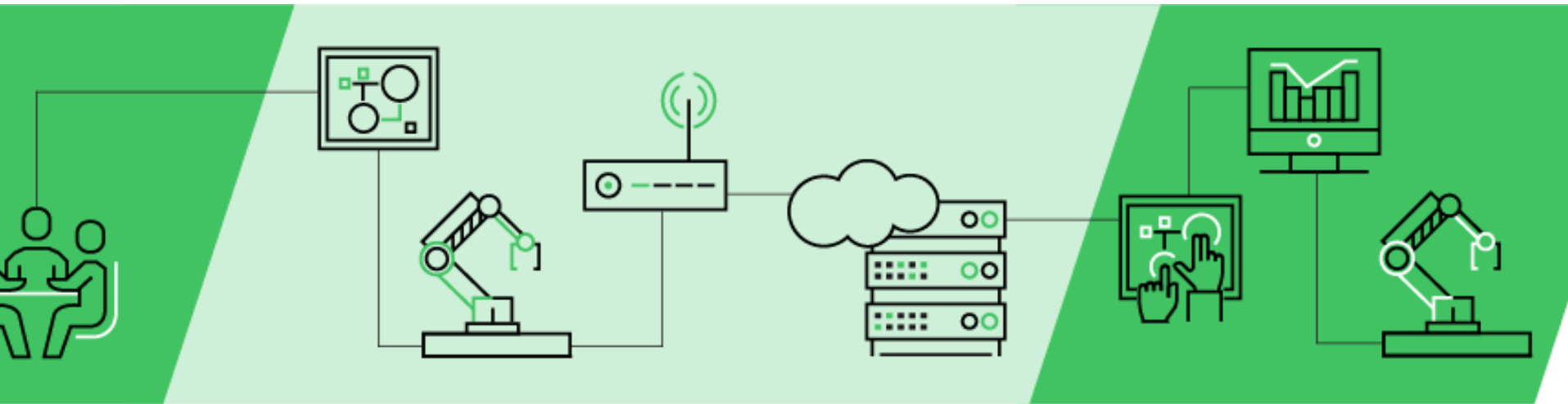


# From Data Collection to Application – using ROHM Sensors in IIOT

2019.12.12 Robert CY CHANG | IOT Market Development | Avnet Asia



...to realize your IoT potential.

...to connect, collect and transfer data on premise or to the cloud.

...to implement real business decisions.

# ROHM delivers “Quality” to global market



## 類比解決方案

融合類比技術與控制技術、  
提供高性能的電源控制

## 功率解決方案

以控制技術及模組技術  
將功率元件的特性發揮至極致

## 感測器解決方案
















將感測元件與無線模組、微控  
制器組合，協助萬物聯網發展

## 行動解決方案

以全球最小元件  
協助行動裝置小型化

# Completed sensor solutions from ROHM



<b>Human I/F</b> 	<b>Motion</b> 	<b>Field and Environment</b> 	
<b>Capacitive Touch SW</b> 	<b>G-Sensor</b> 	<b>Ambient Light</b> 	<b>Temperature</b> 
<b>4-Wire Touch Screen</b> 	<b>Hall</b> 	<b>Color</b> 	<b>Pressure</b> 
<b>Proximity</b> 	<b>Gyro</b> 	<b>UV</b> 	<b>Magnetmeter</b> 

# ROHM's wireless solutions for IOT



Wireless LAN Modules

Specified Low Power  
Radio Station (Sub-GHz, Wi-SUN)

# What is “IOT”?

Internet of Things

M2M

Cloud computing

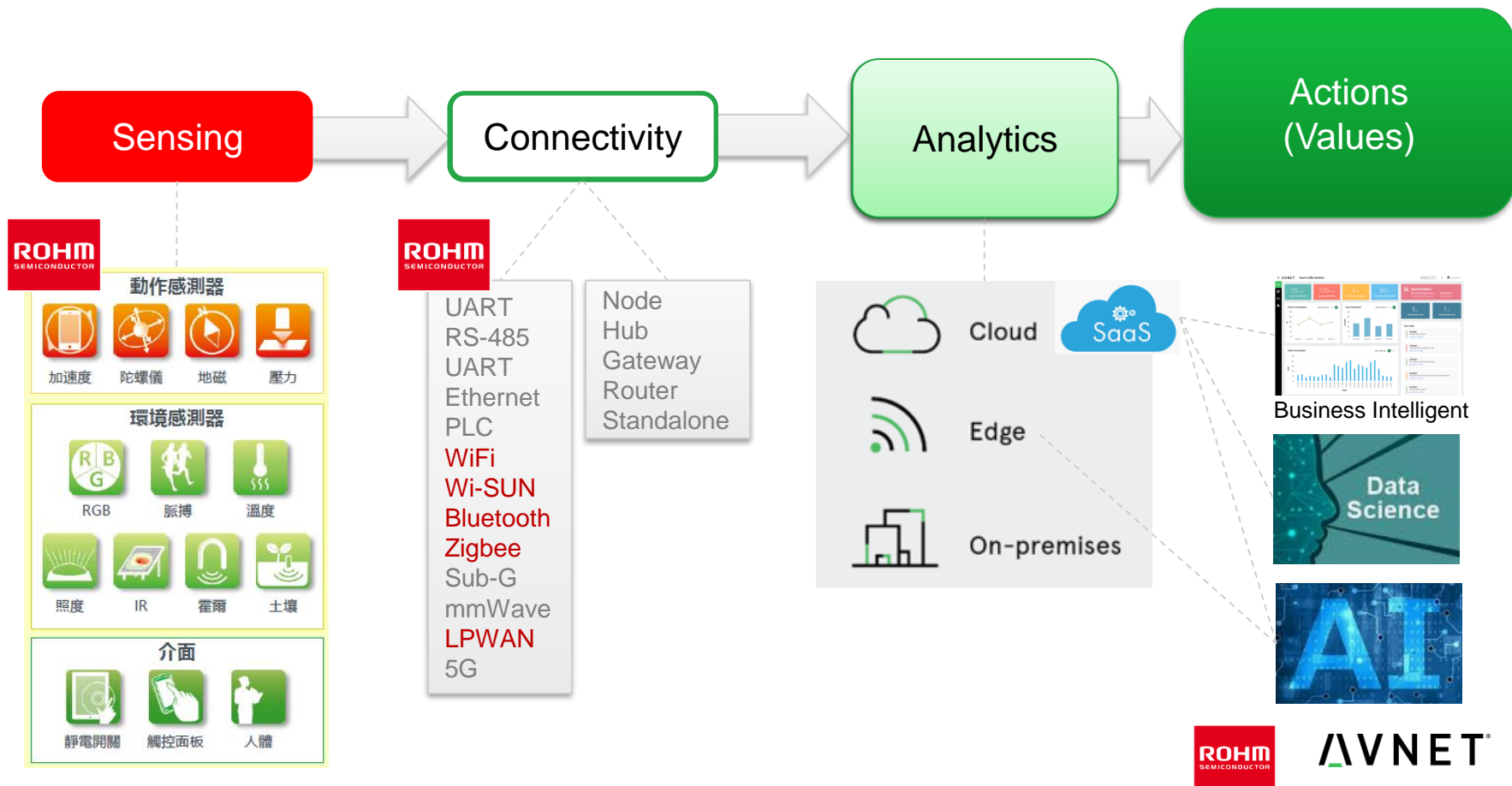
Connectivity focus

Challenges

Digital transformation



# End-to-end value chain in IOT



# Build up an end-to-end service

Sensing



- Temperature sensor
  - Vibration sensor
  - Door sensor
  - Voltage sensor
  - Current sensor
  - Vibration sensor
- } Sensor Mode or Sensor Hub
- } Smart Plug
- } Edge AI Device

Connectivity



Analytics

Actions  
(Values)



- Status report
- Rules and analysis
- Notification
- Device management & FOTA
- Prediction maintenance

# Extend to Smart Factory via data integration

Energy & safety

PLC control and Edge computing

AOI (Automated Optical Inspection)

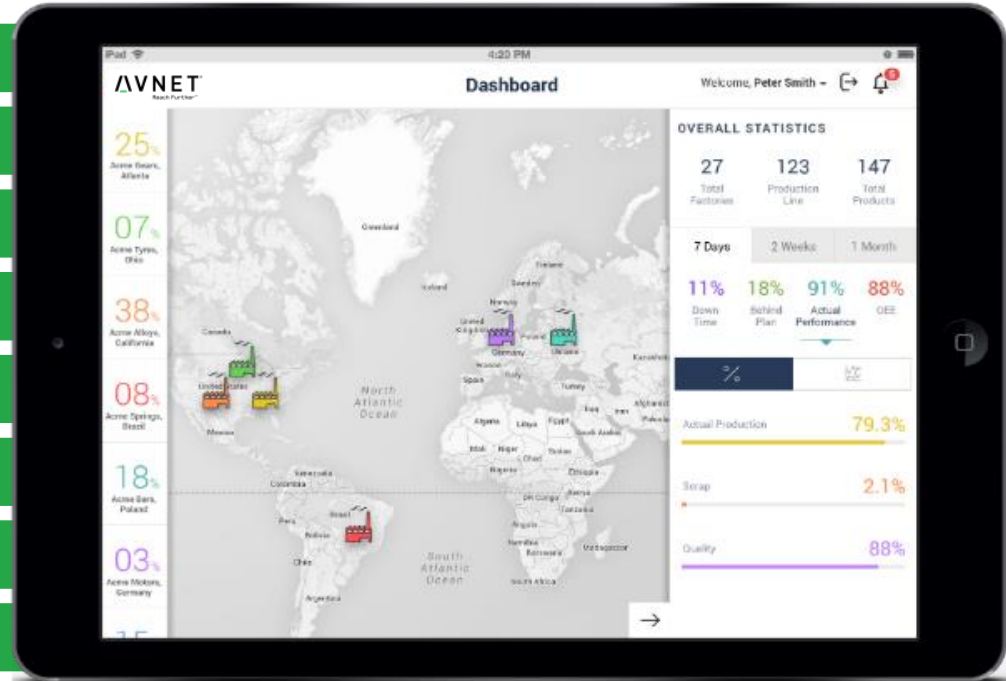
Facial Recognition and access control

Asset monitoring & predictive maintenance

Real-time operational visibility

Integrated supply chain management

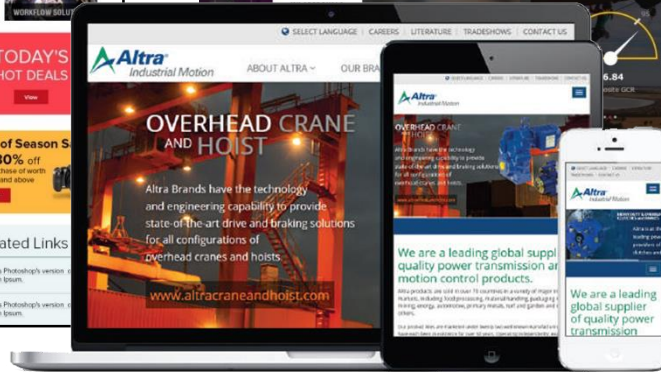
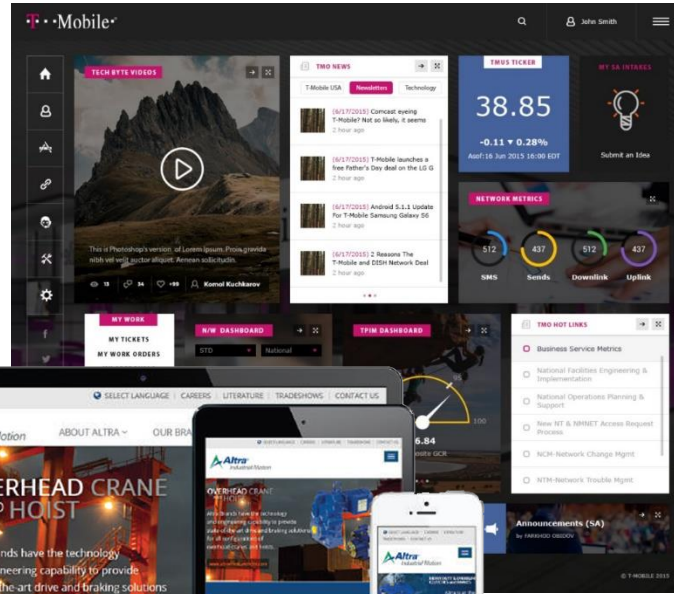
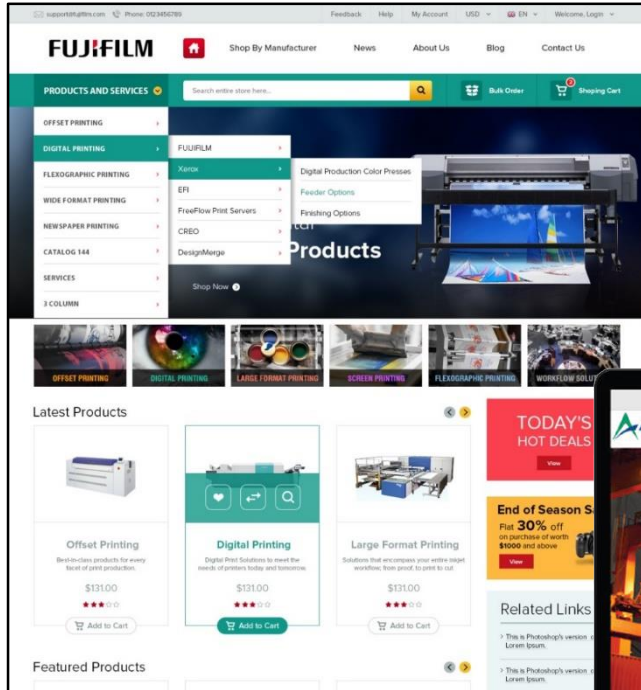
Predictive and perspective analytics





# Avnet experiences on IT/OT integration

Microsoft Partner  
Gold Application Development



# Avnet IoTConnect platform: Best for AI/ML

Accelerate time to Value  
with agile tools and services



Pretrained  
AI Models



Powerful Tools



Comprehensive  
platform

Innovate with AI everywhere  
in the cloud, at edge  
and on-premises



Cloud



Edge



On-premises

Use any language,  
any development tool  
and any framework



python™

PyTorch



ONNX



TensorFlow



Build on Azure

>90% of Fortune  
500 Companies  
use Microsoft Cloud

# IOT one-stop-shopping service

## Avnet's advantages

- Components, HW solutions and security
- PasS, SaaS and data science

### Avnet Core Business



IOT Devices & Edge systems

### Softweb Solutions / IOTCONNECT



Security at End-to-End IOT service

# Your success through ROHM & Avnet ecosystem

## Your ideas. Our Ecosystem.

Bring us your theories, your visions, your bold new ideas. We can make them a reality. No matter where you are in your product journey, we've got the solutions and know-how you need to get to market...fast.

[EXPLORE AVNET'S ECOSYSTEM](#)

