

ADVANTECH

Data Delivery; The Key to Digital Transformation

Bobby Vale
IoT BDM & Orchestrator



ADVANTECH

Brand Slogan:

"Enabling an Intelligent Planet"

Taipei, Taiwan
8,000 employees

USD \$1,5B

Industrial PC Leader
(30+ % market share)



Embedded IoT



Industrial IoT



Service IoT



IPC Leader with more than 8000 P/Ns

WISE-PaaS 3.0 AIoT Edge-to-Cloud Architecture

Integrated Application Cloud Solutions
(SaaS Partners & DFSI)



Co-Creation

End To End Security: SSL/TLS

AIoT.SRPs

SR Situation Room

OEE Overall Equipment Effectiveness

PHM Prognostic Health Management

EQM Environmental Monitoring

AOI AI-based AOI

EMS Energy Management

IVA Video Analytics

More More SRP co-created

RESTful API

Node-RED

WISE-PaaS/EnSaaS

Visualization - Dashboard

WISE-PaaS/SaaS Composer

WISE-PaaS/Dashboard



HTML5 Canvas
Streaming Data
3D Visualization

Asset Performance Management

WISE-PaaS/APM

Asset Models
Asset Statistics & Analytics
Workflow Integration

AI Framework Service

WISE-PaaS/AFS



Caffe



Online Code IDE
Online Flow IDE
Model Training & Deploy

Compute Resource Management



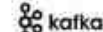
CLOUD FOUNDRY

Micro-services
Elastic Scaling
High Availability

Database & Storage Services



IoT Hub



Customer Management



Multi-tenancy
Metering & Billing
Single Sign-on

Public Cloud



...

Private Cloud



MQTT/AMQP

Edge Intelligence

Industrial SCADA

WebAccess/SCADA

WebAccess/CNC

WebAccess/HMI

WebAccess/NMS

Machine to Intelligence

WISE-PaaS/EdgeLink

Protocol Conversion
Sensor Management
Device Model

Remote Device Management

WISE-PaaS/DeviceOn

WISE-PaaS/EdgeSense

WISE-PaaS/RMM

WISE-PaaS/OTA

WISE-PaaS/Security

Intelligent Video Management

WISE-PaaS/VideoSense

WISE-PaaS/VideoCMS

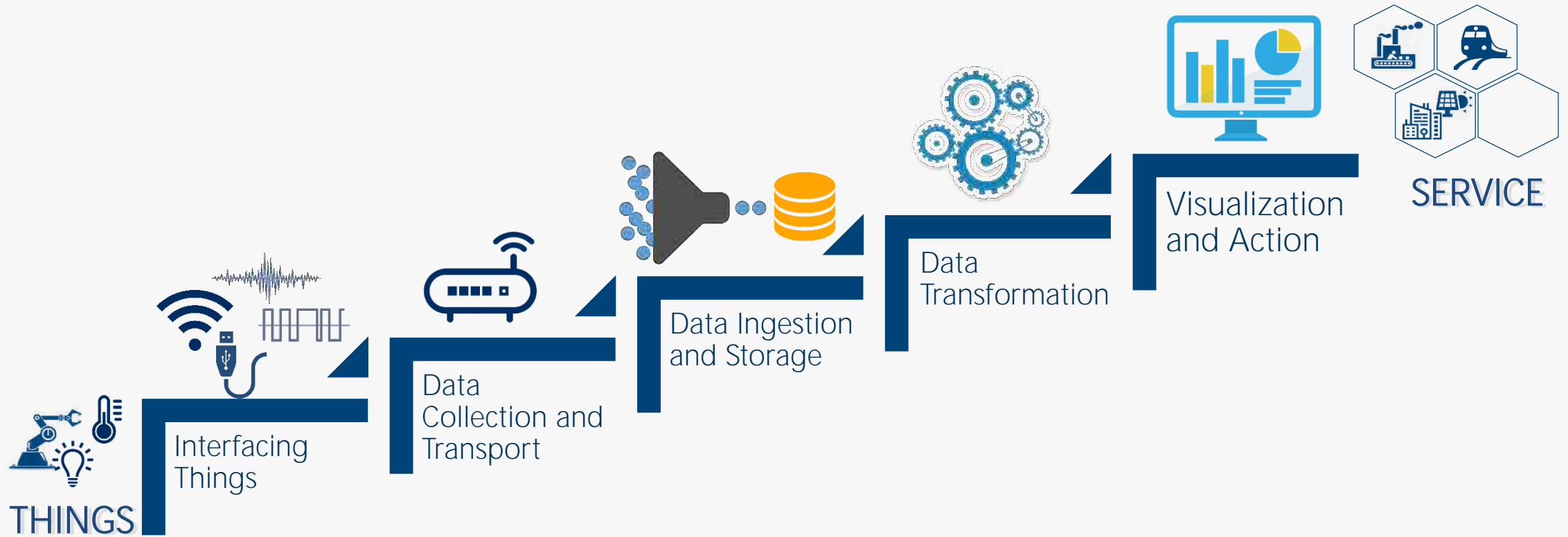
WISE-PaaS/SignageCMS

WISE-PaaS/HumanDetectAI

EDGE X FOUNDRY™

Microservices
System Management
Edge Analytics

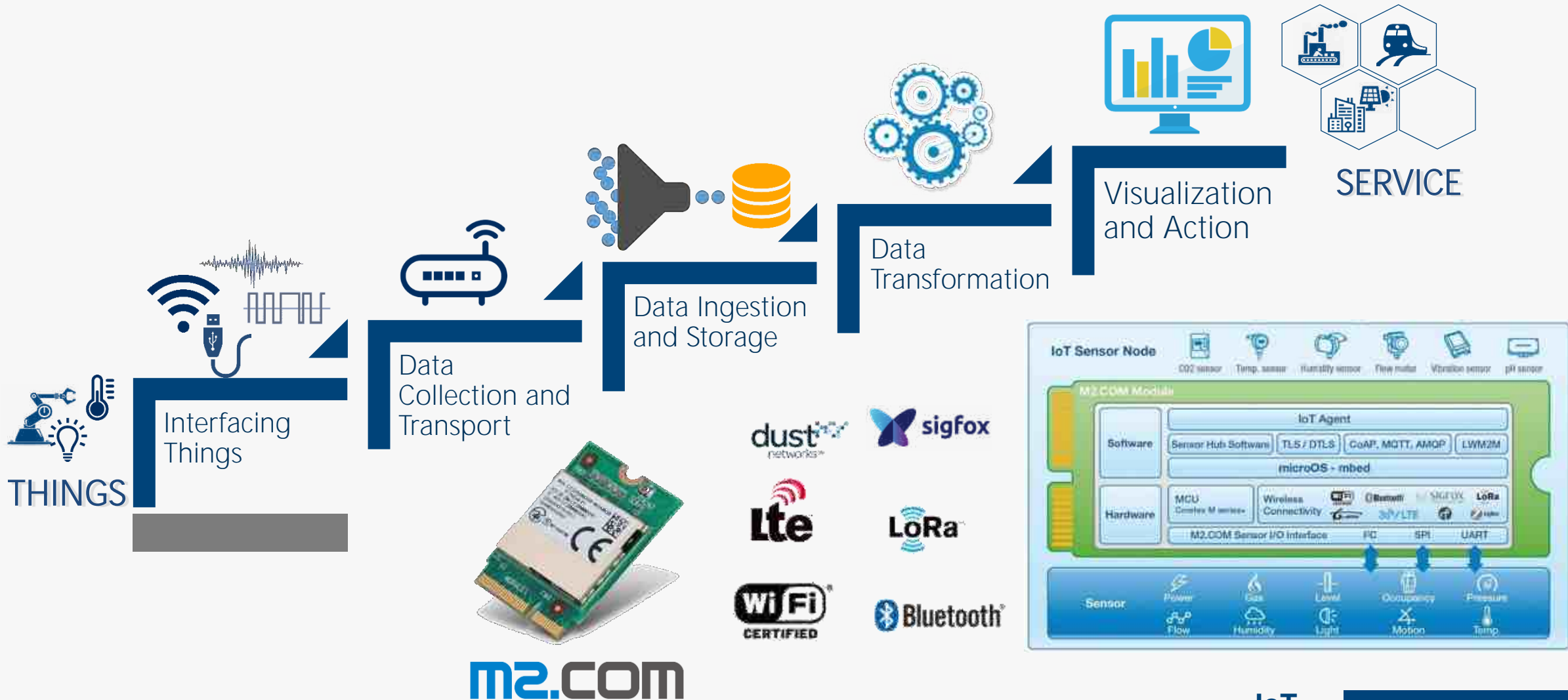
IoT Stack



Interfacing Things



Interfacing Things

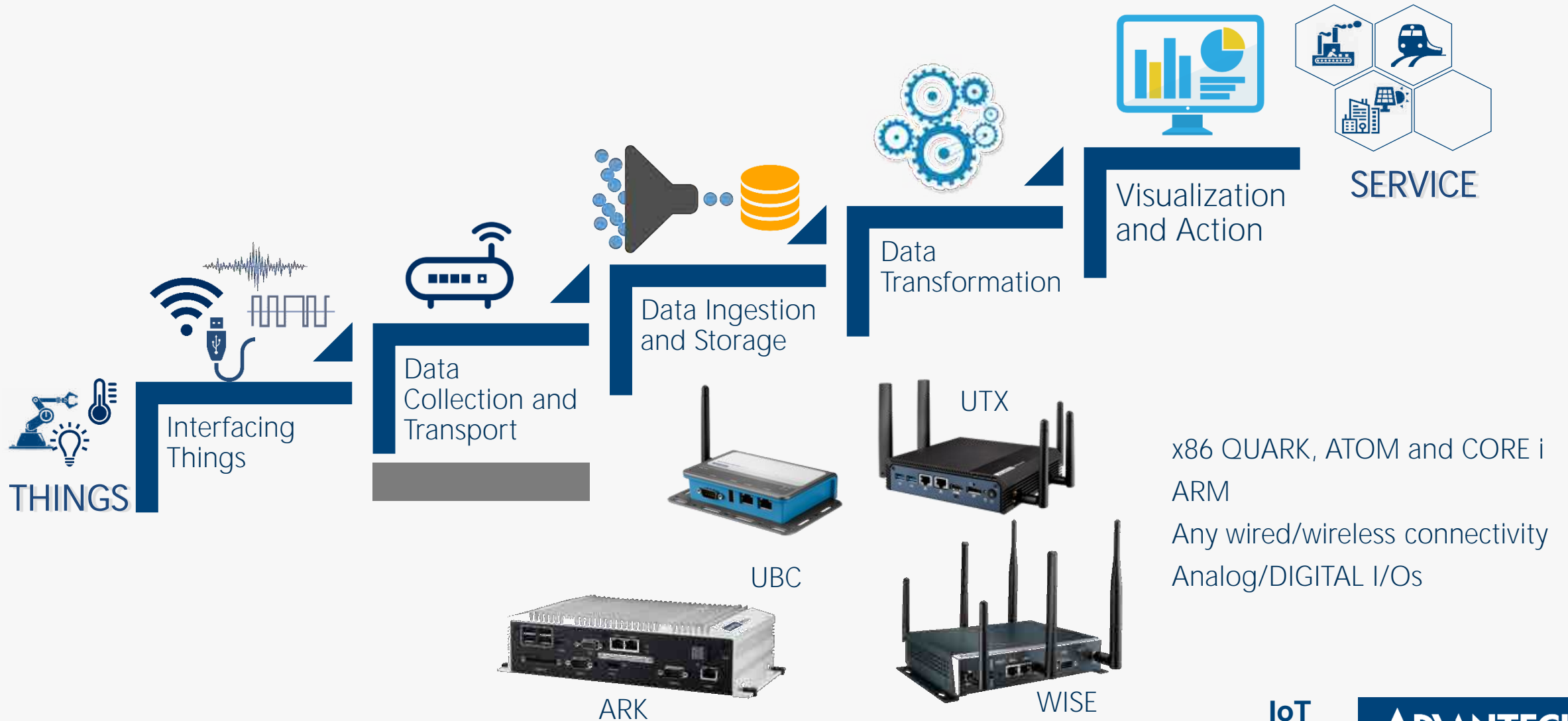


m2.com

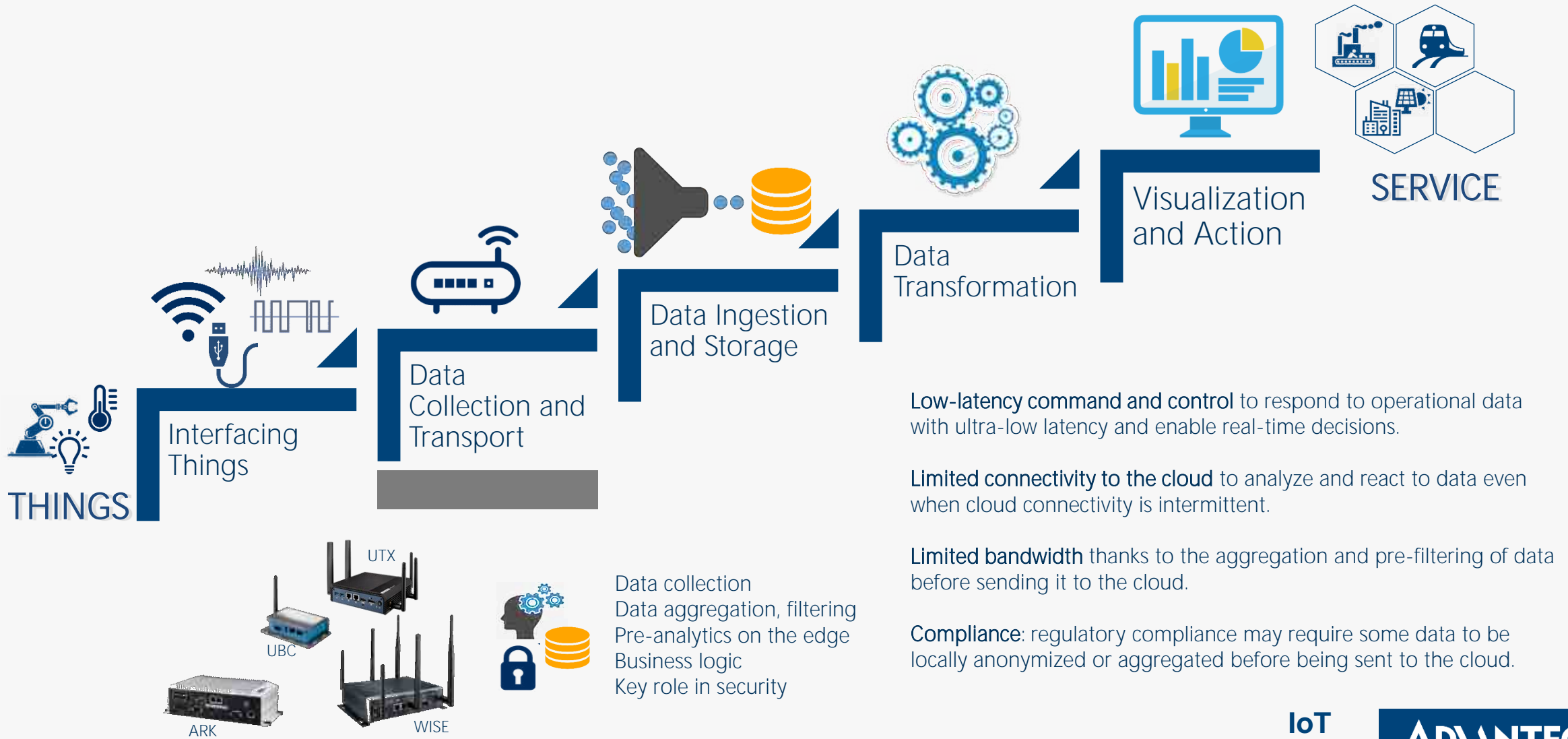
IoT
SELECT TEAM

ADVANTECH

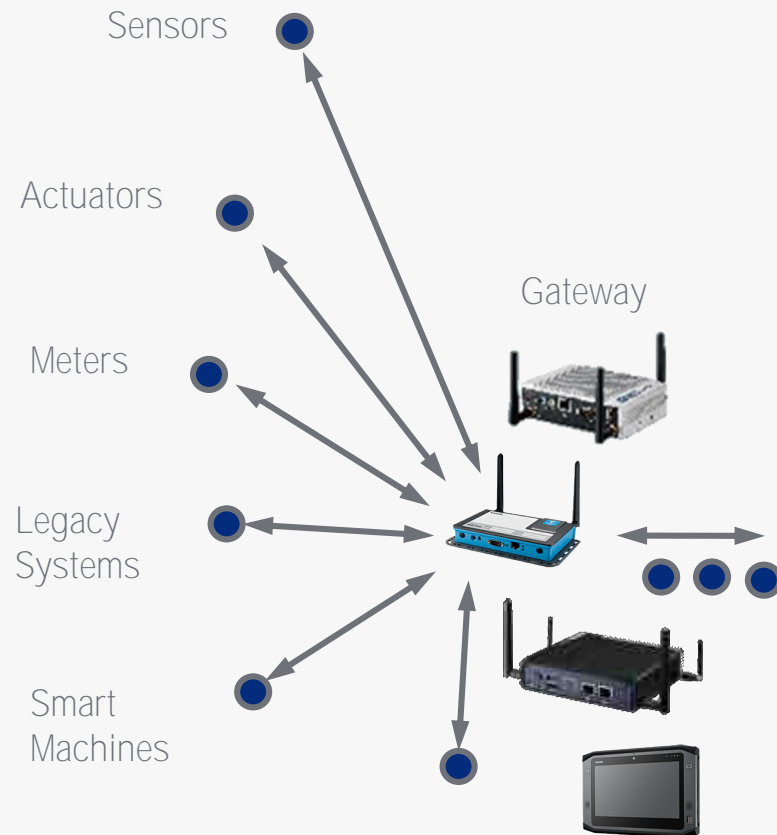
Gateway



Edge Computing



Edge Computing



Multiple business relevant tasks are addressed and technically consolidated

Data delivery using an open protocol effectively decoupling data providers and data consumers

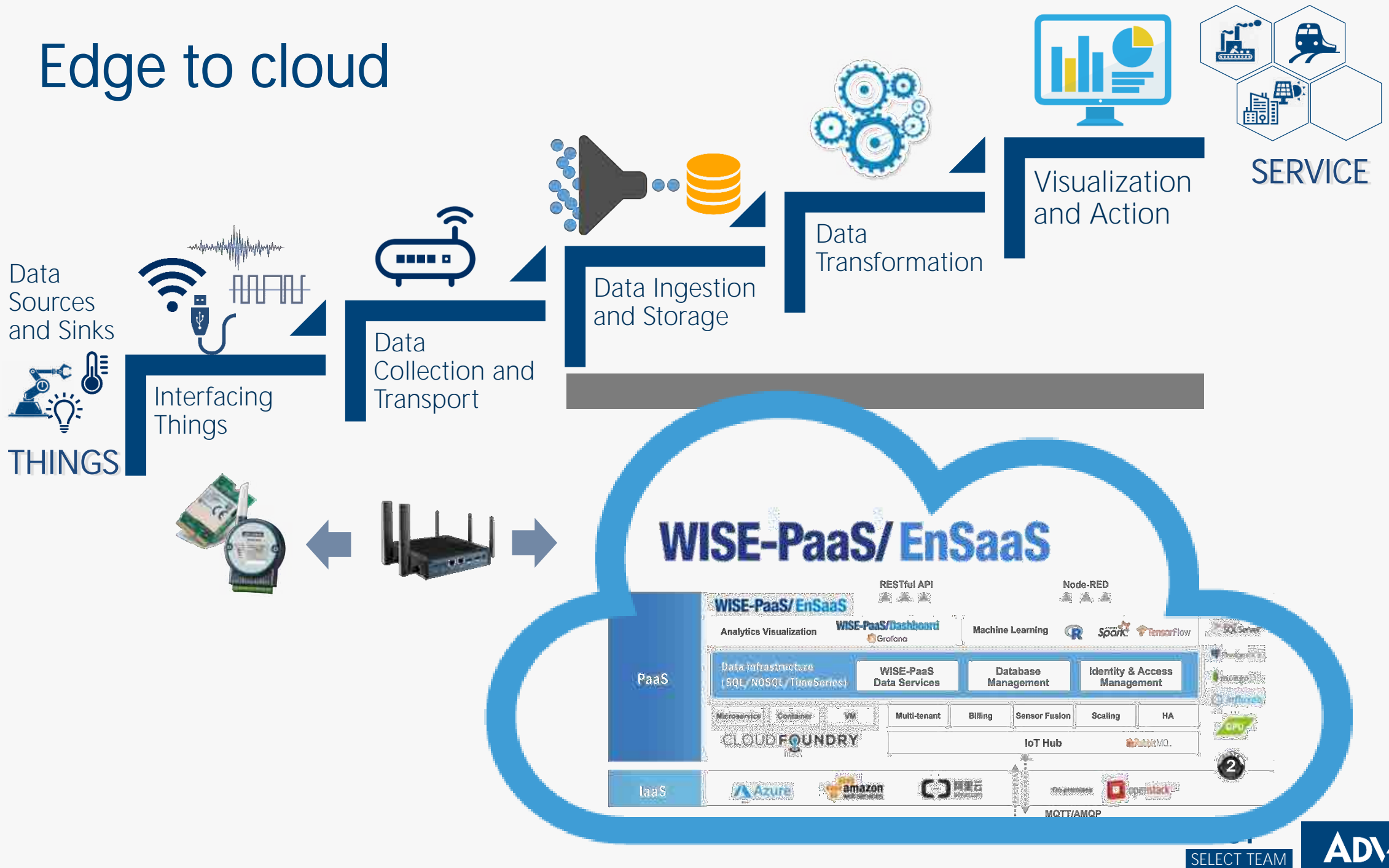
IT centric device application development using Software Frameworks to implement business logic in smart edge devices / multi-service gateways

Additional security layers can be integrated using the intelligence available

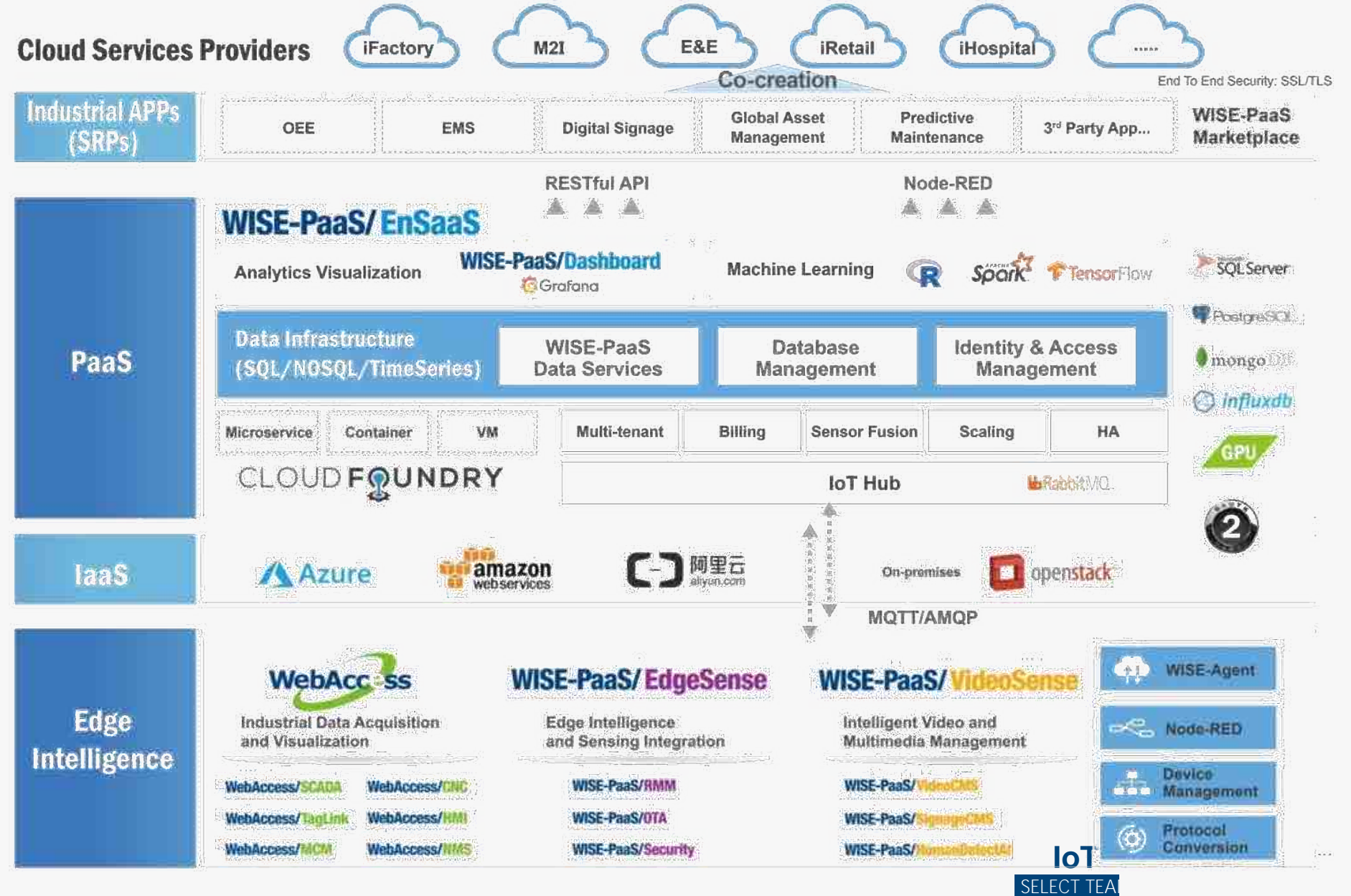
More efficient bandwidth utilisation – carrier cost optimization

Off the shelf purpose built devices designed to meet vertical market value propositions – Standard agent software available for ease of integration to third party devices

Edge to cloud

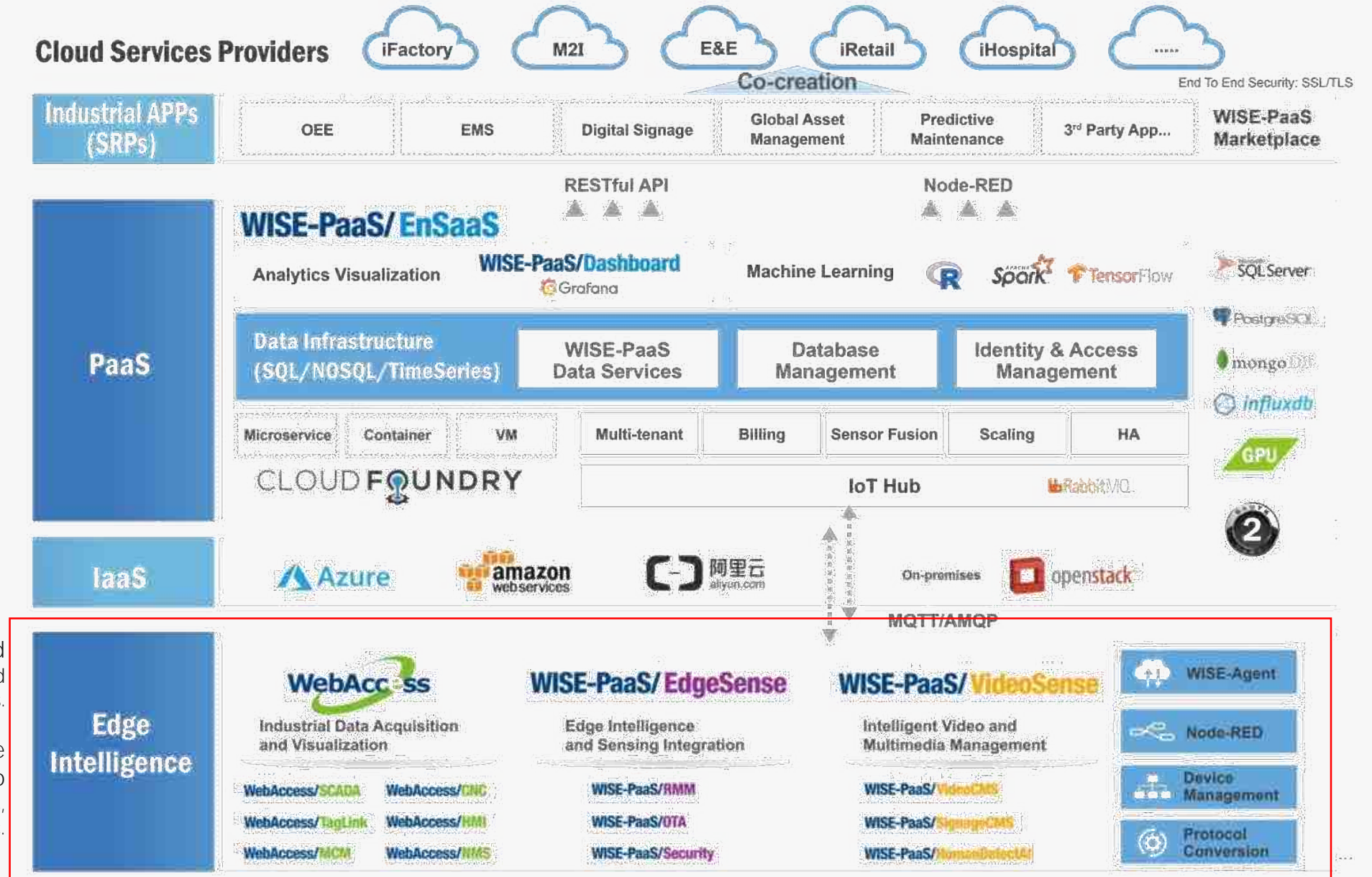


WISE-PaaS/EnSaaS



The Industrial Cloud

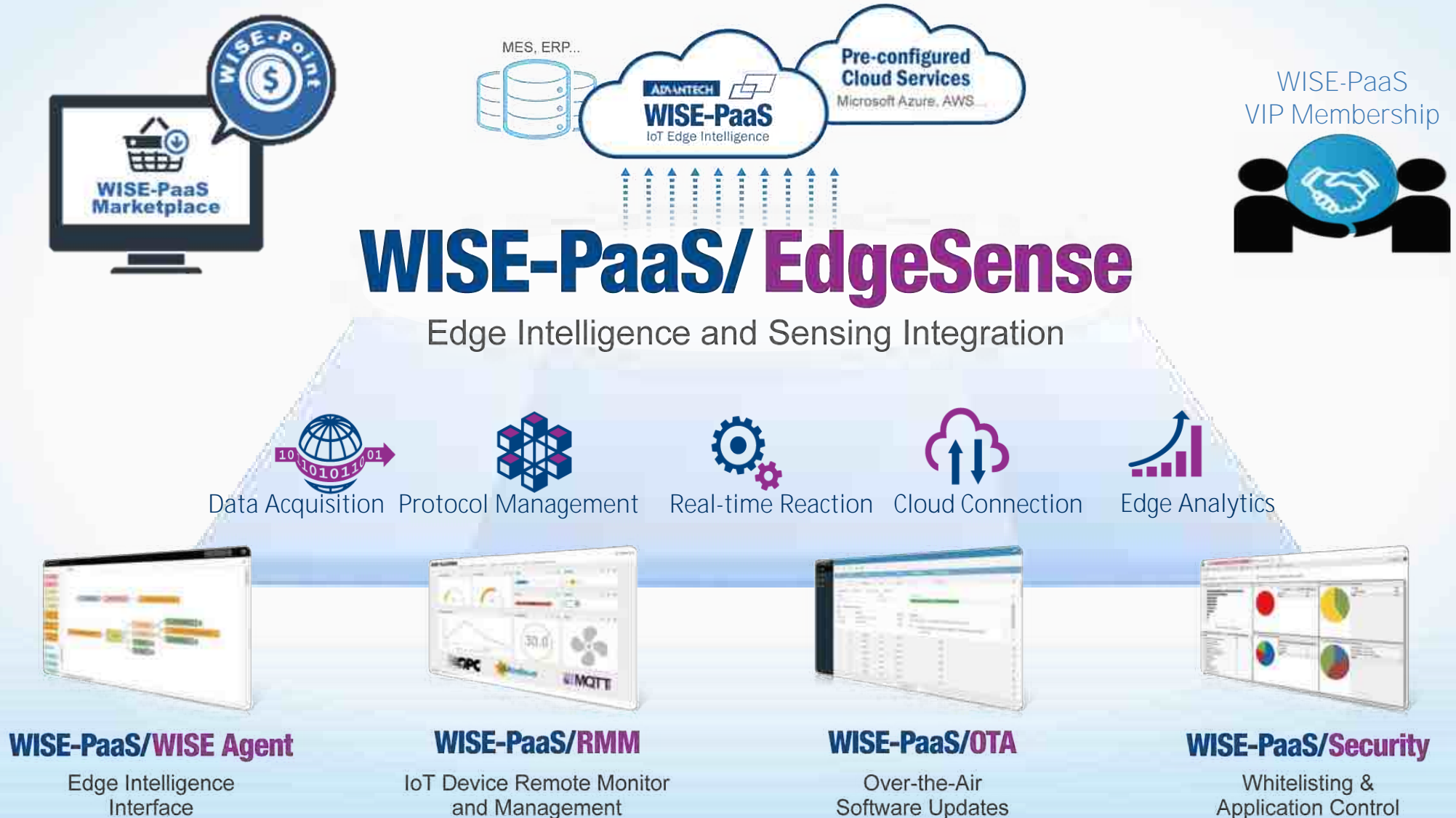
WISE-PaaS is an integrated IoT services platform purposely built to deliver actionable insight from the edge to the cloud.
WISE-PaaS allows you to easily and securely connect, manage and collect massive IoT data.



Edge to Cloud reads sensor data from an edge device, and sends the data to the WISE-PaaS services.

Leveraging Advantech's extensive hardware portfolio including industrial computer platforms, gateways, wireless sensors, etc.

WISE-PaaS IoT Solution Platforms



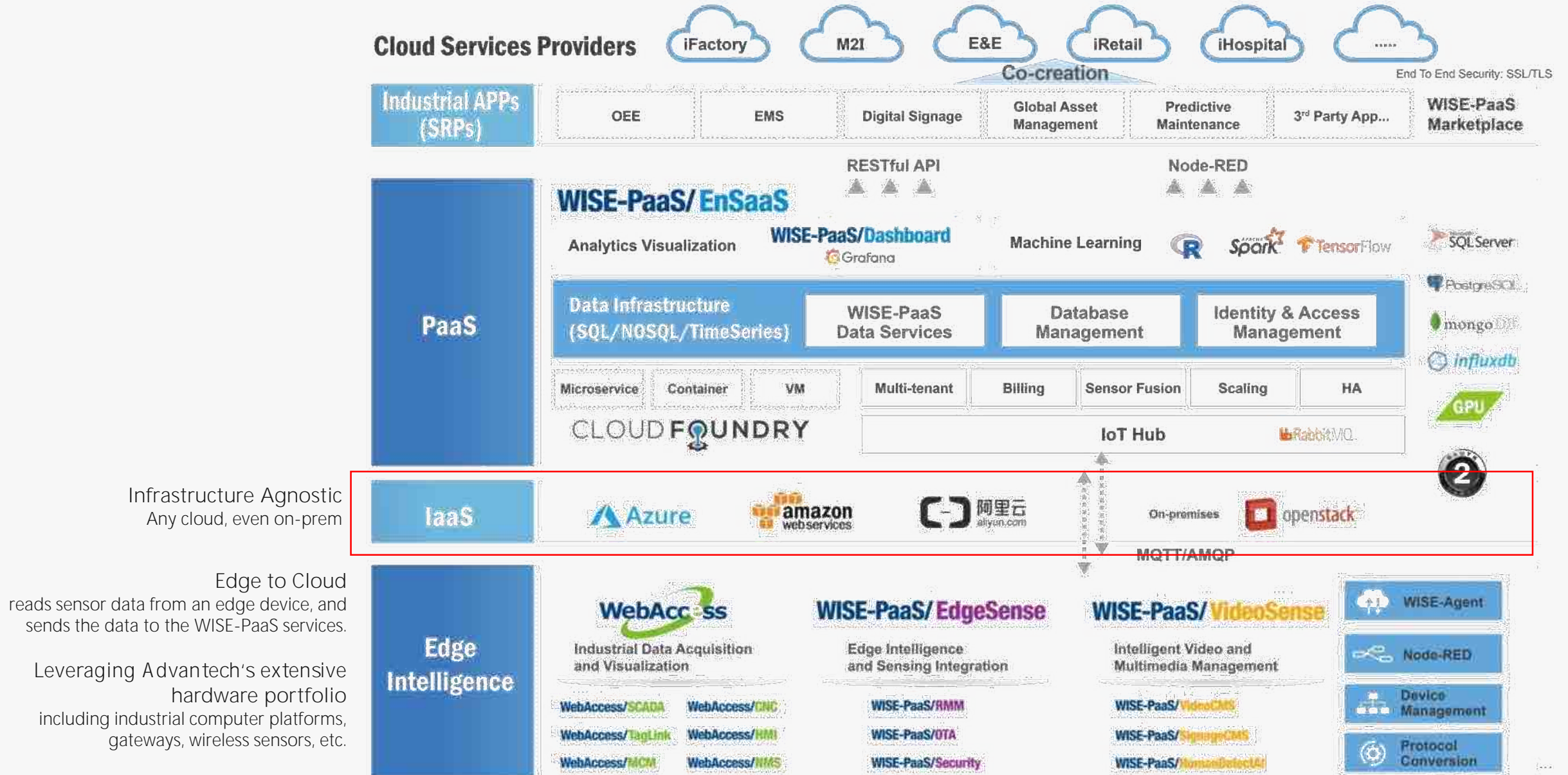
Power Up Your IoT Devices with

Hardware and Software Integrated Solutions



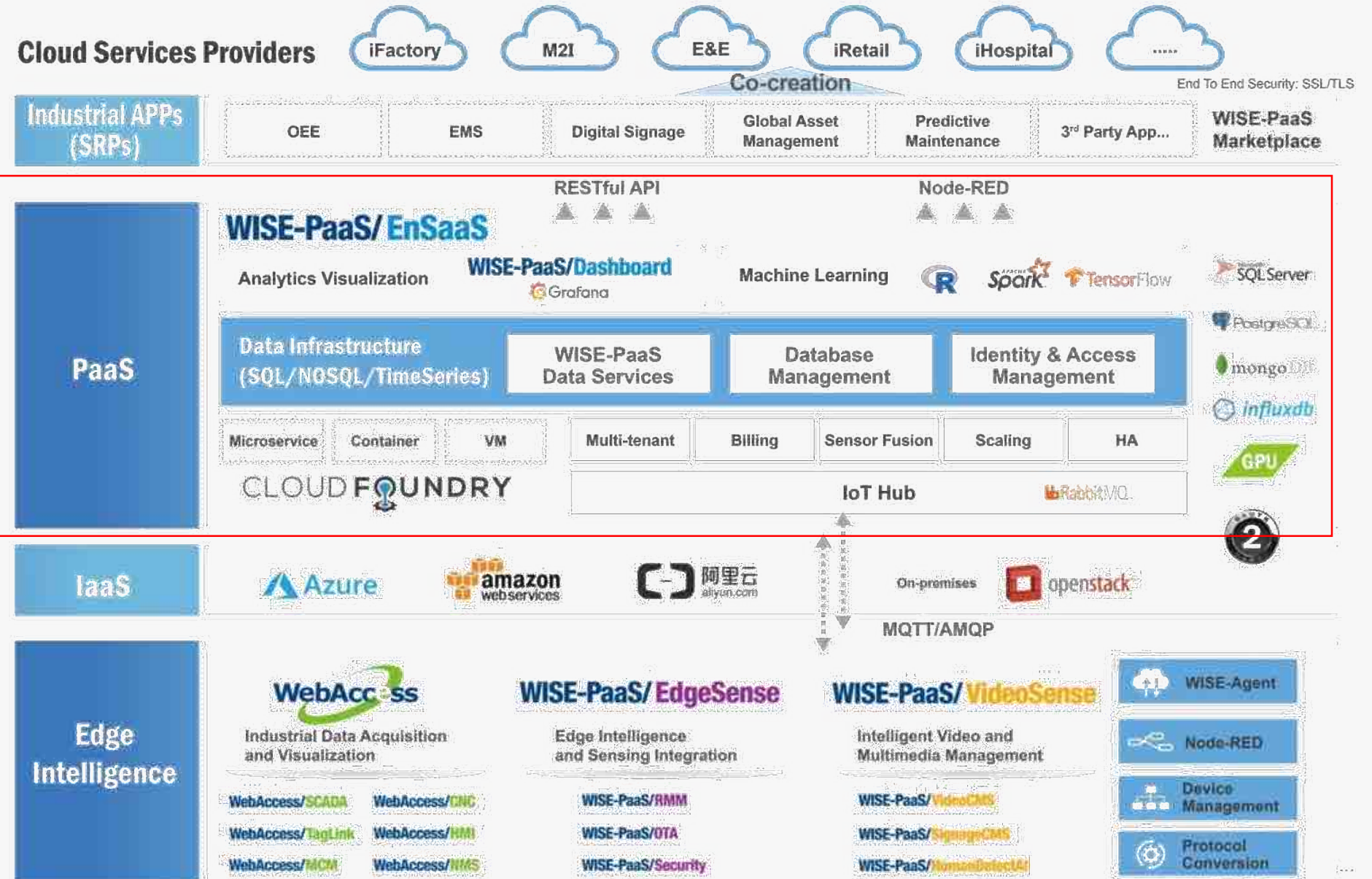
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Data Visualization
WISE-PaaS provides a dashboard builder designed for visualizing multiple data.

Advanced
a rich set of industrial Internet cloud services that developers can easily integrate to build applications for various businesses in different industrial contexts.

Infrastructure Agnostic
Any cloud, even on-prem

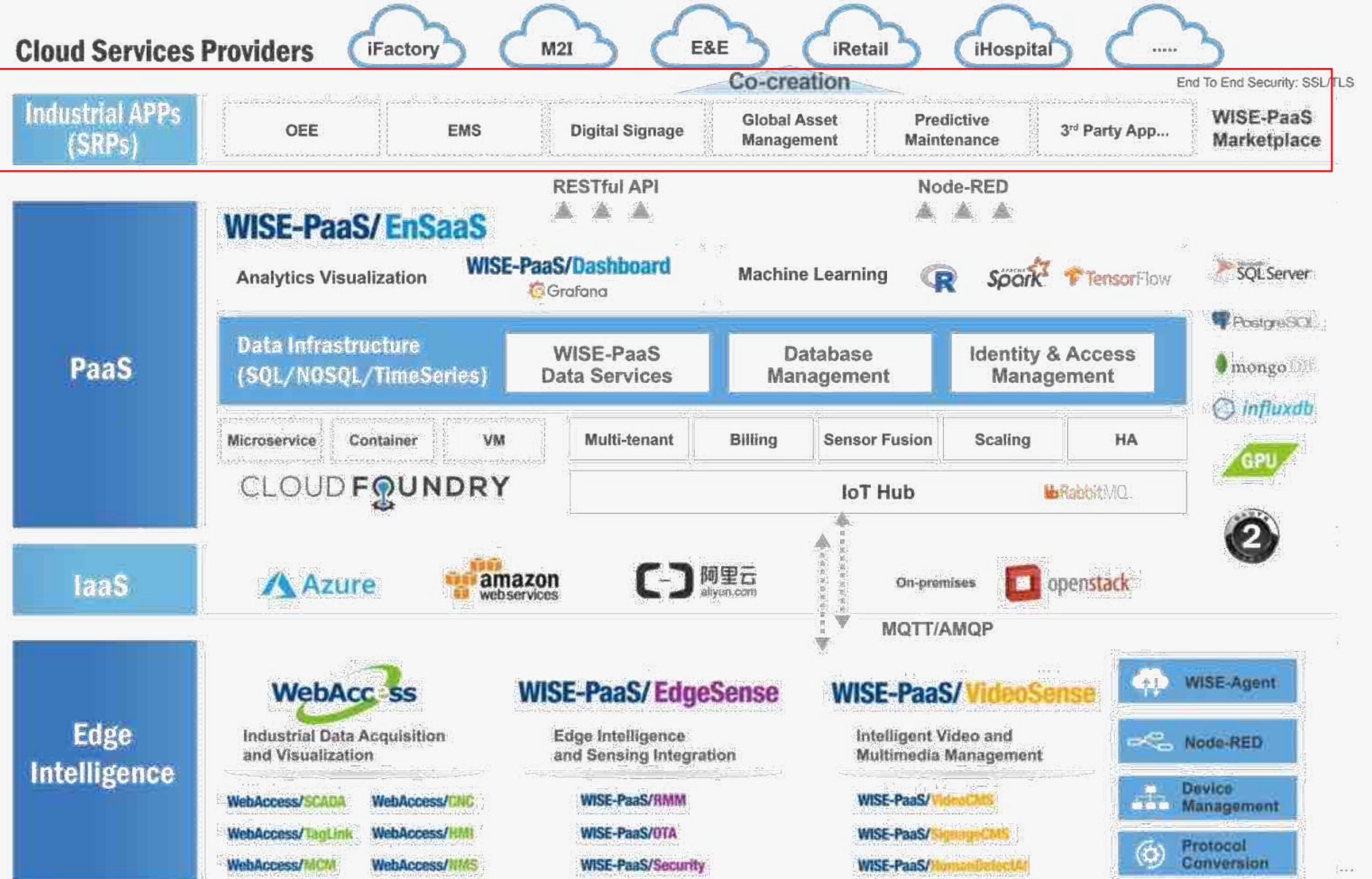
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Solution Ready Package (SRP)
Total solution comprising embedded hardware and an IoT software platform (PaaS) with our system integrator partners, offering versatile solutions for customers in different domains.



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Solution Ready Package

www.advantech.com/srp

Hardware

Software

Domain Know-how



SI

20%

SOLUTION READY PACKAGE
(SRP)

80%

CUSTOMIZATION
INTEGRATION
DEPLOYMENT
SERVITIZATION

Domain
know-how

Edge Intelligence

IoT Sensing
Devices

Industry 4.0 Solutions



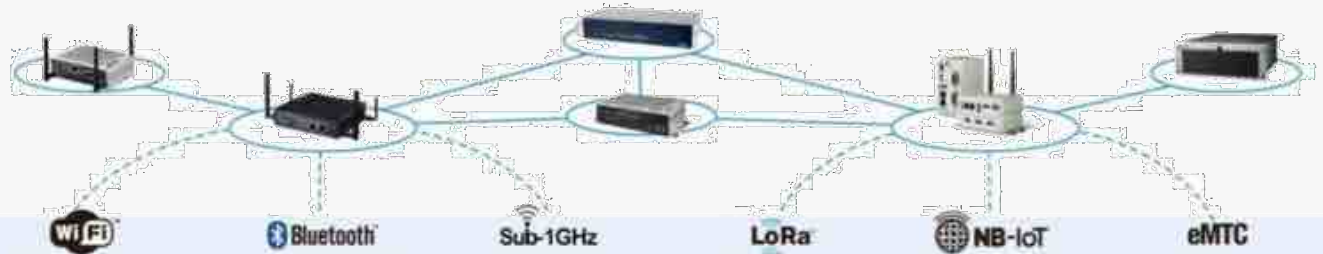
Energy & Environment



Smart City Solutions



Co-Creation





iFactory

➤ Assembly Line iWorkstation Solution

➤ Integrated iFactory Cloud Solution

➤ Factory Energy Management Solution

➤ Overall Equipment Effectiveness Solution



Service-IoT

➤ Cold Chain Management

➤ Integrated UShop⁺


<http://www.advantech.com/srp>

A close-up photograph of a CNC machine's tool head and workpiece, with the text "Machine to Intelligence" overlaid in a large, bold, black font.

Machine to Intelligence

- Intelligent CNC Machine Management Solution
- Solar Power Management Solution

- Intelligent Water Management Solution
- Wind Power Monitoring & PHM Solution

A photograph of a modern building's glass facade reflecting the sky, with the text "Edge to Intelligence" overlaid in a large, bold, black font.

Edge to Intelligence

- Electric Vehicle Charging Management Solution
- Equipment Edge Connectivity Solution
- Equipment Vibration Monitoring Solution

- EnSaaS
- Equipment Real-time Control Solution
- NB-IoT Smart Meter Solutions

A photograph of a city skyline at dusk or dawn, with the text "WISE-PaaS" overlaid in a large, bold, black font.

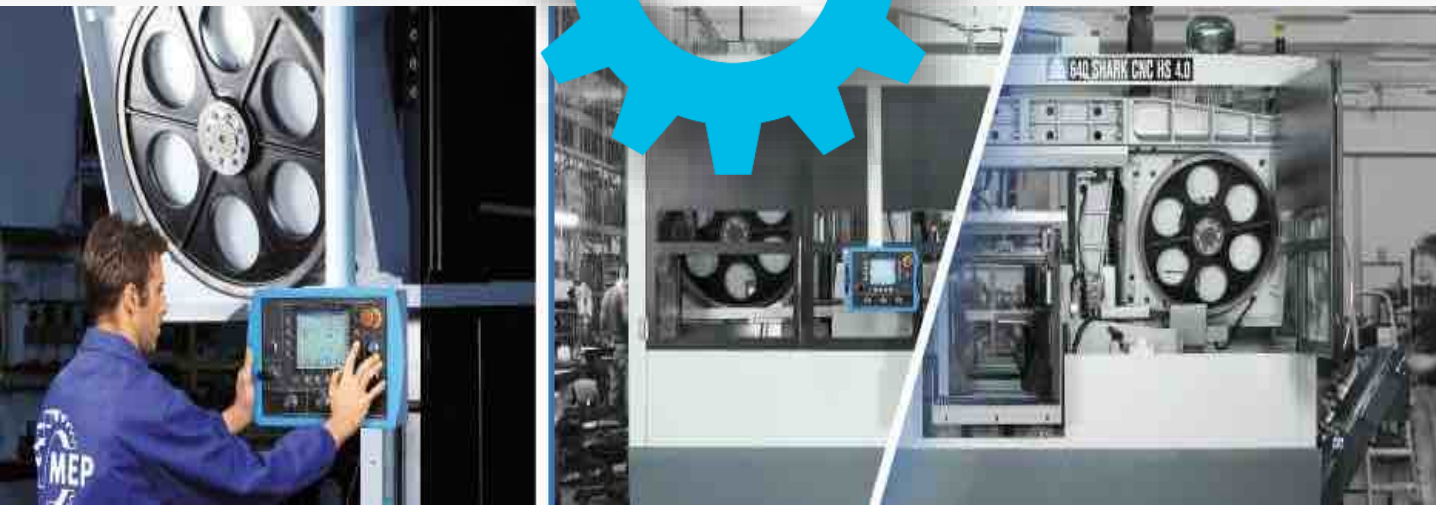
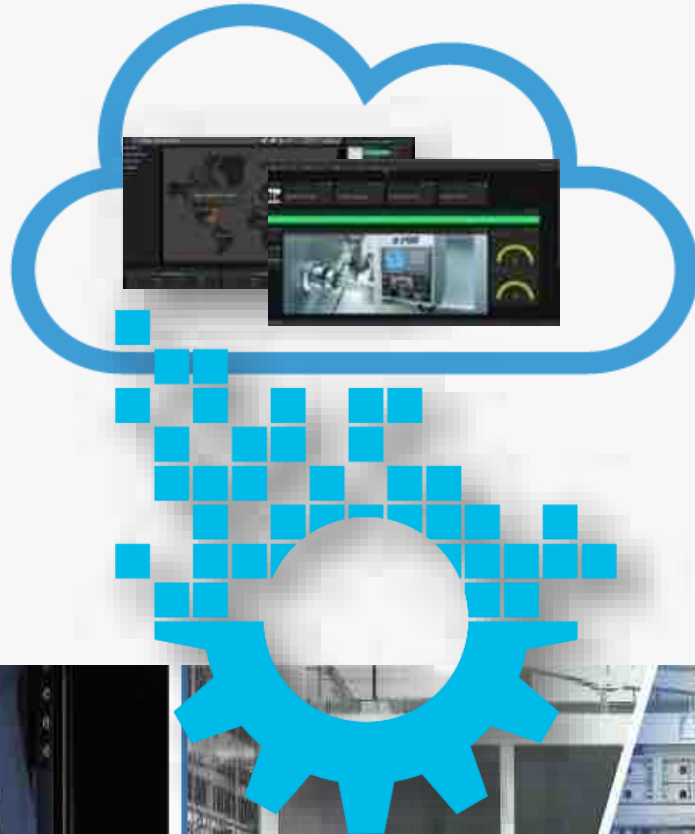
WISE-PaaS

- Situation Room for IoT Solutions
- WISE-PaaS Visualization

- WISE-PaaS Industrial IoT Cloud Platform

<http://www.advantech.com/srp>

An End-to-End Plug&Play Digital Transformation Experience from Equipment to the Cloud



Embedded

Edge Intelligence & Protocol Conversion
Enable Multi-Machine Interoperability and Connectivity

Edge Solution Ready Package

ESRP-EIP-ARK1124H

Machine Protocols Plug & Play

Remote Devices Supervision

Operation Mgmt and Scheduling

Diagram illustrating the system architecture:

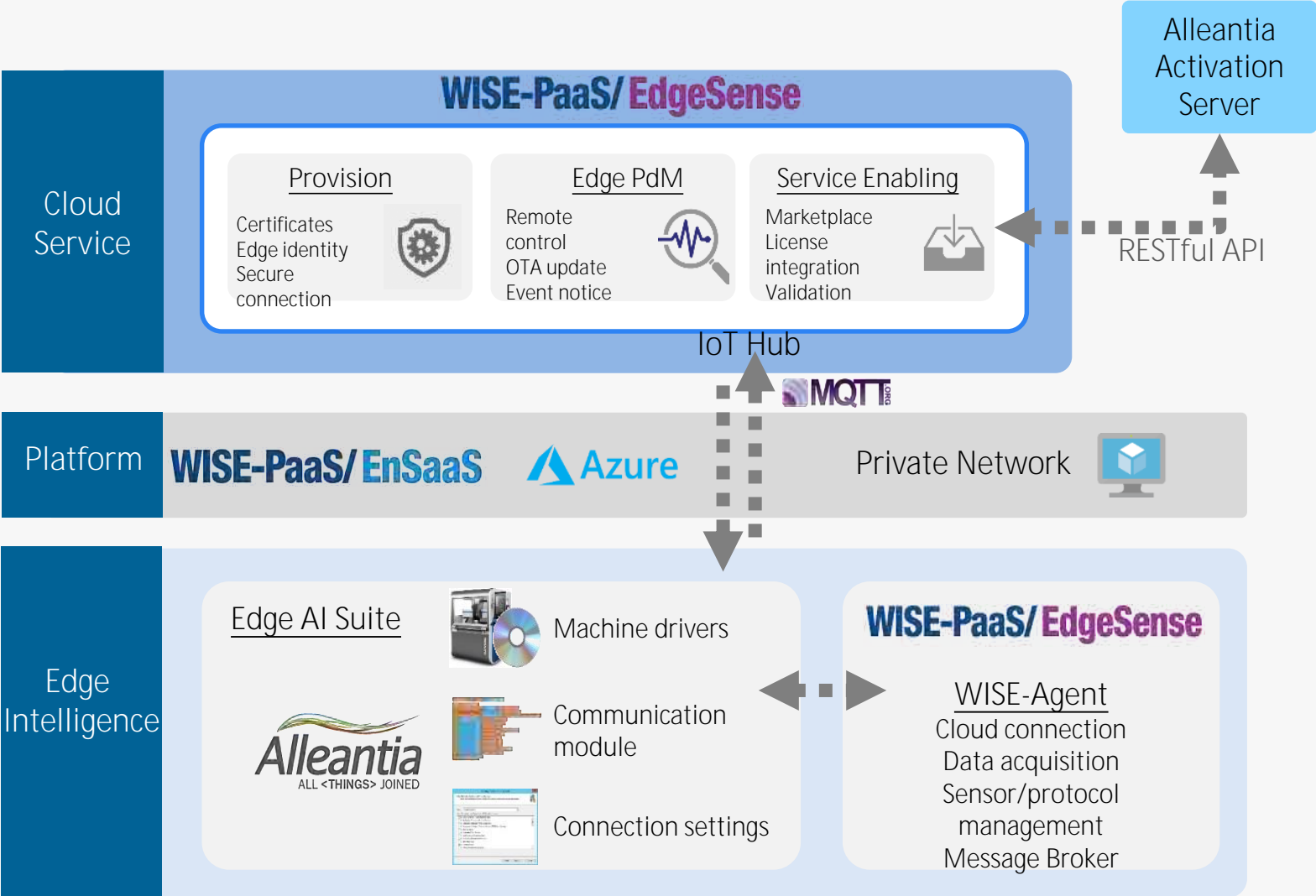
- Machine Protocols Plug & Play:** Includes Solar Panel, Robot Arm, Elevator, Power Generator, and Railway Transportation.
- Remote Devices Supervision:** Includes Microsoft Azure, Public Clouds, SQL Server, and SAP.
- Operation Mgmt and Scheduling:** Includes On Premise.

Central components: **Alliantia** (connected by), **WSE-PaaS/EdgeSense** (Device Provision, Edge PdM, Cloud Connection).

Supports more than 5000 industrial machine drivers

NT Connect, Modbus, MQTT, Ethernet/IP, FANUC, SIEMENS

Augmenting Alleantia through WISE-PaaS



Connecting Alleantia to the WISE-PaaS Industrial Cloud

Remote Monitoring and Management

Overt-the-air (OTA) updates

Security

Auto-generated Dashboards

Multi-domain Digital Transformation: some real use cases

Subway Public elevators

Smart City

800+ plants retrofitting
Remote assistance and customer support
Advanced maintenance strategies



Maritime IoT

Smart Transportation

120 vessels to retrofit (30 already done)
Energy monitoring and optimization
Advanced maintenance strategies
Advanced tracking system



ESRP-EIP-
ARK1124H

Digital Manufacturing

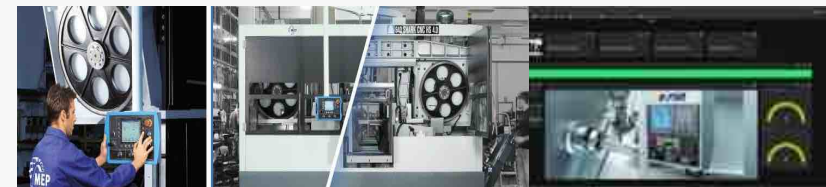
Industry 4.0




Connected OEM Machines



Smart Products

Remote assistance and customer support
New "as-a-service" biz models
Advanced maintenance strategies



WISE-PaaS Marketplace

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Products | Solutions | Services | Partners | Support | Corporate | Contact | eStore

Embedded IoT & Industrial IoT & Service IoT





WISE-PaaS Marketplace


Discovering and Shopping for Your Own IoT Deployments



ADVANTECH  **WISE-PaaS**
IoT Edge Intelligence

[View Solution](#)

Microsoft    



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Solution Packages >

Industrial Cloud Solutions>

WISE-PaaS/ EnSaaS

WISE-PaaS/EnSaaS - edge to cloud services

Service Provider: Advantech Category: IoT Cloud Services
Last Update: 12/29/2017 12:00:00 AM

An Industrial PaaS Solution for the Edge to Cloud Service

[Service Details](#) | [Service Architecture & Successful Cases](#) | [Pricing Details](#)

Introduction

WISE-PaaS/EnSaaS is a cloud-based software platform designed to empower cloud services. It provides a highly secure, multi-tenancy architecture with automatic expansion to create a highly robust data platform for Advantech's domain-focused cloud services or customer's own cloud services.


7.4 up

WISE-Rating

Monthly Subscription
(Trial Available)

[Start Trial](#)

Resource

 Frequently Asked Questions

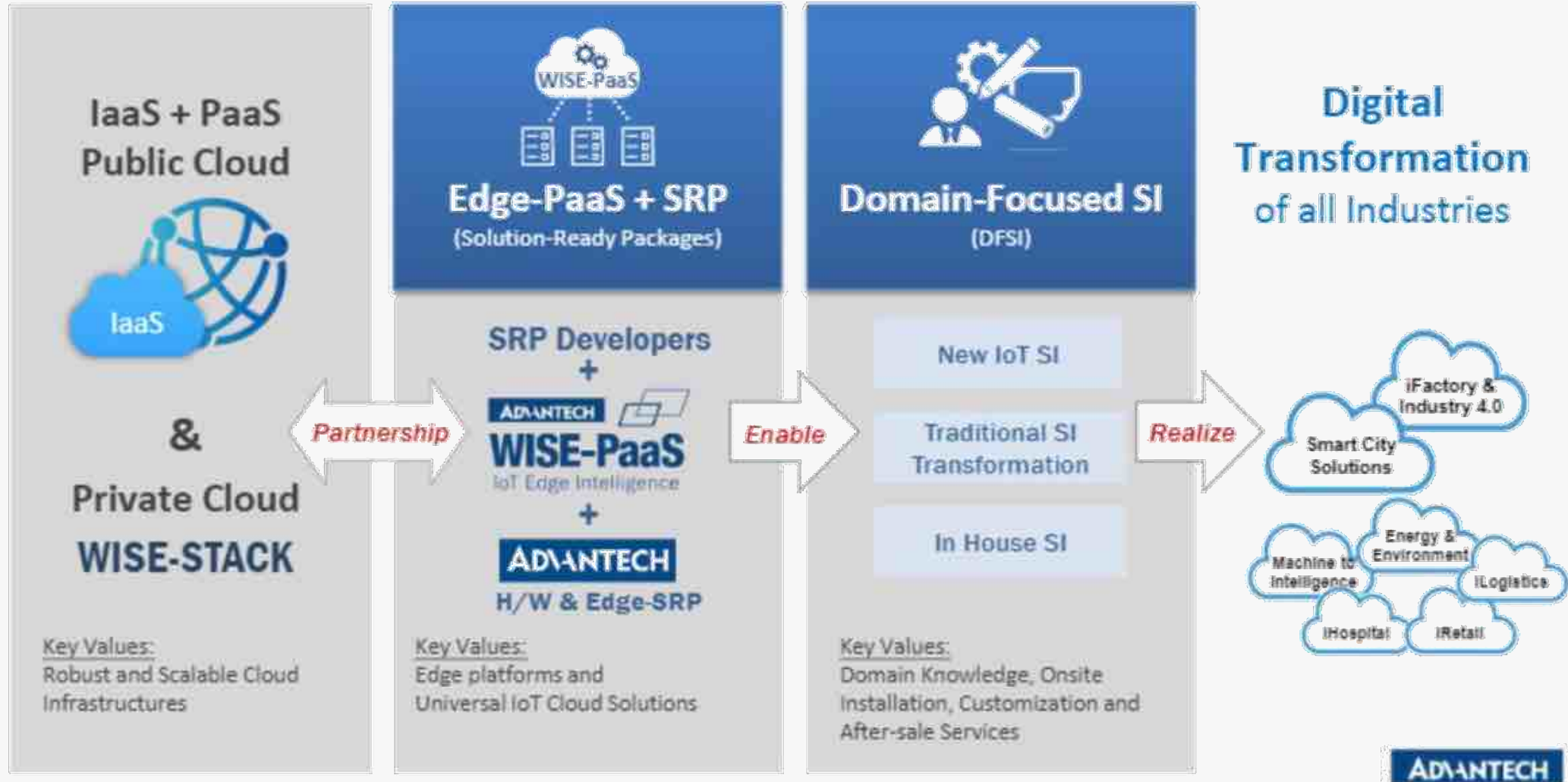
IoT
SELECT TEAM

ADVANTECH

Embedded IoT Co-Creation Partnership



Ecosystem & Value Chain of Industrial IoT



ADVANTECH

Thank You!

Bobby Vale
IoT BDM & Orchestrator

