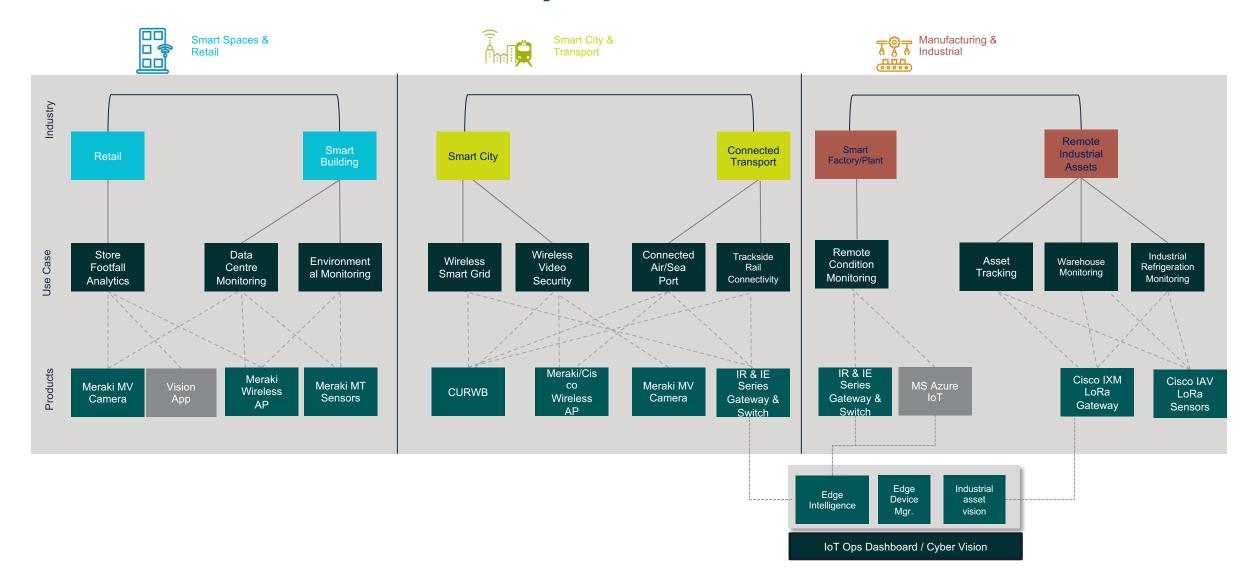




# **Cisco IoT Solution Map**







# **Industrial Manufacturing** Data collection and remote monitoring

# **Solution Overview**

Enable digital operations by connecting machines, sensors and control systems with secure and standards-based industrial wired and wireless networks to improve operations, margins, quality and safety.

Securely connect production systems - including IACS devices, sensors, actuators, and controllers; key machines; and assets such as robots. CNC machines, tools, process skids, and RTUs - to plant and enterprise networks.

# **Industry drivers and Benefits**

- Reliable operations to reduce unplanned downtime
- Reduced costs and downtime through predictive and remote maintenance
- Connect to increasing number of factory devices
- · Adaptability and support for nextgeneration systems
- Visualization of sensor data to anticipate failures
- Real-time edge processing and secure forwarding of critical data
- Secure remote access
- Drive cybersecurity visibility and protection into factories

### **Vendors**



# **Business outcomes**

- Improved OEE
- Real-time production management
- Improved plant-wide productivity
- Lowered operating costs
- Improved asset management
- Improved plant-wide productivity
- Lowered operating costs
- Improved asset management

# **Products**









Cisco Cyber Vision



Cisco IoT Operations Dashboard



Cisco Edge Intelligence



Cisco Catalyst Industrial Ethernet Switches



Cisco DNA Center



# Connected Communities & Transport Outdoor safety & security monitoring



# Connected Communities & Transport Outdoor safety & security monitoring

# **Solution Overview**

The Cisco Ultra-Reliable Wireless Backhaul provides fiber-like connectivity wherever you need it. It deploys like Wi-Fi, uses free spectrum and gives you total control of your network.

Meraki MV smart cameras have a simple architecture that makes them easy to install anywhere to enhance safety and security and add intelligence to any outdoor environment.

# **Industry drivers and Benefits**

- Increased need to access traffic management center functions from remote locations
- Growing demands for communication and data sharing among transportation, police and emergency responders
- Changing expectations for traffic operations and passenger travel
- Requirements to automate legacy systems
- Critical infrastructure network and data security
- Great alternative for metropolitan fiber.
- 20% to 80% installation cost reduction due to elimination of road work.

# Vendors





# **Business outcomes**

- secure remote government work options
- Critical workforce and service continuity
- Secure virtual traffic management, operations, and communications capabilities
- Roadway safety
- Congestion management
- Growing device and connectivity management capabilities

### **Products**



MV72

Cisco CURWB FMMeraki MR Series Ponte 50 Wireless AP

# Vision APPs

i.e. Suspicious Person Detection SW Platform





# Connected Communities & Smart agriculture & Smart Farming

# Asset management with Cisco Industrial Sensors

# **Solution Overview**

Monitoring assets and facilities using sensors helps businesses become better, safer, and more resilient. Environmental factors such as temperature, humidity, and ingress / egress all impact the status of a facility or an asset, whether it is a motor, a refrigeration unit, or even the networking gear itself. Remote monitoring helps to:

- Improve employee safety and efficiency by preventing unnecessary site visits and reducing employee movement throughout facilities
- Reduce expenses by avoiding premature equipment failure
- Improve customer satisfaction by reducing unplanned network outages and operational downtime

# **Industry drivers and Benefits**

- Cisco Industrial Asset Vision is easy to deploy and use, scalable, and secure
- Accelerated time to value: Cisco Industrial Asset Vision uses Cisco sensors and Cisco LoRaWAN gateways resulting in simple, quick, and reliable installation and provisioning.
- easy-to-use, cloud-based dashboard.
   The centralized management dashboard helps you monitor hundreds and thousands of assets. It offers a single view of the asset or facility health across all its associated sensors. And it includes the ability to monitor and troubleshoot the gateway itself.

# Vendors



# **Business outcomes**

- Improve employee safety and efficiency by preventing unnecessary site visits and reducing employee movement throughout facilities
- Reduce expenses by avoiding premature equipment failure
- Improve customer satisfaction by reducing unplanned network outages and operational downtime

# **Products**







# **Industry cybersecurity**Visibility and Security Posture

# **Solution Overview**

As you are being tasked with building more robust and secure industrial networks, Cisco Cyber Vision gives you comprehensive visibility into the OT domain so you can drive segmentation, reduce the attack surface and protect operations while providing value to the operations team so you can build a collaborative workflow together.

As a key component to Cisco Industrial Threat Defense, Cyber Vision provides detailed OT context to Cisco Secure Firewall, Identity Services Engine, SecureX and more so you can extend IT security to your OT to ensure continuity and safety of your industrial operations.

# **Industry drivers and Benefits**

- Automatically inventories all connected assets and their communications so you understand risks and know how to reduce the attack surface
- Visibility sensor is built into Cisco network elements for easy deployment at scale (no additional hardware or network resources required)
- Group industrial assets into zones and share details with Cisco ISE to implement network segmentation and enforce security policies
- Provide operational insights to help troubleshoot industrial processes and increase efficiency

# Vendors



# **Business outcomes**

- Detailed inventory of connected industrial assets, including vulnerabilities, communication patterns and cyber risks
- Drive OT network segmentation
- Detect threats to industrial operations
- Extend IT security to industrial networks

# **Products**



Cisco industrial routers and gateways



Cisco Industrial Ethernet Switches



Cisco Cyber Vision



Cisco Secure Firewall



Cisco ISE



Cisco SecureX