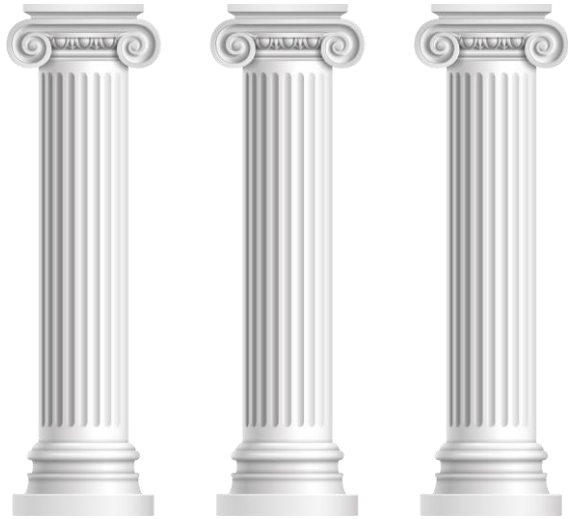
Business & Management



What happens when everything generates data?

22 APRIL 2020

The webinar will begin shortly…

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Business & Management
60 minute webinar: What happens when everything generates data?

Rick Payne
Business and Management Faculty

Alexandra Rehak
IoT practice head, Omdia

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Outline

- Introduction
- How the Internet of Things (IoT) works
- The IoT ecosystem and strategy
- IoT use cases
- Knowledge, Skills and Attitudes
- Q&A

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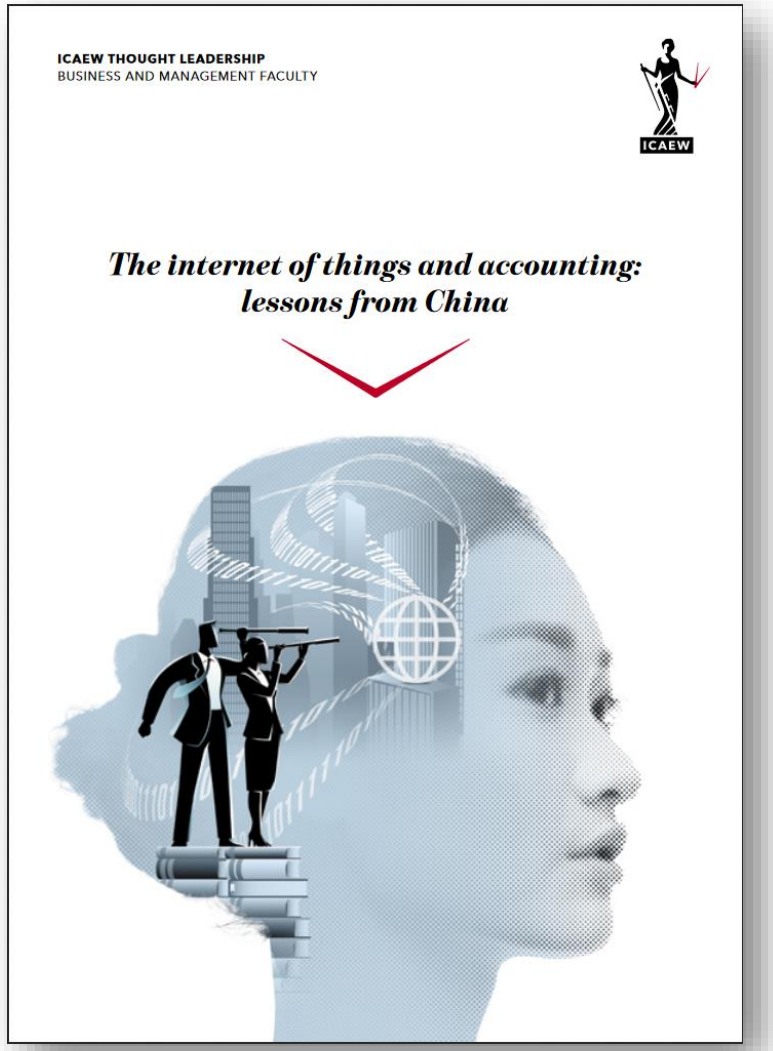
The Internet of Things and Accounting



- In partnership with the Shanghai National Accounting Institute
- www.icaew.com/iotandaccounting

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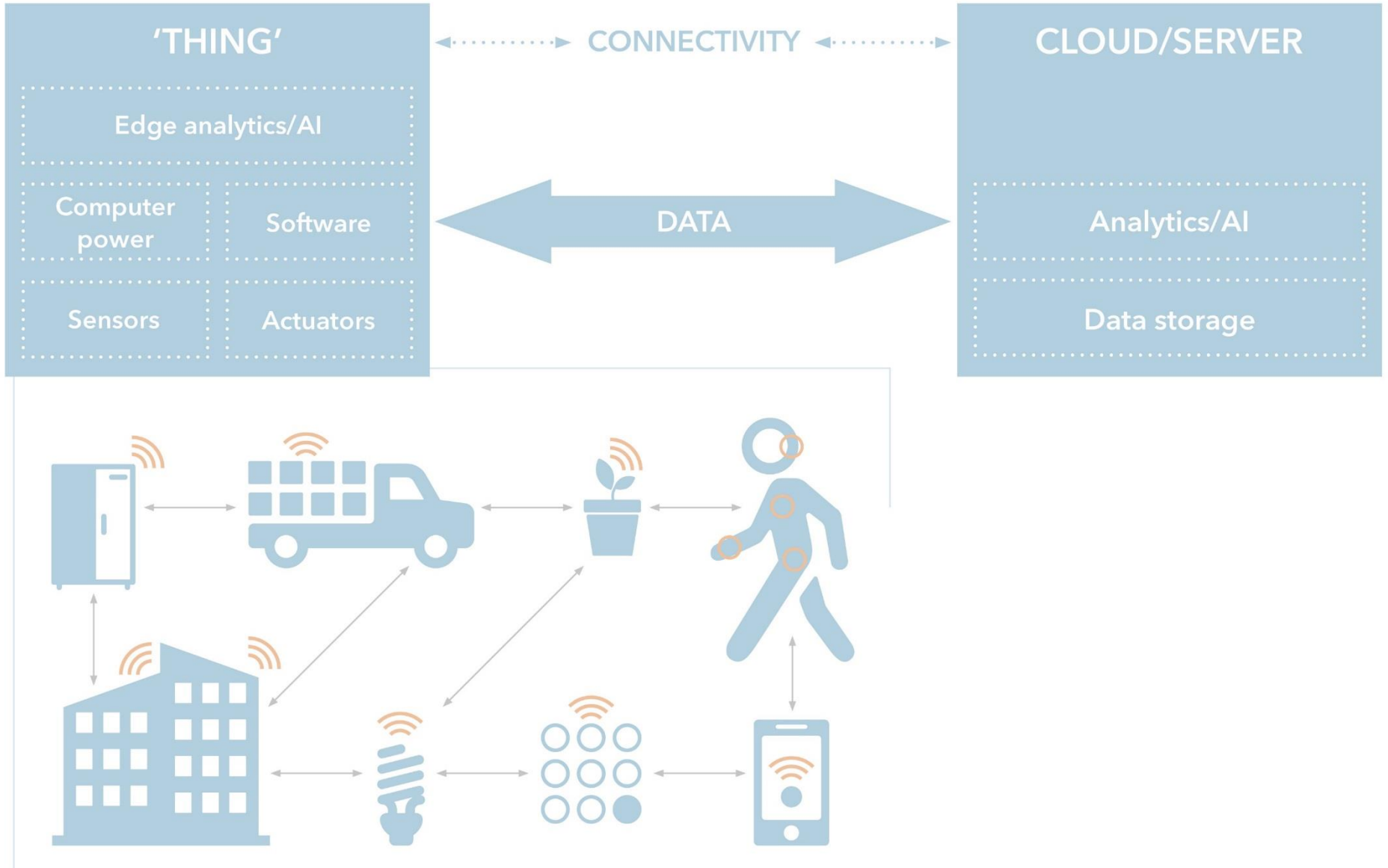
INTERNET OF THINGS



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Importance

- Managing at a distance
- Information quality
- Digital and physical worlds brought together
- New business models
- Valuing data and accounting for ecosystems
- Finance function automation
- Climate change

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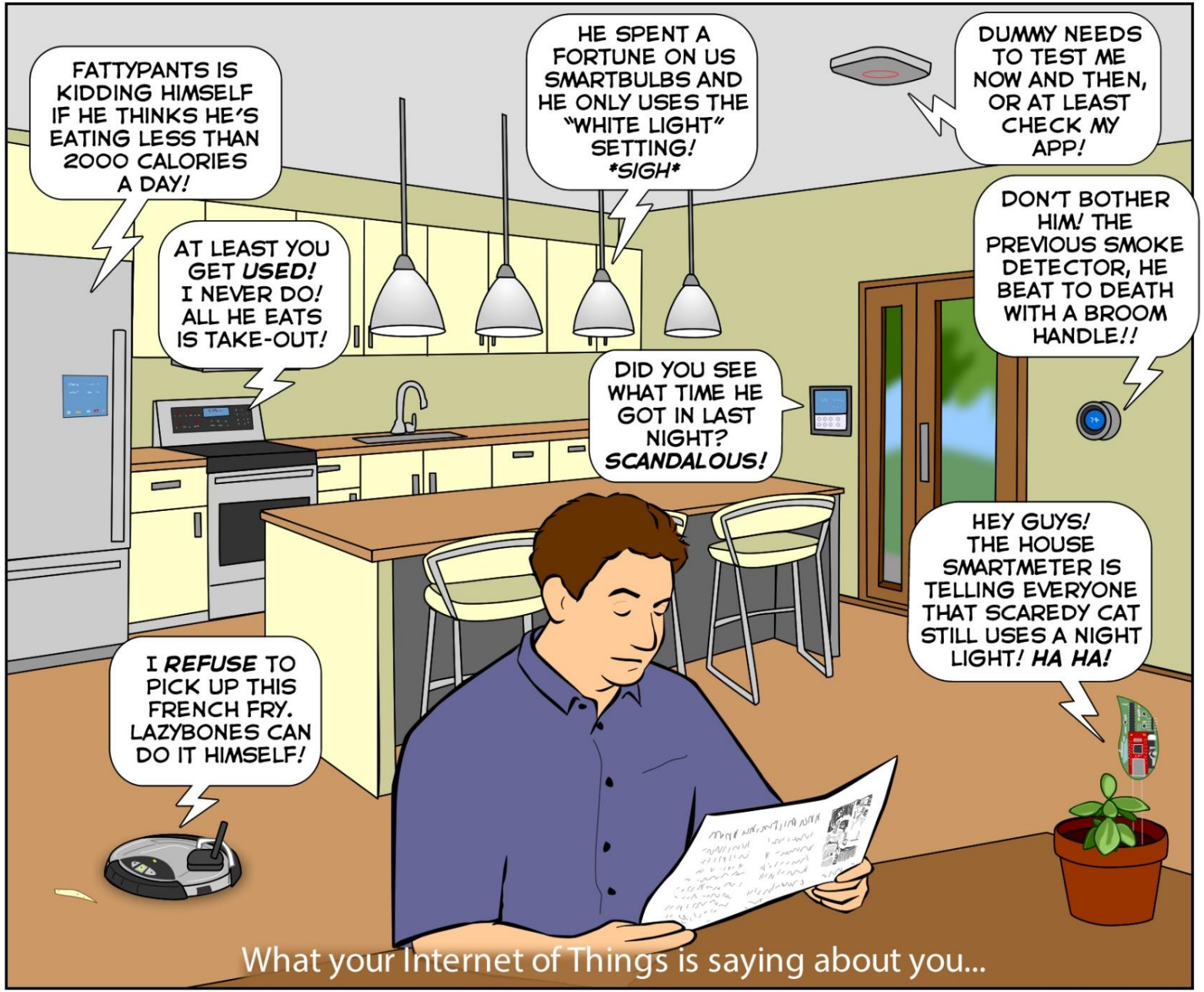

What your Internet of Things is saying about you...

© 2014 Geek Culture

Poll Question 1

To what extent is your business using the IoT?

- Not used
- Pilots only
- Fully operational in some areas
- Core to the business
- Don’t know

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Poll question 2

What are the main IoT uses in your business (select all that apply)

- Asset or buildings management
- Preventative maintenance
- Supply chain management
- Customer analysis
- Employee safety, health or behaviours
- Automation or robotics
- Other

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ICAEW Webinar: “What happens when everything generates data?”

22|April|2020

Alexandra Rehak
Practice Lead, IoT Practice
Alexandra.rehak@omdia.com

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IoT market context and ecosystem

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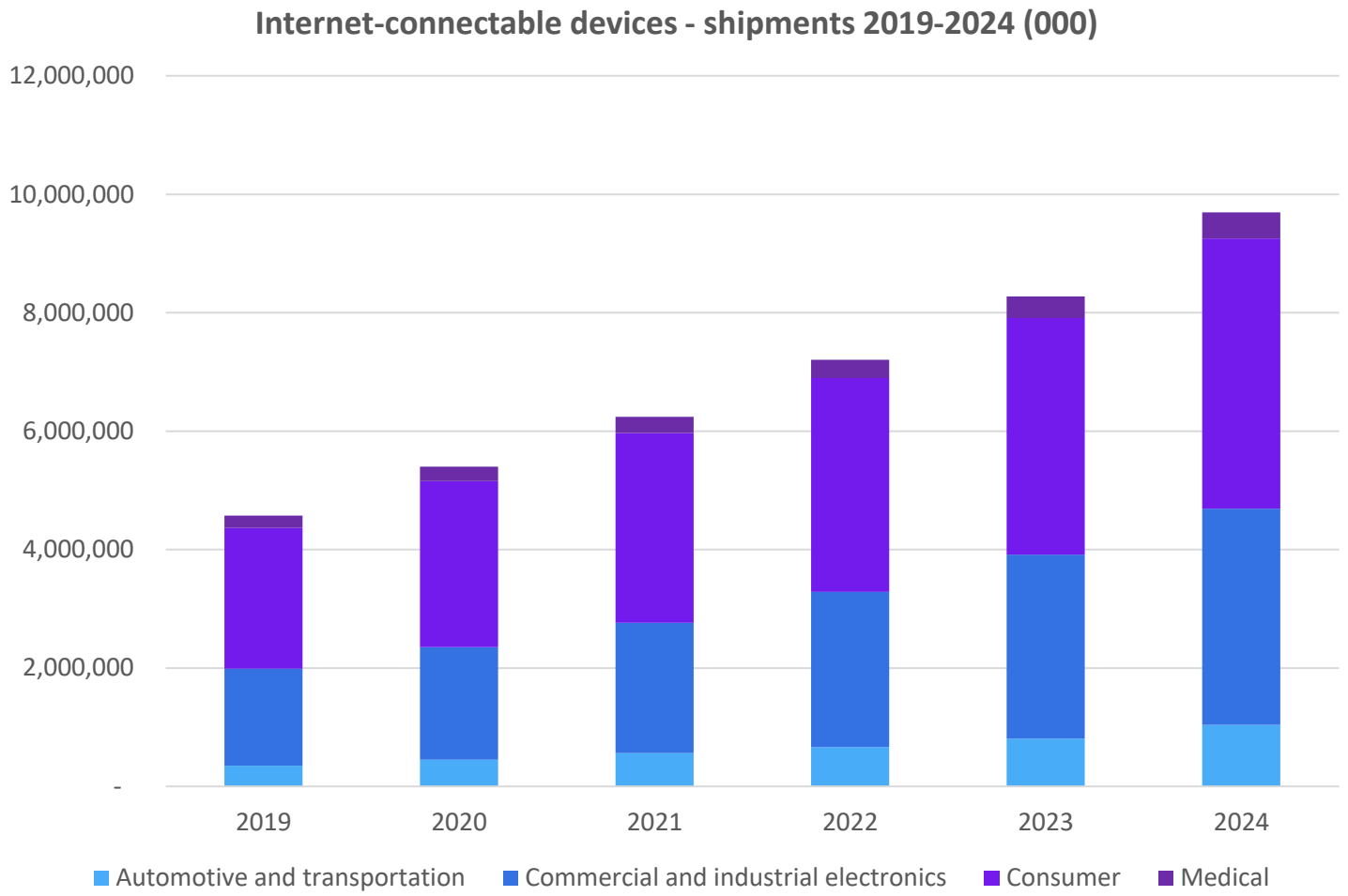
IoT market outlook: steady growth, with some sectors more dominant

Omdia's view of COVID-19 impact:

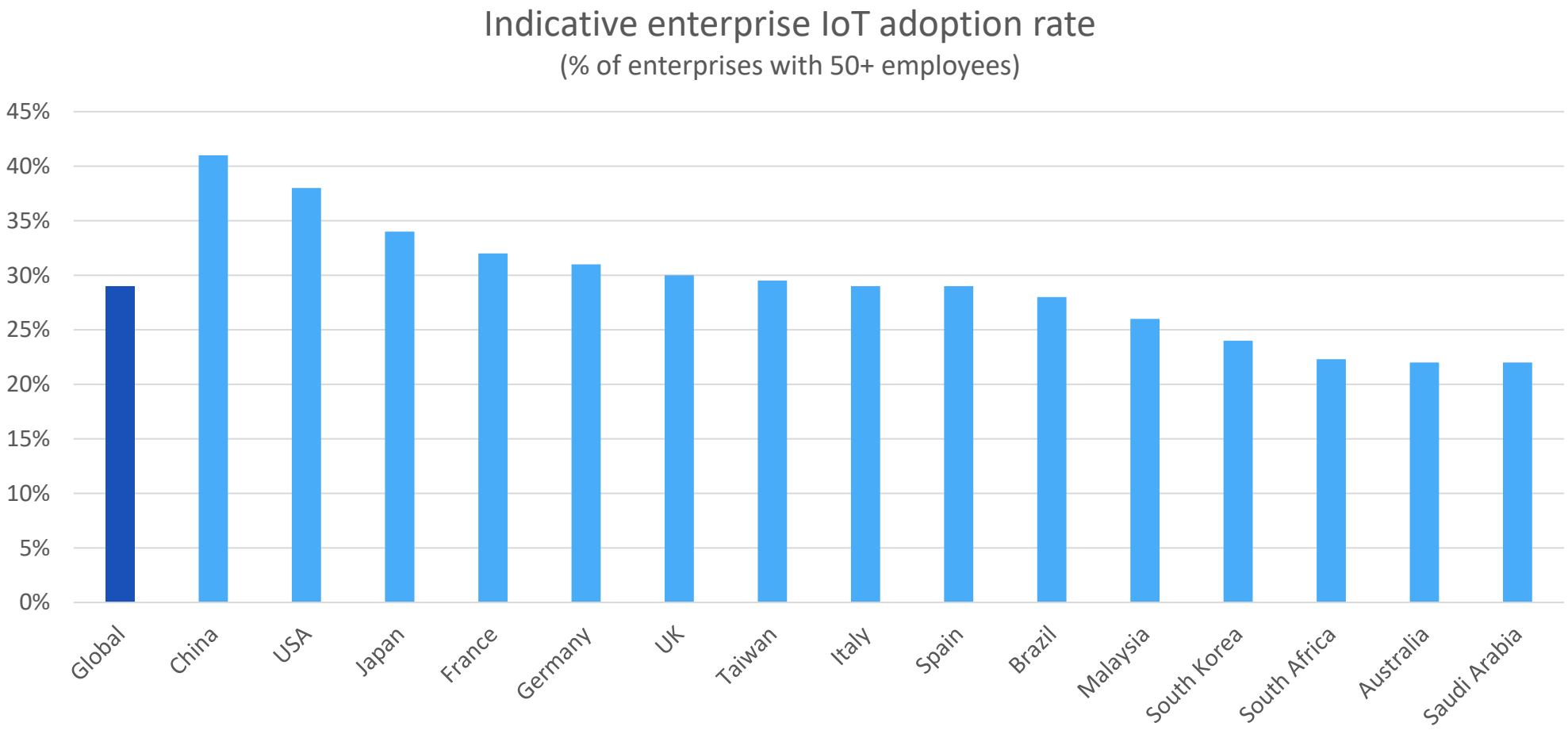
- IoT market: story of slow and steady growth
- COVID-19 impact: more delay than derailment
- Slowdowns due to demand side constraints
  - Lower consumer spend on discretionary items
  - Lower enterprise spend esp. in areas that can be postponed/capital-intensive/manpower-intensive
- **But – some bright spots where IoT spend is likely to see a boost**



Source: Omdia IoT Devices Tracker

Information Classification: General

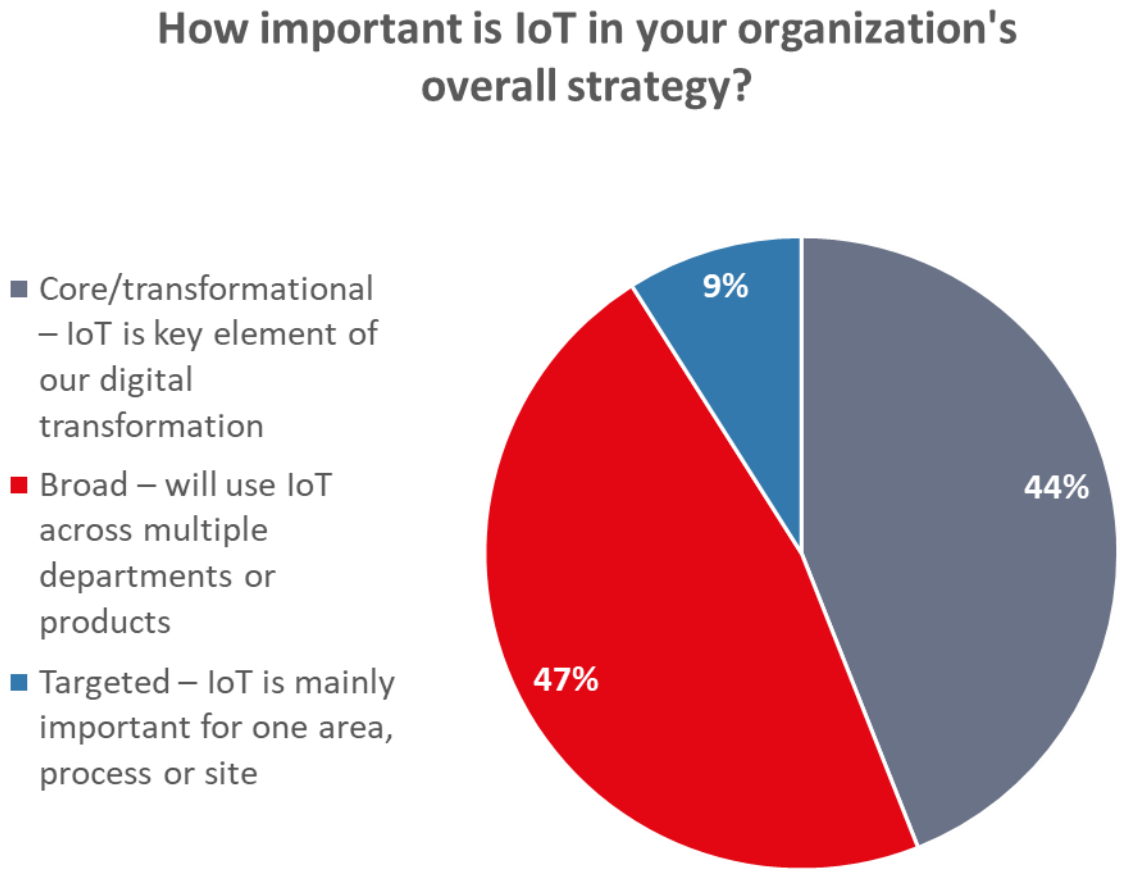
IoT adoption is still far from universal –average adoption rate in developed markets is 29% of companies (with 50+ employees)



Note: % shows share of respondents deploying or contracted to deploy IoT in each of the 15 countries covered; global n = 1746 out of 5980 contacted enterprises total).
Source: Omdia IoT Enterprise Survey 2019/2020

Information Classification: General

IoT strategic approach: nearly half of enterprises say IoT is core to their digital transformation



Source: Omdia IoT Enterprise Survey 2019/2020

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Information Classification: General

IoT deployment goals: enterprises are still likeliest to use IoT to improve existing processes or products and save costs

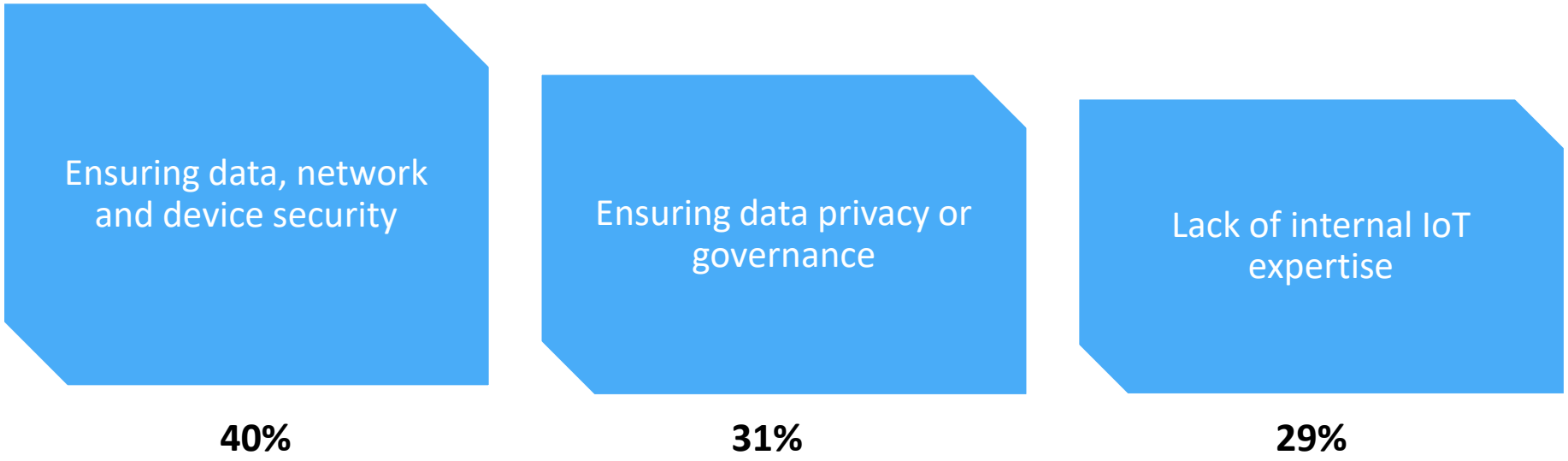
n = 1,746, respondents were asked to choose and rank their top 3 goals from a list of 10. Percentages reflect % of respondents who chose the indicated goal as rank 1,2 or 3.

Source: Omdia IoT Enterprise Survey 2019/2020

Information Classification: General

IoT pain points: enterprises identify security, data privacy concerns, and lack of internal expertise as barriers to successful IoT use

Top 3 barriers to successful IoT deployment
(% of enterprises choosing response as one of top 3)



Question : What do you see as the biggest challenges to successful IoT adoption by your organisation? (choose top 3)

Source: Omdia IoT Enterprise Survey 2019/2020

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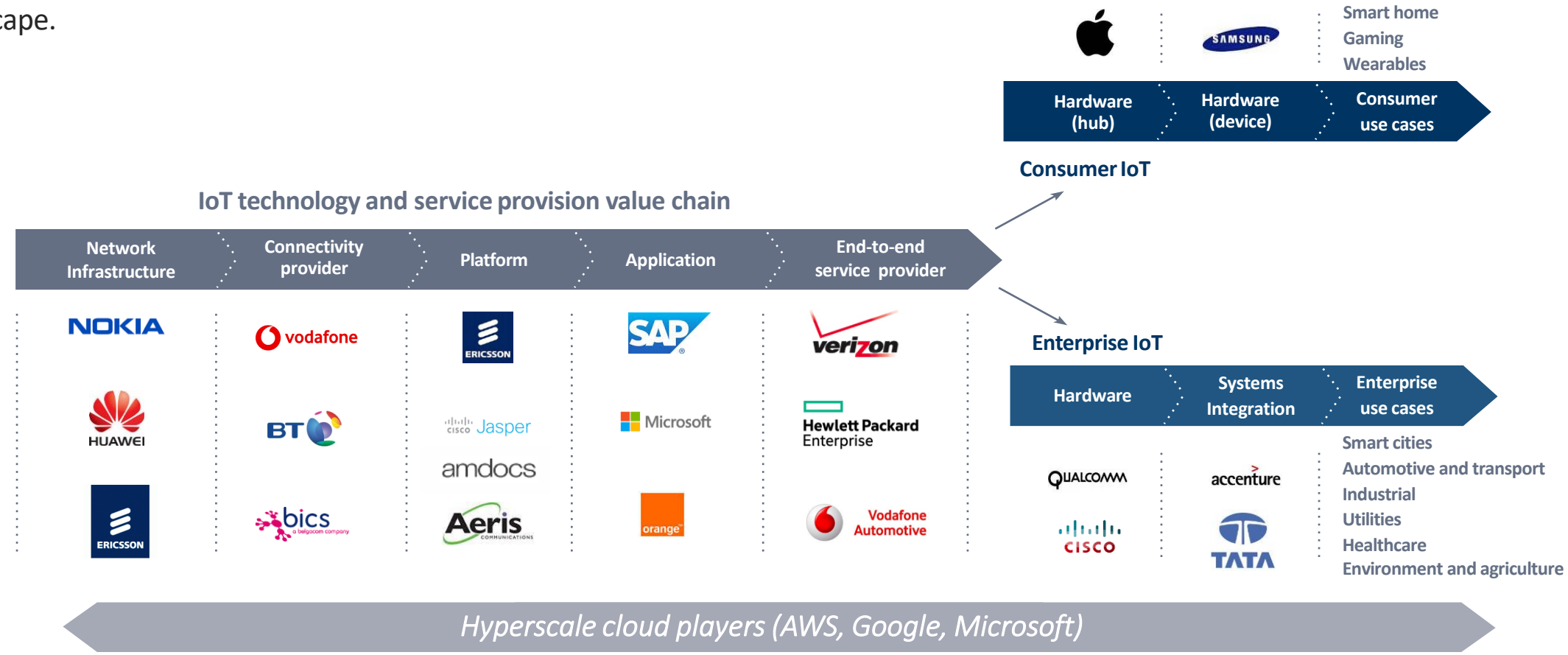
Information Classification: General

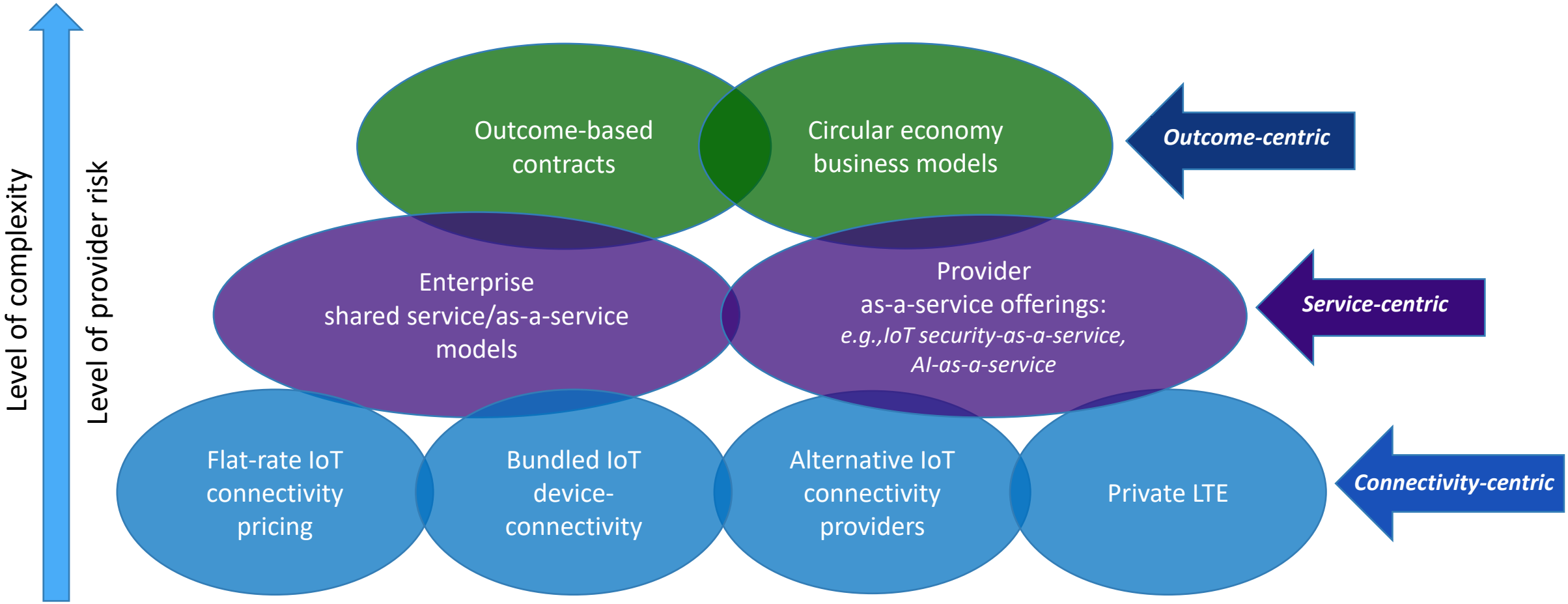
Delivering IoT depends on a complex value chain

New roles and business models will emerge - and merge - across the IoT landscape.

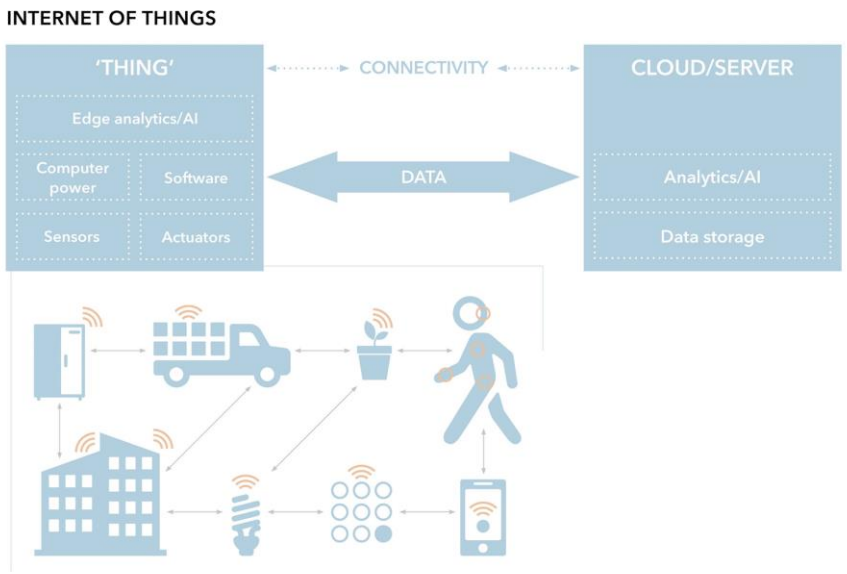


Information Classification: General

Value chain evolution is also driving IoT business model innovation, for both enterprises and providers



Information Classification: General



IoT Use Cases

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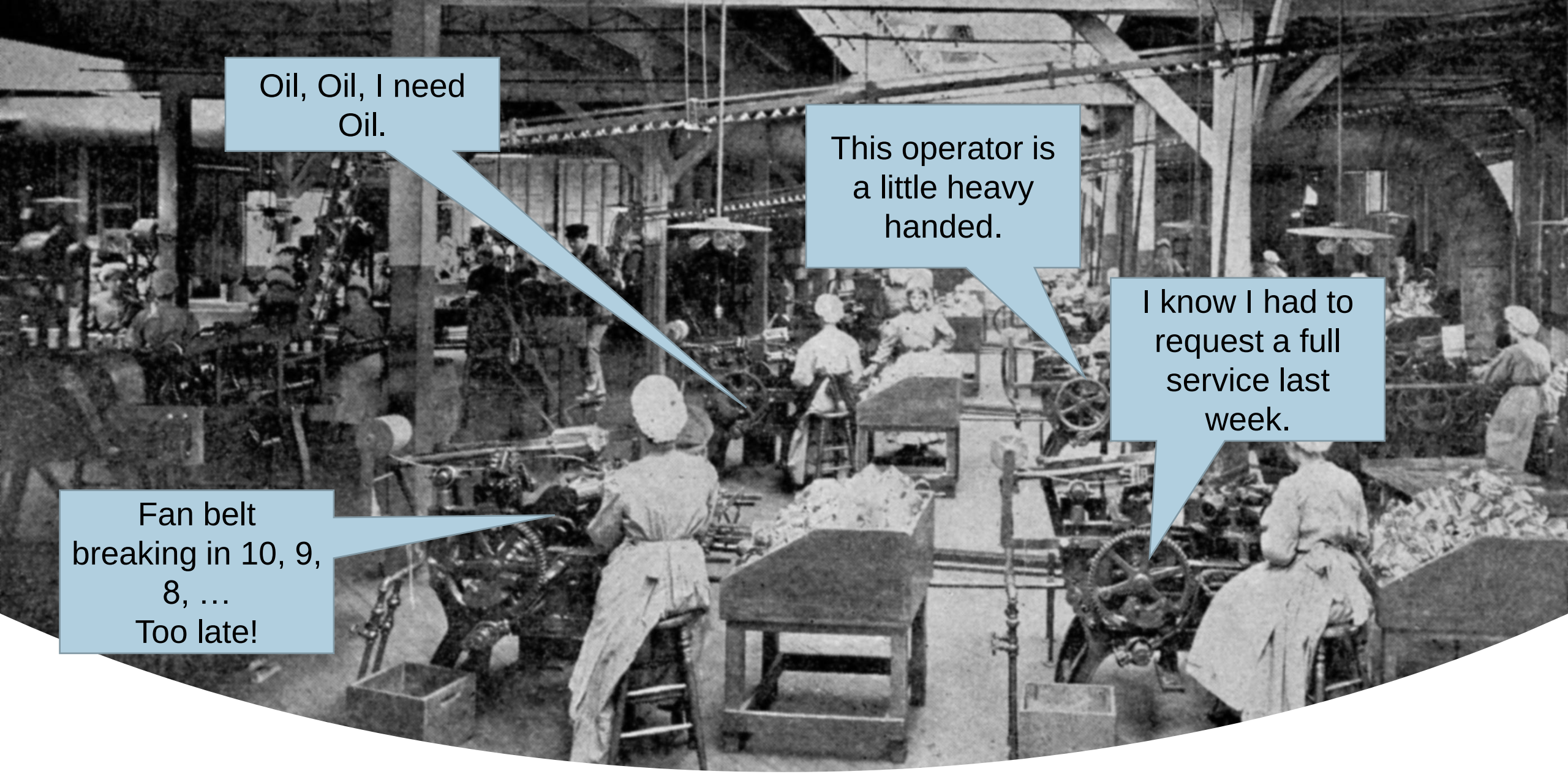
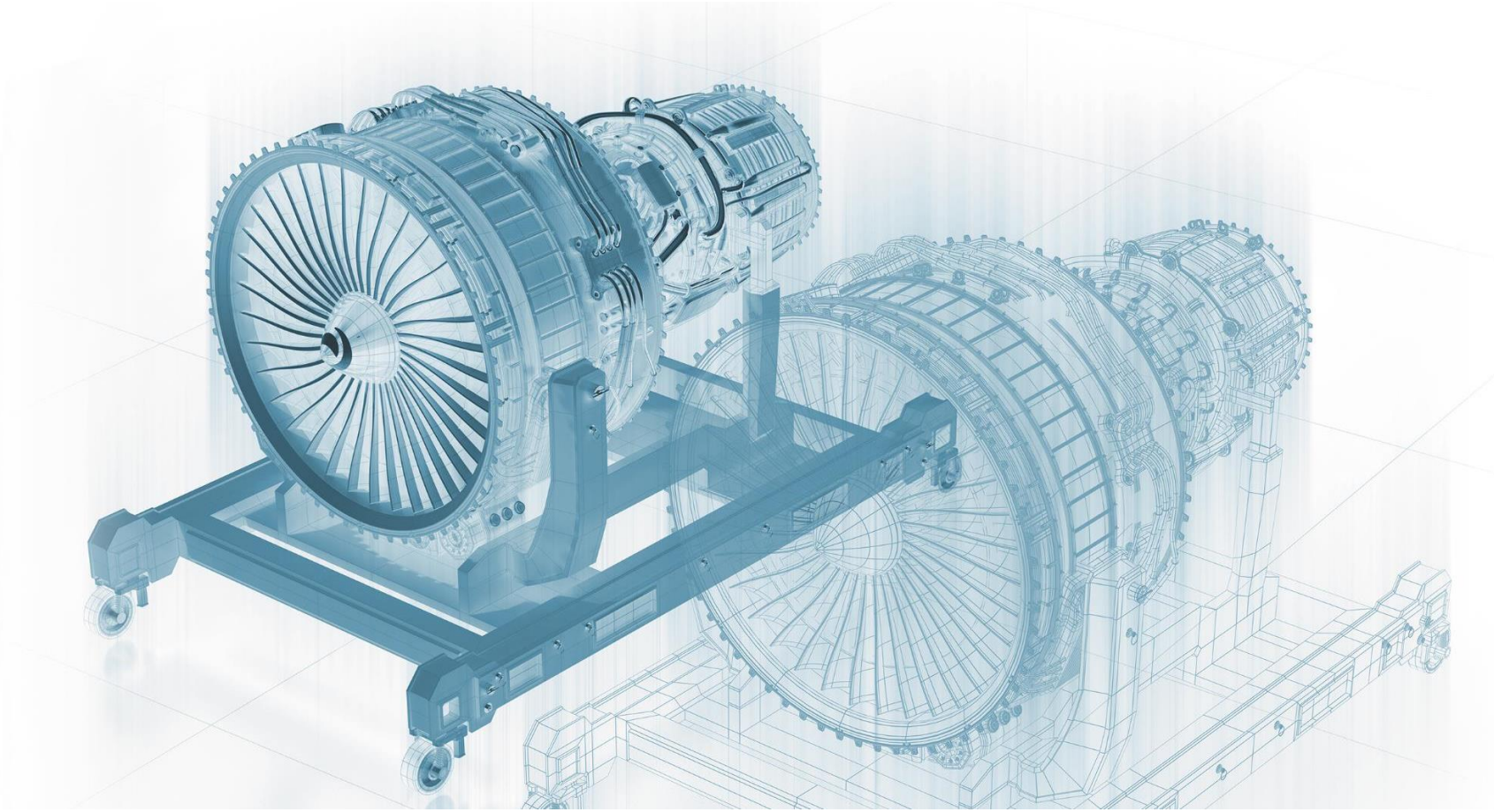
Where are the three inch bobbins when you need them?
I've been sitting in here for 18 months and I'm still on the balance sheet at cost
Here, here! we're over here!


Oil, Oil, I need Oil.
This operator is a little heavy handed.
I know I had to request a full service last week.
Fan belt breaking in 10, 9, 8, …
Too late!

Digital Twins



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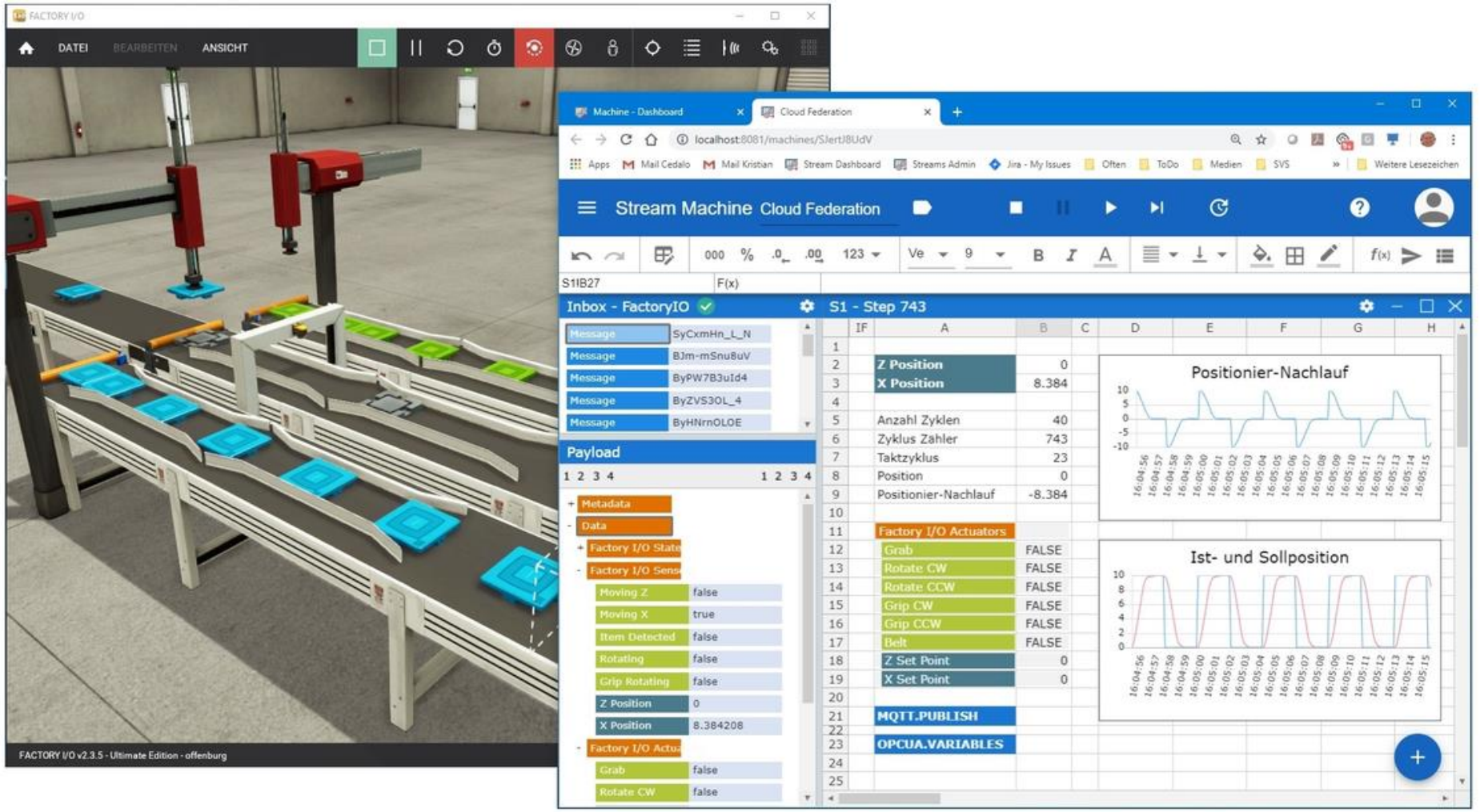
Cedalo Streamsheets



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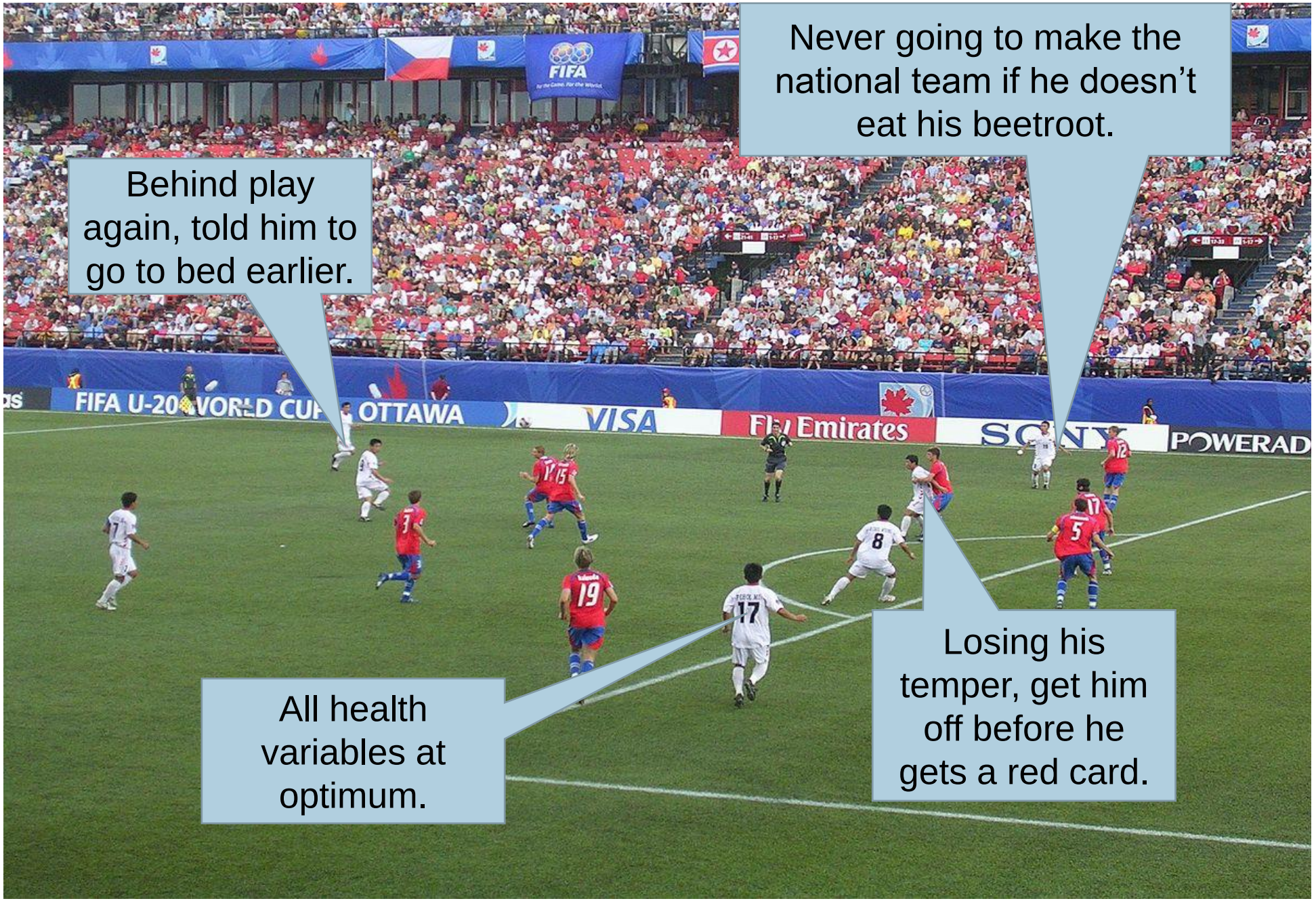
Never going to make the national team if he doesn't eat his beetroot.
Behind play again, told him to go to bed earlier.
All health variables at optimum.
Losing his temper, get him off before he gets a red card.
FIFA
OTTAWA
VISA
Emirates
POWERAD

Post-lunch lull, I'll drop the temperature
When will people learn - stay hydrated!
Diversity's not bad but could do better
Can't fool me, they're not meeting notes
Doodles better than he sells.
Warning – 6 coffees limit reached
Collaboration score 8/10

IoT applications and use cases

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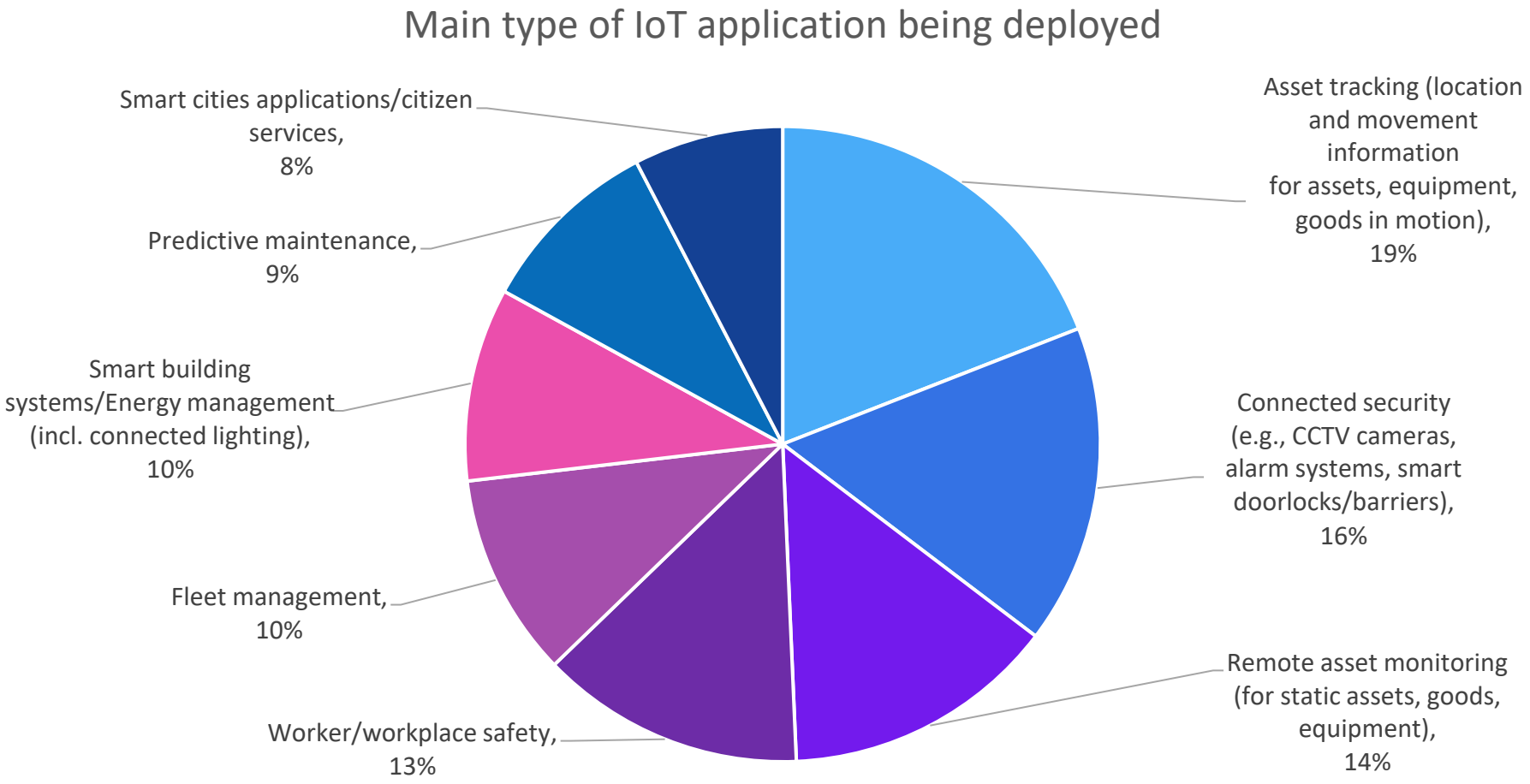
IoT encompasses a wide variety of applications and use cases



Source: Omdia IoT Enterprise Survey 2019/2020

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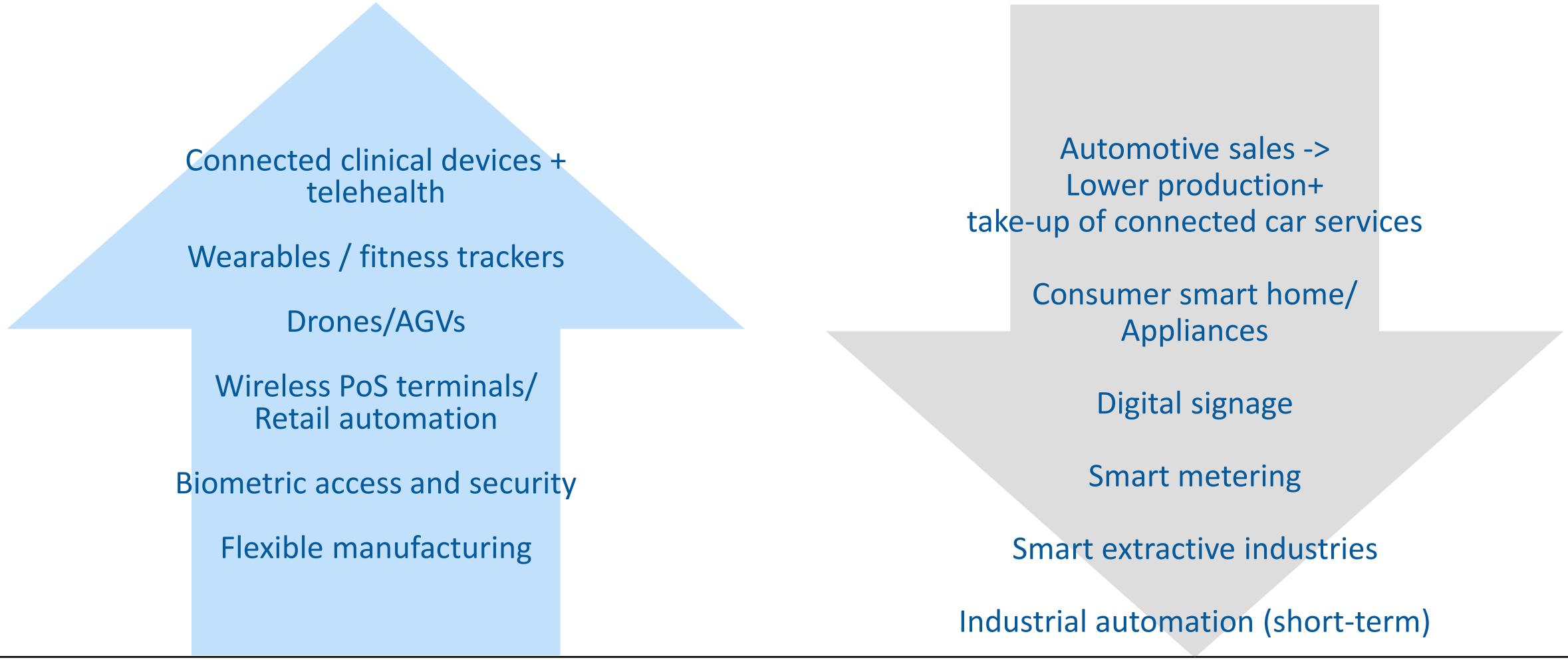
Information Classification: General

COVID-19 impact on IoT – challenge will be more on demand side than supply side, and impact more short-term than long-term



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Examples of IoT in action in the COVID-19 environment

From connecting ad hoc hospitals to supporting rapid shifts in supply chains, IoT solutions are playing an important role in helping organizations and society meet the challenge of COVID-19

Source: China Daily/Reuters

Digital health/big data

- Kinsa: connected thermometer
- Telehealth/remote diagnosis

Smart helmets

- Kuang-Chi: public security & health AI-enabled helmets

Connected buildings

- Building access: video camera monitoring/facial recognition + temperature measurement

Robotics/autonomy

- Neolix: Driverless delivery/street disinfectant
- Hospital and transportation disinfection robots

Drones/UAVs

- ENAIRE/Madrid police: Public health warnings
- Thermal cameras for monitoring
- Disinfectant spraying
- Delivery of supplies/medicines

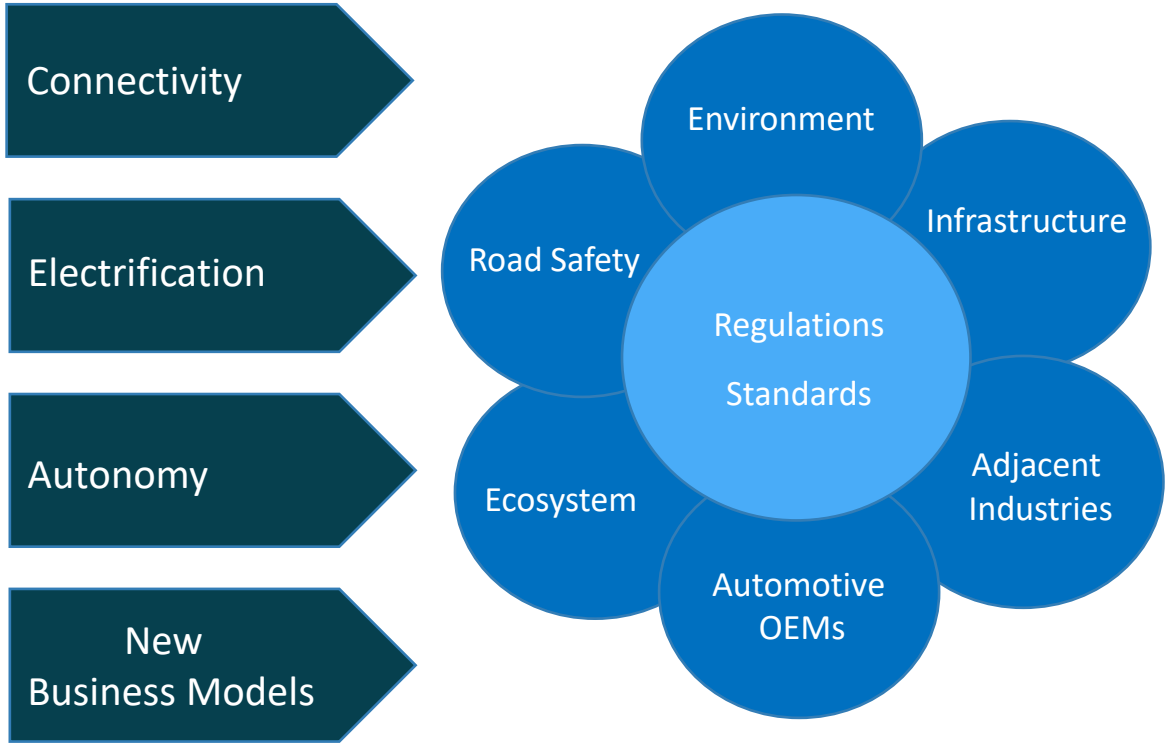
Contact tracing

- Estimote's 'proof of health' wearables for contact tracing
- Singapore's TraceTogether app

Information Classification: General

Connecting more devices creates complex ecosystems, global impacts

Connected Car: the Future of IoT & 5G



Shared Mobility In A City

Business impact on adjacent and ancillary industries

- Insurance
- Dealerships & Services shops
- Vehicle repairs & Healthcare (90 % of accidents are human error)
- Driving schools – transitioning to autonomous
- Parking garages and lots
- Filling stations
- Media - Brands (12 car makers - $42bn on advertising)

Information Classification: General

Not all IoT is highly complex - lower-cost technology solutions are enabling new smart city use cases

Low power wide-area technologies can be up to 5 times cheaper than traditional cellular – providers can be creative in what they 'servitise'

Technology	Module Cost
SigFox	$1-2 (single radio)
LoRaWAN	$5-6 Nano-Tag $2
NB-IoT	$5 retail price T-Mobile USA
LTE-M	$7-10 retail price (AT&T, Verizon)

Information Classification: General

Thank You

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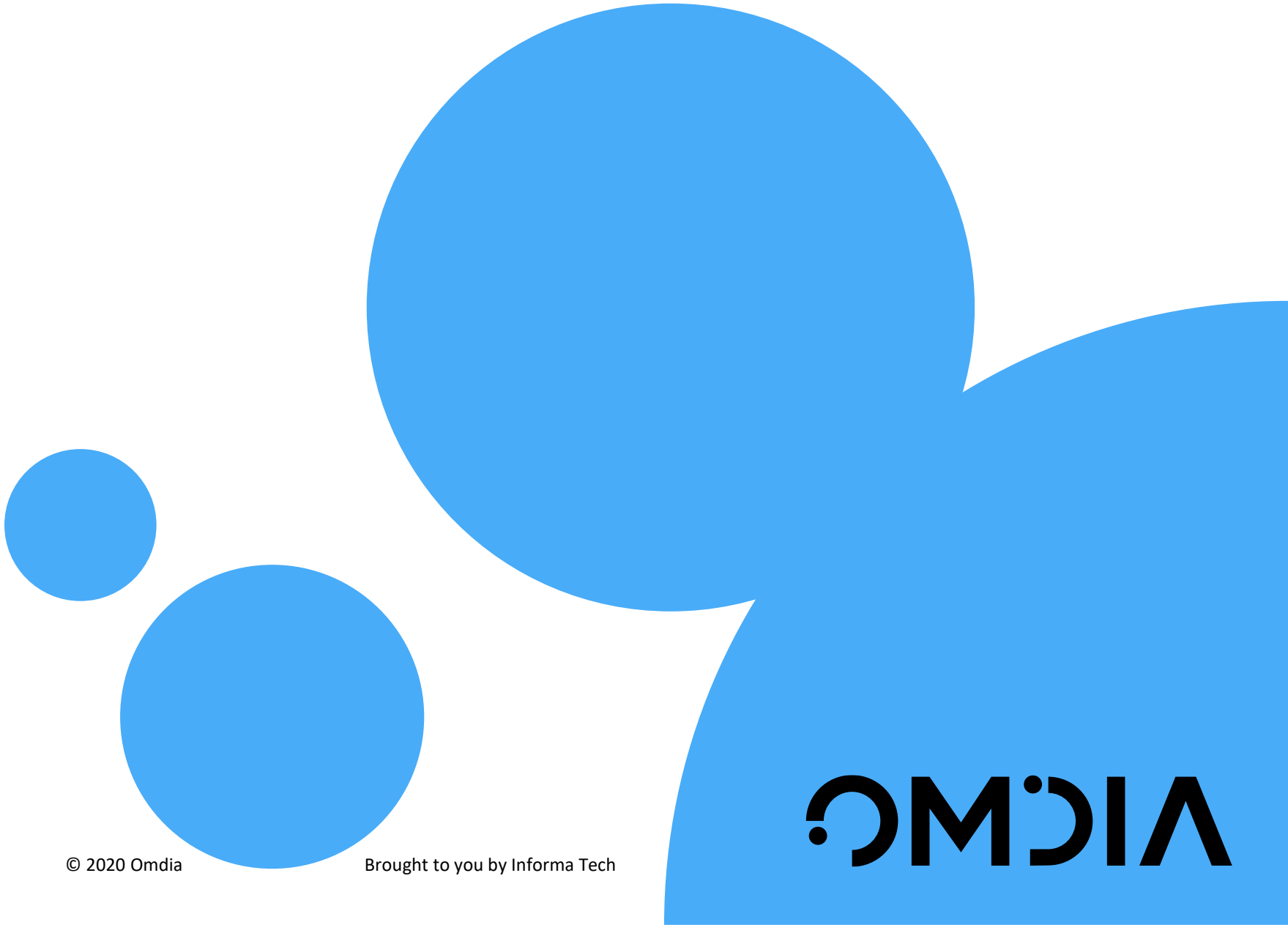

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Knowledge, Skills and Attitudes

- IoT knowledge
- Data and statistics
- Strategy and business cases
- Proactive curiosity

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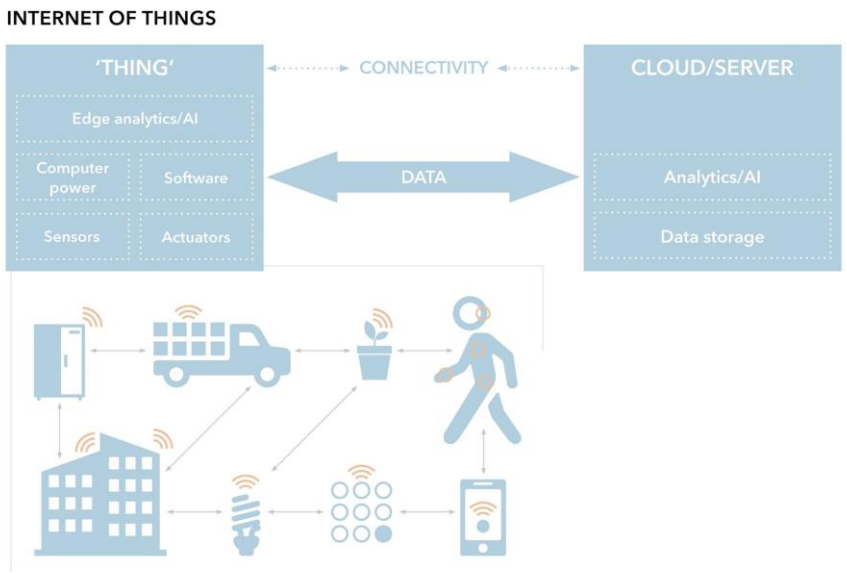

Q & A

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Free 60 minute webinars – 10.00am

How to network your way to success
13 May

Economic update
3 June

Better people management
8 July

Strategic thinking for senior professionals
30 September

Leading resilient teams
7 October

Practical Excel tips
7 December

Free 20 minute webinars – 12.30pm

Top tips for securing board level support for counter fraud
18 May

Simple techniques to improve communication
22 June

The net present value of happiness
23 September

Common online frauds and how to avoid them
14 October

Free evening events – 6.30pm

Creating clarity and impact in your reports and talks
10 September

Navigating 'office politics' positively
5 November

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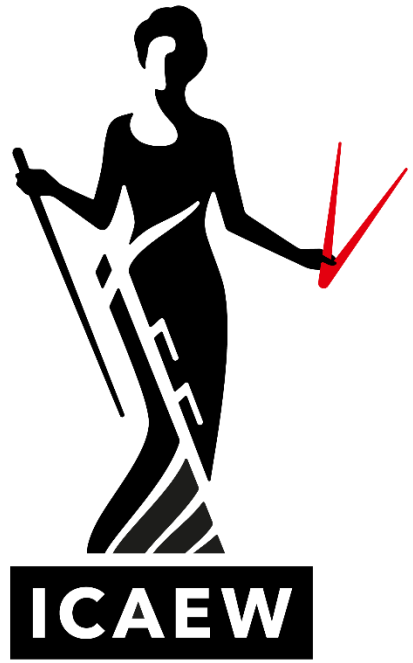

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