

# Интернет на нещата - мисли различно

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# The Internet of things will be used everywhere

## HOME

- Lighting
- Irrigation
- Water recycling
- Security
- Pet feeding
- Smoke/CO monitoring
- Infotainment
- Cooking
- Shopping
- Energy optimization
- Sleep optimization

## BUILDINGS

- Heating and air conditioning
- Security
- Lighting
- Electrical
- Parking control
- Emergency alerts
- Structural integrity
- Meeting room management
- Hot desks
- Huddle spaces
- Digital visitor management

## CITIES

- Digital signage
- Waste management
- Sewage and water
- Surveillance
- Emergencies
- Public space design
- Parking
- Air pollution
- Crime mapping
- Pothole find and fix

## MANUFACTURING

- Inventory tracking
- Supply chain tracking
- Precision plant leasing
- Collaborative design
- Improved safety
- Resource optimization
- Pollution management
- Predictive maintenance
- 3d-printed space parts
- Enhanced monitoring
- Physical security

## TRANSPORT

- Traffic routing
- Air pollution
- "Green priority"
- Safety
- Self-driving cars
- Self-driving buses
- Precision insurance
- Precision leasing
- Parking
- Condition-based maintenance

## HEALTH

- Elderly monitoring at home
- Equipment monitoring
- Hospital cleaning
- Bio wearables
- Food sensors
- Geo-fencing of equipment
- Directions within hospitals
- Assisted diagnostics
- Uber for doctors
- Hospital workflow design

## RETAIL

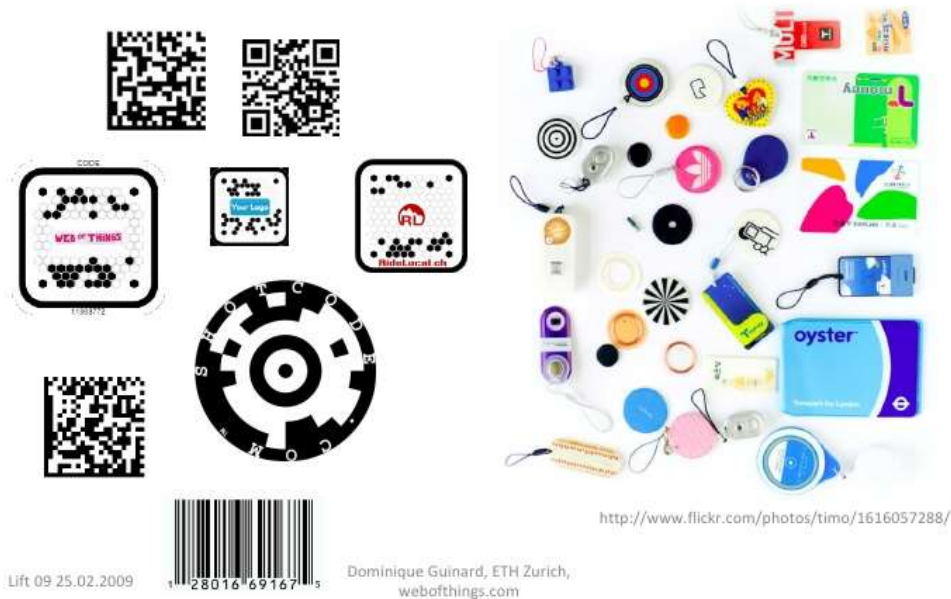
- Smart shopping lists
- Counterfeit reduction
- Inventory theft
- Add-on suggestions
- Targeted promotions
- Optimal store design
- Autonomous checkout
- Digital signage
- Store shelf sensors

## FARMING

- Precision fertilizer
- Precision irrigation
- Animal tracking and proof
- Security – anti-poaching
- Robotic picking
- Vertical city farming
- Self-driving machinery
- Predictive maintenance
- Drone herding
- Fish farming
- Artificial insemination

# IoT 1.0 versus IoT 2.0

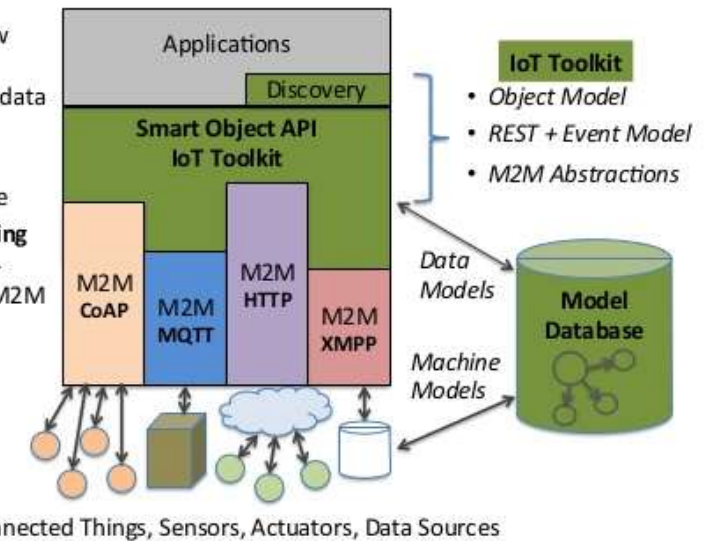
## IoT 1.0: Identifying Things



VS.

## IoT 2.0 – Interoperability

- Easy to deploy new things and applications using data models
- Write once, run anywhere software
- **Any app to any thing** via **any M2M**, use-case appropriate M2M
- Network effect enabled



Horizontal Integration

# IoT requires lots of System Integration

technical challenges:



- 24%, Securing the data
- 24%, Integrating the data (i.e., combining multiple data sources for analysis)
- 16%, Analyzing the data
- 14%, Protecting (i.e., backing up) the data
- 14%, Governing the data (i.e., applying corporate and regulatory compliance)
- 6%, Storing the data
- 5%, Transmitting the data

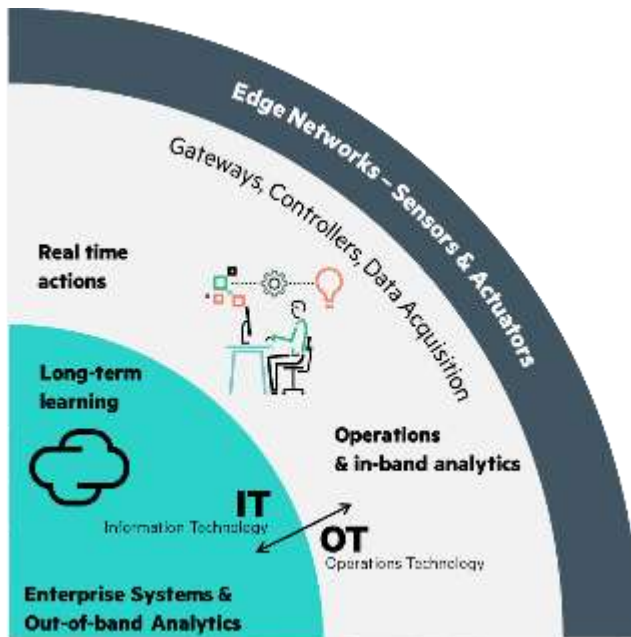
Integrating devices

Integrating Data

Integrating Connectivity

Security & Hybrid

Solution Architecture





# Something Old, Something New

IoT solutions must encompass  
legacy devices

Ripping-and-replacing is not  
typically economically feasible



Gateway Converged IoT System Switching Cellular Backhaul Small Site Outdoor Uncontrolled Spaces Indoor

PHY And/Or Protocol Converters

Power Line Twisted Pair RF BLE

Native Ethernet

Native Wi-Fi

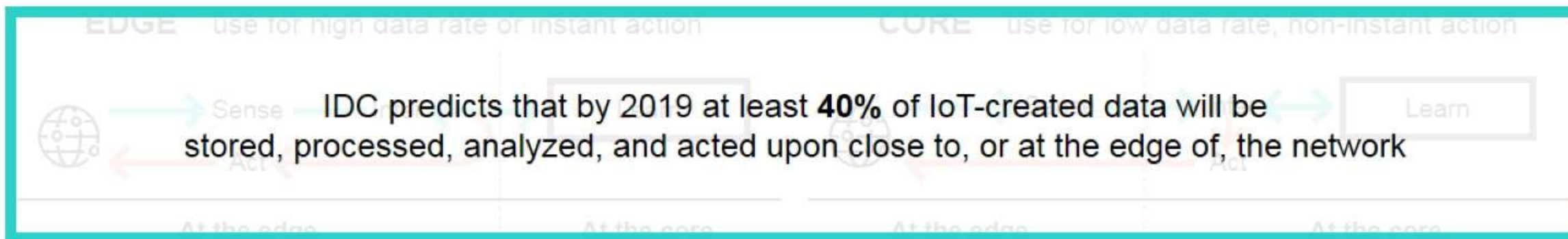
aruba  
a Hewlett Packard Enterprise company



# Pulling It All Together To Create A Trusted IoT



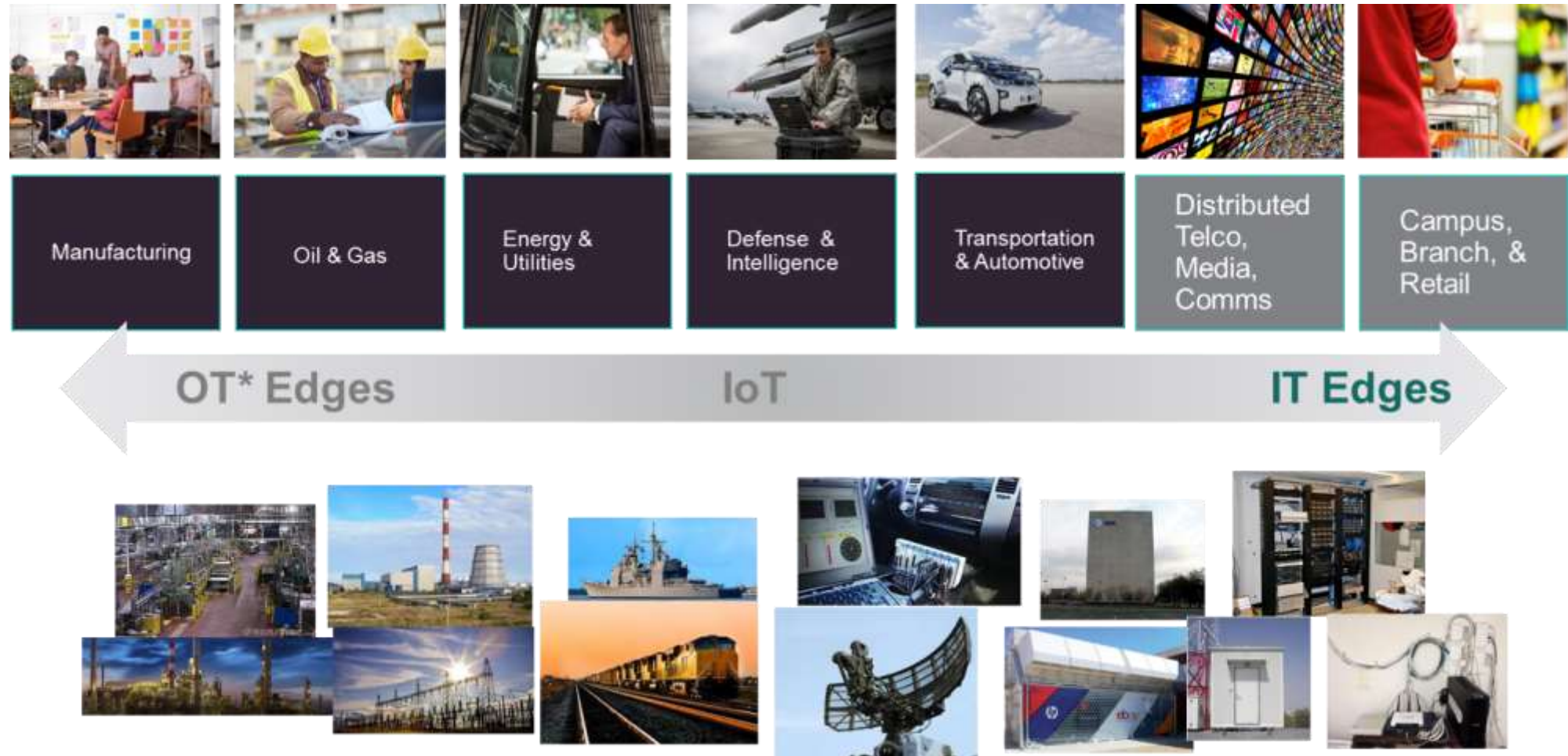
# When to analyze at the edge and when in the core





# Command the Intelligent Edge – with HPE Edgeline Systems

There are many forms of the Intelligent Edge that customers building out

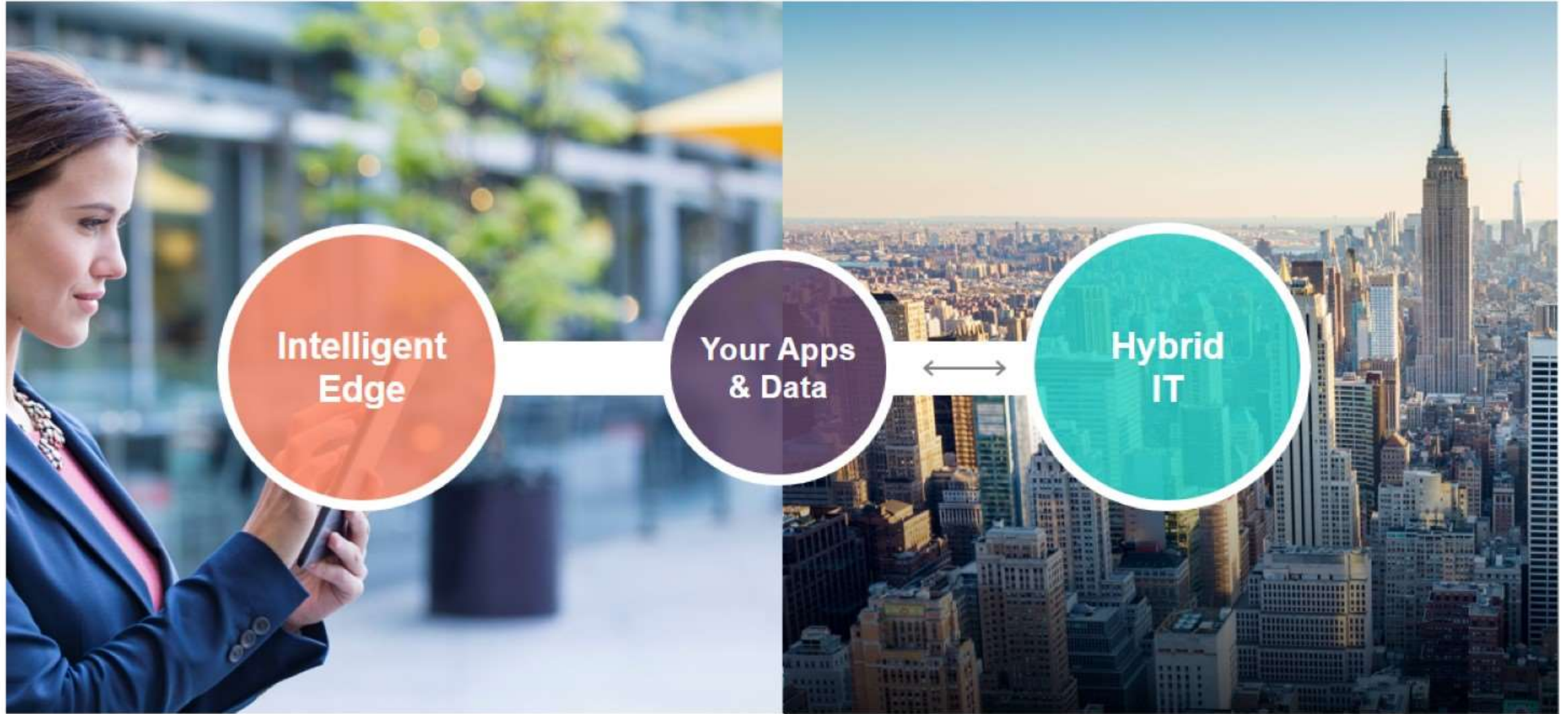


# Gateways, Converged IoT, & Analytics



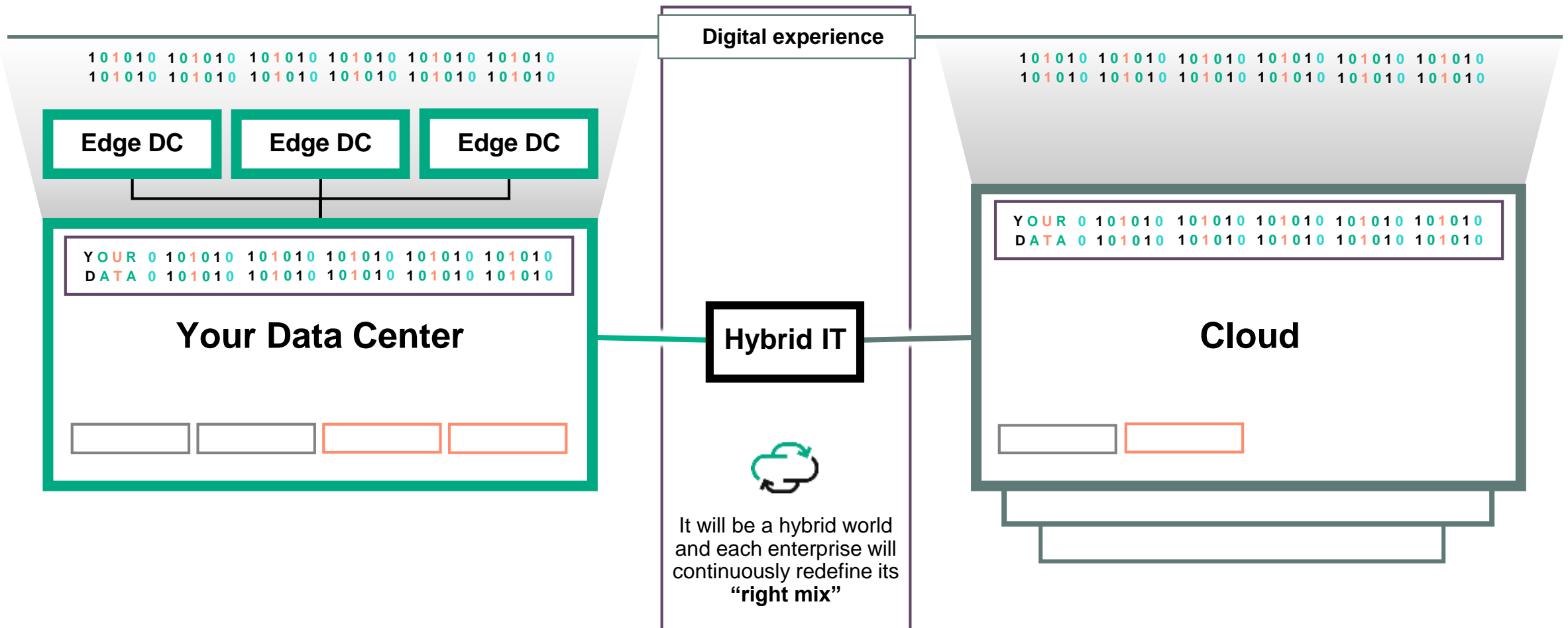


# Hewlett Packard Enterprise: Powering the Intelligent Edge



# Hybrid IT: Accelerating time to value

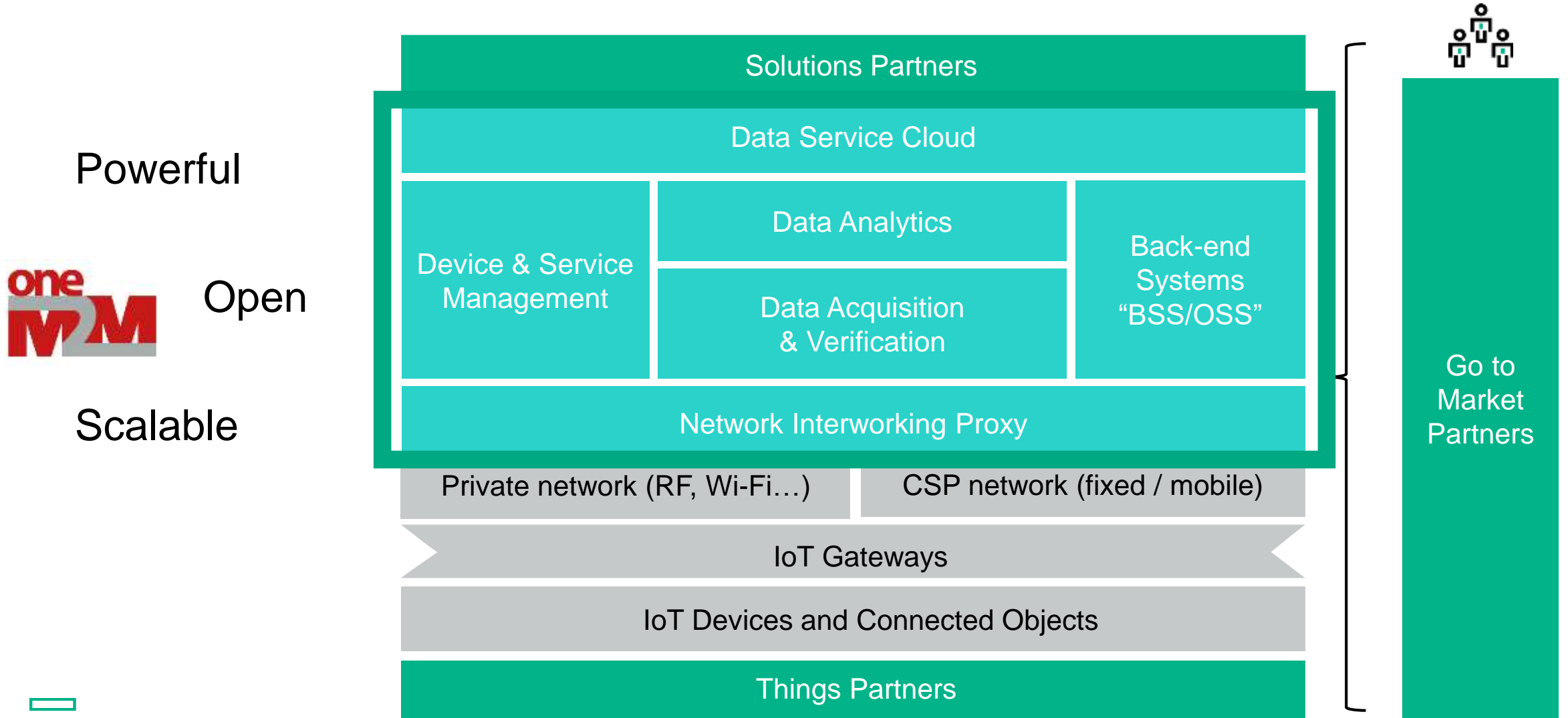
Continuously redefining the IT supply chain to optimize the digital experience





# HPE Universal IoT Platform

A horizontal platform for enabling multi-industry vertical IoT applications

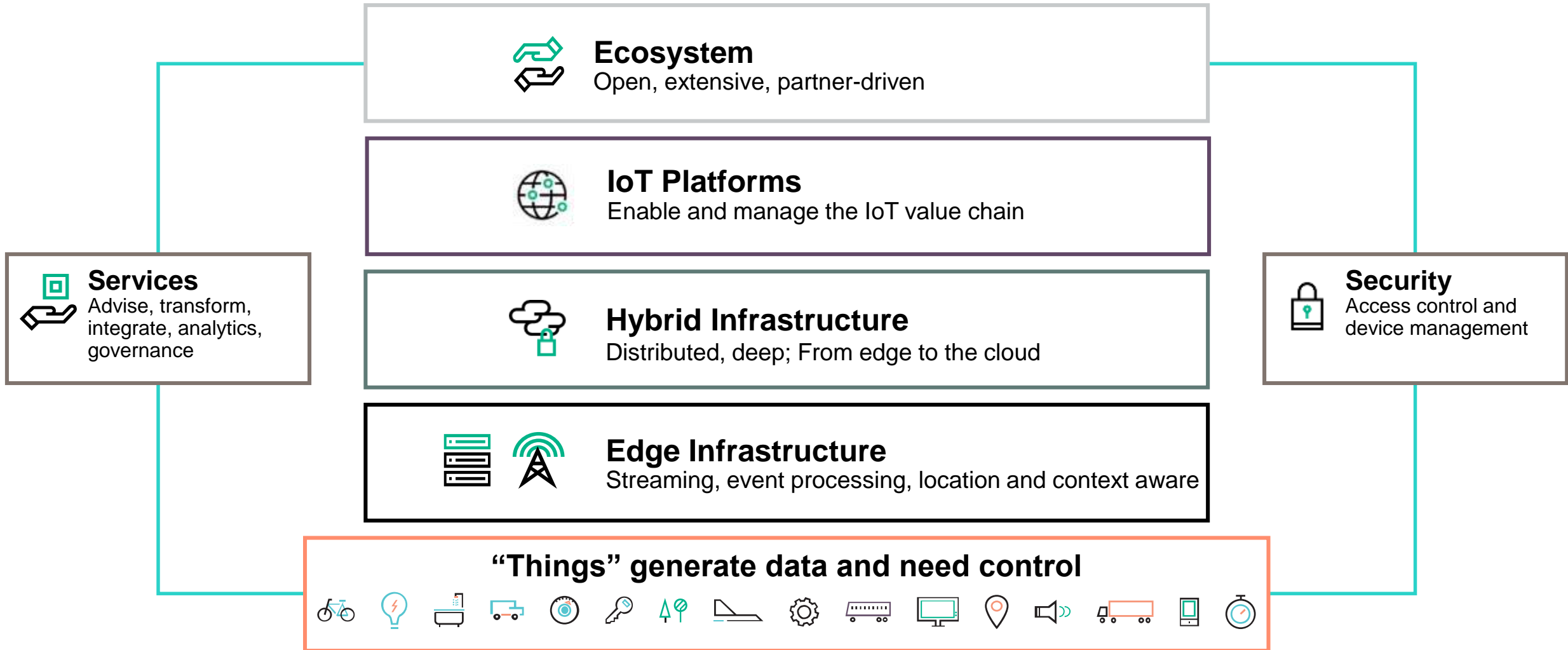


Powerful

Open

Scalable

# HPE can implement IoT from Edge thru Network to Datacenter





# Thank you

