



The IoT Inc Business Meetup Silicon Valley

Opening remarks and guest presentation

Join us on July 2 at 6PM (PST)

Enterprise-Grade IoT:

Why OT Patterns Will
Drive the Future of IoT

Ken Forster
PLAT.ONE

IoT Inc. Meetup

Bruce Sinclair (Organizer): bruce@iot-inc.com

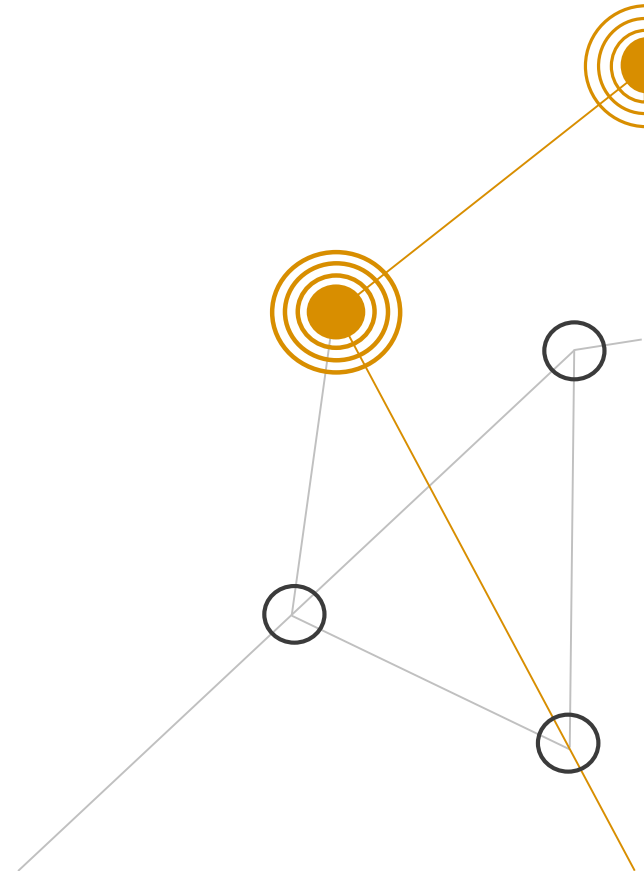


Target of Meetup

For business people selling products and services into IoT
but of course everyone else is welcome: techies, end-users, ...

Focus of presentations and discussions:

Business Models
Support Sales
Marketing Distribution
Post Sales
Pre Sales
Finance



Looking for Help



Reviews

- Help attract great speakers and members
- If you've been attending for a while and like the group, go to homepage to leave a review

Help for our sponsor

- Need to justify their continued support
- Plug and Play are looking to partner with companies big and small

Become a sponsor

Suggest locations to hold future meetings



Upcoming IoT Conference



Attendance

- For 50% off, use code **BRUCE50**

Startup Garage

- The Startup Garage at the IoT Influencers Summit (<http://iotinfluencers.com/siliconvalley/>) on July 21st in the Levis Stadium is looking for Startups in the IoT space that would like to showcase their products to the industry leaders in the IoT space.

Angel Hack

- Hackathon starts July 6 to be revealed on July 21

APPNATION IoT SUMMIT

LY 21

08:15 AM
STAGE 1A

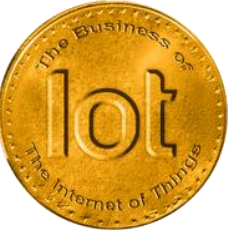
THE EARLY BIRD ACADEMY – THE A-B-C'S OF IoT (Presented by IoT-Inc.)

Bruce Sinclair
President



© IoT-Inc. 2015

Notes



Next Meeting

First Thursday of August -> **August 6**

Globant IoT Studio

Presentation, video and notes from today's meeting will be sent in one week
In September we will be starting our dinner series

Join us on July 2 at 6PM (PST)



Enterprise-Grade IoT:

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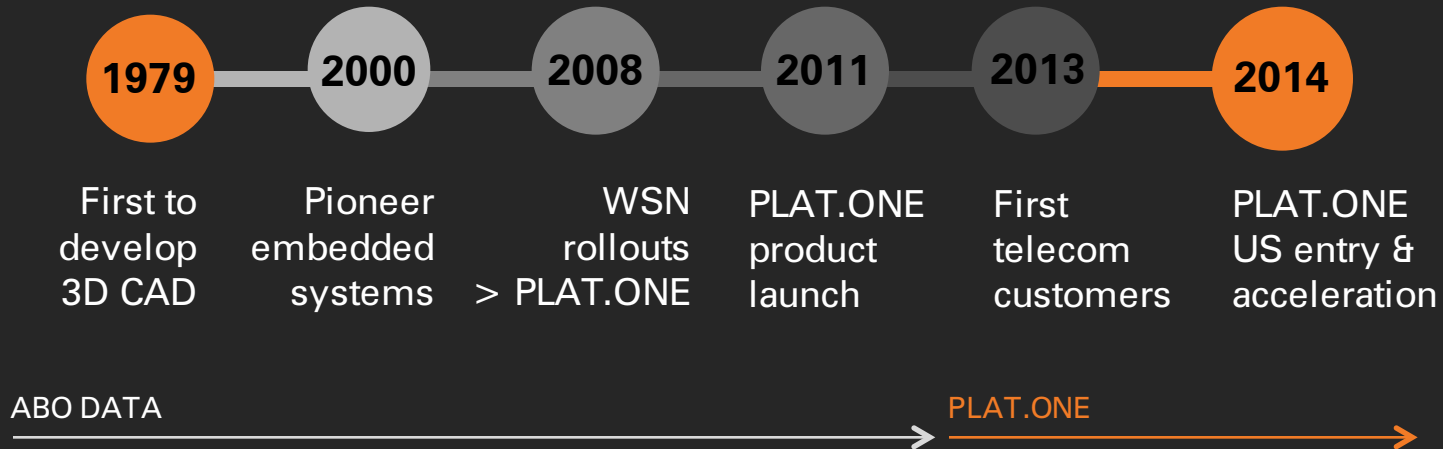
ENTERPRISE-GRADE IOT WHY OT PATTERNS WILL DRIVE THE FUTURE OF IOT

July 2, 2015

KEY TOPICS

- / CONNECTED INDUSTRY WAVES
- / THE NEW COMPUTING TIER
- / DISTRIBUTED APPLICATION PLATFORM
- / IIOT USE CASES

WE KNOW INDUSTRIAL



OUR EXPERIENCE BASE

- 200,000+** devices under management
- 84** man years in development
- 25** industrial customers
- 3** major telecoms
- 1** Enterprise-Grade Application Platform



 Cisco Entrepreneurs in Residence



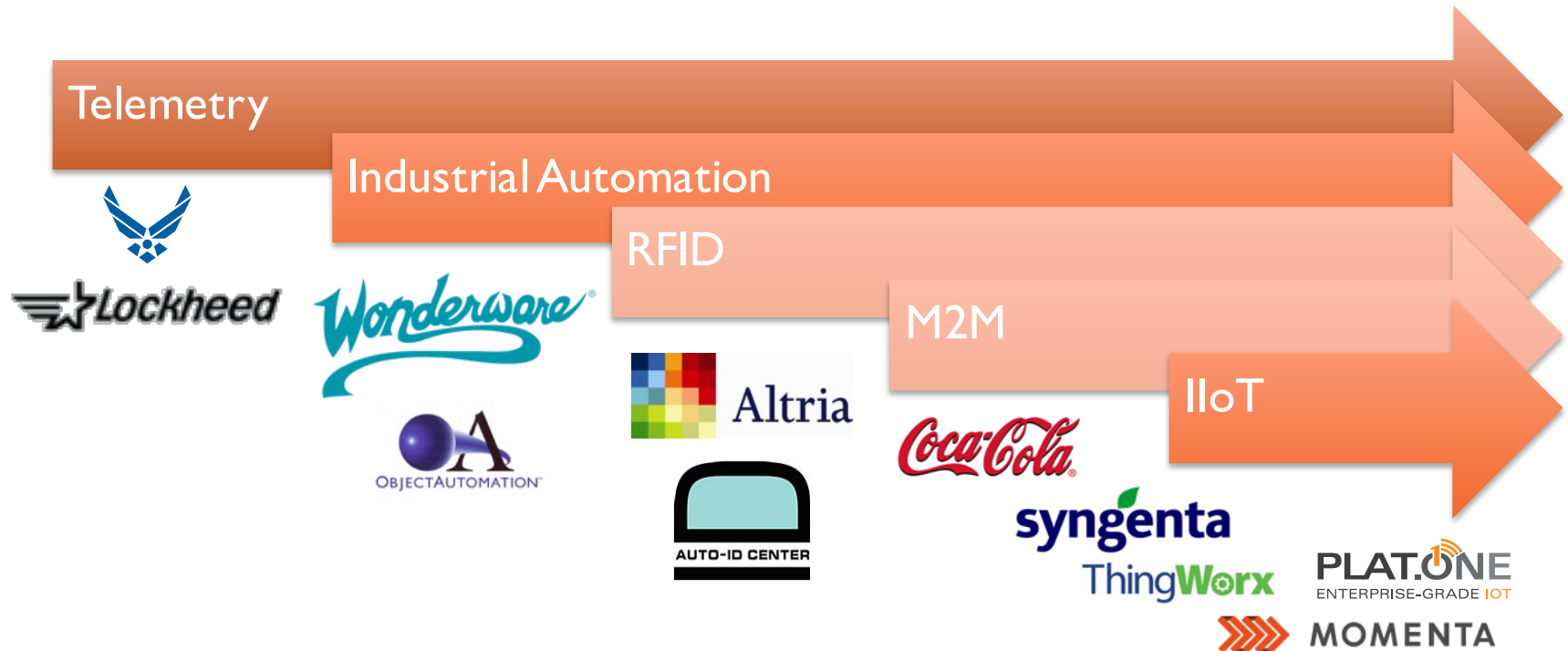
**Machina
Research**

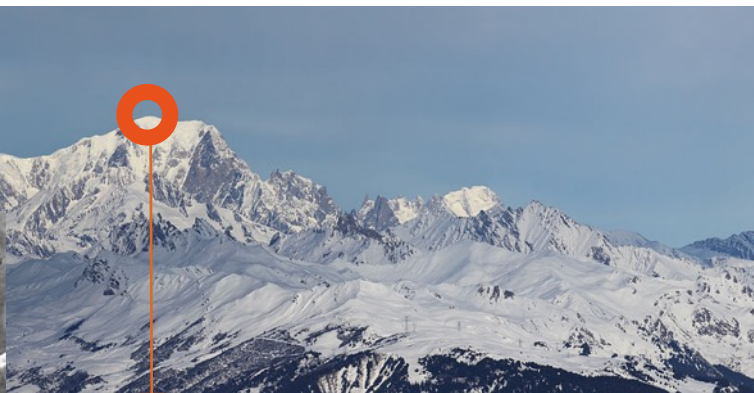
Gartner

ABIresearch[®]
technology market intelligence

Harbor Research

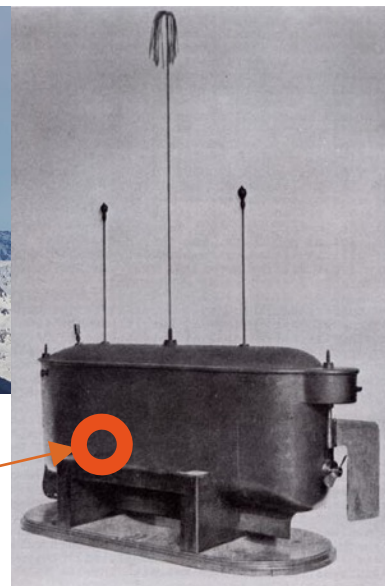
CONNECTED INDUSTRY PATTERNS





Sense
(1874)

Actuate
(1898)



Sense &
Respond
(1914)



Process



ingest



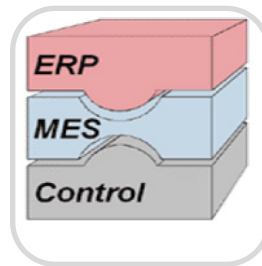
visualize



store



analyze



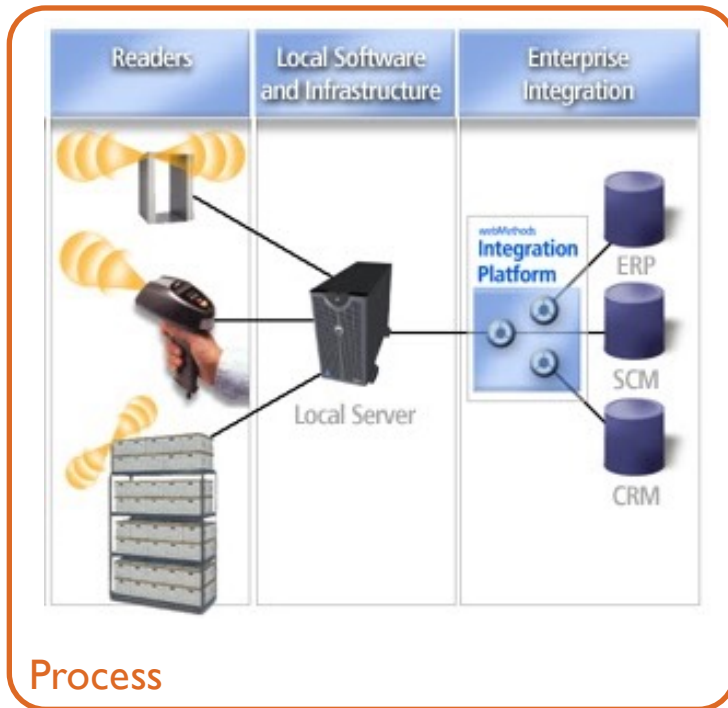
integrate

Process

Characteristics

- Proprietary
- Scale: Thousands
- Edge-based
- Closed-loop
- Real-time





Process



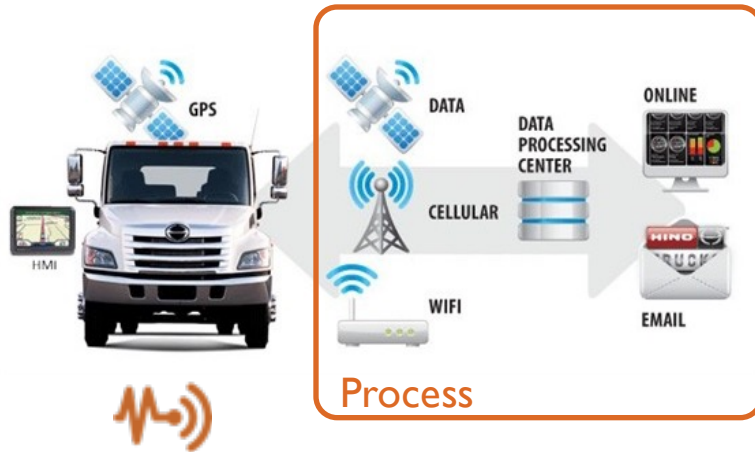
Internet of Things

“We need to empower computers with their own means of gathering information, so they can see, hear and smell the world for themselves, in all its random glory.”

Kevin Ashton

Characteristics

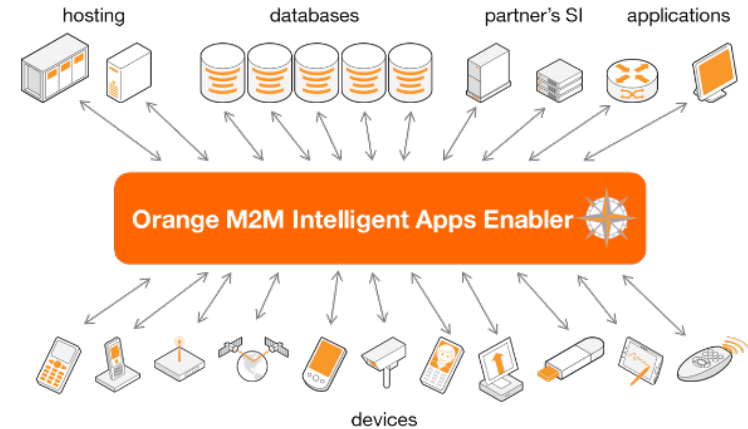
- Fully Internet-based
- Scale: Millions
- Self-ID



Vertical (Stovepipe)

Characteristics

- Wireless (multi)
- Cloud
- Open Source



“Horizontalization”

LA CIBALI

Espresso

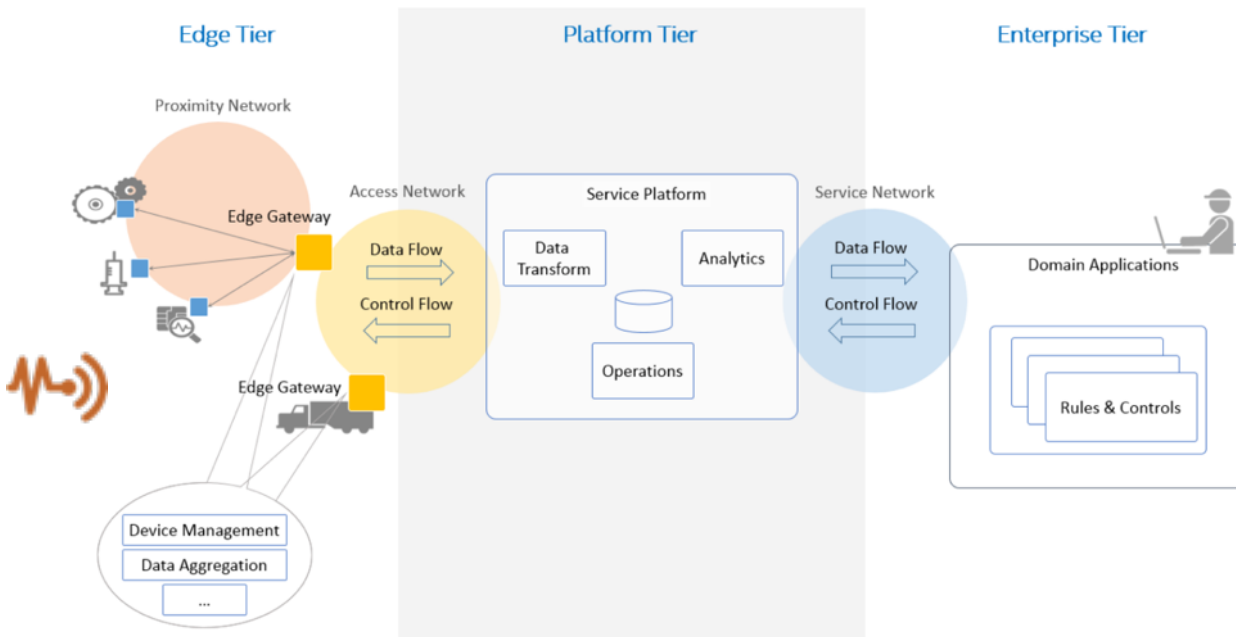


**Vertical
Point to Point
(M2M)**

DoubleShot



**Horizontal
Data Hub
(IoT)**



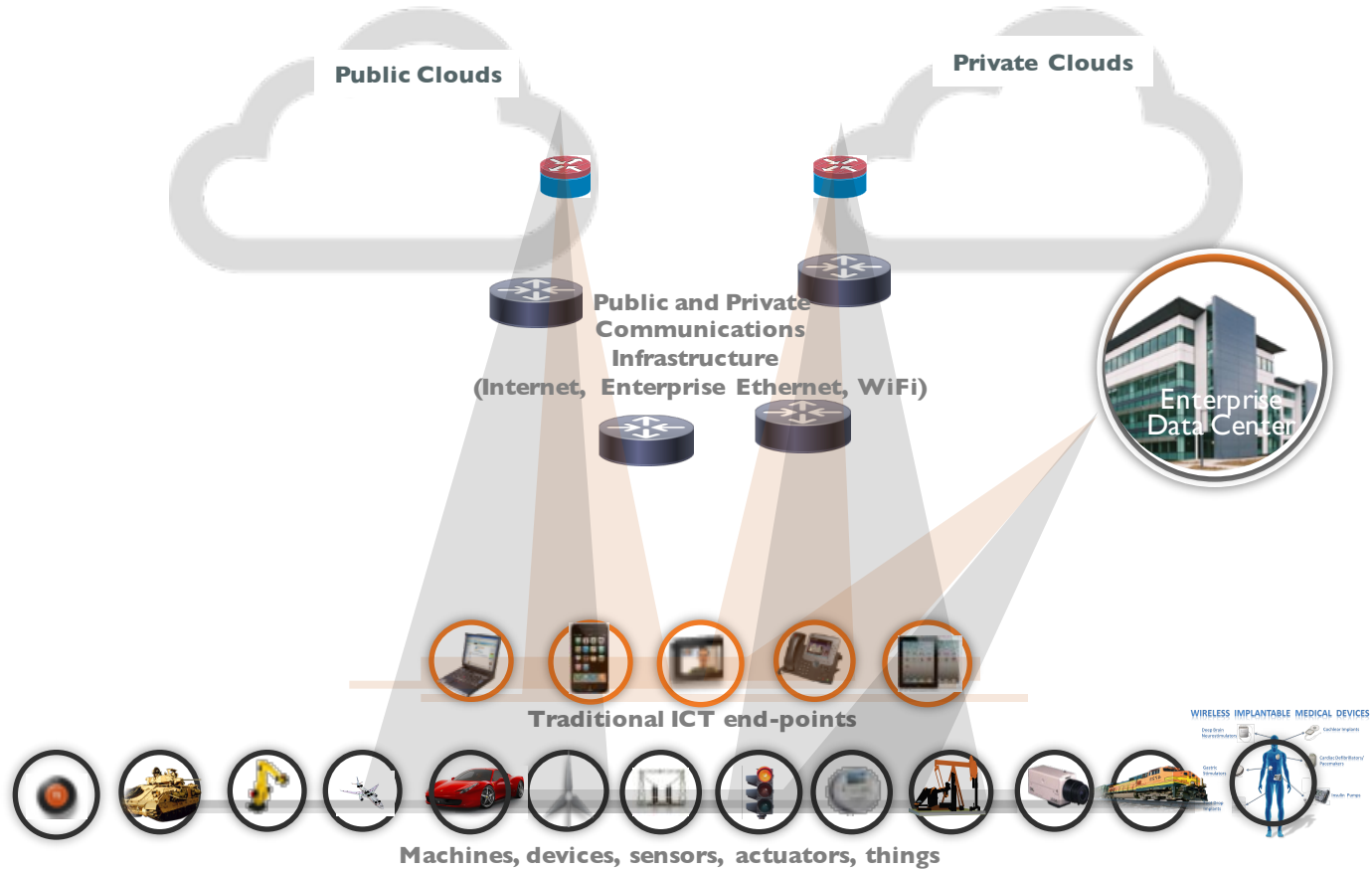
- ✓ Fully Internet-based
- ✓ Scale: Billions
- ✓ Wireless (multi)
- ✓ Cloud
- ✓ Open Source
- ✓ Self-ID
- Edge-based
- Closed-loop
- Real-time



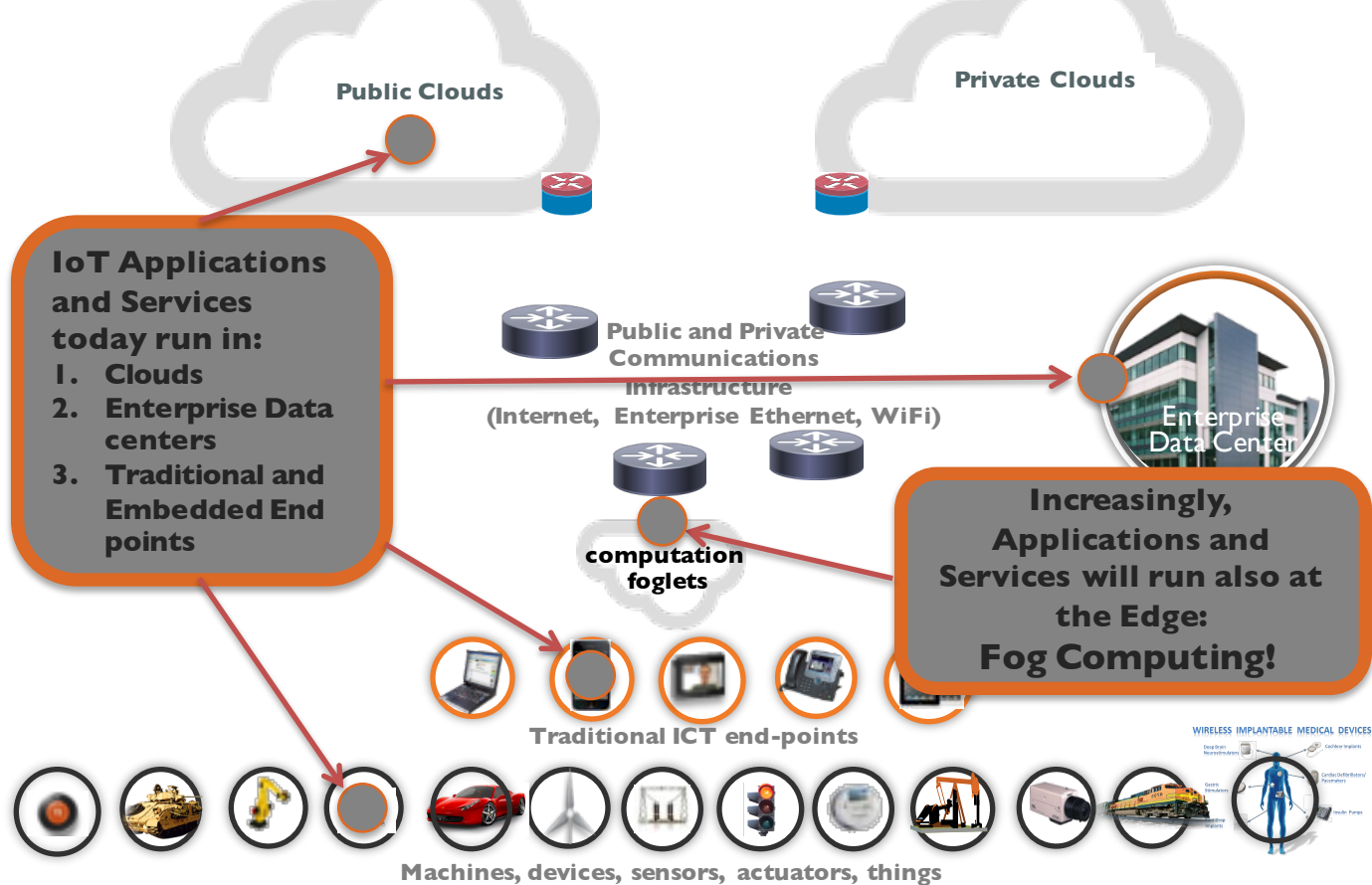
“Standardization”



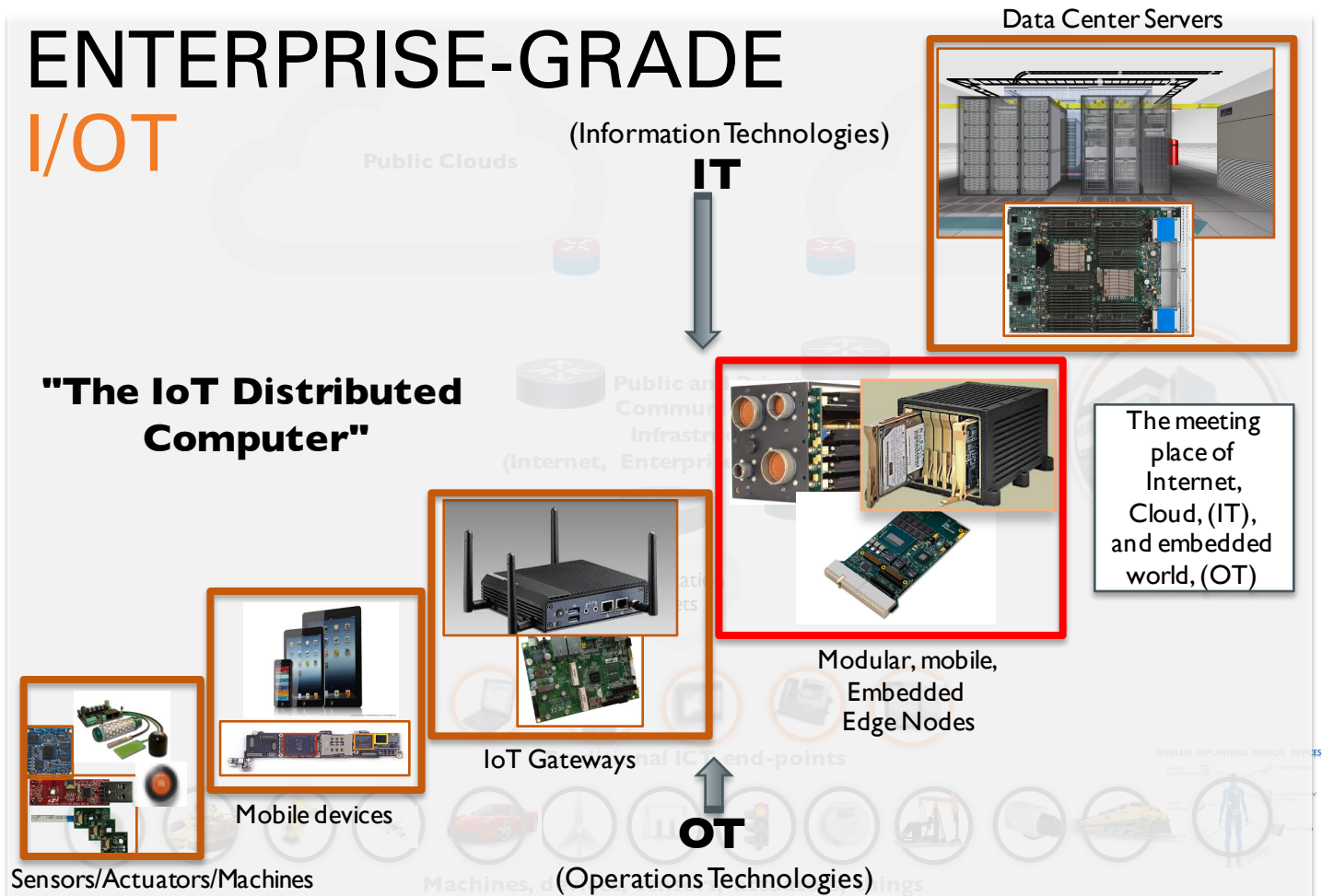
IT EVOLVES TO IOT



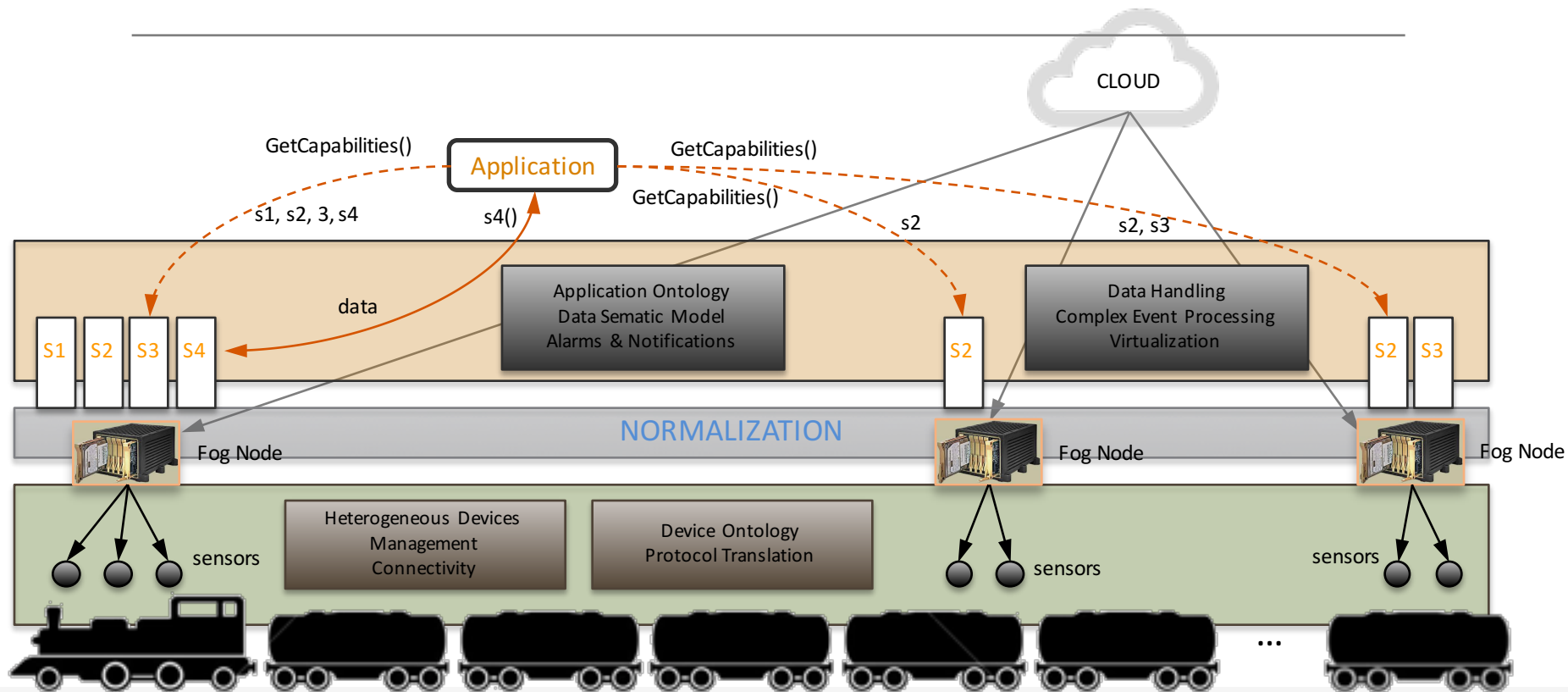
DISTRIBUTED MIDDLE TIER



ENTERPRISE-GRADE I/OT



INDUSTRIAL IOT IN ACTION



AN ENTERPRISE-GRADE APPLICATION PLATFORM

Rapidly Develop & Deploy

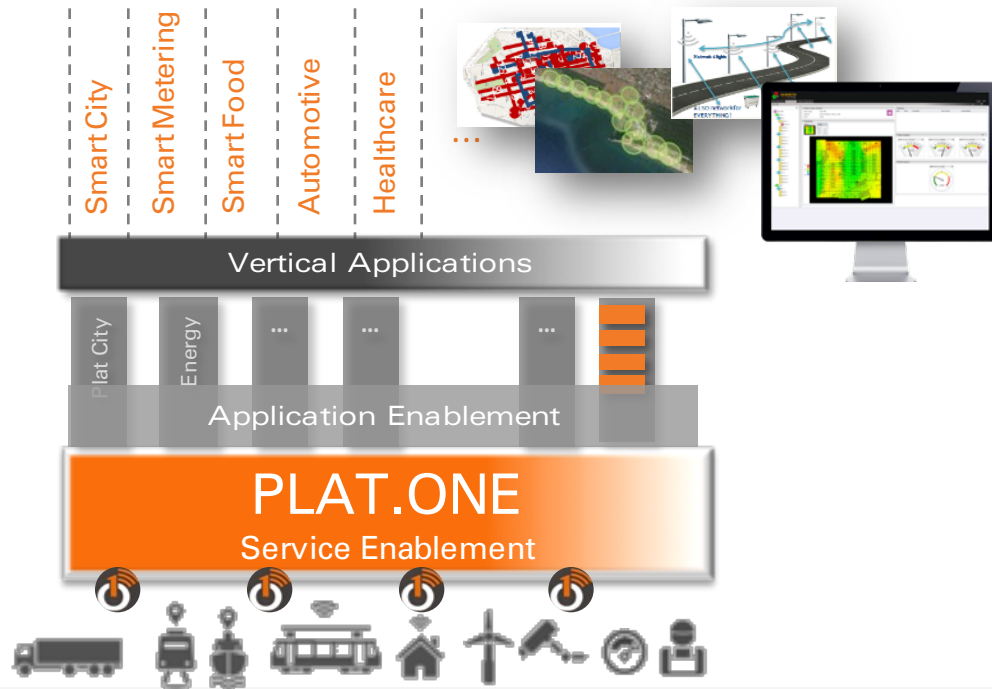
- 10x faster than custom development
- Limited technical skills
- Flexible deployment (cloud, on-premise)

Complete Enterprise-Grade Platform

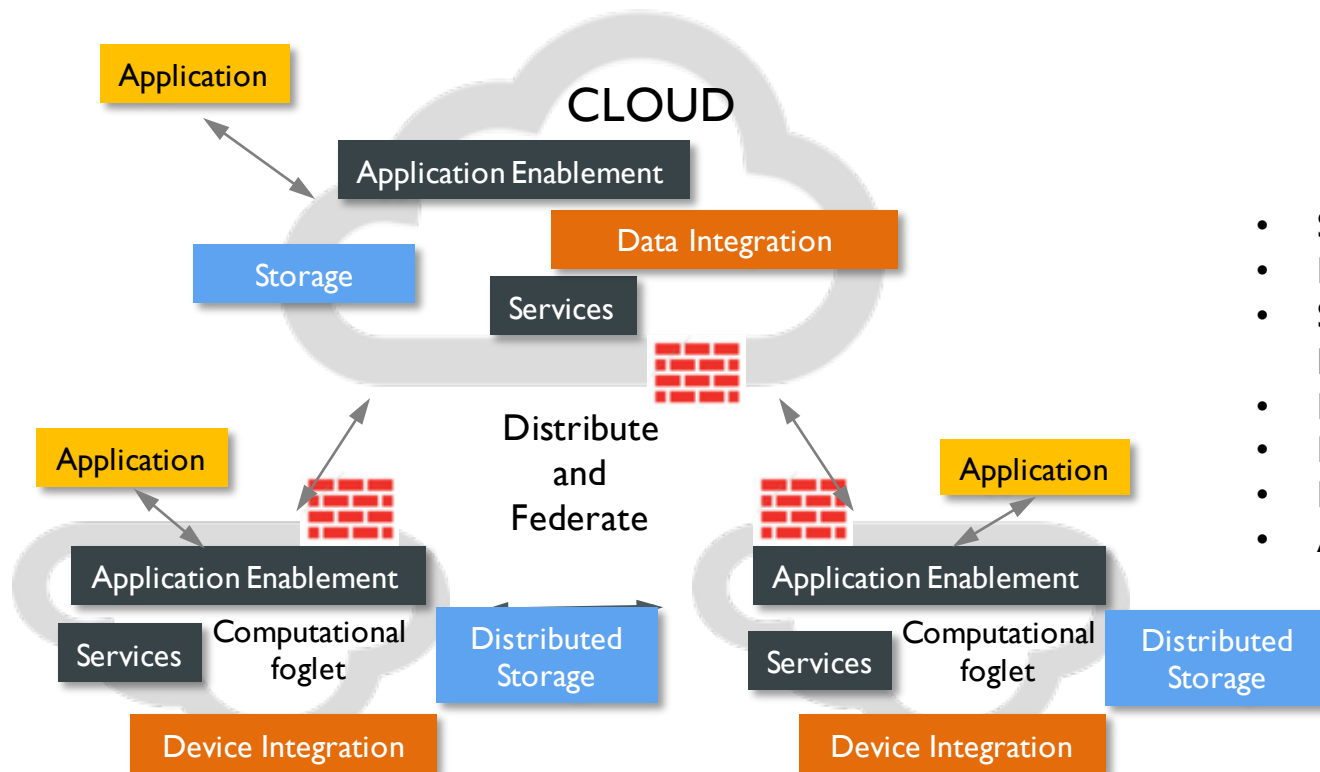
- Multi-Tenant, Scalable, Secure
- Distributed ('Fog Ready')
- Edge-data Ready

Broad Industry Use

- Standards-based (OSGI and OneM2M)
- Extensible, Interoperable
- Rapidly growing ecosystem

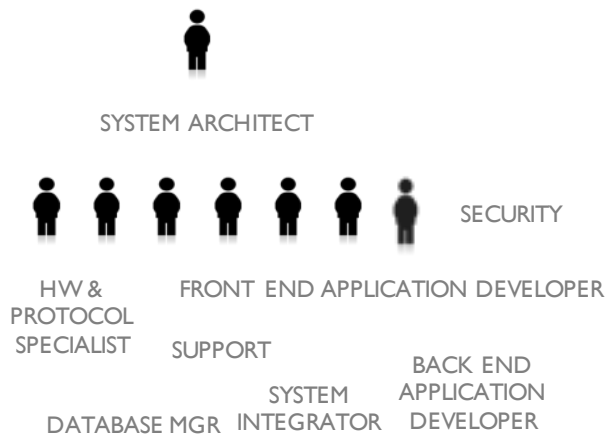


DISTRIBUTED ARCHITECTURE

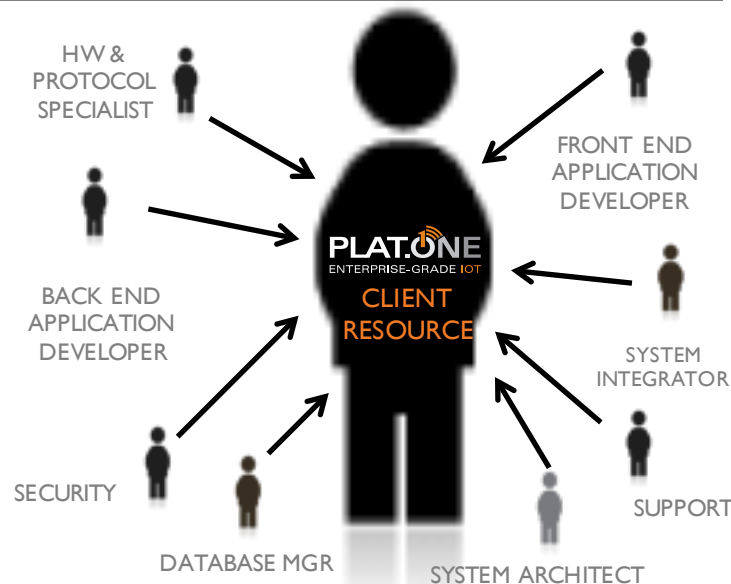


- Standards-Compliant
- Interoperable
- Service & Application Life Cycle Management
- Fog-Ready
- Distributed Edge Computing
- Federated Supervisory
- Agent Technology

ACCELERATING TIME TO VALUE



WITHOUT PLAT.ONE: Clients need a broad array of resources to execute. Resources must also be properly aligned within the organization.



WITH PLAT.ONE: Clients need far fewer and less specialized resources. PLAT.ONE magnifies the value of our client's resources. Organizational barriers are reduced or eliminated.

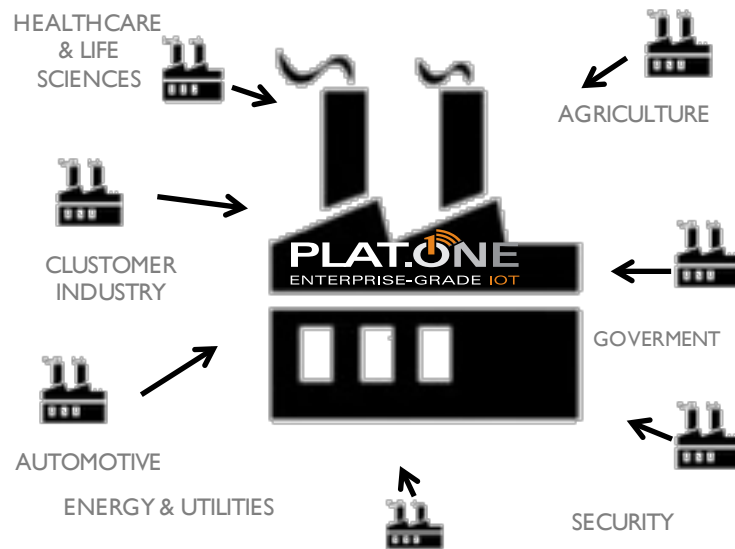
ENABLING FAST INNOVATION



Time to market: 9-18 months

WITHOUT PLAT.ONE: Clients develop solutions within the context of their respective industries.

CUSTOMER SOLUTIONS



Time to market: 4 months

WITH PLAT.ONE: Clients develop solutions leveraging our platform and eco-system effect across a wide array of industries around the world.

DEVICE AGNOSTIC



- Protocol translation (standards & common data formats)
- Device data repository
- Data Flow Control Policies
- Device Security
- Connectivity

- Device Identity Management
- Configuration & Resource Management
- KPI and QoS
- Troubleshooting
- OTAP

RICH PROTOCOLS SUPPORT

Protocol translation (standards & common data formats)

Device Protocols repository

Service Enablement & Device Management

Protocols

Zigbee
XBee
ZWave
6lowPAN
BT & BTLE
WiFi & LPWiFi
IEEE 802.15.4
MQTT
CoAP
TR069
SNMP
HART & W-HART
SIGFOX
Semtech LoRa
NWave UnB

OMG DDS
BACNET
LON
KNX
Modbus
Profibus
Inibus
DLMS/COSEM
KSAT (Viasat)
PLC(*)
OPC UA
OMA LWM2M
ETSI M2M v.1.1
Active Message
SWAP(*)
XMPP(*)

Vendors

Accent
Agora Energy
Agulla
AnyDATA
Arduino
Asoka
ATIM
Axible
AXIS
B&B Electronics
CloudGate
Connit
CPL
DiGi
Digicom

Distech Controls
E-Senza
Ekahau
Elster
EPISENSOR
Eurotech
Honeywell
Intenses
ITRON
Kamstrup
LIBELIUM
Marvell
MeterSit
MICRON
Mobile Devices

NaelBox
Netcomm Wireless
NETVOX
NWave
Packet Power
PARADOX
PIKKERTON
Pulsar
Radiocrafts
RaperryPI
Schneider Electric
Semtech LoRa
Sensinode
SIERRA WIRELESS
SIGFOX

SimpleHomeNet
SITEC
SmarteoWater
SMARTEX
ST Micro
Sterela
Telecom Design
TELIT
TekPea
TRIDIUM
VIASAT
WAGO
Wi-NEXT
Worldsensing
XIRGO

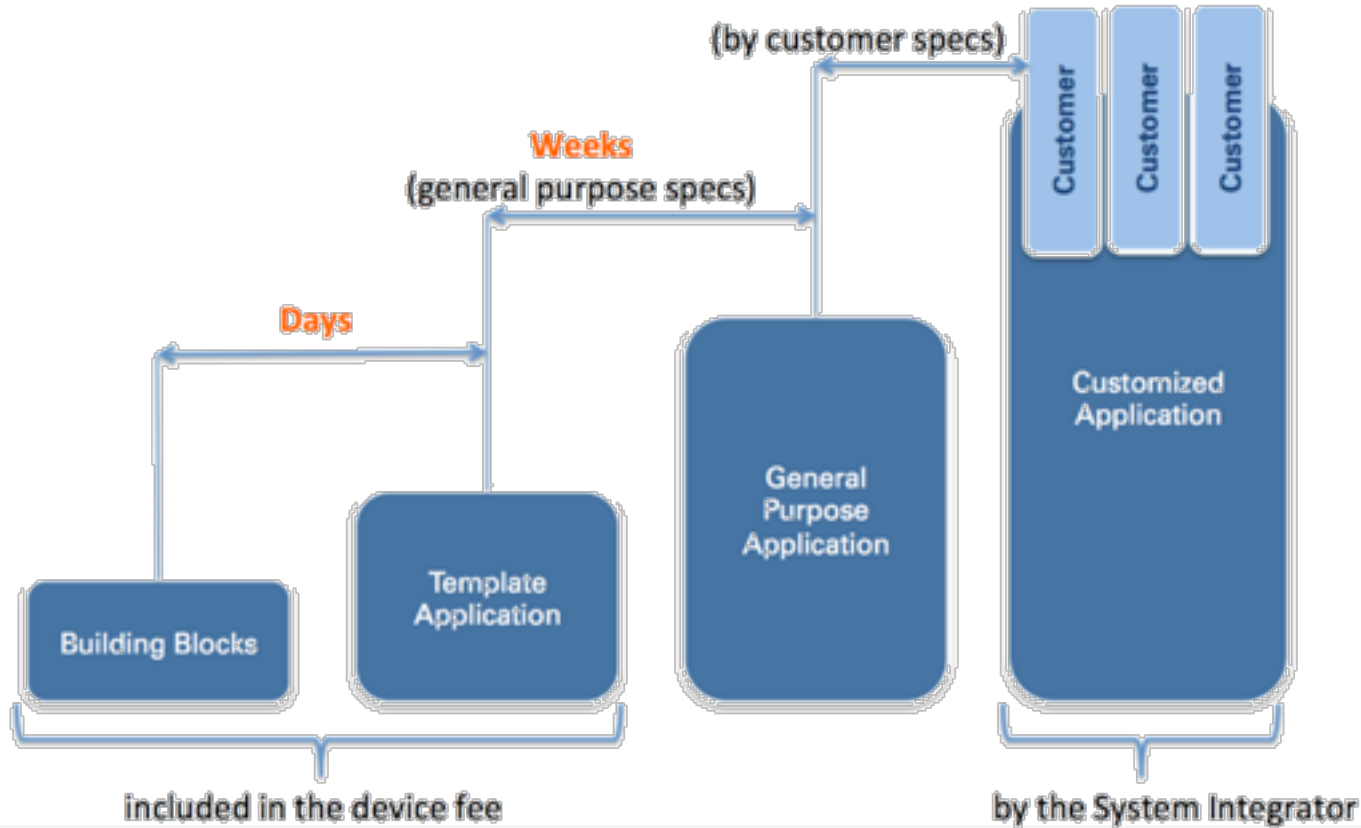
SEMANTIC DATA MODEL



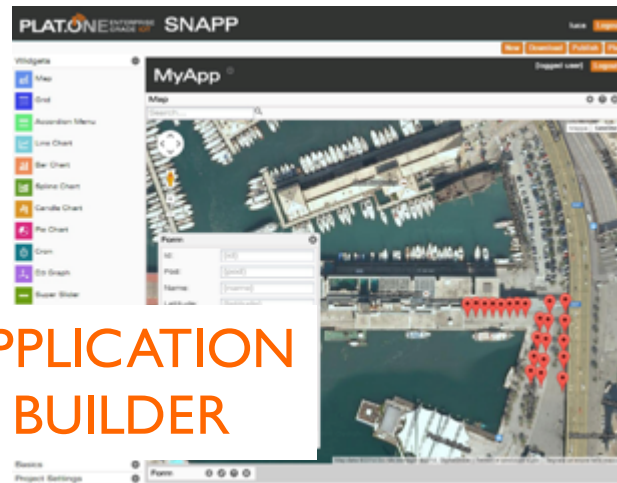
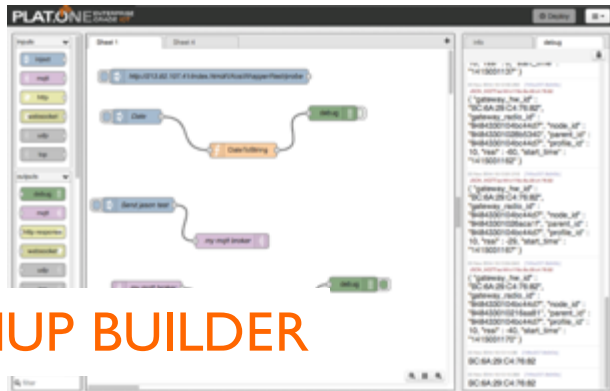
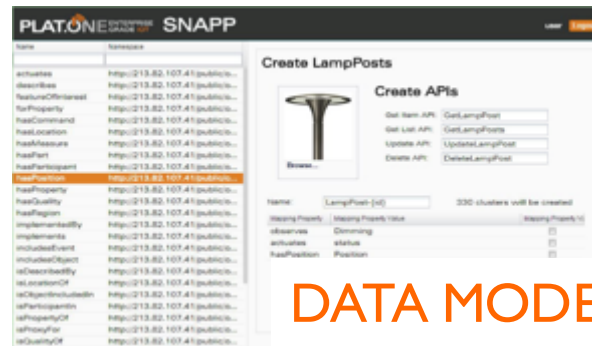
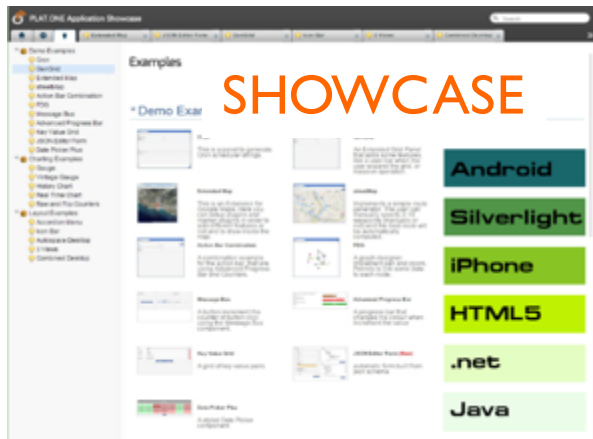
APPLICATION ENABLEMENT



EASY APPLICATION DEVELOPMENT



VISUAL TOOLS



DATA ANALYTICS

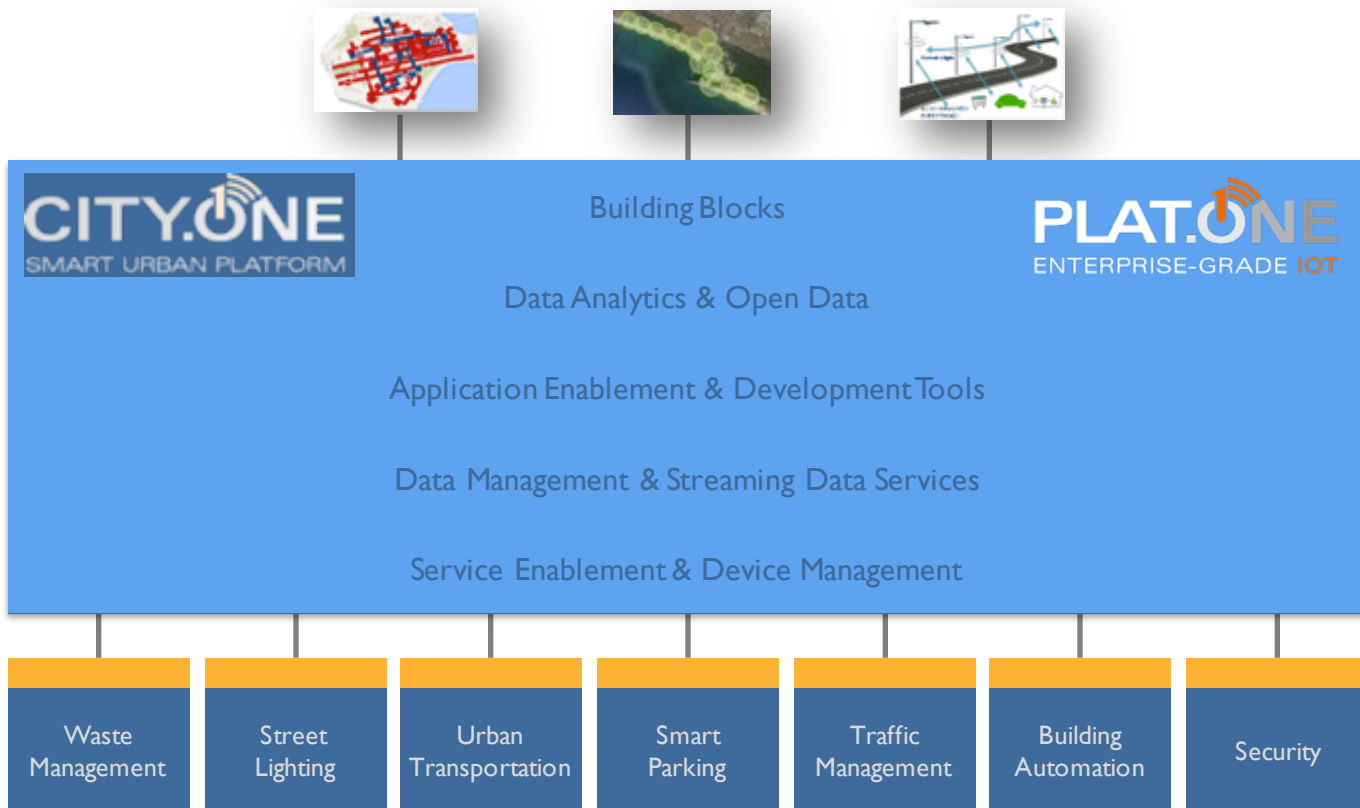


- Engine Integration (plugins)
- Application Analytics
- Device Analytics
- Complex Events Processing
- Continuous Queries
- Distributed Storage & Analytics
- Exporting
- Reporting
- BI Integration

DOMAIN SPECIFIC BUILDING BLOCKS



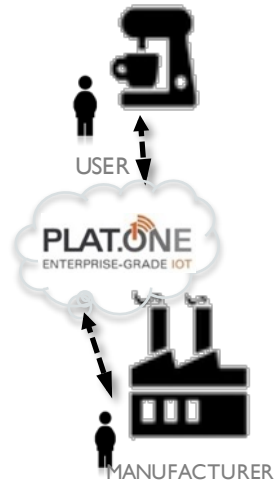
A COMPLETE CITY PLATFORM



CONNECTED INDUSTRIES



Espresso



CONNECTED PRODUCTS



Espresso



TODAY: PLAT.ONE is the hub to connect LaCimbali to remotely monitor, manage and monetize its industrial coffee machines.

DoubleShot



TOMORROW: PLAT.ONE is the data hub to connect LaCimbali to all members of the coffee eco-system.



PARKING & LIGHTING (SPAIN)

1,000 Light Poles
360 Parking Spaces

SECURITY & PARKING (FRANCE)

Video-Based
Saved 50% per space

SMART CITY NETWORK (GERMANY)

Smart lighting
Smart refuse
Transportation

TOURIST NETWORK (ITALY)

Citizen Wi-Fi
Cell Phone Tracking

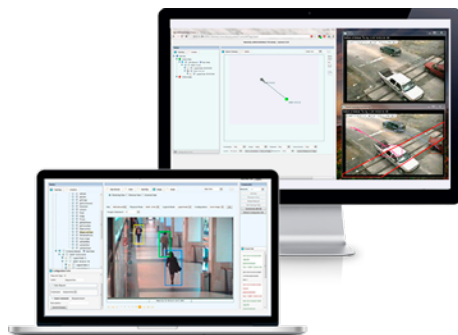
CONNECTED MANUFACTURING



- ✓ Full integration between legacy systems through OPC
- ✓ Industry protocols support (Modbus, Profibus, ProfiNet, OPC, OPC UA, DeviceNet, HART, Bacnet, KNX, LON, OBIX, Zwave, Zigbee, W-Hart)
- ✓ Detection of “attention” or alarm conditions
- ✓ Data tagging and context awareness
- ✓ Real-time data acquisition and streaming data management on the edge
- ✓ Continuous Queries, Feature Extraction, Data Compression, and more
- ✓ Drag-n-Drop Application development
- ✓ Running on commodity hardware

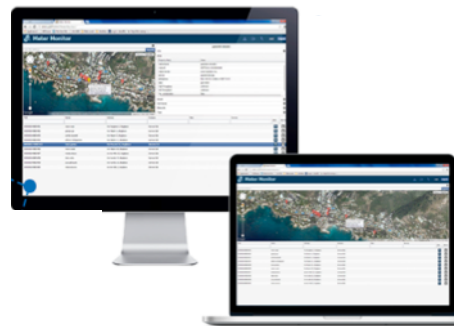


OTHER CONNECTED INDUSTRIES



VIDEO MONITORING

PLAT.ONE provides a full-featured intelligent video analytics solution called Visionell



SMART METERS

PLAT.ONE provides a smart metering solution to manage smart energy meters and connect them with enterprise systems



SMART WASTE MANAGEMENT

PLAT.ONE is used as the hub for a city-wide smart waste management solution that provides significant cost savings and improves metrics

IN SUMMARY

01 / IOT IS NOT NEW OR NOVEL

02 / TO PREDICT THE FUTURE LOOK TO THE PAST

03 / OT APPLICATIONS CANNOT BE SERVED BY TWO-TIER

04 / VALUE IS CREATED SEMANTICALLY (END-TO-END)

05 / SECURITY AND DATA PRIVACY BEGIN AT THE EDGE



THANK YOU

KEN FORSTER
COO

KEN.FORSTER@PLAT.ONE

PLAT.ONE | ENTERPRISE
GRADE IOT