing

Using the XOGO Player and XOGO Manager apps, customers can turn any Windows 10 device into a digital sign in just a few clicks. To make the process even easier, they can get the XOGO Mini media player, an ultra-small appliance that comes preinstalled with XOGO Player running on Windows 10 IoT Core.

Connect it to a display and control digital signage with the XOGO Manager app—no keyboard or mouse required. The solution connects with the Microsoft Azure cloud platform for enhanced content management.

PRODUCTS AND SERVICES

Azure Cloud Services Azure SQL Database
Azure Event Hubs Azure Storage
Azure Functions Power BI
Azure IoT Hub Windows 10 IoT Core
Azure Stream Analytics

ORGANIZATION SIZE

Small (1 - 49 employees)

INDUSTRY

Retail & Consumer Goods

COUNTRY

United States





Keeping brick-and-mortar grocers competitive against online shopping

The supermarket of the future: Using IoT to design for humans

Looking to offer its brick-and-mortar customers the same information-rich experience of shopping online, Italy's biggest grocery cooperative is using IoT technology to help shoppers return to the sociable days of open-air markets, when there were shopkeepers at every stall, ready to answer any question a customer might have about their wares. Coop Italia created an IoT solution that analyzes customer data to both keep shelves properly stocked and deliver valuable insights into customer shopping habits.



Products and Services

Windows
Azure
Azure SQL Database
Azure IoT Hub

Industry

Retail

Country

Italy

Partner

Accenture
Avanade

Business Need

Customer Experience
Product Innovation





Bringing a new solution to the table: interactive technology transforms the restaurant industry

Increasing restaurant sales by 32% with real-time menu adjustments

Kodisoft, a creator of interactive restaurant technology, wanted to create a new way for engaging consumers. The company designed an innovative platform based on Windows 10 IoT and Microsoft Azure to connect interactive restaurant dining tables with cloud services. Consumers can touch the table surface to order menu items and services, play games, and more, while the table responds intelligently with personalized themes and offers.

As a result, consumers gain a digitally-enhanced dining experience, and businesses benefit from more traffic and higher profits..

PRODUCTS AND SERVICES

Azure Active Directory Azure IoT Hub
Azure Machine Learning Azure Storage
Azure Media Services Power BI
Azure SQL Database Windows 10
Microsoft Cognitive Services Windows IoT

ORGANIZATION SIZE

Small (1 - 49 employees)

INDUSTRY

Retail

COUNTRY

Ukraine





*Improving hospital
hygiene and saving
lives*

Reducing hospital-acquired infections through connected sanitizer dispensers

Knowing proper hand washing is the most effective way to reduce hospital-acquired infections, GOJO, inventor of Purell, used Azure IoT to apply a system of sensors and monitors that track hygiene practices in hospitals and report real-time compliance data.



Products and Services

Azure, Azure IoT, Azure IoT Hub

Organization Size

?

Industry

Healthcare

Country

United States

Business Need

Industry Compliance
Safety





Gaining insights based on terabytes of data and testing new product scenario with very little IT setup or cost barriers

Medical breakthrough transforms from idea to lifesaving application in less than a year

If your discovery could help improve quality of life or even save lives, how could you get your discovery to market with a scalable technology model and minimal investment? Dr. M. Marc Abreu established BTT Corp. to bring to market a service that monitors brain temperature, non-invasively and continuously. Company scientists needed data and software to uncover all the ways this discovery could help people live healthier lives. To gain insights based on terabytes of data, and for the computing power to run tests and develop product scenarios with very little IT setup, the company chose Microsoft Azure.



Products and Services

Microsoft Azure
Azure App Service
Azure Functions
Azure IoT Hub
(See speaker notes for full product list)

Organization Size

Small

Industry

Health

Country

United States

Business Need

Product Development based on IoT



Better value for the money and greater opportunity to make breakthrough treatment more widely available



Raising the stakes in the fight against cancer using Azure IoT

Belgium-based medical tech company, IBA Worldwide, is the leading specialist in producing equipment for proton therapy, an advanced cancer treatment. With Microsoft Azure IoT, the organization is now on its way to making its therapy devices autonomous, meaning better value for the money and greater opportunity to make the breakthrough treatment more widely available.



Products and Services

Azure IoT Edge
Azure IoT Hub

Organization Size

Large

Industry

Health

Country

Belgium

Business Need

Remote monitoring
Predictive maintenance





Greater customer value for greater business growth

Finding a cloud IoT platform to enable product offering and organizational growth

After trying different technologies, it found a low-cost licensing and maintenance model in Azure that also allowed it to offer its on-demand services. Origis integrated Azure and IoT to develop an online patients purchase history in 6,000 pharmacies in Mexico. At the pharmacy, the Origis user will present a card where the purchase history is saved and where the authorizations for discounts are processed.



Products and Services

Azure IoT Hub
Azure Event Hubs
Azure Machine Learning
Power BI

Organization Size

Small

Industry

Healthcare

Country

Mexico

Business Need

Product Innovation





Dr. Gene Frazer



Surface Hub

Microsoft



Ingesting & storing massive volumes of data with optimized analytics and faster access to insights on a secure, cost-effective platform

Mobile healthcare provider uses Azure to scale and evolve diabetes care solution

"China currently has 130 million citizens who have been diagnosed with diabetes. It is our mission to help these patients and their families manage this chronic disease."

—Vincent Yang, CEO

Zion China's mobile app for diabetes management transmits personal patient data every three minutes for analysis by doctors. The Beijing company needed more robust data management and storage that could handle the huge volumes of data and enable predictive analysis. The developers turned to the scalability, speed and agility of Azure cloud solutions, including Azure IoT Hub, Stream Analytics and Machine Learning. The resulting new architecture can ingest and securely store massive volumes of data with optimized analytics and faster access to insights on a secure, cost-effective platform.



Products and Services

Azure IoT Hub
Azure Machine Learning
Azure SQL Database
Power BI Embedded

Organization Size

Medium

Industry

Healthcare

Country

China

Business Need

Data management
Analytics





Improving patient health and medical treatment decisions

Transforming in vitro diagnostic medical devices with Microsoft IoT

Roche uses an IoT platform to connect and manage its IVD devices intelligently and remotely. In turn, these capabilities enable the company to collect operational data, such as location, in near-real time from those devices. The company can now assess each IVD system's health data, troubleshoot any issues, and if problems exist, can trigger alarms to alert and dispatch supporting teams for service. Furthermore, health providers are able to make more effective decisions on what medical devices to employ from the wealth of diagnostic data available.



Products and Services

Azure HDInsight
Azure IoT Hub
Azure Notification Hubs
Azure Storage
Azure Stream Analytics

Organization Size

Corporate

Industry

Healthcare

Country

China

Partner

Cleidon

Business Need

Remote Monitoring
Asset Optimization
Customer Insights





*Improving quality,
access, and costs of
cardiovascular
patient health care*

Top hospital working with 37 organizations to develop a “digital companion” to save lives

To help more people live longer, cardiologists need data such as electrocardiogram (ECG) readings or blood pressure measurements collected over weeks, months, or even longer. To make such data collection possible, a consortium of 37 organizations built an Internet of Things (IoT) prototype, Digilog, using a fitness band and tiny wearable sensors to capture and send a patient's ECG readings and other health measurements to Microsoft Azure. There, IoT and other services transform disparate medical data into easy-to-read summative dashboards and key performance indicators (KPIs), which users and their physicians can view from a mobile app or a web portal with lower costs and fewer geographical boundaries.





*Collecting
archeological data
from ancient sites
with restricted
physical access*

Can IoT save remote Roman ruins?

Archeologists concerned for the state of an underground site discovered beneath the Opera House in Rome turned to Politecnico di Milano for an automated solution. Although physical access to the site was limited, archeologists needed to determine whether humidity, temperature, and other environmental factors were destroying the ancient friezes and sculptures. The university developed a smart-sensor technology that could provide the onsite data monitoring the archeologists were restricted from performing manually. Microsoft Azure was the simplest solution for an IoT-based system that would provide the archeologists with the data they needed to monitor the site.

Products and Services

Microsoft Azure
Azure App Service
Azure IoT Hub
Azure SQL Database
Azure Stream

Organization Size

Large

Industry

Education

Country

Italy

Business Need

Remote monitoring
based on IoT





Creating new revenues with packaging as a service

Tetra Pak® technology keeps food and drink flowing safely from farm to table

Tetra Pak, a supplier of food processing and packaging solutions to manufacturers in more than 175 countries, uses the cloud to foresee machine problems—or spot breakdowns—reducing plant downtimes and the high costs they carry. By connecting packaging lines to Microsoft Azure, Tetra Pak collects operational data to help predict informed maintenance timing. If repairs are needed, Tetra Pak service engineers use Microsoft HoloLens headsets to diagnose and fix machine issues, even in remote locations.





Increasing efficiencies, optimizing processes, and decreasing ingredient waste

Hershey creates IoT solutions for sweeter success

To improve efficiencies, optimize processes, and decrease ingredient waste, Hershey is expanding their Microsoft IoT solution, including Cortana Intelligence, from intelligent sensors on the factory line to packaging, transportation, and customer behavior.



Products and Services

Azure,
Azure IoT
Azure IoT Hub
Microsoft AI

Office 365
OneDrive for Business
SharePoint Online
Yammer

Organization Size

Corporate

Industry

Consumer Goods

Country

United States

Partner

BrightStarr

Business Need

Factory Optimization
Waste Reduction
Customer Insights





Providing more timely and accurate customer service activities

Improving workplaces using IoT-connected vending machines

To improve operational efficiency for its partners in the field, MARS DRINKS built an Azure IoT-based solution that uses predictive analytics and collects real-time data from vending machines to reduce the frequency of downtime and out-of-stock products.



Products and Services

Azure
Azure IoT
Azure IoT Hub
Microsoft AI
Power BI

Organization Size

Medium

Industry

Consumer Goods

Country

United States

Partner

Neal Analytics

Business Need

Customer Satisfaction
Inventory Management



The IoT of the Storm



The IoT of the Storm:

Energy provider builds real-time asset tracking, enhancing storm recovery and customer service

Scalably tracking people, places, & things for immediate disaster response

Southern Company, one of the largest energy providers in the United States, needed a way to collect sensor data from trucks, equipment, and crew member devices, and then condense the datasets into actionable insights. Using Microsoft Azure technologies such as Stream Analytics and IoT Hub, the company now gathers and processes real-time data from internal and external sources.

That helps Southern Company accelerate power restoration, deter equipment theft, and increase driver safety.



PRODUCTS AND SERVICES

Microsoft Azure
Azure Cloud Services
Azure Event Hubs
Azure Stream Analytics

ORGANIZATION SIZE

32,000 Employees

INDUSTRY

Power and utilities

COUNTRY

United States





Enabling product innovation for customer security solutions

Building a new future: Transforming Australia's construction industry with digital technologies

ATF Services, a leading provider of security and safety solutions for Australia's construction industry, has launched a pioneering, intelligent, multisensor, IoT alarm system using Microsoft Azure Service Fabric and Azure IoT Edge. The firm teamed up with software developer Two Bulls to create a platform that connects low-powered IoT devices to Azure and a mobile app. Easily installed virtually anywhere, the new platform puts sophisticated site surveillance within reach of everyone from private homeowners to large construction firms.



Products and Services

Microsoft Azure
Azure IoT Edge
Azure Service Fabric

Organization Size

Medium

Industry

Professional Services

Country

Australia

Partner

Two Bulls

Business Need

Business Agility





Saving property owners more than €40 million (\$42.37M) in hot water costs alone

Swedish firm uses IoT technologies to save energy, water, and millions of dollars for property owners

To reduce environmental impact and save money, Swedish property manager Stockrose teamed with Eniga, a provider of intelligent cloud solutions, to connect thousands of apartments to the Microsoft Azure cloud platform. By using Internet of Things (IoT) technologies, Stockrose expects to save property owners more than €40 million (US\$42.37 million) in hot water costs alone. The platform easily extends to more equipment and buildings, enabling Stockrose to create a smart buildings-as-a-service business model and improve sustainability across Sweden.





*Saving lives, time,
and money with
street-level weather
data*

Late-stage startup accelerates IoT adoption across several industries by switching to Microsoft Azure

A provider of Internet of Things (IoT) technologies across multiple industries, Fathym switched from Amazon Web Services to the Microsoft Azure platform to accelerate deployment and business growth. With Azure IoT Hub and other Microsoft cloud services, Fathym has gained the flexibility it needs to rapidly deliver innovative, data-driven solutions at scale for diverse customers. Its solutions include WeatherCloud, which provides real-time, street-level weather data collected from vehicles, and an education platform used by 20,000 students across five states. Taking advantage of Microsoft IoT technologies, Fathym is quickly expanding into industries such as transportation, education, power, infrastructure, manufacturing, and oil and gas.



Products and Services

- Microsoft Azure App Services
- Microsoft Azure IoT Hub
- Microsoft Azure Virtual Machines

Organization Size

Medium

Industry

Professional services

Country

United States

Business Need

Business critical



Smart-building control at hyperscale: only possible in the cloud

Supporting bidirectional communication with millions of devices; "We can assure our enterprise customers that Azure security helps protect their IoT devices from becoming portals for malicious attacks"

- Ted Colton, VP of Communications, Crestron



Using Azure IoT, Crestron is equipping its Internet of Things (IoT) products with new levels of intelligence, control, and predictive analytics that give customers unprecedented insight into building usage and costs.

By taking advantage of Azure IoT platform services, Crestron saved time and money in getting new products to market.

PRODUCTS AND SERVICES

Microsoft Azure
Azure Event Hubs
Azure IoT Hub
Azure Data Lake Store
Azure SQL Database

ORGANIZATION SIZE

2,000 employees

INDUSTRY

Partner professional services

COUNTRY

United States





Coor innovates the activity-based workplace with IoT

Building unique digital experiences with AI & Cognitive Services

Internet of Things, Machine learning, Cognitive Services and AI is not only changing the way we work and get insights – it also transforming the physical office into activity-based digital-first workplaces.



PRODUCTS AND SERVICES

Azure API Management
Azure Event Hubs
Azure IoT Hub
Power BI

ORGANIZATION SIZE

Large (1,000 - 9,999 employees)

INDUSTRY

Professional Services

COUNTRY

Sweden

BUSINESS NEED

iBiz Solutions





Cutting data center costs in half, and scaling anywhere in the world

Creating real-time conversations with consumers, wherever they are

Targetbase has transformed its offering with uniquely differentiated capabilities by improving customer engagement for consumer packaged goods and retail companies via real-time, intelligent offers to consumers, across devices and marketing channels. To create this real-time, anytime, anyplace consumer conversation, Targetbase rewrote its marketing platform using Microsoft Azure and the Cortana Intelligence and Microsoft Azure analytics. With Azure, Targetbase can quickly set up new customers, expand and scale anywhere in the world, and cut datacenter costs in half.

Products and Services

Cortana Intelligence
Microsoft IoT solutions
Azure IoT Hub
Microsoft Azure

Organization Size

Medium

Industry

Professional Services

Country

United States

Partner

Artis Consulting

Business Need

Big data and analytics





Energisme optimizes enterprise energy performance

30% reduction in energy costs, 70% in staff efficiency gains, deployed in four weeks

In an energy environment of change and complexity, the French energy services provider Energisme uses Microsoft Azure IoT Hub and other Microsoft services to power the Energisme energy management platform and help enterprise energy consumers optimize their energy profiles.

With Energisme and Azure, local authorities, large manufacturers, and independent energy suppliers can make better decisions, take faster action, and reduce their energy consumption, impacts, and costs—while Energisme can serve a wide range of customers at any scale.



PRODUCTS AND SERVICES

Azure IoT Hub
Azure Machine Learning
Power BI

ORGANIZATION SIZE

100 Employees

INDUSTRY

Partner Professional Services

COUNTRY

France





Becoming the world's first 'Smart Nation'

From building and construction management to reap energy and manpower savings from municipality owned buildings, to a completely connected transportation infrastructure enabled by an open 'data mall,' to connected hospital care for the elderly powered by big data and a fleet of IT partners, the Singapore government is well on the way in their IoT-enabled digital transformation journey.

PRODUCTS AND SERVICES

- Azure
- Azure IoT Hub
- Azure Machine Learning
- Azure Stream Analytics
- Azure Storage

ORGANIZATION SIZE

Large (1,000 - 9,999 employees)

INDUSTRY

Government

COUNTRY

Singapore





Cleaning up the Ganges river

200 monitoring stations with 17 analytic measurements across 2,500 km to fight pollution

For decades the Ganges has been in peril, polluted with all manner of contaminants. In an effort to turn the situation around, the Indian government created a new ministry with a charter to restore, manage and monitor the Ganges.

The Central Pollution Control Board (CPCB) has been tasked with the huge challenge of not only cleaning up the ancient river, but also monitoring its water quality levels to enforce requirements for each Indian state along the waterway. To combat pollution and restore balance to the Ganges, the CPCB has turned to IoT at a massive scale.



PRODUCTS AND SERVICES

- Azure
- Azure IoT Hub
- Azure Stream Analytics
- Azure SQL Server
- Azure Blob Storage

ORGANIZATION SIZE
Medium (50 - 999 employees)

INDUSTRY
Government

COUNTRY
India

BUSINESS NEED
TechSpan Engineering



How Alaska outsmarts Mother Nature in the cloud

Expecting an 80% reduction in accidents



To keep Alaska's highways open and safe during severe winter weather, the Alaska Department of Transportation & Public Facilities uses the Fathym WeatherCloud solution and Microsoft Azure IoT technologies to make better, hyper-local decisions about deploying road crews.

By using the cloud to make better ground-level decisions, Alaska saves lives and significantly reduces road maintenance costs.

PRODUCTS AND SERVICES

- Microsoft Azure
- Azure Data Lake Store
- Azure Event Hubs
- Azure IoT Hub
- Azure Stream Analytics

ORGANIZATION SIZE

3,100 Employees

INDUSTRY

Government

COUNTRY

United States

PARTNER

Fathym



Miami-Dade Water gets smarter with IoT

Improving servicing and municipal costs, analyzing years of data in seconds not days



With 6,000 miles of pipes, the Miami-Dade County Water and Sewer Department (WASD) faces the challenge of maintaining the system to protect residents and the environment from leaks and spills.

With IoT and thousands of sensors gathering data such as water pressure, flow rates, and rainfall, Miami-Dade's WASD is developing a smarter way to manage and supply this precious resource and manage the wastewater serving over 400,000 households across the County.



PRODUCTS AND SERVICES

Azure IoT solution accelerators
Azure SQL Data Warehouse
Azure SQL Database
Power BI
SQL Server 2016

ORGANIZATION SIZE

Medium (50 - 999 employees)

INDUSTRY

Government

COUNTRY

United States





*Saving money,
and improving
scalability to
3 million users*

Saving lives by alerting people about earthquakes before they strike

SkyAlert is addressing this massive public safety threat of earthquakes by providing an early-warning system that alerts people in Mexico about an impending earthquake using a mobile app, standalone devices, and an Internet of Things (IoT) solution that runs in Microsoft Azure. In production just two months, three million people already use the mobile app, and more than 40 organizations, including Fortune 50 companies and schools, are using the standalone devices. The solution alerts people about an impending quake up to two minutes before it's felt. By using Azure instead of onsite infrastructure, SkyAlert also saves money and it's able to scale the solution to a new region in three months or less.



Products and Services

Microsoft Azure
Azure IoT Hub
Microsoft Visual Studio Team Services
(See speaker notes for full product list)

Organization Size

Small

Industry

Public Safety

Country

Mexico

Business Need

Product Development
based on IoT



*Real-time,
automated
monitoring of
7,000+ pieces of
equipment*

International world trade centre gains control of costly assets with cloud-based IoT

The Dubai World Trade Centre (DWTC) hosts millions of visitors each year. DWTC wanted to improve asset tracking and management for more than 7,000 pieces of costly audio, video, and lighting equipment rented for events. To improve efficiency, DWTC implemented a cloud solution that connects on-premises sensors gateways, ibeacon tags, and an ERP system to the Microsoft Azure IoT services. The venue now has real-time insight into the location and usage of its equipment, and automated processes have improved everything from equipment allocation to inventory management.



Products and Services

Microsoft Azure IoT Services
Azure IoT Hub
See speaker notes for full list of products

Organization Size

Large

Industry

Hospitality & Travel

Country

United Arab Emirates

Partner

KPIT Technologies

Business Need

IoT Services





*Delivering a
unprecedentedly
custom and efficient
visitor experience*

Revolutionizing back-of-house operations with Azure IoT and Windows 10 IoT

Anticipating and accommodating guests' needs is at the core of the hospitality industry. The Steigenberger Airport Hotel in Frankfurt, Germany, wanted to connect the appropriate staff with guest requests as effectively as possible to ensure outstanding service. Employees now don a wearable Internet of Things (IoT) device, powered by Windows 10 IoT Core and Microsoft Azure IoT, to help manage their daily work. The management team generates up-to-the-minute service and cleaning plans so that guests can be taken care of immediately—streamlining operations, improving the guest experience, and building loyalty.

Products and Services

Azure IoT Hub
Windows 10 IoT Core
Azure Virtual Machines

Organization Size

Large

Industry

Hospitality and Travel

Country

Germany

Partner

Trekstor

Business Need

Operational Efficiency
Enhanced Customer Experience





Crowne Plaza Belgrade differentiates guest service with smart parking solution

"Using Azure, IoT, & ParkNET, we are striving for excellence, competitive leadership in the market, & innovation in our guest experience."

- Sasa Cvetkovic: Director of Engineering, Crowne Plaza Belgrade

To offer a unique service in a highly competitive hospitality industry, Crowne Plaza partnered with DunavNET and created a smart parking solution powered by Microsoft Azure.

Now, busy guests and helpful staff can see parking availability in real time, ensuring a convenient arrival experience and saving everyone time. Building on that success, the hotel plans to explore and implement more IoT services in Azure.

