

Avnet IoTConnect and Smart Warehouse Solution

Optimize Warehouse Space Use, Energy & Capacity

AVNET



Agenda

1. IoT market opportunity and challenges
2. Avnet IoTConnect
3. Avnet Smart Warehouse 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.

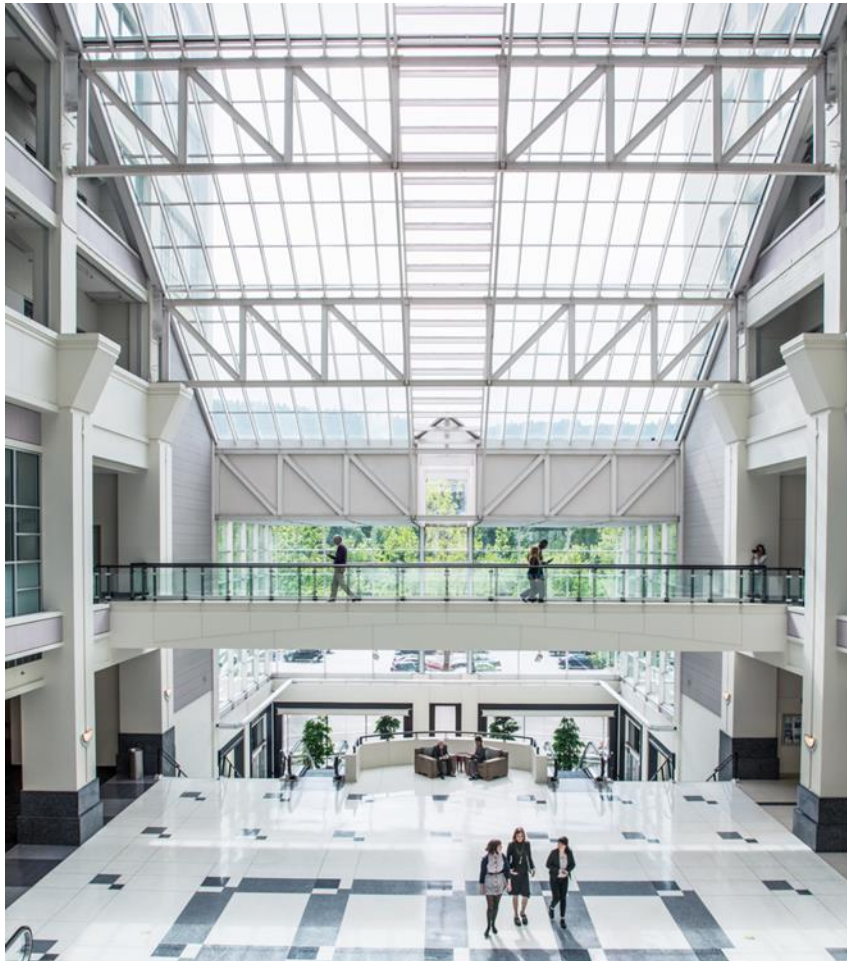
Accelerate decision making and speed time to market by giving stakeholders across the business access to real-time insights via customized, interactive dashboards.

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



Smart Facility Monitoring

A facility management company helps ensure tenant satisfaction with Avnet



A large facilities management company needed a more intelligent way to ensure the reliability of key building resources and wanted to empower tenants to understand and optimize their utility usage. Avnet's Azure-enabled Smart Facility Monitoring solution allows the company's facility managers to monitor important building components from a centralized location. It also gives them a robust, AI-powered analytics engine to help both managers and tenants optimize resource usage.

FAULT DETECTION & DIAGNOSTIC

Facility-related tasks are optimized by discovering AI-driven descriptive, prescriptive, and predictive insights.

OPTIMIZED ENERGY USAGE

A blend of AI and IoT technologies are used to monitor energy consumption by different devices.

EFFICIENT BUILDING OPERATIONS

Ensure optimized usage of all facility resources and avoid sudden breakdown of equipment and devices.

IMPROVED TENANT EXPERIENCE

Modern access control systems enable tenants to monitor how they're using resources such as utilities.

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 Facility 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



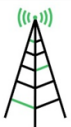
Smart Retail



Smart Asset Monitoring



Smart Factory



Smart Cell Tower Monitoring

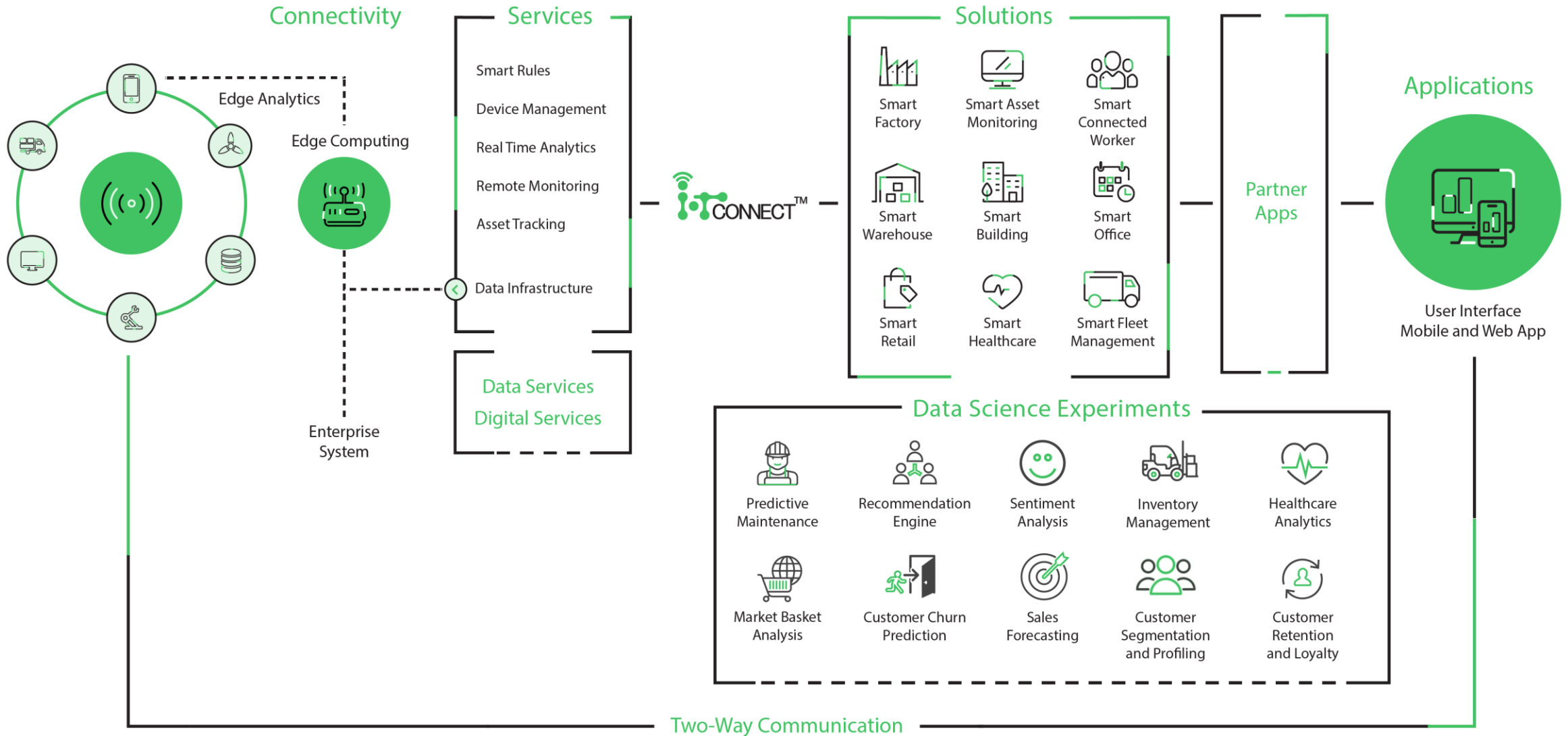


Smart Facility Monitoring



Smart Energy Monitoring

End-To-End IoT Offerings



Optimize Office Space Use, Energy & Capacity

Avnet Reference Architecture



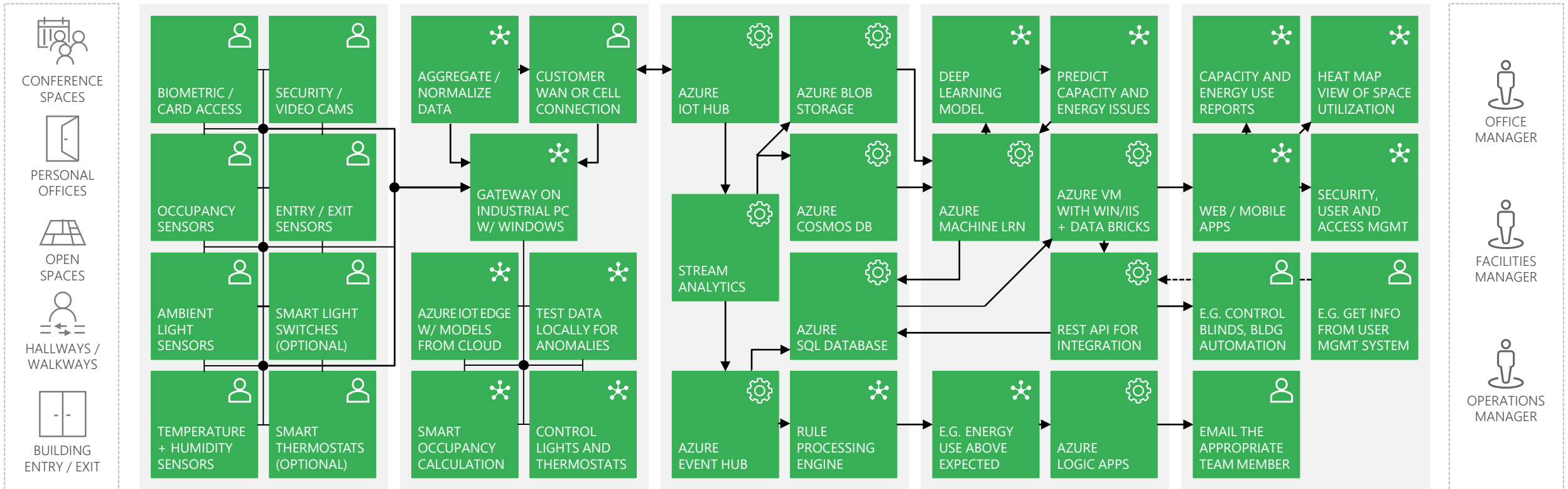
Avnet's solution helps your team monitor space and energy use across your facility to optimize capacity and minimize op costs.

Each facility includes an industrial PC that integrates with your systems, processes and tests data, then uploads it to the cloud.

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

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

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

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