



**Hewlett Packard
Enterprise**



Translate Data into Action with IoT solutions

Rupert Holzbauer

SAP Alliance Director EMEA, Director SAP Competence Center EMEA
Hewlett Packard Enterprise

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Hewlett Packard Enterprise

A true partnership where collaborative people,
empowering technology and transformative ideas
accelerate change.

Accelerating innovation
Accelerating transformation
Accelerating value

Accelerating possibilities

Our vision

Be the industry's leading provider of **hybrid IT**, built on the secure, next-generation, **software-defined infrastructure** that will run customers' data centers today, bridge to multi-cloud environments tomorrow, and power the emerging **intelligent edge** that will run **campus, branch and Industrial IoT** applications for decades to come. All delivered through a world class **services** capability.



Our strategy



We make
Hybrid IT simple

Traditional Data
Center

Private Cloud

Managed Cloud
Services

Public Cloud

Traditional Data
Center

Software-defined Infrastructure
and Private Cloud

Multi-cloud
Partnerships



We power the
Intelligent Edge

Campus & Branch

Industrial Internet of Things



We have the **expertise to
make it happen**

Advisory & Professional
Services

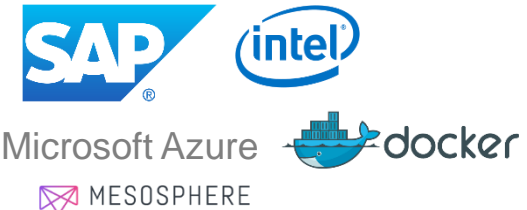



Technical
Services

IT Consumption
Models

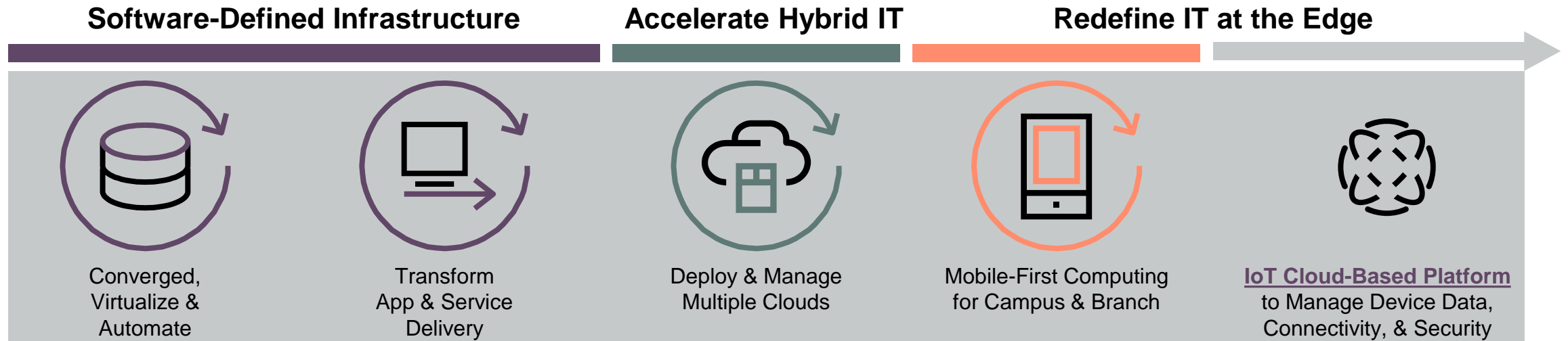
Realizing our Vision

HPE Vision

Be the industry’s leading provider of hybrid IT, built on the secure, next-generation, software-defined infrastructure that will run customers’ data centers today, bridge them to multi-cloud environments tomorrow, and enable the emerging intelligent edge that will power campus, branch and IoT applications for decades to come.

Strategic Partnerships	Targeted Acquisitions	Focused Investments	Portfolio Optimization
<ul style="list-style-type: none">SAPMicrosoft AzureIntelDockerMesosphere <div></div>	<ul style="list-style-type: none">Aruba Networks - \$2.7BSGI* - \$275M <div></div>	<ul style="list-style-type: none">HPE SynergySAP HANA InfrastructureEdgelineOneViewHelion Cloud Platform <div></div>	<ul style="list-style-type: none">TippingPoint sale - \$300MH3C deal in China - \$2.6BSpin-merge of Enterprise Services business with CSC* - \$8.5BSpin-merge of non-core software assets with Micro Focus* - \$8.8B <div></div>

Secure hybrid IT and campus mobility solutions for the Internet of Things



Software-defined and services as key enablers

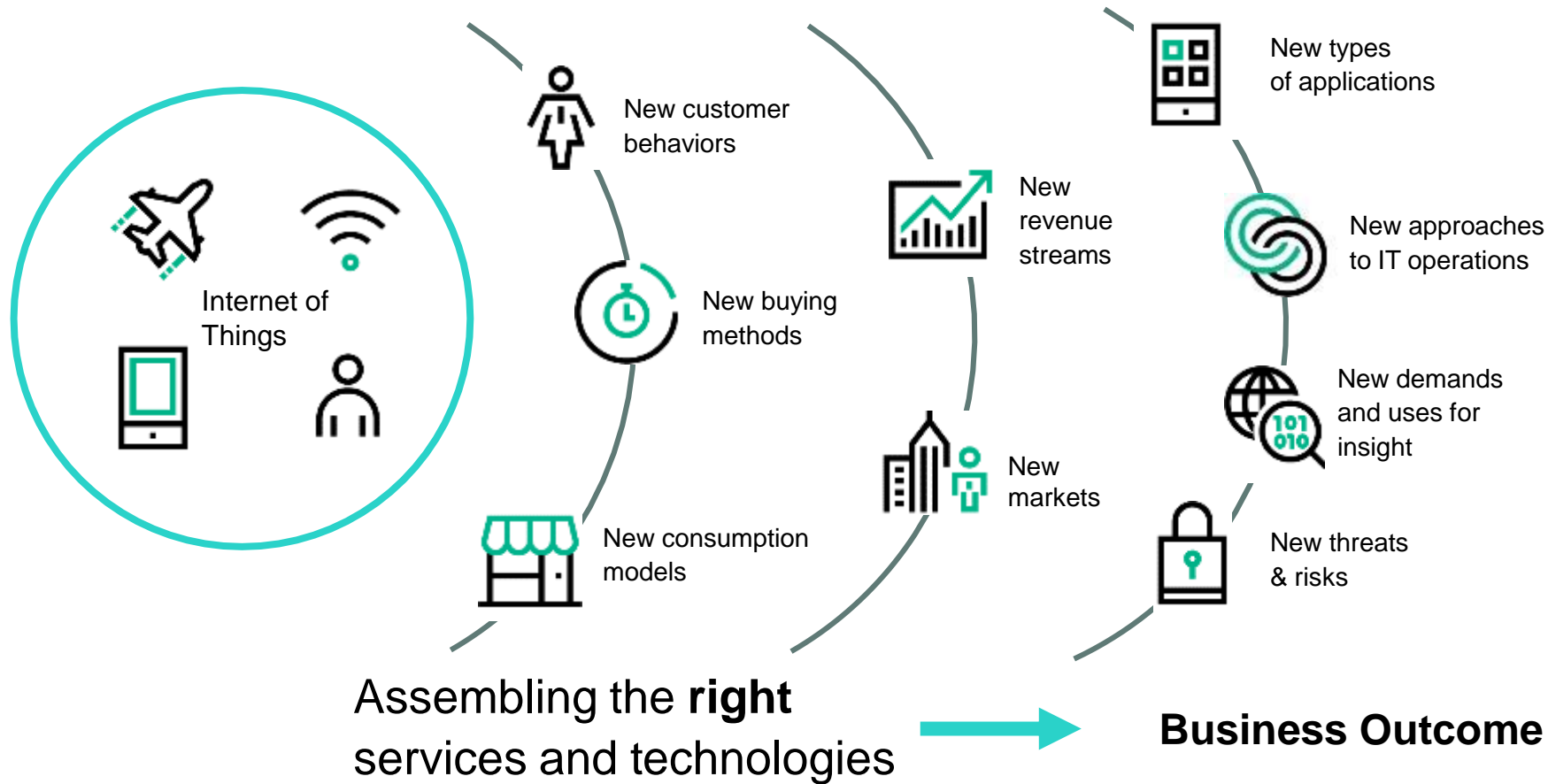
- Technology Services helps customers transform their IT environment and take advantage of opportunities in emerging areas
- Software-defined capabilities power and differentiate infrastructure solutions and are critical in a cloud environment



From Buzzword to Real

What is the Internet of Things

It's about translating data into action



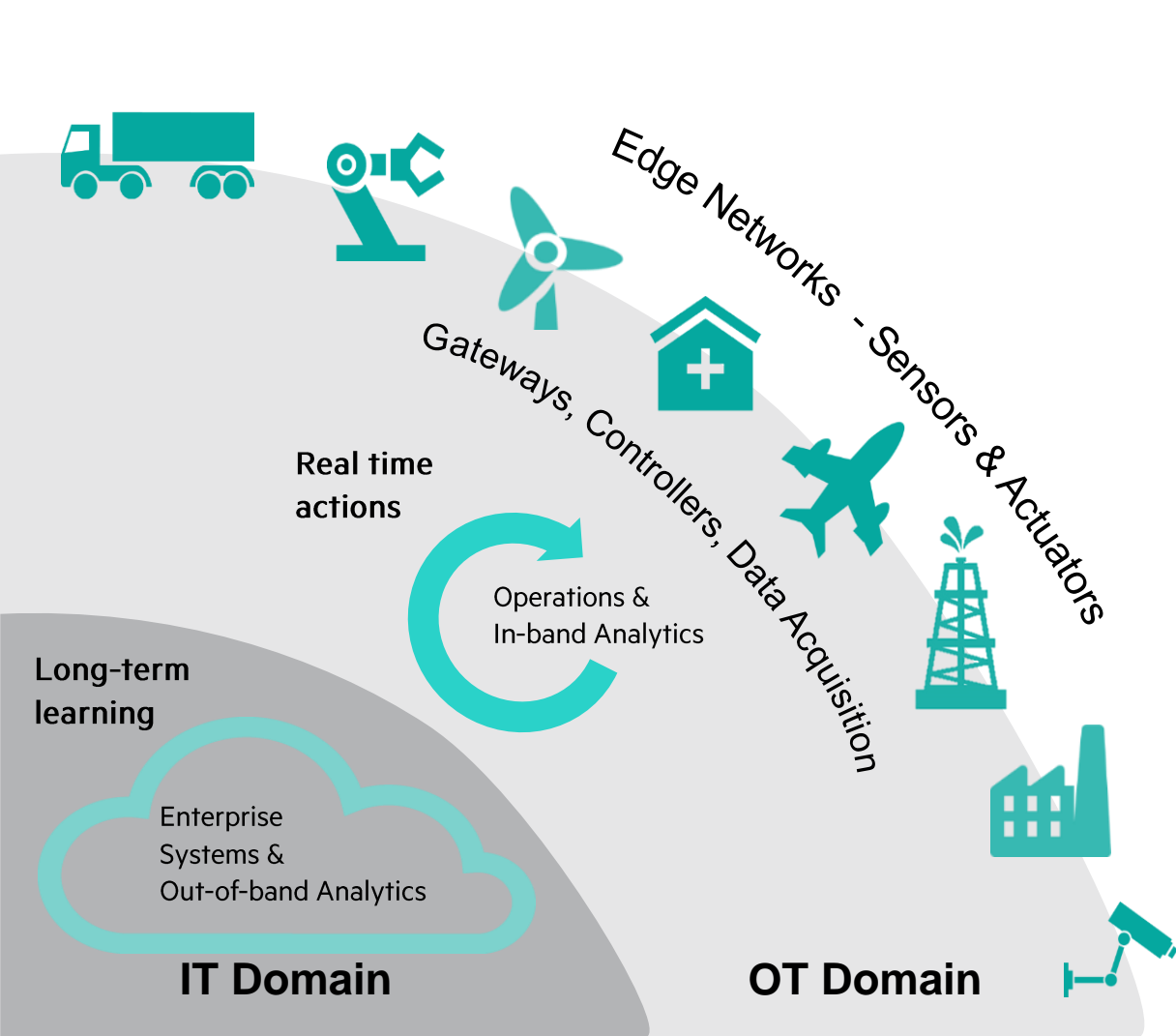
It's about business outcomes

Incredible things happen when you connect the unconnected

- Reduce costs, risk reduction and improve operation efficiency
- Improve customer experience
- Improve existing revenue streams
- New revenue streams / market opportunities

What is the “Edge” or a “Thing”?

The IoT “Edge” is where the action is...where the “things” are



- Manufacturing floor
- Product test facility
- Wind farm
- Energy power plant
- Ships, boats, submarines
- Crop fields
- Sports arena
- Electrical power grid
- Planes, trains, and automobiles
- Medical facility
- Residences
- People, animals, nature

The things embody new insights . . .

The 3 Types of Insight from the IoT

Business

Engineering

Scientific

New, optimized converged **systems at the Edge**,
derive value from these new insights

OT = Operations Technology

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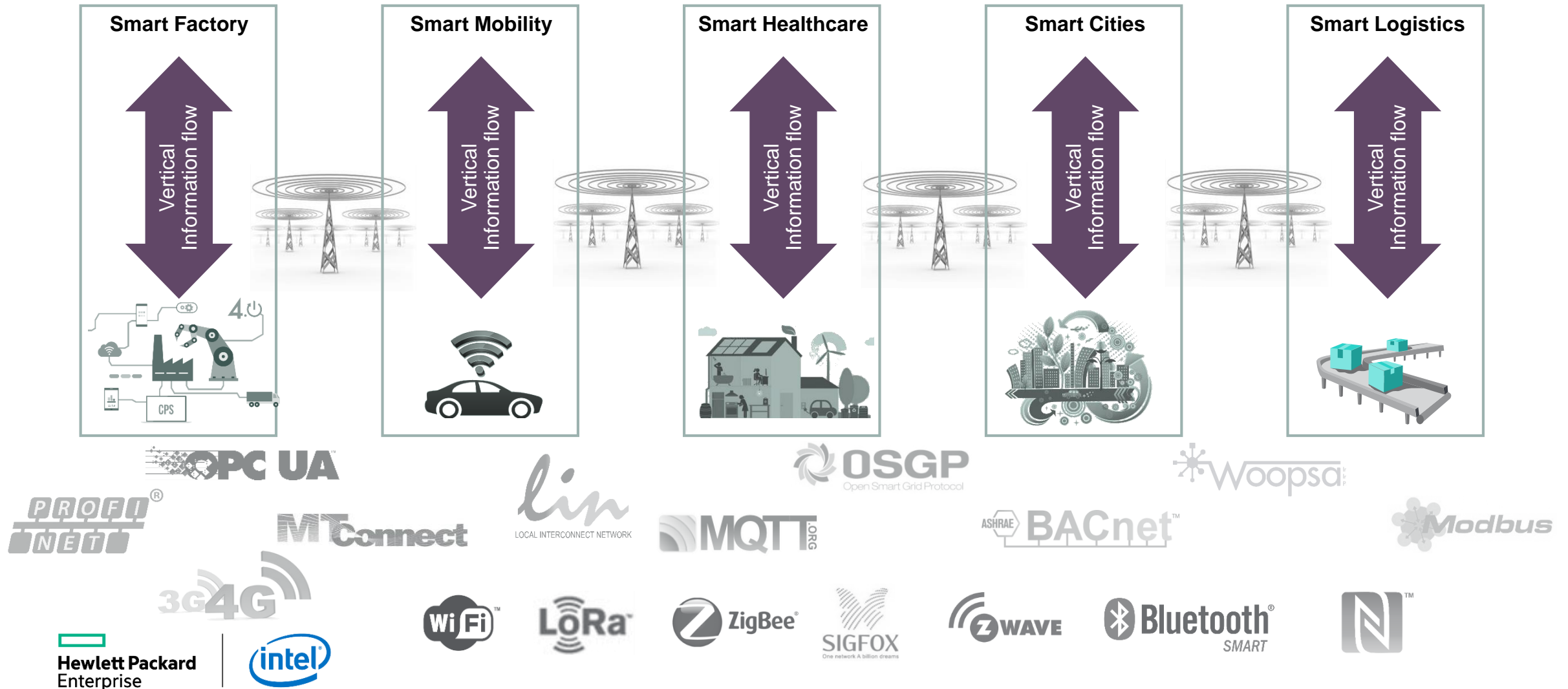




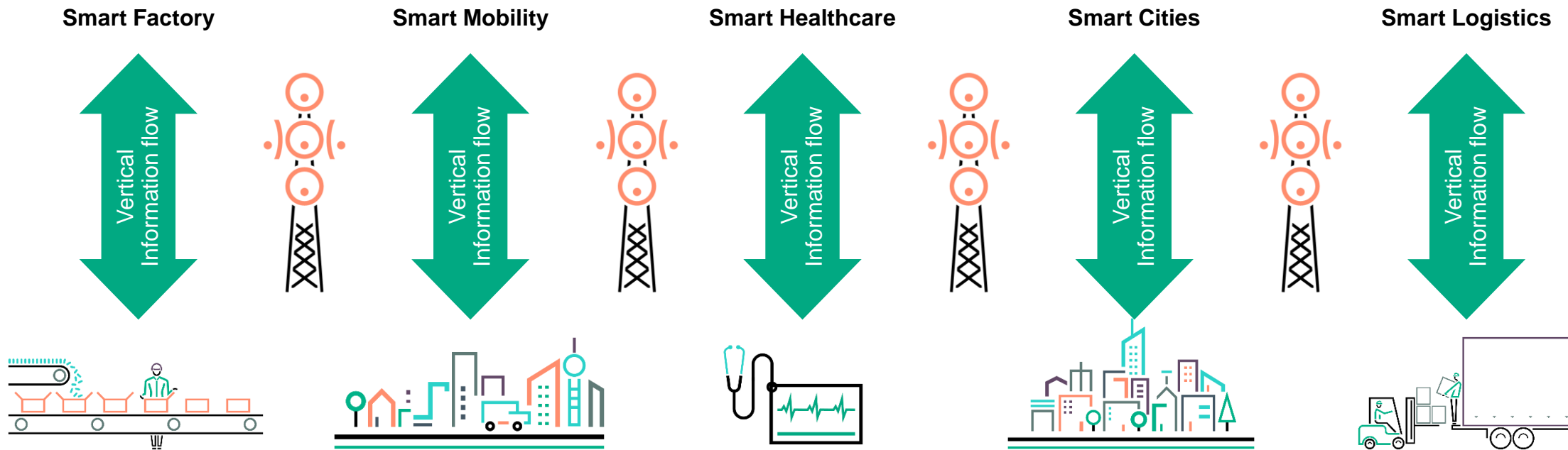
Standards are Key

Edge, Connectivity and Analytics

Encapsulated eco systems: Vertical vs. Horizontal information view with many connectivity possibilities



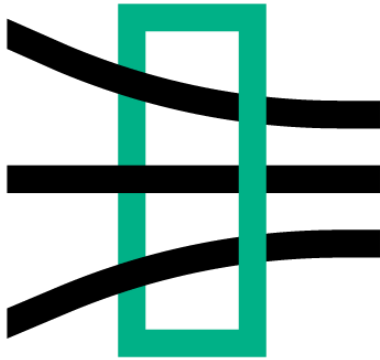
HPE's open Universal IoT platform is horizontal oriented and covers out of the box cross domain capabilities



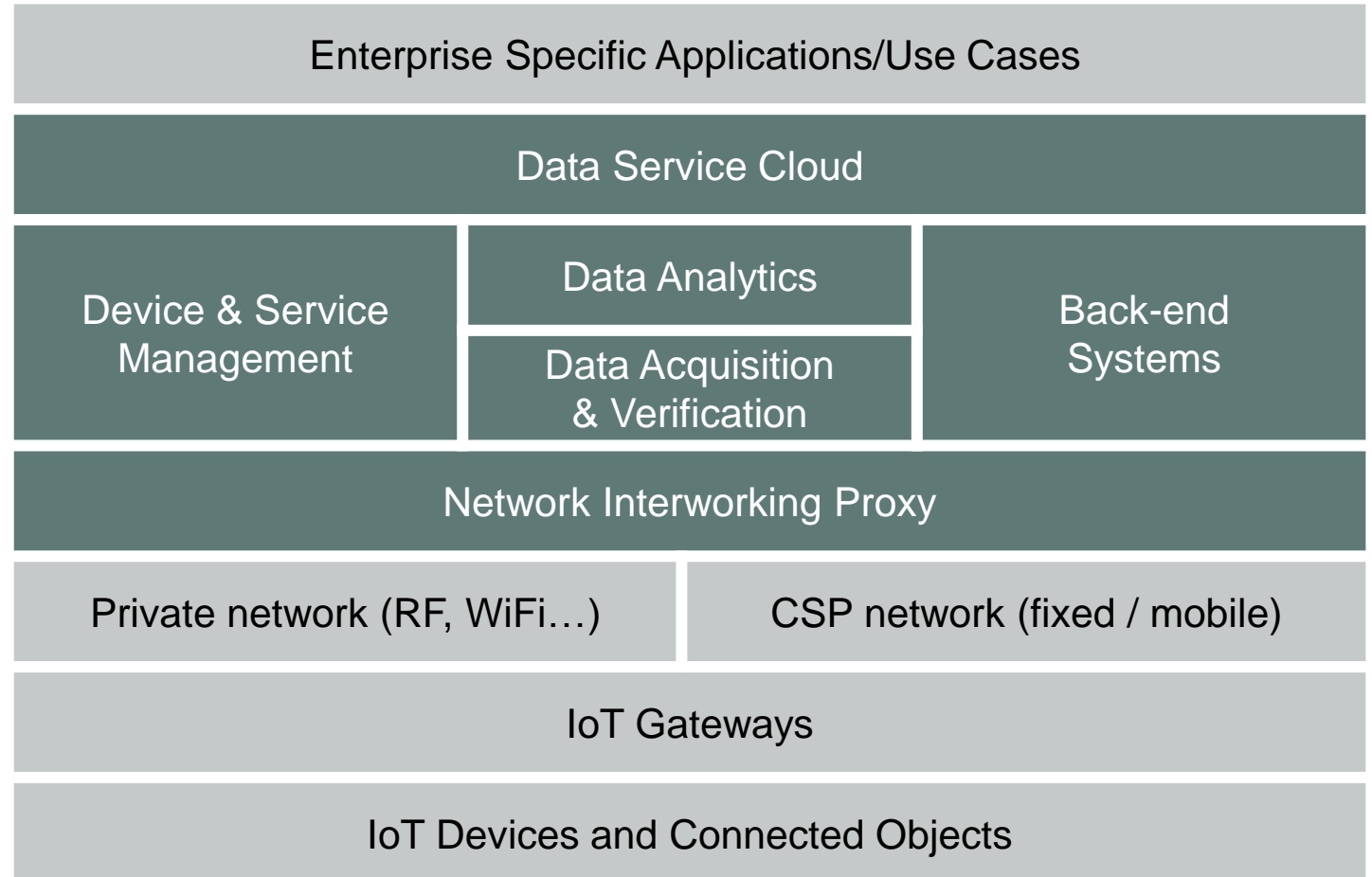
HPE Universal IoT Platform
(carrier grade class)



IoT platform architecture



Standardized architecture streamlines onboarding new applications and manages information in a **unified, secure, and flexible** end-to-end system.



HPE Universal IoT Platform

HPE combines telco with automotive knowledge to accelerate customer centric connected platforms and ensure sustainable growth



Carrier Grade Class

High available and reliable services based on Telco sector proven technologies



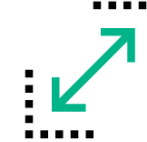
Flexible Pricing Model

Pricing model supports various business scenarios, from ramp-up to mass market



Full Lifecycle Support

Worldwide Consulting and integration capabilities and cloud service / deployment methods



Cross Industry Capabilities

Horizontal focused IoT platform to effectively support heterogeneous business requirements



IoT Standard & Global Coverage

Ensure interoperability based on the global oneM2M standard + global service coverage



IoT collaboration with SAP

Joint engineering activities

Co-Innovation Labs from HPE and SAP



Digital Enterprise Platform

Design and certification of SAP HANA on-premise and cloud platforms for the Digital Enterprise



SAP HANA and IoT

Standardized architecture in a unified, secure, and flexible end-to-end system



Security

Fortify for SAP HANA



Future technologies

SAP HANA on „The Machine“

Co-Innovation
Labs in
Walldorf,
Palo Alto and
Chennai

Over 200 engineers from SAP and
HPE are working together

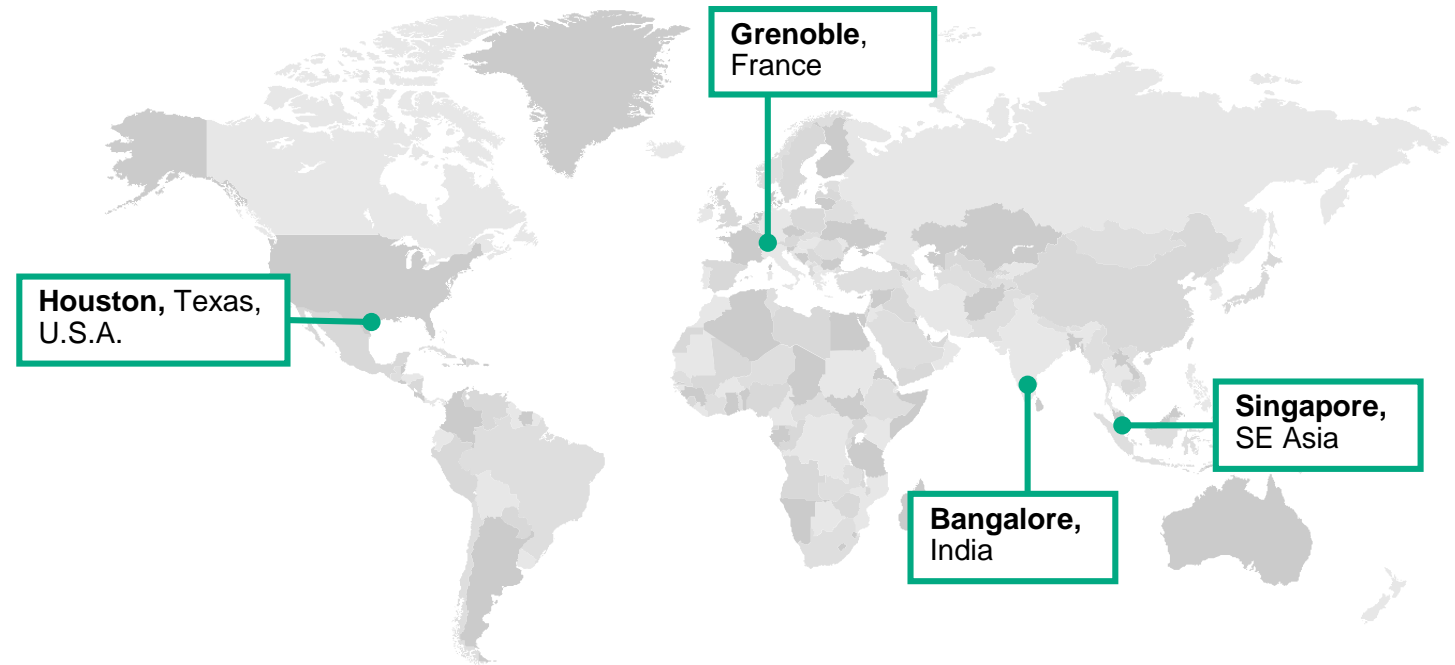


IoT Innovation Labs

Enabling total access to HPE IoT technology

Partner and customer engagement, interaction, assessment and collaboration on solution development and applications

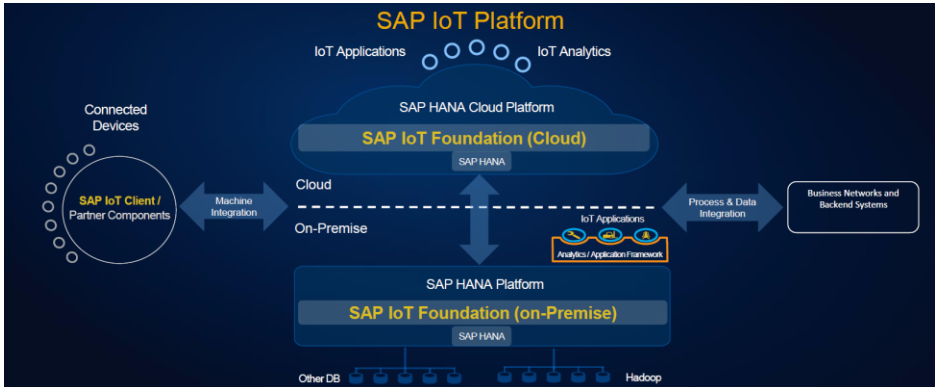
- Building, testing and pre-validation of Edgeline systems and end-to-end HPE IoT solutions
- Integrated real-life “Edge Experience Zones” to interact with and highlight industry applications
- On-site access or secure remote access
- Datacenter connectivity and testing



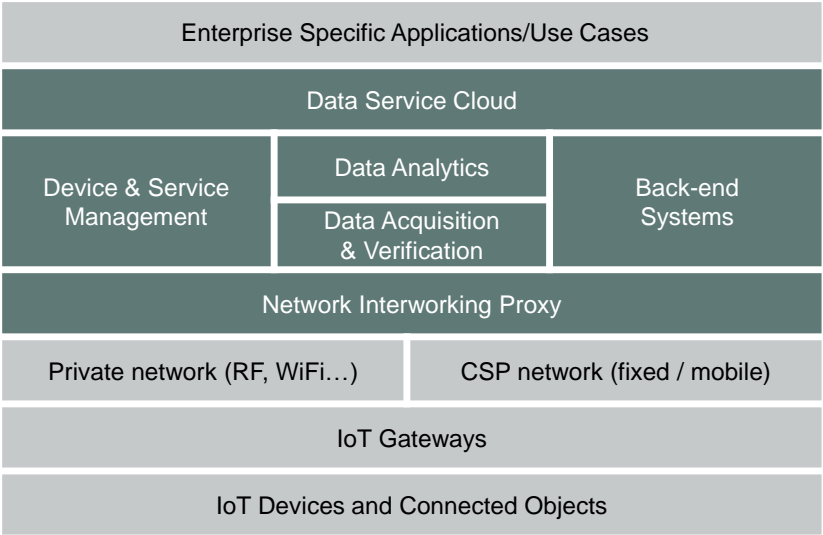
hpe.com/info/iotinnovationlabs.com

SAP - HPE IoT Platform

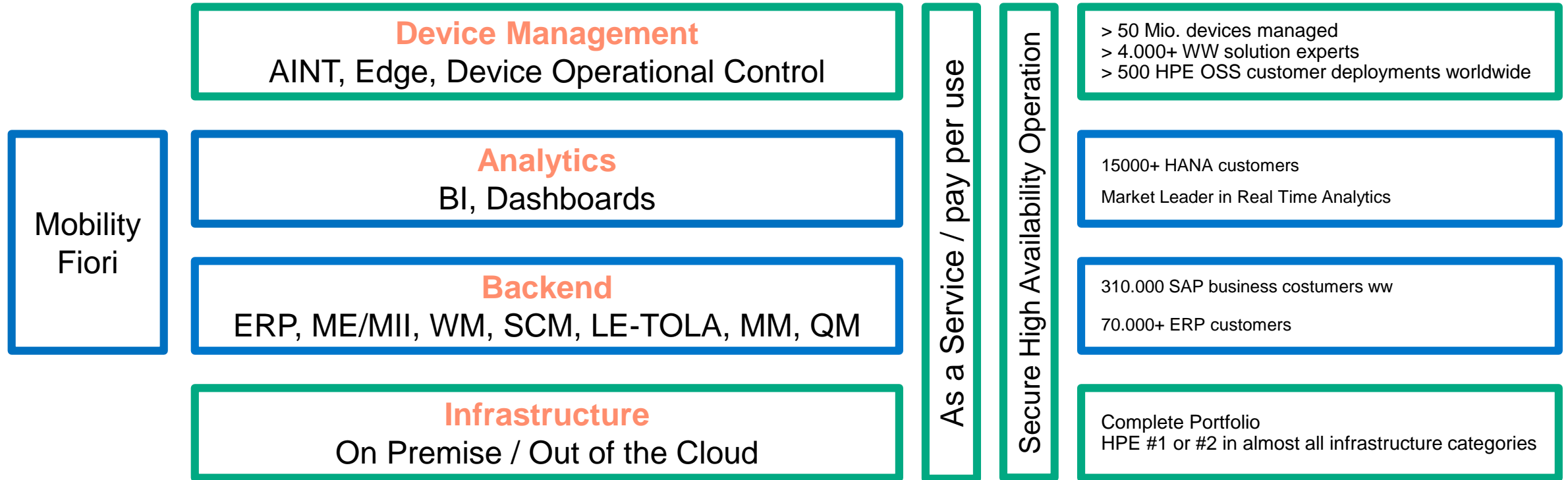
Combine infrastructure and Big Data standards from market leader



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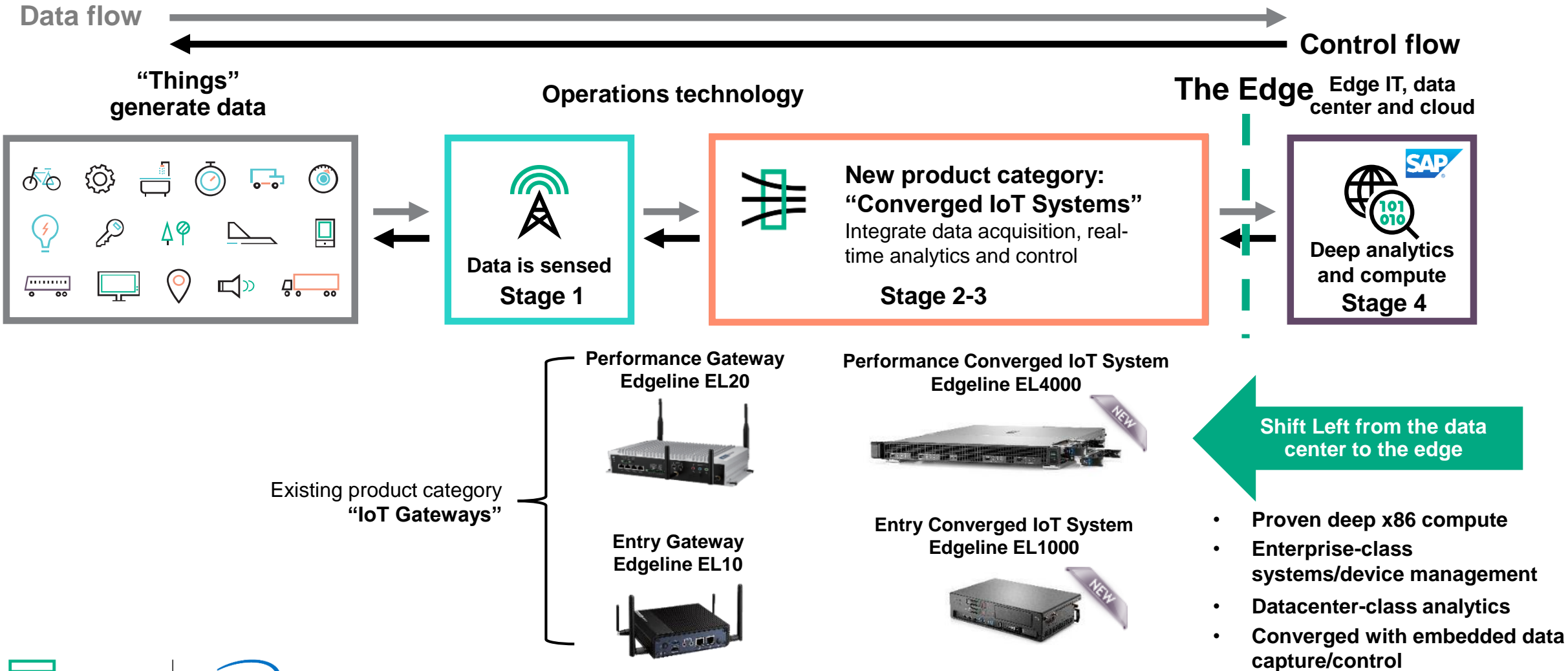


SAP-HPE IoT Architecture



Introducing the Edgeline EL1000 and EL4000

Intel based products engineered specifically for the IoT



HPE IoT Backend Solutions for SAP HANA

Workload-optimized systems designed for speed, flexibility, and unmatched scalability

FAST

reduce time to insight and action

EFFICIENT

refocus investments on innovation

SIMPLE

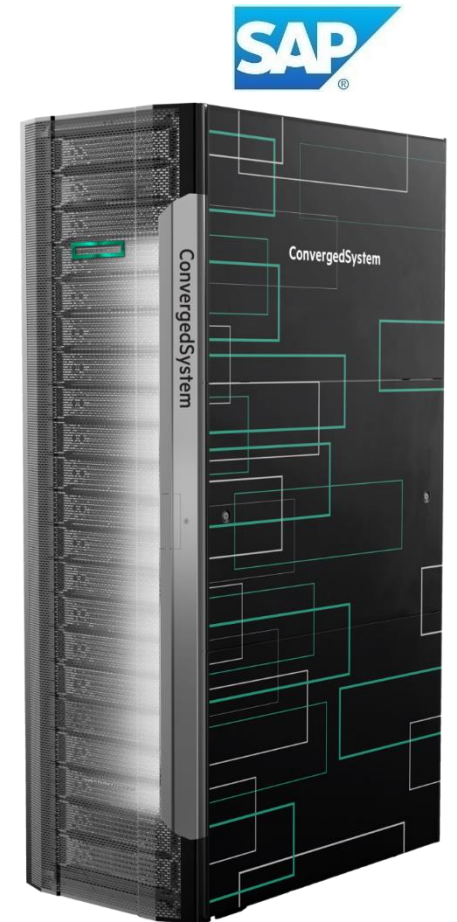
easily stand up and manage new services



#1 Market Share Leader in every product category (2/4/8/16 sockets)

Built on the next generation **Intel® Xeon® E7 v4 (Broadwell)** Processor

Mission-critical **high availability and data protection**



Translate Data into Action with IoT solutions

Customer Scenarios

Translate Data into Action with IoT solutions

Customer Scenarios

Energy



Windpark Management

Manufacturing



Predictive Maintenance

Connected Cars



Vehicle sensors, vehicle control, and communications

Smart Cities



Transform municipalities

IoT in Manufacturing Industry

A close-up, shallow depth-of-field photograph of industrial machinery. Several hexagonal bolts are visible, some in sharp focus in the foreground and others blurred in the background. The machinery appears to be made of metal, with some parts showing signs of wear and grease. The lighting is warm, highlighting the textures of the metal and the threads of the bolts.

Kaeser Kompressoren



Reduced maintenance costs and spare parts inventories, improve customer satisfaction



Requirements

Kaeser Compressors, a leading innovator in compressed air systems technology, needed real-time data feeds from globally distributed customer equipment to identify potential failures before they happened.

“Our solution with SAP HANA is expectable to result in \$10 million annual savings and a 60 percent reduction in down time.”

Falko Lameter, CIO, Kaeser Kompressoren

IoT Predictive Maintenance

Business Value for Kaeser Kompressoren

- **App. 10M\$ Cost Saving / Year**



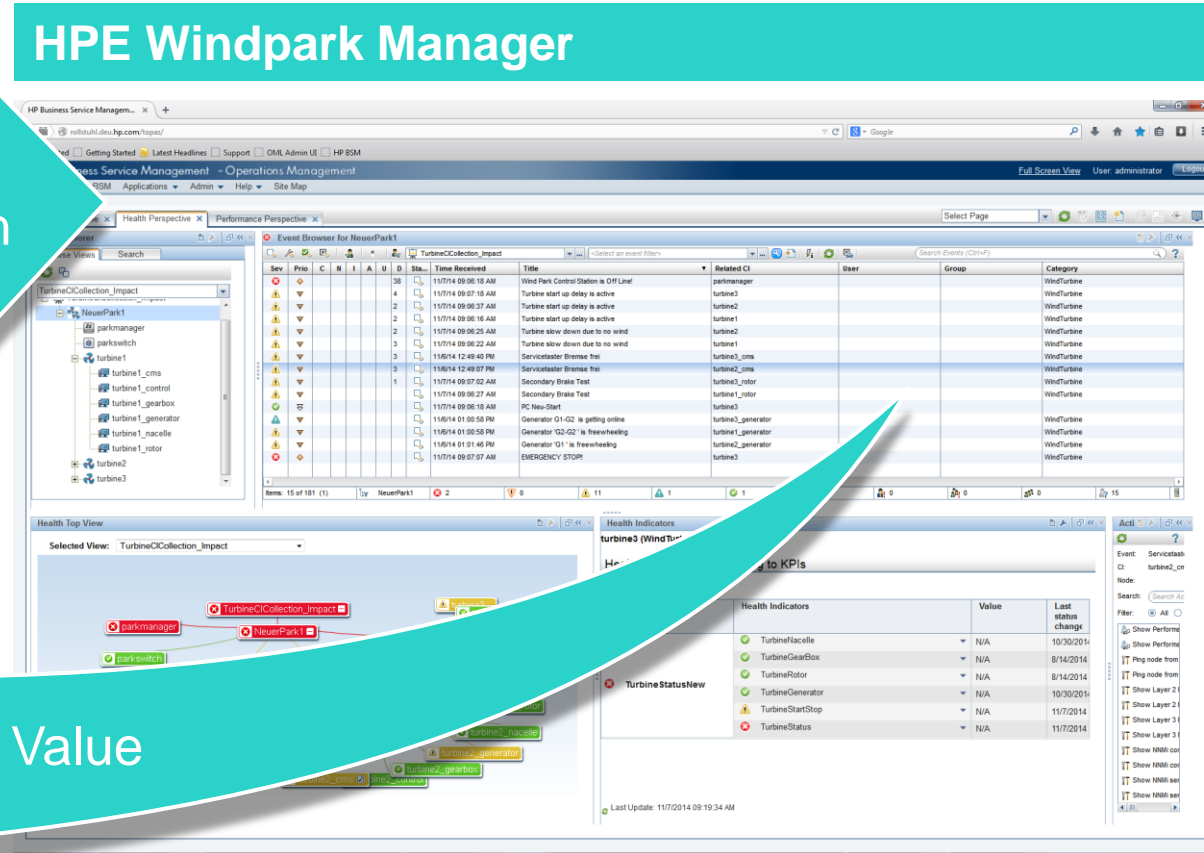
- **Unique offering: “Compressor as a Service”**



IoT in Energy Industry

A row of wind turbines in a field at sunset. The sky is a mix of orange, yellow, and blue, with some clouds. The turbines are silhouetted against the bright sky. The foreground is a dark, flat field with some tracks or furrows.

Heterogeneous Windpark Management with HPE IoT platform architecture





Connected Cars

IAV - Hyper-connected vehicles

Accelerating the automotive industry through digital transformation



Requirements

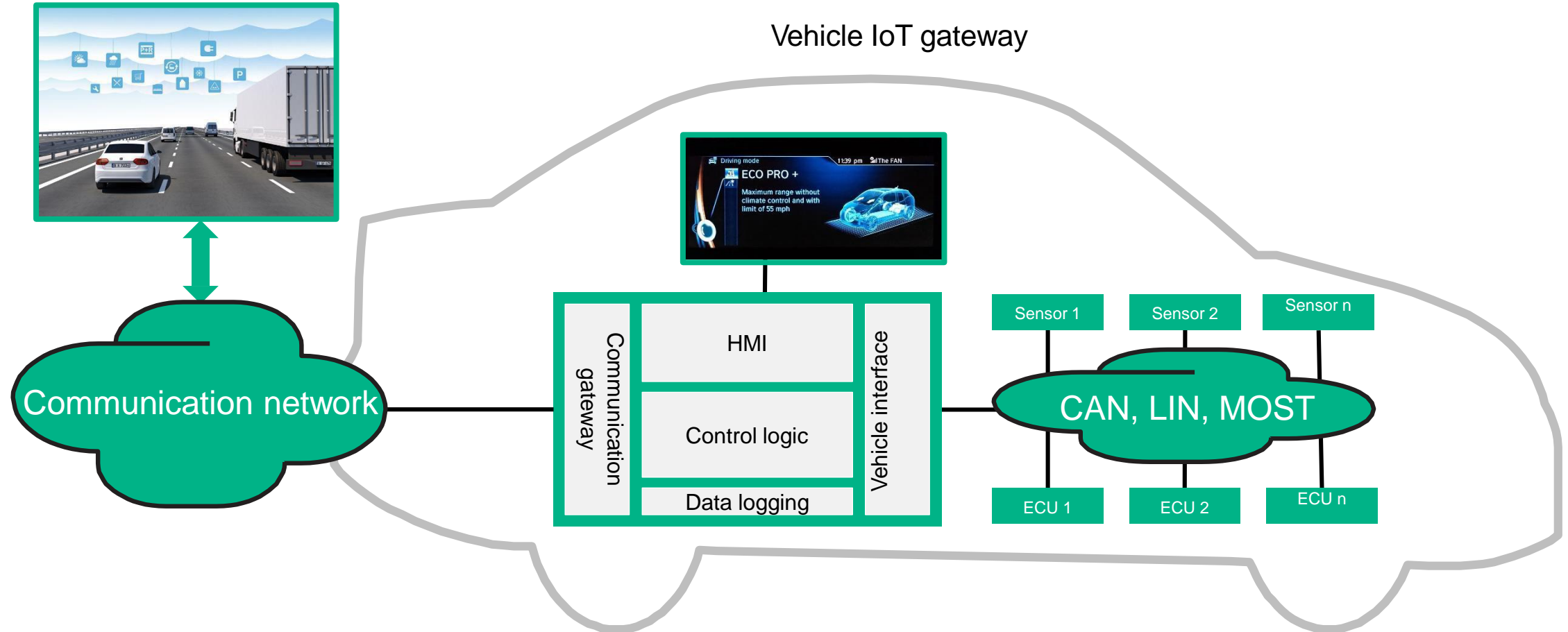
Need the ability to offer new and disruptive services to automobile manufacturers to enable car sharing, usage-based insurance, and assisted driving. Also need an IoT platform capable for real time connectivity, device management and analytics - not more apps.

Global Automotive OEMs are seeking to transform into new digital business. In order to enable this, a real time IoT platform with analytics capabilities is required.

Examples include: geo-fencing, road and weather conditions, infrastructure integration; vehicle-to-cloud, vehicle-to-vehicle real time analytics

Car Connected Services

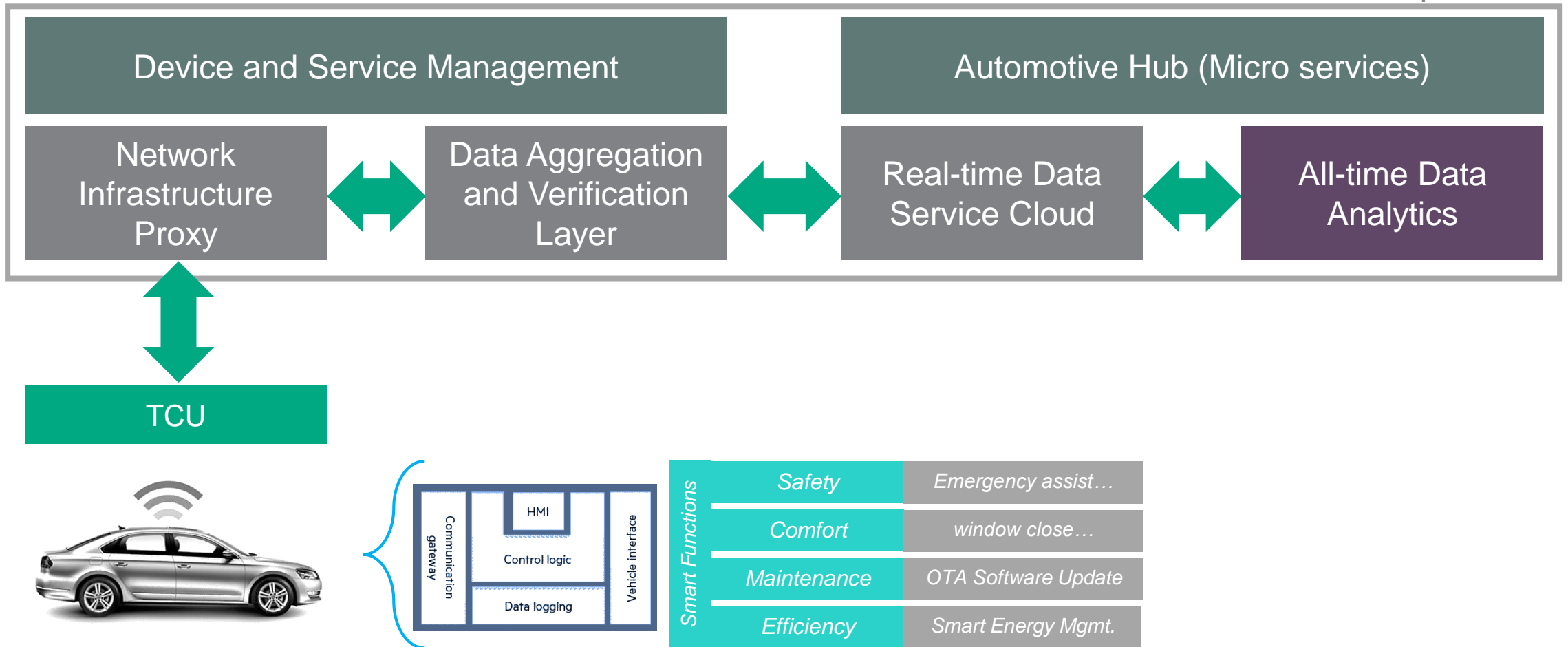
Solution concept: Vehicle sensors, vehicle control, and communications



HPE's Bi-directional IoT platform

Control smart car functions based on swarm intelligence by real-time analytics

Universal HPE IoT platform



Smart City



HPE IoT solutions enable smart city use cases

Smart Water



Make more informed decisions, protect city's water supply and prevent water waste using data from detecting water pressure, temperatures, and leaks

Smart lighting



Save time for maintenance crews and save fuel costs—from driving around town to find and replace broken bulbs

Smart traffic



Improve traffic flow using traffic signals, the number of vehicles and pedestrians; inform commuters about the next bus or train in near-real time by using digital signage

Smart parking



Save energy by turning lights on only when a car approaches; provide real-time parking availability info, reduced circulation times to lower environmental impacts (pollution, noise)

Smart building



Improve building electricity usage with motion sensor lights which can dim or shut off when a room is empty; **alert** when there is a leaking pipe using smart meters; **monitor energy use** of an electric meter and alert when it reaches a specific threshold

Smart industry



Enable easier tracking of transport and logistics flows, not only for one industry, but also for multi-industry (e.g., retail, oil, shipping, etc.)

Smart farm



Improve water utilization and irrigation by leveraging weather forecast and farm data, key trends and anomalies, and evapotranspiration index

Smart goods



Provide real-time city event info; leverage GPS locations and combine with the user profiles to find a suitable parking spot while considering the driver's sport interest, event starting time, tickets purchased/seat numbers, etc.

Visit the HPE SAP Competence Center in Walldorf

All SAP experts in the Walldorf location for over 20 years

Book a free one day **WORKSHOP** to discuss your journey to IoT and verify your SAP HANA architecture and configuration

Talk to HPE's most experienced senior **ENGINEERS** working on latest SAP HANA joint solutions with SAP

Visit our secret **SAP LAB** with latest innovations and certifications (NDA required)

Combine your visit with a **BUSINESS DINNER** and short sight seeing in the beautiful city of Heidelberg

Contact: rupert.holzbauer@hpe.com for arrangements





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Discover 2016

London 29 November – 1 December

Thank you