



Business  
Services

# BUILDING CAPABILITIES FOR BIG INDUSTRIES

How to drive smarter ecosystems  
for a new digital future



**Business  
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**1. How ready are you for Industry 4.0?**

**2. IIoT at Work**

**3. Smart Ecosystems  
and New Possibilities**

**4.  
Take the  
next step**

“

**In this rapidly changing world, understanding, developing, and executing on integrated strategies that leverage Industry 4.0 technologies should be a priority for all organisations.**

”

**Deloitte Insights, 2020**

## HOW READY ARE YOU FOR INDUSTRY 4.0?

Since they were born, traditional industries have been through several revolutions, having to shift and innovate quickly to address changing market dynamics and increased customer demand. Today, disruptions in supply chain and production have also had to be mitigated in the wake of the COVID-19 pandemic.

### **Industry 4.0, or Industrial IoT**

**(IIoT)** is a revolution for traditional industries, **an integration of the physical world with the digital**, where machines and equipment meet advanced technologies, such as big data and artificial intelligence (AI). IIoT is the industrial application of networked physical objects that contain embedded technology (sensors, mobile communication devices, etc.) to communicate their internal conditions (e.g. temperature, stock levels, faults, etc.) and interact with other systems or people to drive decision-making.

It is a proven strategy to increased speed and agility at every phase of the industrial lifecycle and achieve operational excellence – from managing supply chain and monitoring plant safety, to identifying bottlenecks in production and predicting equipment failure.

These massive data interactions can only take place in a **smart ecosystem** where the Internet of Things (IoT) converges with **cloud, big data, AI and machine learning** to enable industries and enterprises to extend capabilities and future-proof their business, flexibly and securely. With more data and applications distributed among multiple cloud environments, interconnecting all of them with minimal complexity is critical.

**That's where we come in.**

# THE FUTURE OF IoT IS AT THE EDGE

Any data that is generated needs to be stored, processed, and analysed – and this is where **cloud-ready strategies** add the greatest value, with advanced applications such as data streaming and analytics.

As the amount of IoT devices and associated data increases, gateways centralised in traditional IT infrastructures can't scale to meet growing business needs.

Operating at the source of **where the data resides** – such as machinery, warehouses, building sites, or order distribution facilities – is a key consideration in establishing a smart ecosystem. Data doesn't have to travel as far as it needs to under a typical cloud architecture, thereby reducing latency and enabling real-time insights.

By moving your IoT devices closer to the edge, the sources of data changes from one centre to several sites.

IoT at the edge improves performance, accelerates development, reduces costs and enables valuable, real-time insights



## Tailored customer engagement

Improved quality of services and products



## End-to-end visibility

Improved asset productivity and workflow management



## Market alignment

Faster time to market and lower development costs



## Real-time insights

Increasingly reliable operations through distributed analytics

### How do you...



Ensure you have the right capacity and control for distributed data generation?



Define the right KPIs for your business?



Extract more meaningful insights for your operations?

# IIoT DRIVES BROAD APPLICATIONS FOR INDUSTRIES AT THE EDGE



Failure detection and emergency management



Production quality and output monitoring



Worker safety monitoring



Workforce tracking and geofencing



Logistics optimisation



Asset usage monitoring



Predictive analytics and forecasting



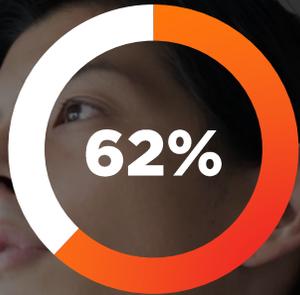
Remote tuning, service and configuration



Inventory and material management



of CEOs agree that investments in smart factories will rise by June 2021<sup>2</sup>



of manufacturers are moving forward with smart manufacturing initiatives<sup>3</sup>



**\$83B**

Estimated total number of IoT connections by 2024<sup>4</sup>

# SMART ECOSYSTEMS OPEN DOORS TO NEW POSSIBILITIES

While monitoring systems and sensors create a path to better decision-making and increased competitive advantage, it has also led businesses to question – **how do you deal with the influx of data generated by IIoT devices?**

After being collected, data must be transported (network), stored and processed (cloud), analysed (AI and big data analytics), and of course, secured all the way (cyberdefence). It means businesses must leverage IIoT platforms to realise greater revenue and growth. Centralised IT infrastructures can't scale or integrate IIoT capabilities that are needed to leverage operational and customer insights.

This is why industries are now embracing an 'ecosystem' approach to operate smartly and efficiently, while embracing innovation and new use cases.

Open and integrated IIoT environments will drive efficiencies in existing processes – from planning to production and delivery, and everything in between.

IIoT requires new business models to capture unprecedented value, while enterprises and consumers seek smart, integrated services. To fulfill these requirements, companies across industries need an optimised IT architecture to gain the intelligence required to compete in a digital world and realise greater revenue and growth from IIoT innovation. The data sent by your connected objects must also make it to the intended destination safely and reliably, with the connectivity and security that is right for your business.

**Equinix and Orange help unlock new growth opportunities, using your data to drive innovation and power new service offerings.**

<sup>2 & 3</sup> Deloitte, "Accelerating smart manufacturing – The value of an ecosystem approach, 21 October 2020"

<sup>4</sup> Juniper Research, "IIoT – The Internet of Transformation 2020"

# WHAT DOES A SMART ECOSYSTEM LOOK LIKE?

Let's now explore what a smart ecosystem looks like in practice.

Take the construction industry as an example, a vertical that faces significant business and technology challenges which include equipment and skilled labour shortages, increasingly short project schedules, and rising costs of infrastructure delivery. Overall, the rate of innovation and technological adoption has been slow in the industry.

These conditions aren't optimal for Industry 4.0 success. Instead, the construction industry of the future - or Construction 4.0 - must involve solutions with connected objects that encompass broad applications such as environmental management, asset and inventory management, fleet management, and personnel productivity systems.

**Leading infrastructure company  
McConnell Dowell chooses Orange  
Business Services to deliver smart IoT  
solution for construction sites.**

[Read more >](#)



## License-Plate Recognition

License-plate readers automatically raise and lower booms for authorized vehicles.



## Geo Fence and Worker Productivity

Locate workers in case of emergencies, evacuations, digitalise forms and conduct e-training.



## Environmental Monitoring

Sensors monitoring dust, pollutants, noise, and vibrations ensure greater compliance with public safety laws.



## Fleet Management

Monitor vehicles to enhance fuel consumption, asset life, working condition, and delivery time estimation.



## Predictive Maintenance

Sensors monitoring equipment enable predictive maintenance resulting in augmented equipment uptime, and lifetime value.



## Equipment Utilization

Greater visibility into equipment utilization allows procurement executives to optimize lease costs.



## Instant Intelligent Insights

Site executives use dashboards to monitor machine location and usage; and environmental and weather measures, among others, using visual analytics, big data, machine learning, and additional data from BoM and Google Maps.

# TAKE A LOOK AT SOME CONNECTED INDUSTRIES



## MANUFACTURING

### Greater insights for operational excellence

A global leader in industrial trucks improves operations through high-end geo-location, predictive maintenance of forklifts, and optimised intervention processes.

[Read more >](#)



## CONSTRUCTION

### Generate millions of AU\$ in savings

Smart IoT solutions maximises utilisation of equipment and resources for the removal of 75 of the most dangers and congested level crossings in Victoria, Australia.

[Read more >](#)



## UTILITY AND SERVICES

### Reduce water bills by analysing and predicting consumption

Digitalised remote water meter reading services helps customers in France reduce bills by analysing and predicting consumption.

[Read more >](#)



## ENERGY

### Optimising distribution channels

A gas distribution customer tracks its supplies using an IoT platform to adapt deliveries to sales points and assess gas quality via sensors.

[Read more >](#)



## TRANSPORT

### Asian countries digitally transforming public transport

Four countries across Asia Pacific are moving with the times by digitally transforming traffic management and public transport services.

[Read more >](#)



## SHIPPING & LOGISTICS

### Data science enhances port operations

The Port of Antwerp optimises vessel traffic and drives operational improvement through data science.

[Read more >](#)

# CREATE YOUR SMARTER WORKPLACE WITH US



**Grow your business and protect investments with scalable and robust IT infrastructure.**



**Build future state capabilities with our flexible, end-to-end infrastructure solutions.**



**With global connections to major cloud providers, we can integrate any solution according to any requirement.**



**Unlock new growth opportunities by using your amplified data to drive innovation.**



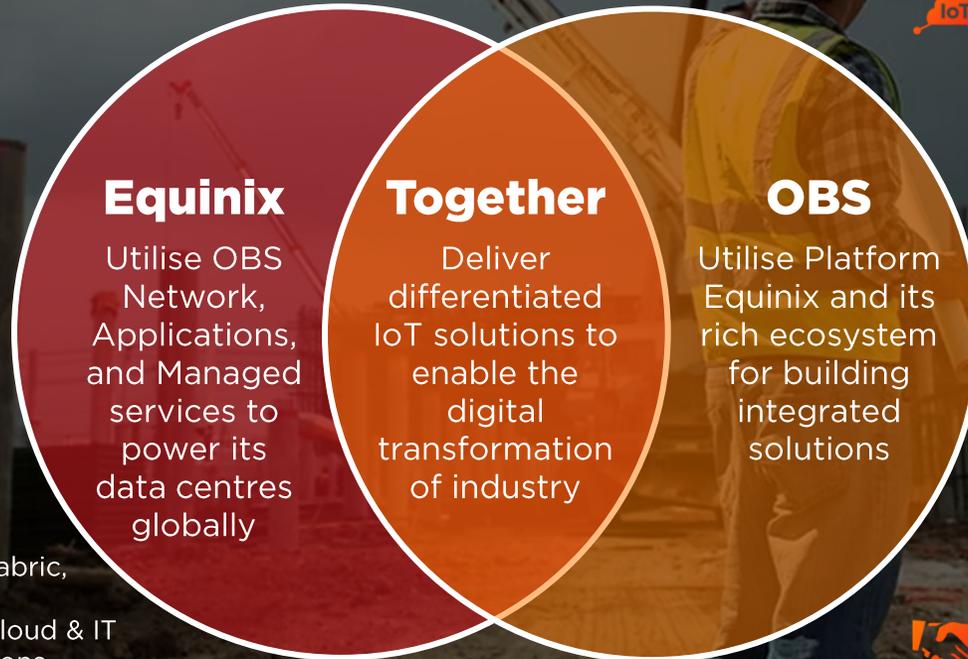
**Define the right KPIs for your business, extracting insights through major cloud providers such as AWS and Azure.**

## There is no 'one size fits all'.

**Our best-of-breed partnership delivers robust and high performance IoT solutions to our customers.**

# JOINT OBS AND EQUINIX VALUE PROPOSITION

A unique opportunity to unlock your digital dexterity



 World class Interconnectivity in its IBX

 World Class Data Centre Facilities

 Innovative Platform for Cloud Adjacency

 Largest global data centre fabric, supporting 1800+ networks, 675+ digital media, 2900+ cloud & IT services, 350k interconnections

 IoT solutions for Instant Intelligent Insights and real-time decision making

 Located in over 100 countries, to deploy and supervise your networks and digital solutions on a daily basis

 Integrate remote collaboration, omni-channel, security, multicloud and connectivity solutions on a global scale

 Step by step consultative approach to help you integrate and orchestrate with best-of-breed technologies

 Support our customers in the transformation of their infrastructure as a network-native digital services company



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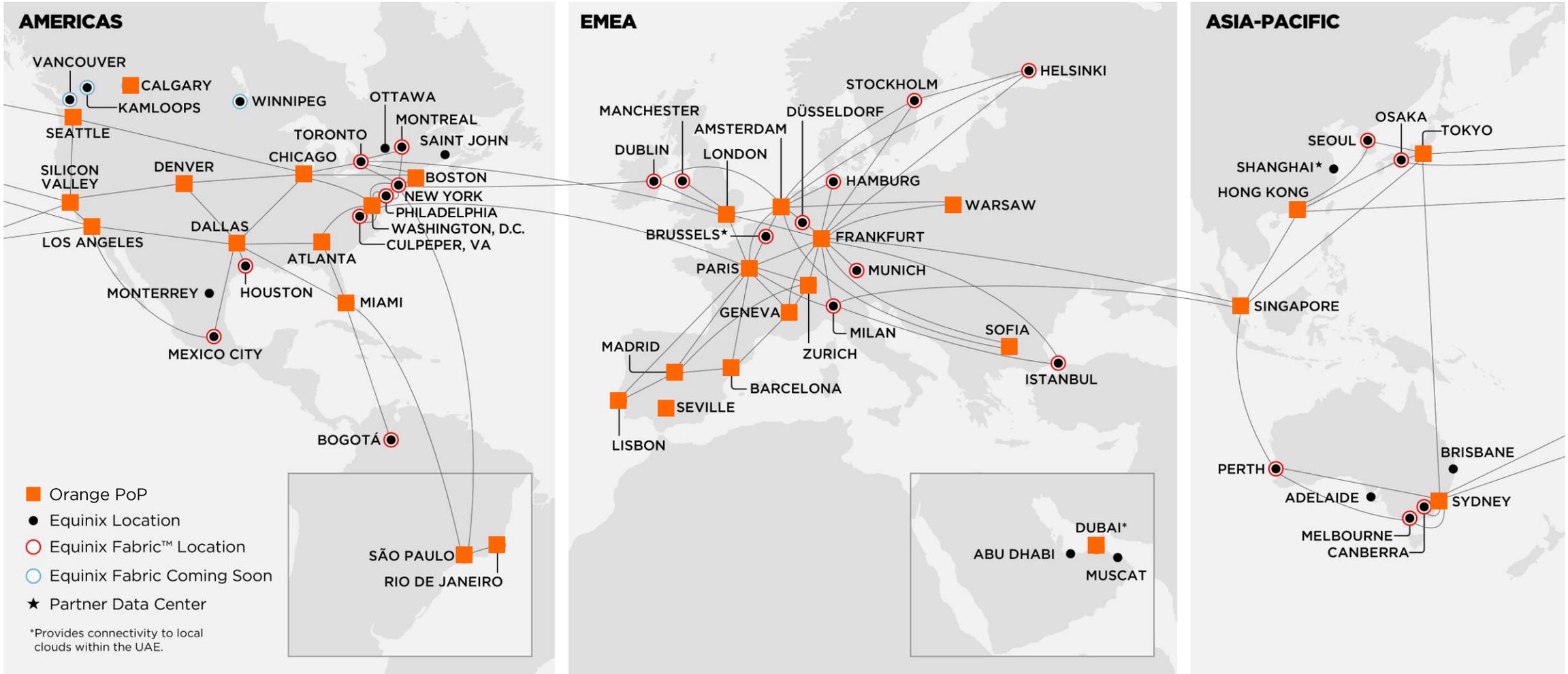
# TOGETHER, WE POWER DIGITAL LEADERS

When big data meets big network – quite simply, there is great synergy.

Equinix is the world's digital infrastructure company, enabling fastest application performance, lowest latency and a digital ecosystem for multiple networks, delivered through a single global platform that creates the foundation for your success.

Orange is one of the largest network partners in the world with extensive global presence, transferring data from user to data centre. Orange is also one of the only global IoT partners helping to interconnect the data from customer, partner, cloud and smart mobility teams to help derive the best value from IoT data.

# ORANGE PoPs AT EQUINIX METROS





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# TAKE THE NEXT STEP

Collaboration between two leaders in their own fields brings together the best technology, knowledge and experience to create the right operational environment to apply IoT monitoring, data capture and analytics.

This helps enterprises improve safety, be more efficient and decrease operational risk.

**Ready to unlock your business potential?  
Contact us now.**

**+65 6517 1000**

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