Powering cloud-ready building management and industrial automation

ICONICS IoTWorX™ combines new IoT software technology with affordable IoT devices to create secure, out-of-the-box solutions that help you run your business.

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Microsoft

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Taking the mystery out of IoT

We live in the time of Industry 4.0 — in which interconnectivity, automation, machine learning, and real-time data all converge. And for a long time, organizations have been promised that the Industrial Internet of Things (IIoT) will help them streamline operations and reduce costs.

It's not a question of "if" organizations will move to sophisticated IIoT solutions. It's a question of *when*. But challenges still remain. How do you get started? How do you integrate your existing infrastructure? Will pilot projects actually work? And what is the return on investment? Simply put, implementing IIoT strategies and solutions can be uncharted territory. And that's where the ICONICS Suite with IoTWorX™ comes into the picture.

30%
IoT projects that fail in the proof-of-concept stage without expert guidance*

47%
Organizations that believe there aren't enough skilled workers to build or maintain an IoT network*

97%
Companies that have security concerns about IoT devices and infrastructure*

$11.1 trillion
The overall economic impact of IoT by 2025**

* IoT Signals, Edition 2 Microsoft, October 2020

** https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-can-we-recognize-the-real-power-of-the-internet-of-things#
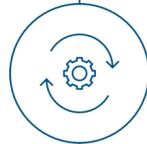
How ICONICS Suite with IoTWorX™ delivers

ICONICS IoTWorX™ combines new IoT software technology with affordable IoT devices to create secure Azure-ready solutions for energy, building automation, manufacturing, and industrial applications. Based on ICONICS' proven Supervisory Control and Data Acquisition (SCADA), analytics, and mobile products, IoTWorX gives organizations like yours the ability to move to true Industry 4.0 with a new generation of SaaS and IoT applications.

By bringing all these powerful technologies together, you'll get simple — yet highly secure — real-time, site-to-cloud communications. And that means you can truly take advantage of the benefits of IIoT and Industry 4.0 standards:

Deliver advanced enterprise-wide visualization on any device, any time, anywhere

Ensure mission-critical redundancy

Get powerful centralized configuration

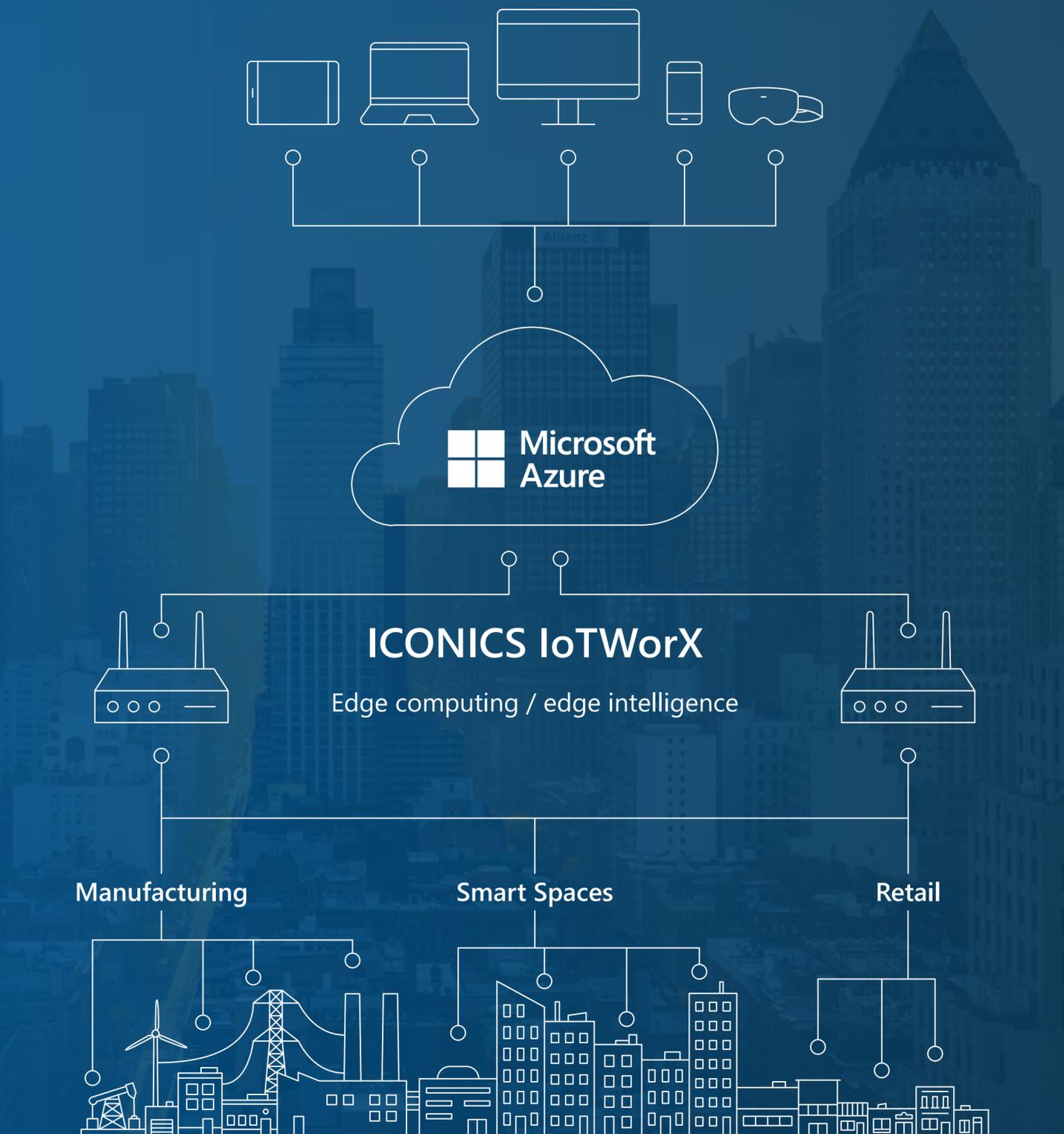**Take advantage of universal connectivity**

IoTWorX does the heavy lifting for you

IoTWorX is an easy, cost-effective solution for any organization that needs to start implementing IoT solutions across their enterprise. As an out-of-the-box solution, it can be configured to address any industrial use case and offers several key technologies that enable IIoT — such as industry-standard protocols to easily connect disparate assets, edge analytics, and data storage closer to where data is being collected, and secure data transport to Azure IoT Hub. It enables real-time data visualization using any smart device with self-service configurable dashboards that help detect any anomalies and gives you the ability to take corrective action before problems occur.

Connect your entire ecosystem into a single platform

With IoTWorX, you'll be able to connect your buildings, factories, and equipment into a single platform. It includes powerful enterprise-wide visualization and analysis tools that send the right information directly to executives, managers, and industry personnel. As a result, you can visualize the most important performance indicators of any system or business from any desktop or mobile client and even transfer dashboards seamlessly. Now, you can uncover and address inefficiencies while getting the tools you need to make better decisions — all in real time.

Universal connectivity

- Integrate a broad range of building equipment and systems seamlessly
- Easily connect your on-premises IT environment with the public cloud
- Save on upfront costs with a pay-for-use model

Powerful visualization

- Get advanced visualization and reporting on any device
- Configure dashboards easily to reduce costs and accelerate deployment
- Use new technologies, such as Azure Digital Twins, with ease

A trusted solution

- Take advantage of a secured centralized platform to create, engineer, and deploy configurations
- Trusted by the 50,000 buildings that currently run on ICONICS
- Delivers 99.95% monthly SLA

Microsoft Azure

ICONICS IoTWorX

Edge computing / edge intelligence

Manufacturing   Smart Spaces   Retail

Swedish Medical Center saves $350,000 in energy costs within 12 months

Situation

With five campuses in the Seattle area, Swedish Medical Center needed to gain more visibility into its energy use and reduce its carbon footprint, and embarked on a five-year plan to increase operational sustainability and cost savings.

Solution

Working with MacDonald-Miller Facility Solutions, the organization deployed ICONICS IoTWorX to implement Fault Detection and Diagnostics (FDD) at three of its hospital campuses. FDD uses software and AI to apply a set of "smart" rules that monitor lighting, heating, and cooling systems, outlets, and water. The system can then notify building personnel when equipment stays running too long, valves are leaking, or sensors are faulty.

Benefits

Operational sustainability now covers three campuses – totaling 2.8 million square feet

Energy savings of $350,000 in 12 months, which exceeds annual projected savings expectations

The hospital was awarded an innovation award by the U.S. Department of Energy for New Installation of Fault Detection & Diagnostics in the Healthcare industry

Major oil company nearly halves energy costs

Situation

A major oil company's 385-acre campus houses 10,000 employees and was constructed to achieve the highest standards of energy efficiency and environmental stewardship. The company wanted to connect all its data so it could improve operations — and provide a baseline for extending lessons learned to a new facility in a different country.

Solution

The company used the ICONICS IoTWorX platform to connect the 23 buildings and 35 different systems in the original campus into a single integrated building management solution.

Benefits

Connected 6,500 assets and one million data elements being monitored

Included 500,000 historical tags

Achieved 40 percent energy savings within five years

Provided a baseline for creating a new facility

ScholleIPN connects pan-global manufacturing sites for more efficient production

Situation

With 14 different sites around the world, packaging manufacturer ScholleIPN was challenged with managing its complex and high-output production process. For instance, disparate data management had led to hundreds of data islands, leading to lack of inconsistency and efficiency.

Solution

ScholleIPN worked with ICONICS to connect all their global locations to a unified control system. Each site gives regional operators HMI screens and tablets to digitize and centralize data, which is then sent to Azure for corporate reporting.

Benefits

A single production system supports data normalization and provides global reporting capabilities

Centralized, real-time reporting and management ensures consistency across the entire production process

New dashboards have minimized human error and almost eliminated manual data entry and calculations

Danish engineering company reduces costs and waste, and improves overall efficiency

Situation

A Denmark-based engineering company that delivers factories, machinery, and other offerings to the cement and mining industries wanted to extend its value by offering its customers a new service to monitor equipment.

Solution

The company worked with ICONICS to create a robust equipment and asset performance monitoring service that could scale, give customers the right software to detect and predict equipment faults, and create dashboards to connect and compare different sites.

Benefits

Flexible dashboard creation enables rapid rollout of custom solutions using the customer's own data

Customers using the solution are reducing energy and waste costs, lowering carbon footprint, and increasing efficiency

The ability to better monitor and manage equipment is consistently leading to longer equipment lifetimes

Large retail chain connects more than 1,800 stores

Situation

A large retail chain with 1,836 different store locations wanted to connect its refrigeration, HVAC, and lighting systems for better centralized management. The challenge? Integrating tens of thousands of rules for fault detection and an extensive alarm and fault management system in one place.

Solution

Working with ICONICS, the chain created an advanced visualization, alarm management, and fault detection solution that connected 116,000 different assets across all its locations, which included 1.5 million historical tags and 3.1 million real-time tags.

Benefits

A better store experience for employees and customers alike
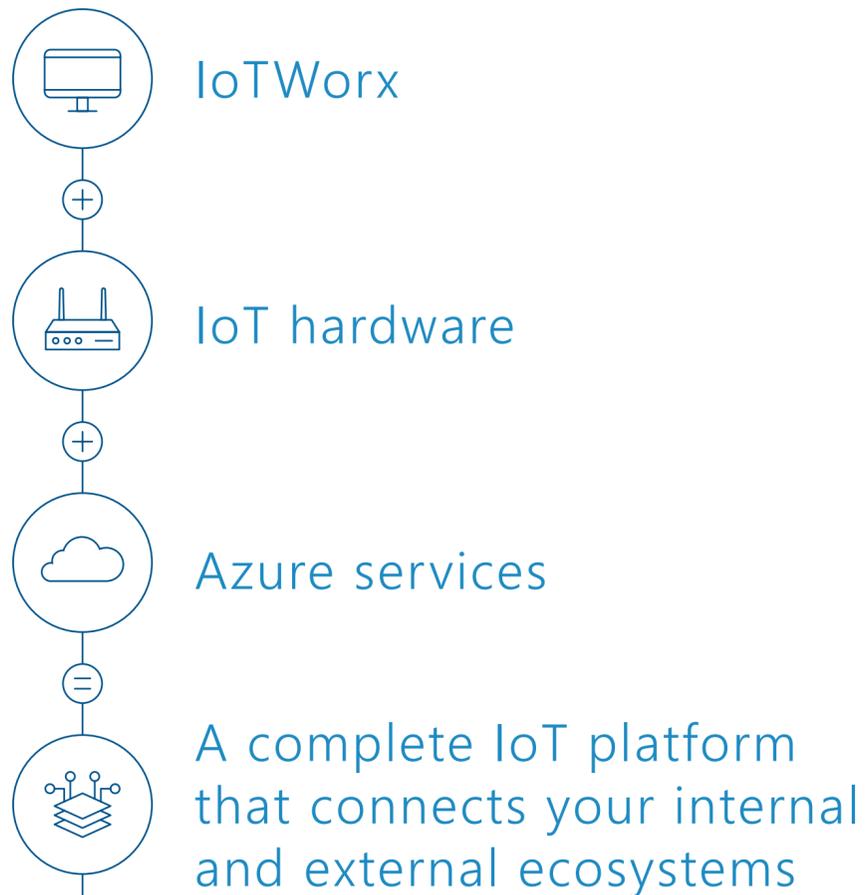
The ability to get a centralized view of all stores, leading to the ability to focus and prioritize actions

Longer term benefits that include identifying best and worst-performing stores, reducing food spoilage, and empowering regional workers

ICONICS and Microsoft create connected systems to unlock new opportunities

The ICONICS and Microsoft partnership is driven by a common goal: to deliver a contextualized view of global operations. ICONICS is a longtime Microsoft Gold Partner and has been recognized as a Microsoft Partner of the Year nine times, for Manufacturing, Application Development, CityNext, Sustainability, and more.

IoTWorx

+

IoT hardware

+

Azure services

=

A complete IoT platform that connects your internal and external ecosystems

ICONICS

An affordable, subscription-based offering that takes advantage of ICONICS' visualization, data historian, analytics, and mobile solutions

One single platform that connects internal and external ecosystems

2D and 3D visualizations to derive the benefits out of every data transaction

Edge analytics and data storage closer to where decisions need to be made

Microsoft

The cloud building blocks to securely connect, monitor, authenticate, and aggregate data for monitoring and machine learning

A flexible application model with a rich set of services, including SDKs, caching, messaging, and identity

The full weight of Microsoft security and privacy

Get started today

Ready to put IoT to work for your business?

For more information, please visit: www.iconics.com/IoTWorX

Contact us to get a free assessment at IoT@iconics.com

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