

The background image shows two men in an industrial setting. One man, wearing a light green shirt and a white hard hat, is gesturing with his right hand raised, pointing towards the upper left. He has a focused expression. The other man, wearing a dark blue shirt and a white hard hat, is seen from the back, looking towards the first man. They are standing in front of large blue industrial cabinets, likely electrical control panels, with various wires and components visible. The lighting is bright and even, typical of an industrial facility.

Avnet IoTConnect and Smart Energy Monitoring Solution

Energy Use Monitoring in Industrial Facilities

AVNET



Agenda

1. IoT market opportunity and challenges
2. Avnet IoTConnect
3. Avnet Smart Energy Monitoring Solution
4. Get started today!

IoT deployments face unique challenges

Connecting devices,
data, and systems

Seamlessly connecting and integrating disparate legacy devices, data and systems can be a daunting task, requiring expertise that most businesses don't have.

Identifying the right
resources

IoT complex and requires different hardware and software resources and more integration than most traditional IT projects.

Managing a complex
ecosystem of providers

It can take up to 10 partners to get an IoT system deployed, which can cause disconnects that slow time to market.

Avnet IoTConnect & Smart Solutions

Everything you need to jump-start the development of your IoT initiative



Secure connectivity & control



Optimized operations



Data-driven insights

How it works

An end-to-end solution that takes the complexity out of IoT



Your business infrastructure

Any devices, data, and systems you want to connect, such as:

- *Devices and equipment*
- *Sensors and gateways*
- *Internal data systems (ERP, CRM, etc.)*
- *External data (social media, weather, traffic, APIs, etc.)*



IoTConnect (PaaS)

A secure platform built on Azure cloud services

- *Multi-protocol connectivity*
- *Easy-to-use toolkit*
- *Hardware support*
- *Artificial intelligence*
- *Predictive analytics*
- *Data visualization*



Smart Solutions (SaaS)

Nine pre-built solutions that address common business challenges



Secure connectivity & control

Easily connect and manage all your devices, data, people, and systems using a secure, cloud-based platform.



Seamlessly and securely connect all your devices with support for multiple connectivity protocols and cross-device communication.

Easily register and pair legacy devices to the platform without coding to get up and running fast.

Manage all devices, data, and applications from one central portal.

Rely on the enterprise-grade security of the Azure platform to encrypt sensitive data, protect devices from viruses and malware and secure network traffic.



Optimized operations

Lower your costs and increase productivity by making existing processes and infrastructure more efficient than ever before.



Minimize downtime and increase productivity using real-time analytics and predictive maintenance to proactively monitor devices and improve processes.

Reduce costs by identifying and addressing issues early. For example, by using IoTConnect, an oil and gas company discovered a gas leak issue that was costing them \$150,000 per day.

Quickly scale your computing power up or down as your business needs change.

Jump-start development of your IoT system with smart, market-ready connectivity solutions for 9 different verticals.



Data-driven insights

Use real-time analytics and artificial intelligence to gain deeper insights, make informed decisions, and drive innovation.



Harness the potential of the vast amounts of data collected by your IoT solution with real-time analytics and artificial intelligence capabilities powered by Microsoft Azure.

Integrate and analyze data from new and existing systems to identify trends, optimize operations, better understand customers, and uncover new revenue sources.

Accelerate decision making and speed time to market by giving stakeholders across the business access to real-time insights via customized, interactive dashboards.

Use live, interactive reports to monitor and optimize device performance and improve processes over time.



Smart Energy Monitoring

A food & beverage company reduces energy costs with comprehensive monitoring



A prominent food & beverage company was seeing significant budget overruns due to inefficient energy usage in their production environments. Avnet's Smart Energy Monitoring solution provided their operations team with the intuitive, AI-driven insights and end-to-end monitoring capabilities it needed to ensure optimal energy usage and ultimately reduce costs.

REMOTE MONITORING

The operations team was able to monitor and analyze energy consumption for production lines from anywhere via mobile devices.

DEEPER ANALYTICS

The solution is powered by real-time data from IoT sensors, big data analytics, and AI so data was immediately accessible for making better decisions around energy usage.

REDUCED ENERGY COSTS

A robust IoT platform allowed operations to communicate with building resources to optimize energy usage and take smart actions.

FLEXIBLE & CLOUD-ENABLED

Smart Energy Monitoring uses an Internet connection to synchronize its data storage to the cloud so extensive network configuration was not needed to start optimizing energy usage.

Powered by Microsoft Azure

Built on Azure services, IoTConnect includes the enterprise-grade security, connectivity and powerful analytics needed for a best-in-class IoT solution.



Connectivity



Scalability



Powerful
analytics



Artificial
intelligence



Security and
management



Next steps

- We'll connect you with the sales team for IoTConnect: iot@avnet.com
- Learn more about Avnet [IoTConnect](#)
- Learn more about Avnet [Smart Energy Monitoring Solution](#)

AVNET®



Avnet Smart Solutions

Get a head start on your IoT initiative with ready-made solutions built on IoTConnect.



Smart Building



Smart Healthcare



Smart Fleet Management



Smart Office



Smart Connected Worker



Smart Warehouse



Smart Retail



Smart Asset Monitoring



Smart Factory



Smart Cell Tower Monitoring

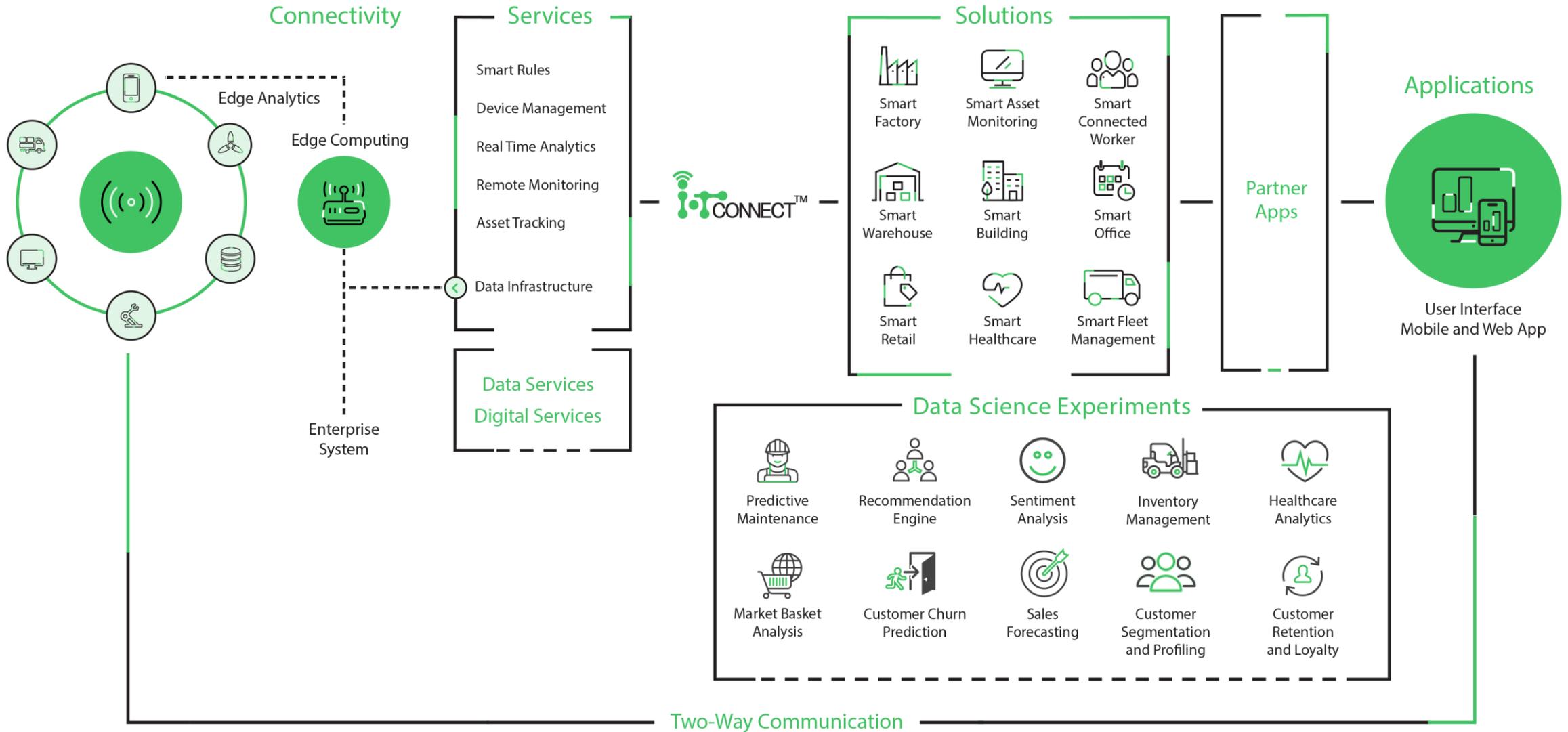


Smart Facility Monitoring



Smart Energy Monitoring

End-To-End IoT Offerings



Energy Use Monitoring in Industrial Facilities

Avnet Reference Architecture

Edge Intelligence

Avnet's solution helps your team monitor energy use across your facility to reduce consumption, lower costs and optimize ROI.

Engineer Experience

Service engineers working on tickets use a mobile app to help them quickly diagnose, document and address issues on-site.

Cloud Services

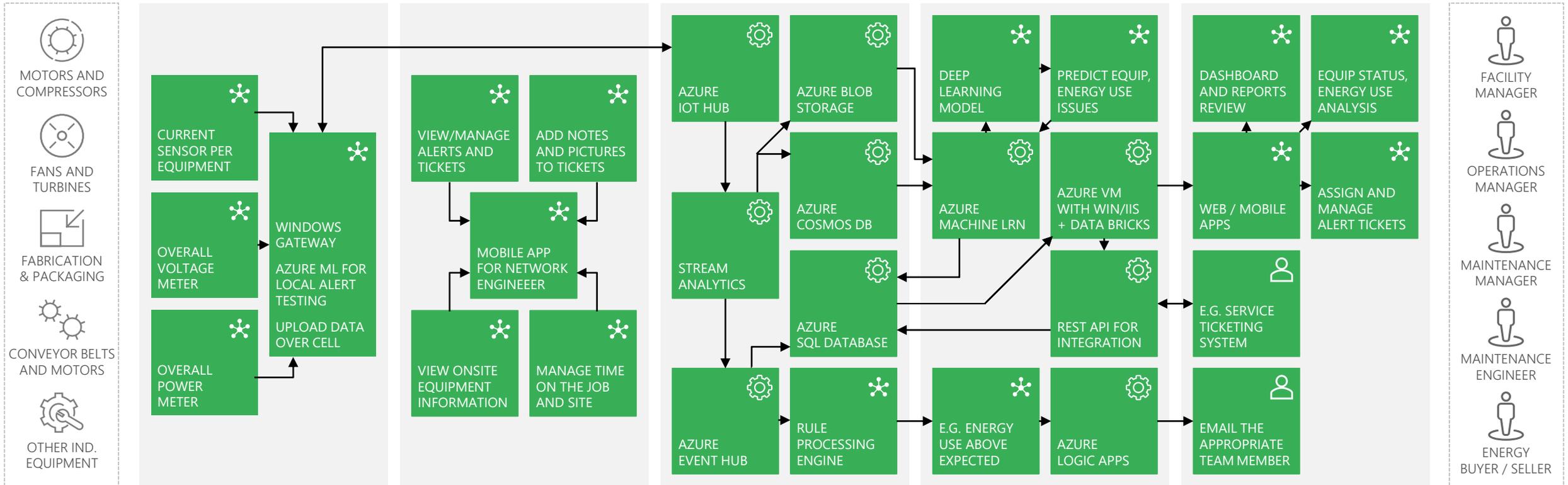
Microsoft's Azure provides the solution with a scalable and secure back-end for all your data and for our cloud solution components.

Cloud Intelligence

Avnet's AI-as-a-Service analyzes equipment and energy usage to deliver predictions on possible areas to address or improve.

Mgmt. Experience

Your team is notified of issues on the fly and can use the built-in reporting and analysis to improve execution and optimize results.



Partner component

Azure service

Customer component

- FACILITY MANAGER
- OPERATIONS MANAGER
- MAINTENANCE MANAGER
- MAINTENANCE ENGINEER
- ENERGY BUYER / SELLER

Avnet Edge-to-Enterprise IoT Services

Consult

Develop

Deploy

IoT Advisory Services

- IoT Transformation Roadmap Strategy
- IoT Audit and Readiness Assessment
- Proof of Value (POV) Programs



IoT Device Design and Build Services

- Product Development
- Manufacturing
- Integration
- Technology Selection
- Inventory Management



IoT Cloud and Digital Services

- Cloud and Analytics
- AI and Cognitive
- Machine Learning
- UI / UX and Visualization
- Web and Mobile Apps Development
- Device Management
- IoT Connectivity

IoT Lifecycle Services

including:

- Field Implementation and Maintenance
- Sensor, Device and Hardware Installation
- Data Integration with Any Enterprise Apps
- Infrastructure Performance Optimization and Monitoring
- Firmware and Security Patch Management
- Technical Assistance Center



IoTConnect Platform

- Robust and Secure IoT Cloud
- Remote Device Management
- Real Time Analytics and Smart Rules
- Avnet Smart Apps

Avnet Smart Apps



Smart Factory



Smart Healthcare



Smart Office



Smart Asset Monitoring



Smart Building



Smart Warehouse



Smart Connected Worker



Smart Retail



Smart Fleet

Data Science

- Predictive Maintenance
- Recommendation Engines
- Customer Churn Prediction
- Customer Loyalty and Retention
- Inventory Management
- Fraud Analytics
- Healthcare Analytics