

# Las Redes de Nueva Generación y la prospectiva de la tecnología 5G

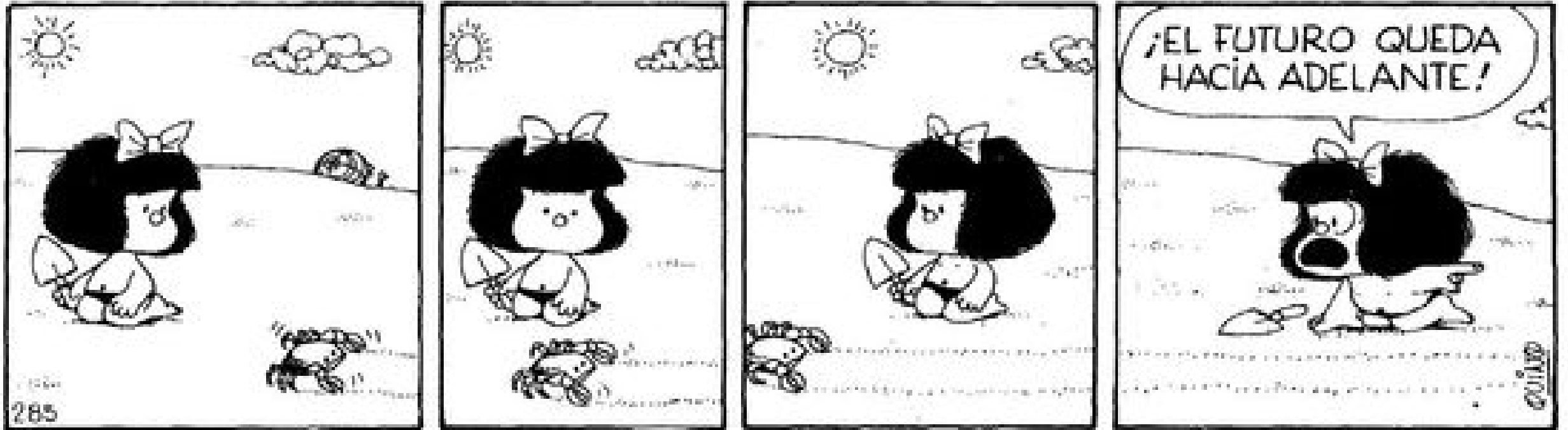
28 Octubre 2020

Sonia Agnese

Senior Principal Analyst Latin America

OMDIA

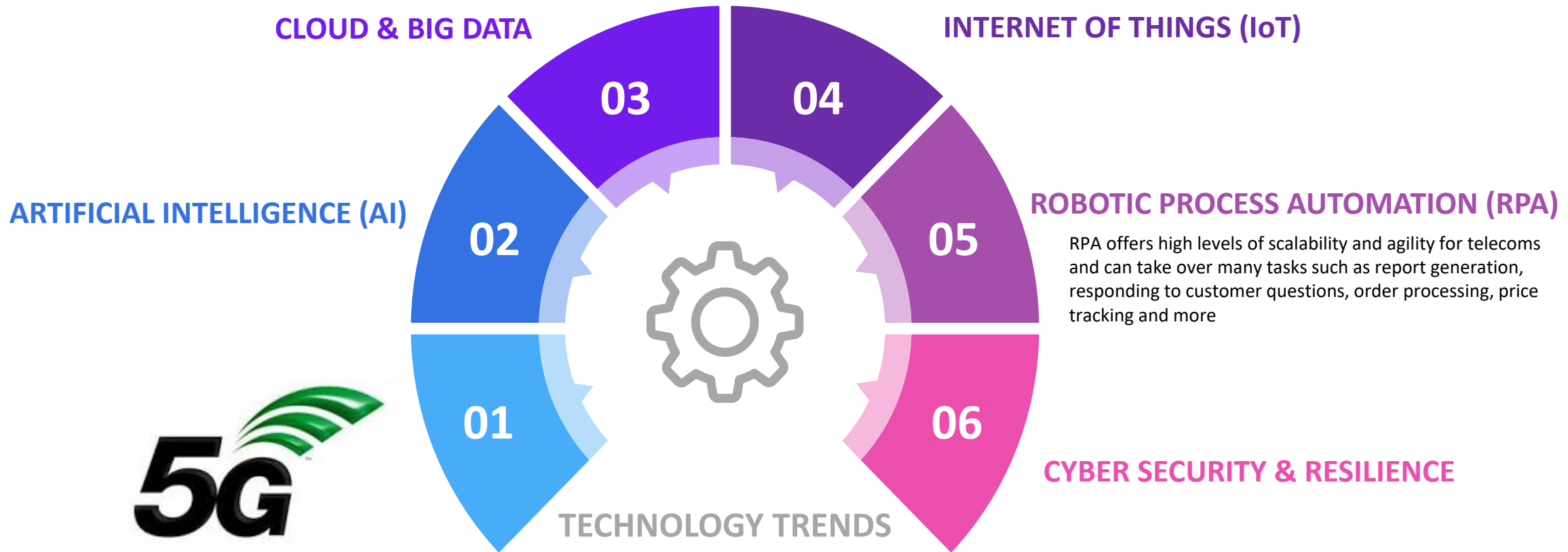




# The 5G Opportunity



# Main Technology Trends That Will Transform Telecoms



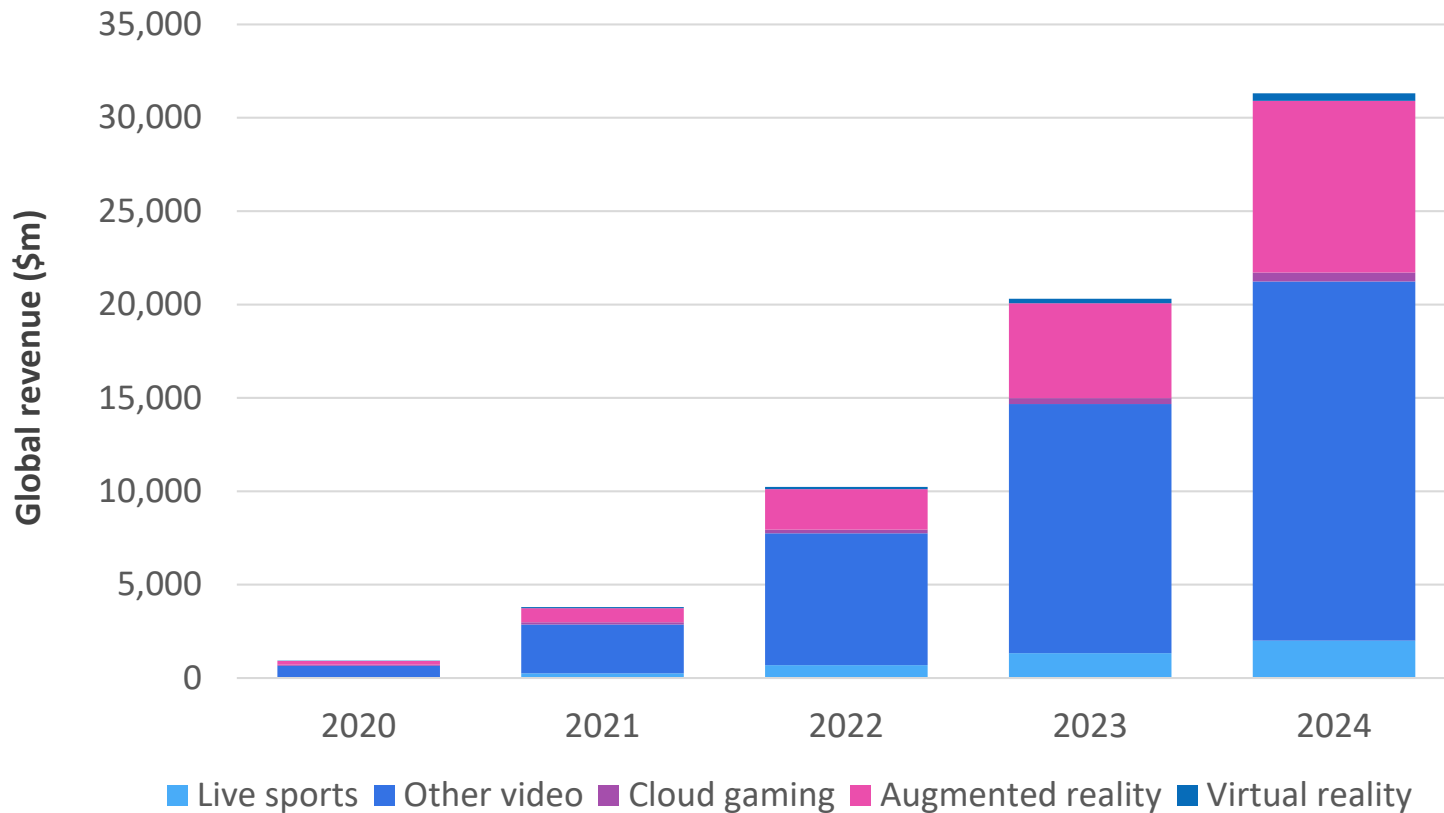






# B2C: Video, AR, VR and live sports main revenue earners over 5G

5G-enabled revenues by category – 2020-24 (\$m)



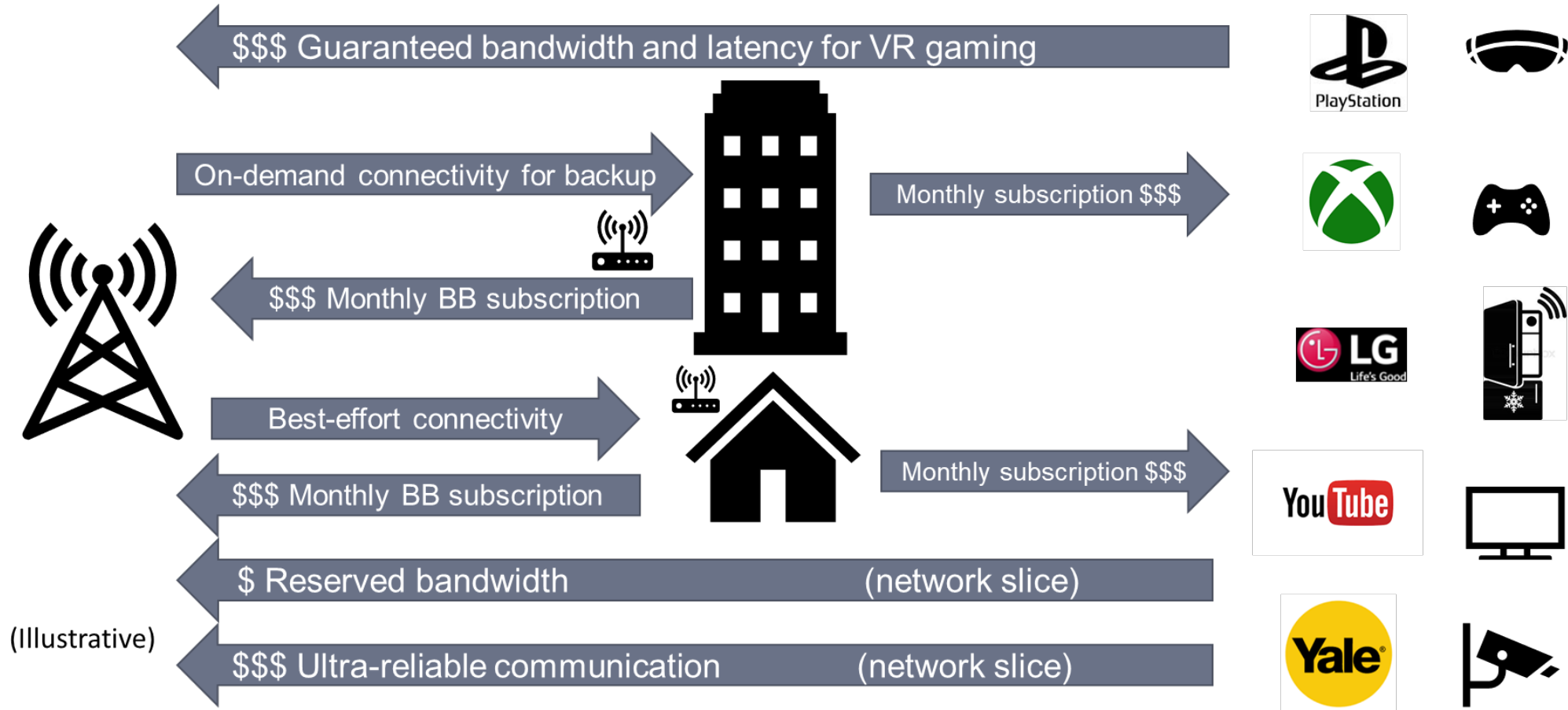
Source: Omdia, Intel

- The mass-market opportunity is based on the **immersive technologies powered by 5G** that will take our digital experiences to the next level and beyond.
- Consumers will be attracted to the immersive technologies that 5G can provide (**cloud gaming, VR, AR, and mixed reality**).
- **Gaming is probably for early adopters**, but 5G will inspire new modes of experiencing video entertainment, education, shopping, communicating and even travelling.



# 5G Fixed Wireless Access (FWA)

New business models result in a “win-win”

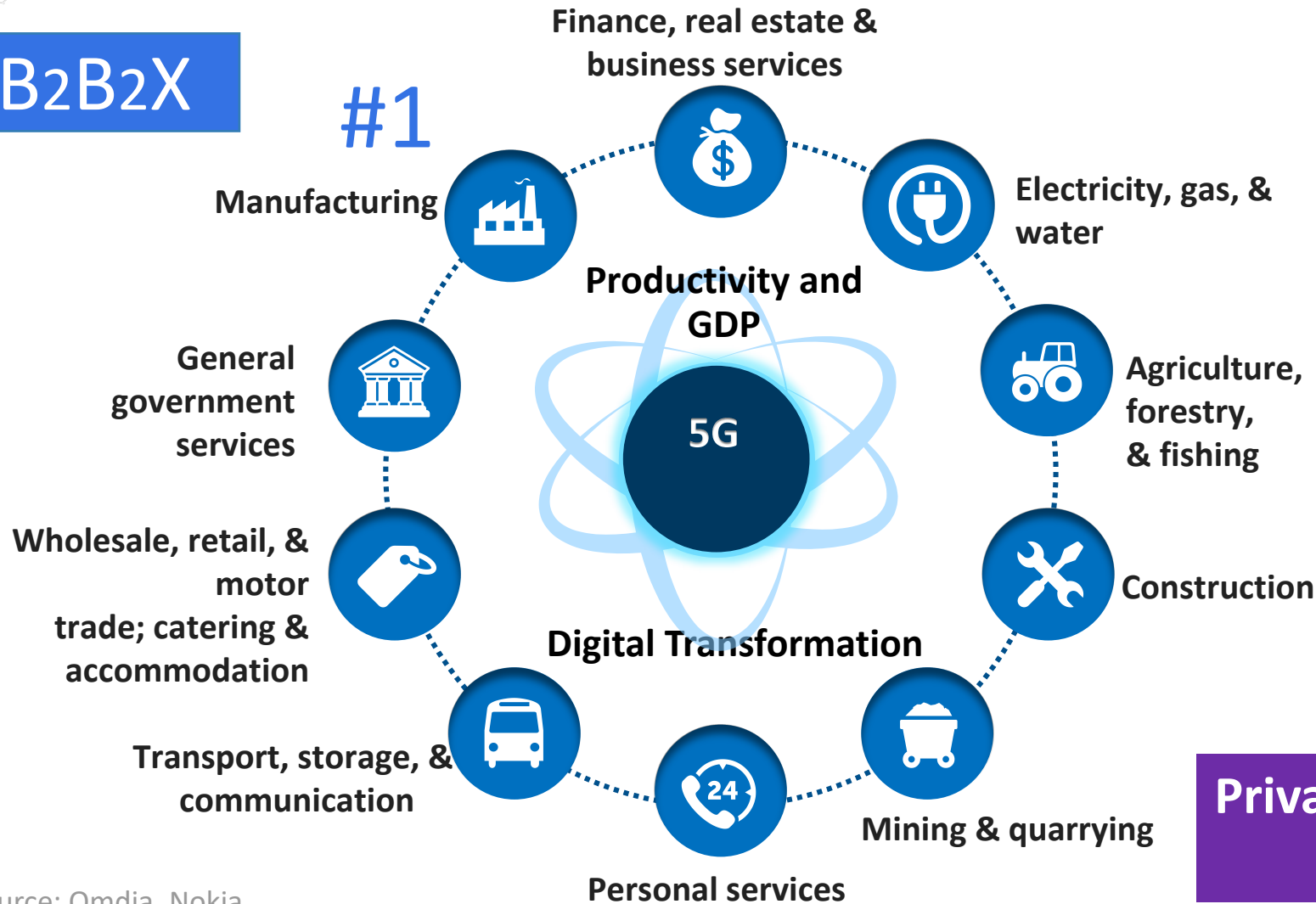


4G FWA was not a major competitor to fixed broadband. But 5G’s faster speeds and compelling price points make it a real upgrade choice to replace Fixed Broadband of less than 50Mbps cost effectively.

# 5G Enterprise

B2B2X

#1



## Other 5G key applications

- Health
- Education
- Agribusiness
- E-Government
- Transport and logistics
  - Transportation terminals and logistics
  - Energy transport
- Other services:
  - Retail
  - Finance
  - Real Estate

Private Networks could start with advanced 4G and evolve

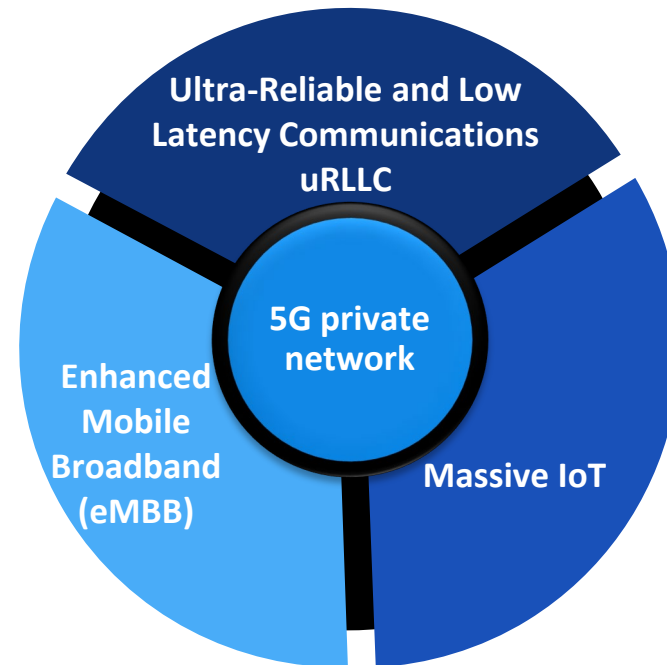
Source: Omdia, Nokia

# 5G Private Networks

## Targeted needs

- Temperature sensors
- Spectrum re-use
- On-premise compute and storage
- Seamless interworking with public network

- Real-time asset tracking
- On-device Intelligence
- Local management for low latency and protection of sensitive data
- Real-time collaboration

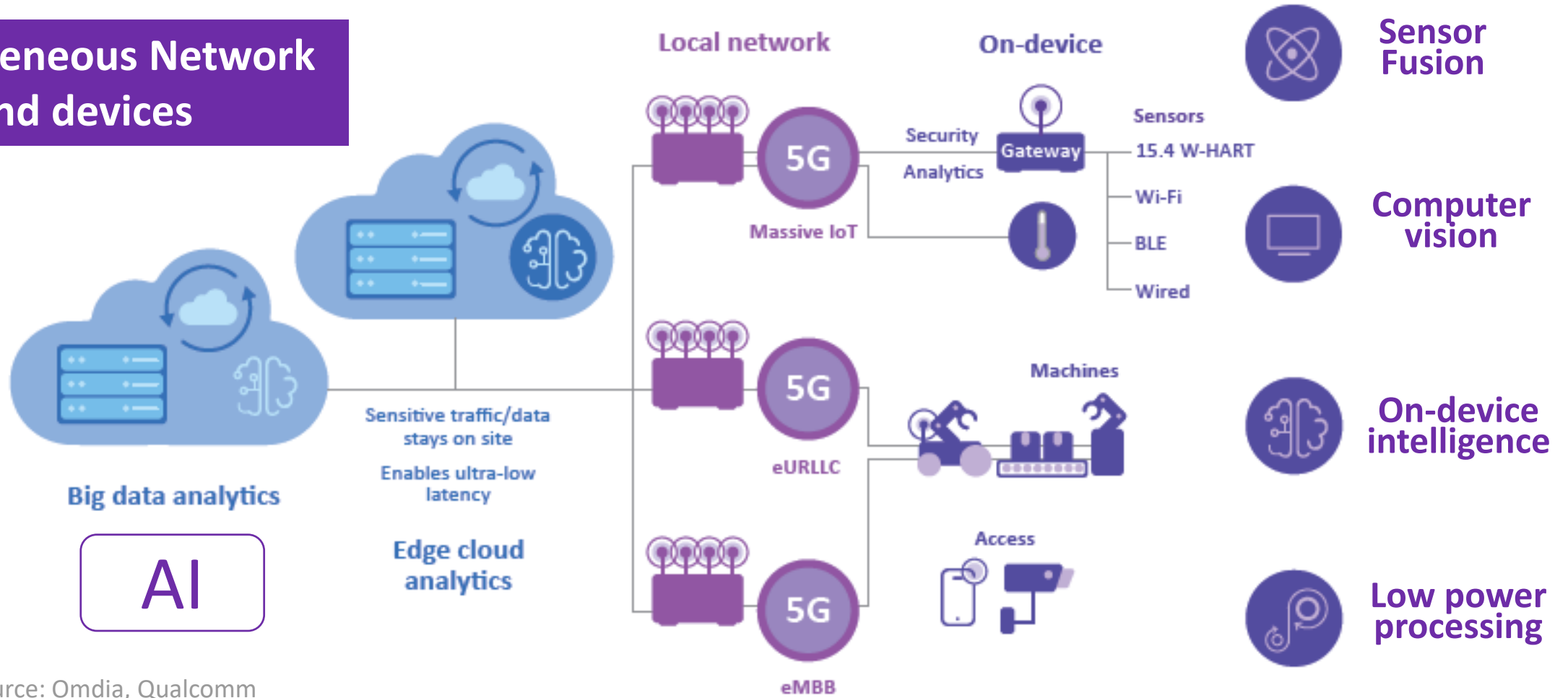


- UHD surveillance
- Reliable robotic control
- Real-time inventory
- AR guided execution

**Private Networks could started with advanced 4G and evolve. As the company transforms itself digitally and puts more demands on its basic applications (lower latency, higher sensor density, etc.) it will naturally migrate to 5G, with the fundamental architecture already in place.**

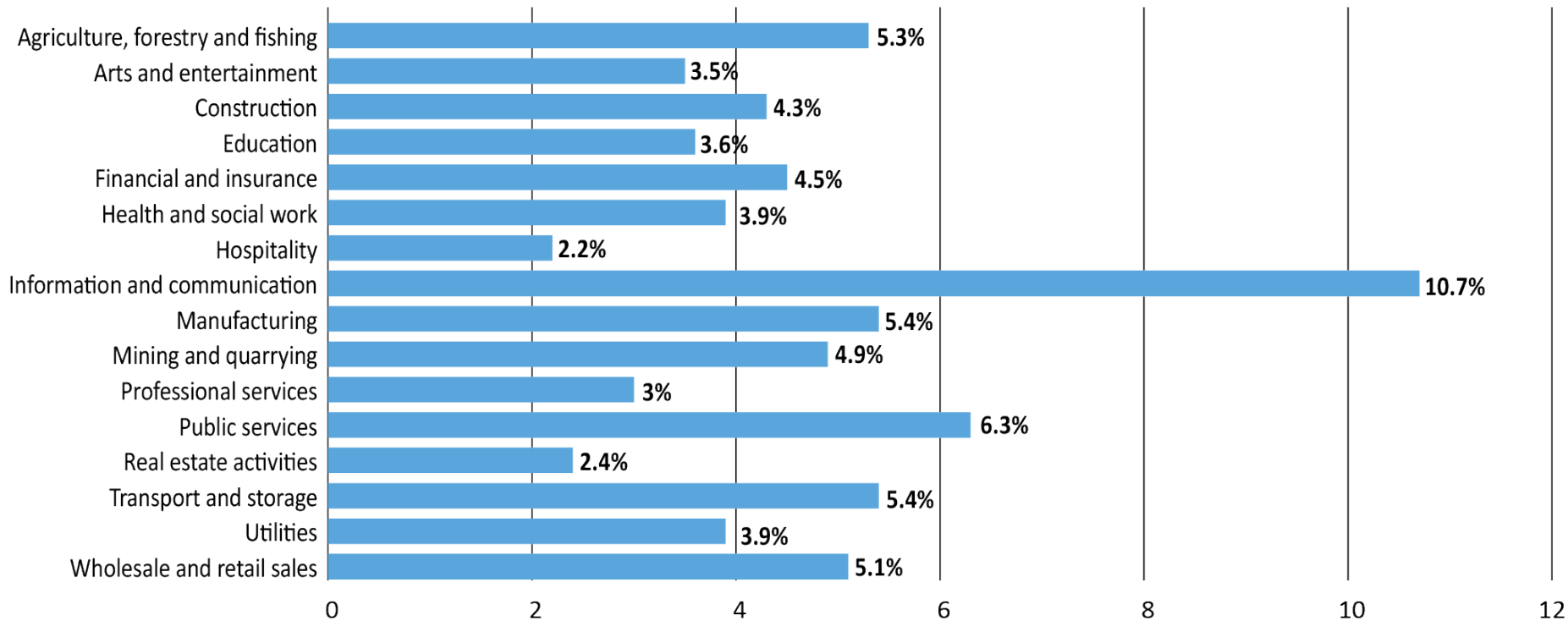
# Industrial IoT in 5G

## Heterogeneous Network and devices



Source: Omdia, Qualcomm

## 5G revenue growth impact by economic sector, 2020–35



Across all different sectors, 5G-enabled sales will have a different impact, starting at 2.2% and rising to more than 10% for ICT revenue

Source: Omdia, The 5G Economy: How 5G will contribute to the global economy, 2019

5G could contribute a significant productivity jump during the 2029–35 timeframe when the aggregate for the constituent technologies reaches the tipping point at 51% penetration

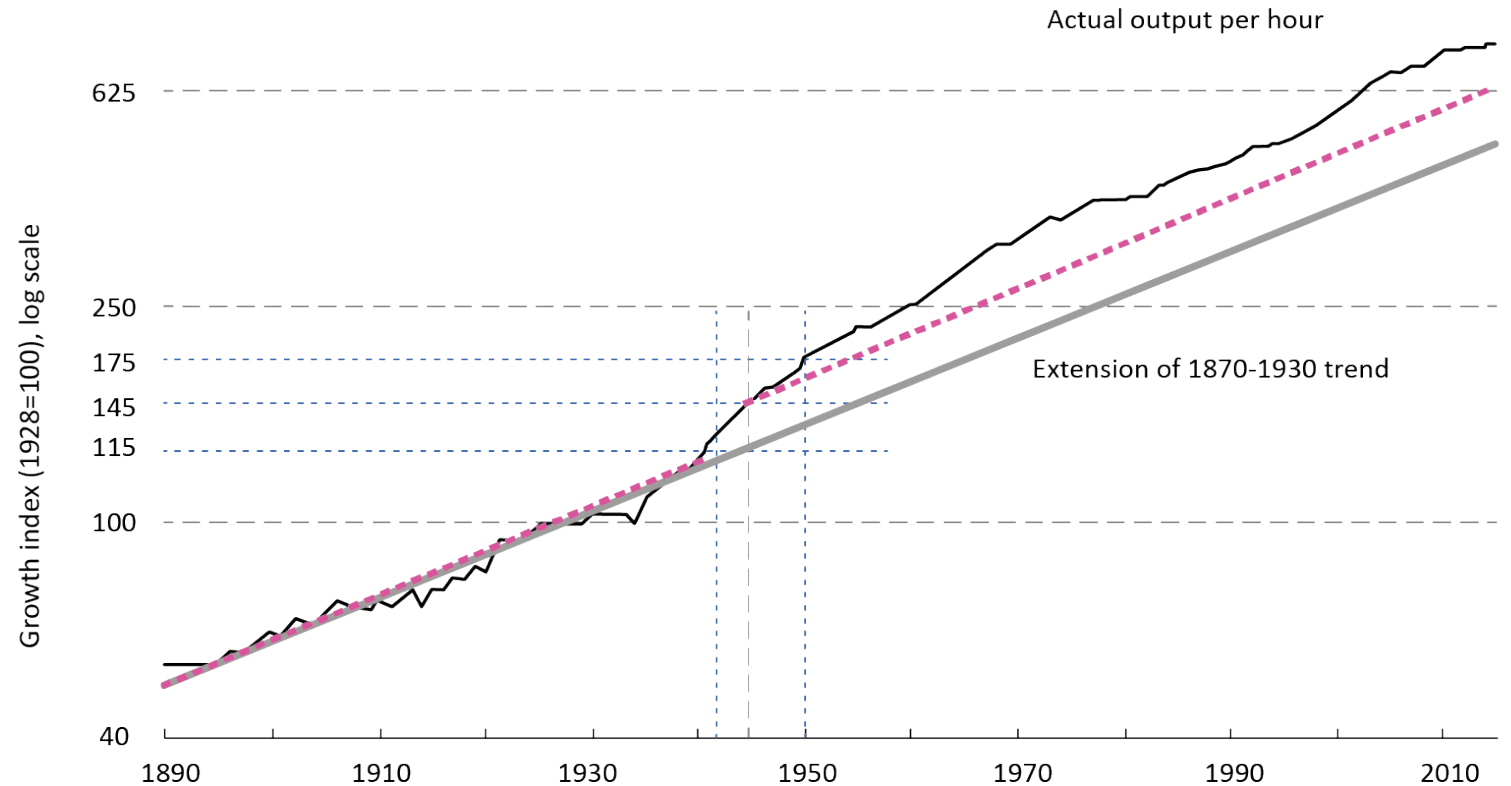
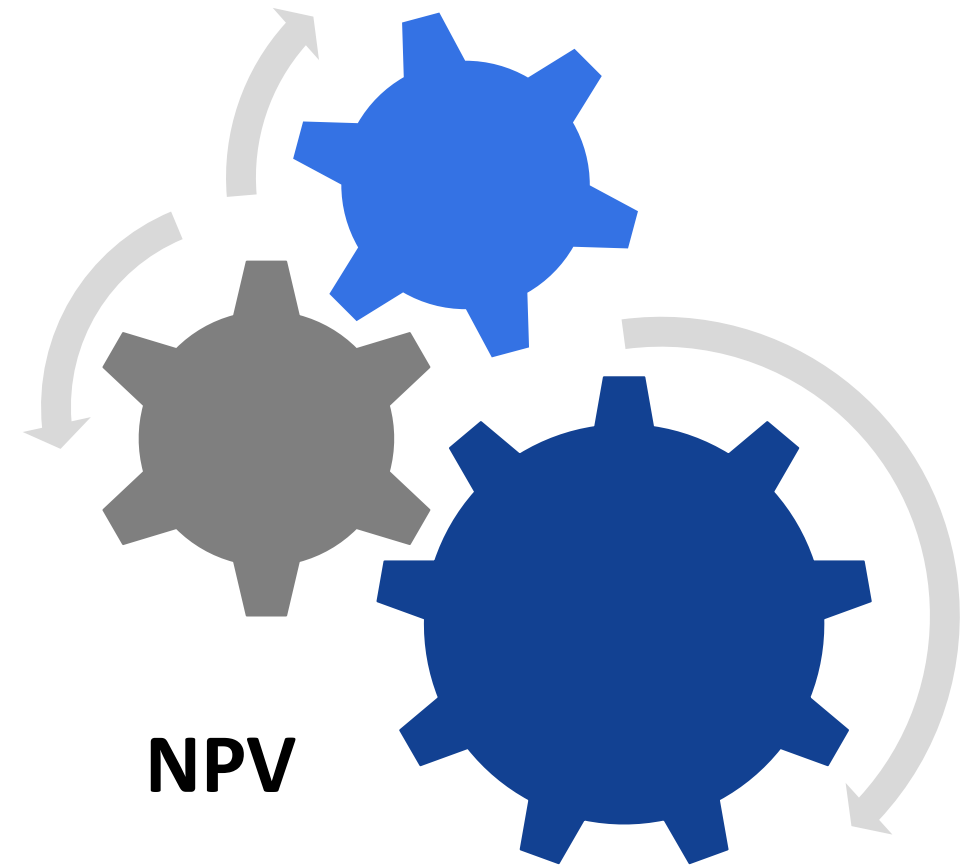


FIGURE 1. Depiction of Gordon's analysis showing a one-time productivity jump of ~30% during 1940-1950 (115 units pre-1942 to 145 units post-1945).

Source: Bell Labs

# Omdia designed a model to estimate the economic and social impact of 5G through 2035 in Latin America

- 5G Economics and opportunities
- Impacts: productivity and revenues
- Latin America GDP and sector breakdown configuration per country





# Immediate 5G Opportunities in Latin America

## 5G economic and social impact by industry, 2021–35



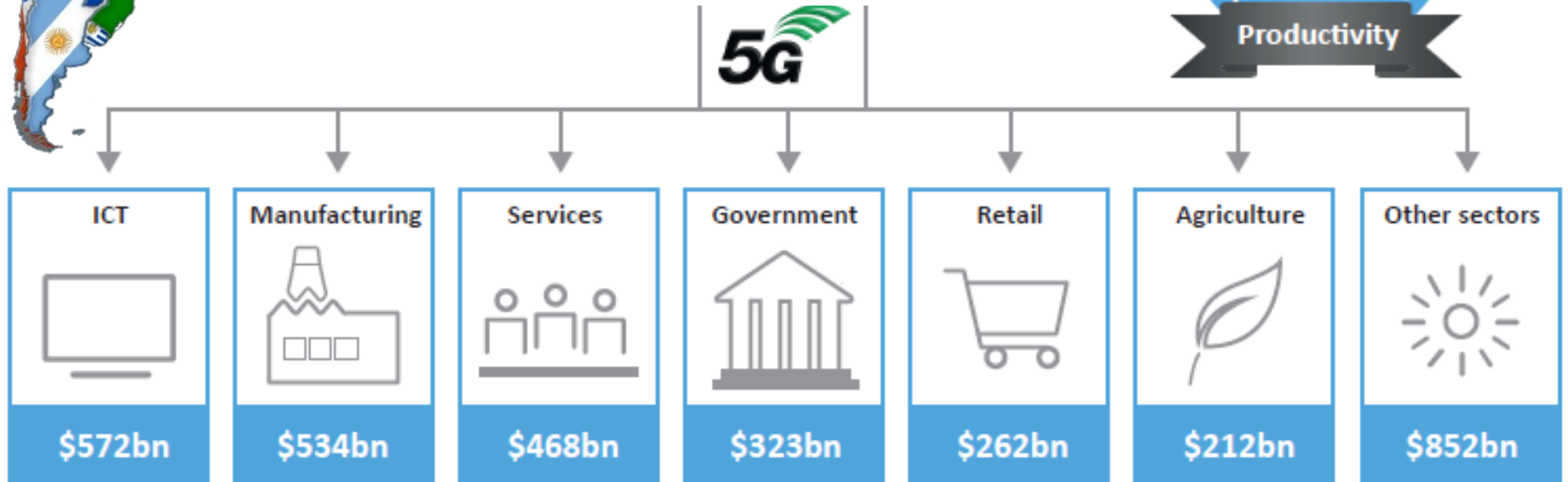
\$3,225bn

**5G economic output 2021-2035**  
(additional revenue growth impact)

**+1 p.p.**  
additional  
GDP per year  
(on average)

**Productivity**

- GDP Average growth
- No 5G: 3%
  - 5G scenario: 4%



Source: Omdia, based on Omdia and Bell Lab economic models

# Immediate 5G Opportunities in Mexico

## 5G economic and social impact by industry, 2021–35



\$730bn

**5G economic output 2021-2035**  
(additional revenue growth impact)

**+1 p.p.**  
additional  
GDP per year  
(on average)

GDP Average growth

- No 5G: 3%
- 5G scenario: 4%

**Productivity**



Source: Omdia, based on Omdia and Bell Lab economic models

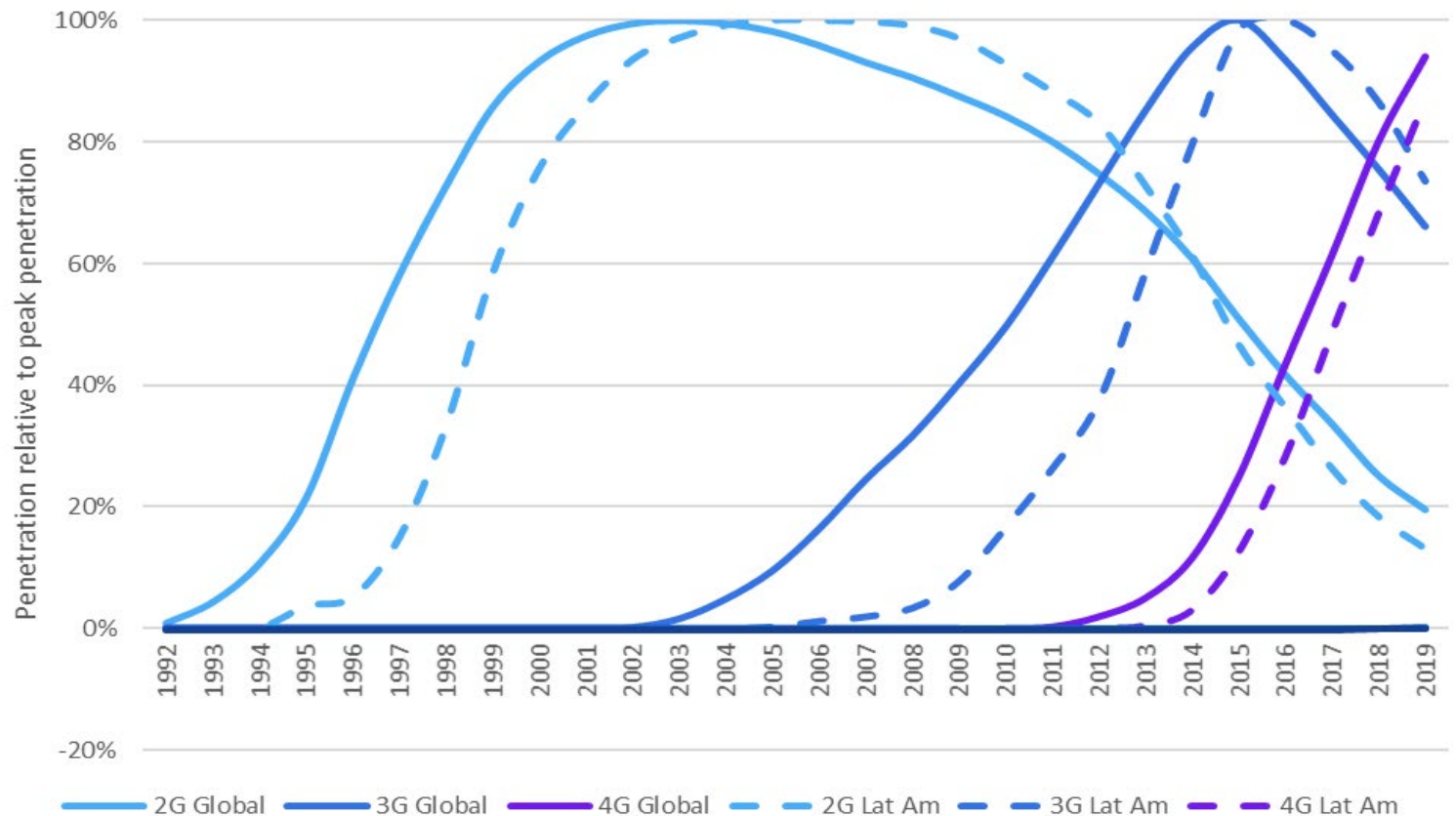
“5G can add up to 1 p.p. (percentage point) to GDP per year in Latin America on average due to a productivity boost. 5G will become a key driver for economic recovery in the post-COVID19”

Omdia

# America tech acceleration: 5G coming sooner than later

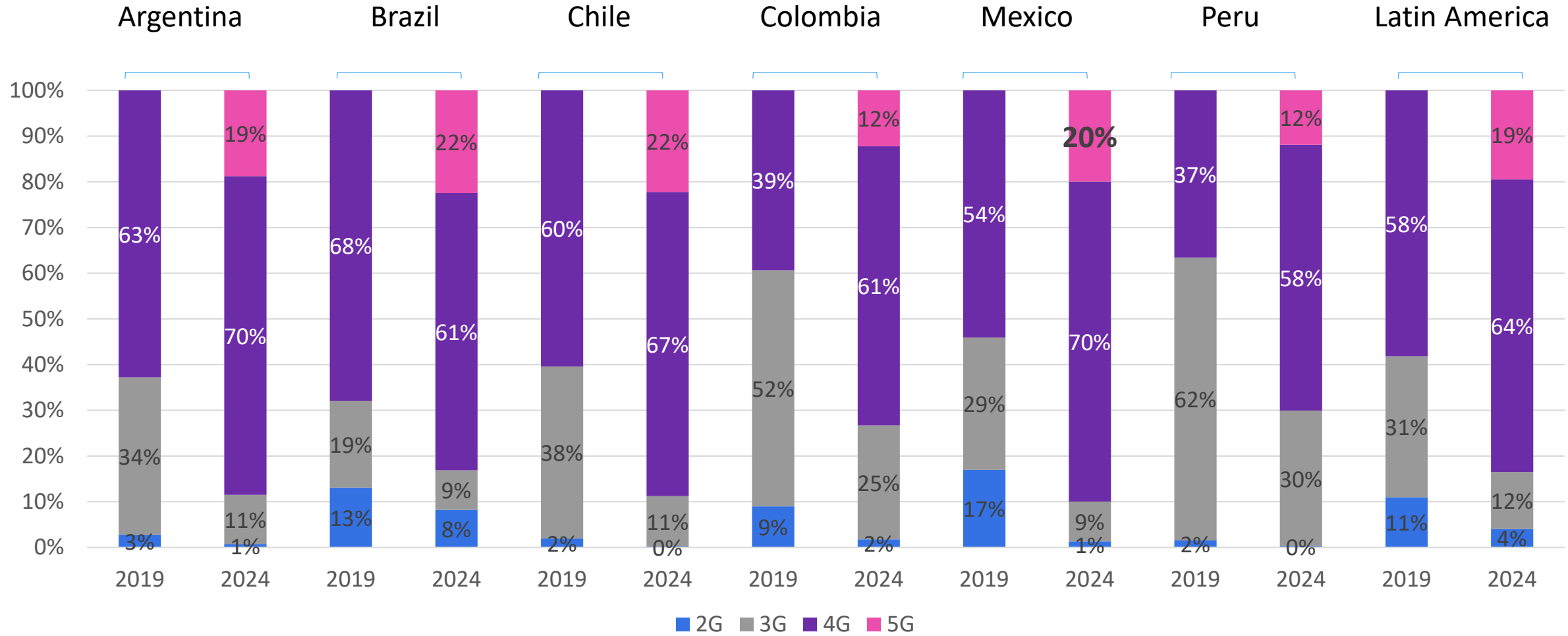
- Latin America launched 2G, 3G, and 4G around three years after the global trendsetters did
- Handsets lower prices more quickly, becoming more accessible to the regions' consumers, and markets tend to grow faster, replacing old technologies more quickly
- Each generation has a quicker catch up

Global and Latin America, mobile penetration relative to peak penetration, by generation, 1992–2019



Source: Omdia

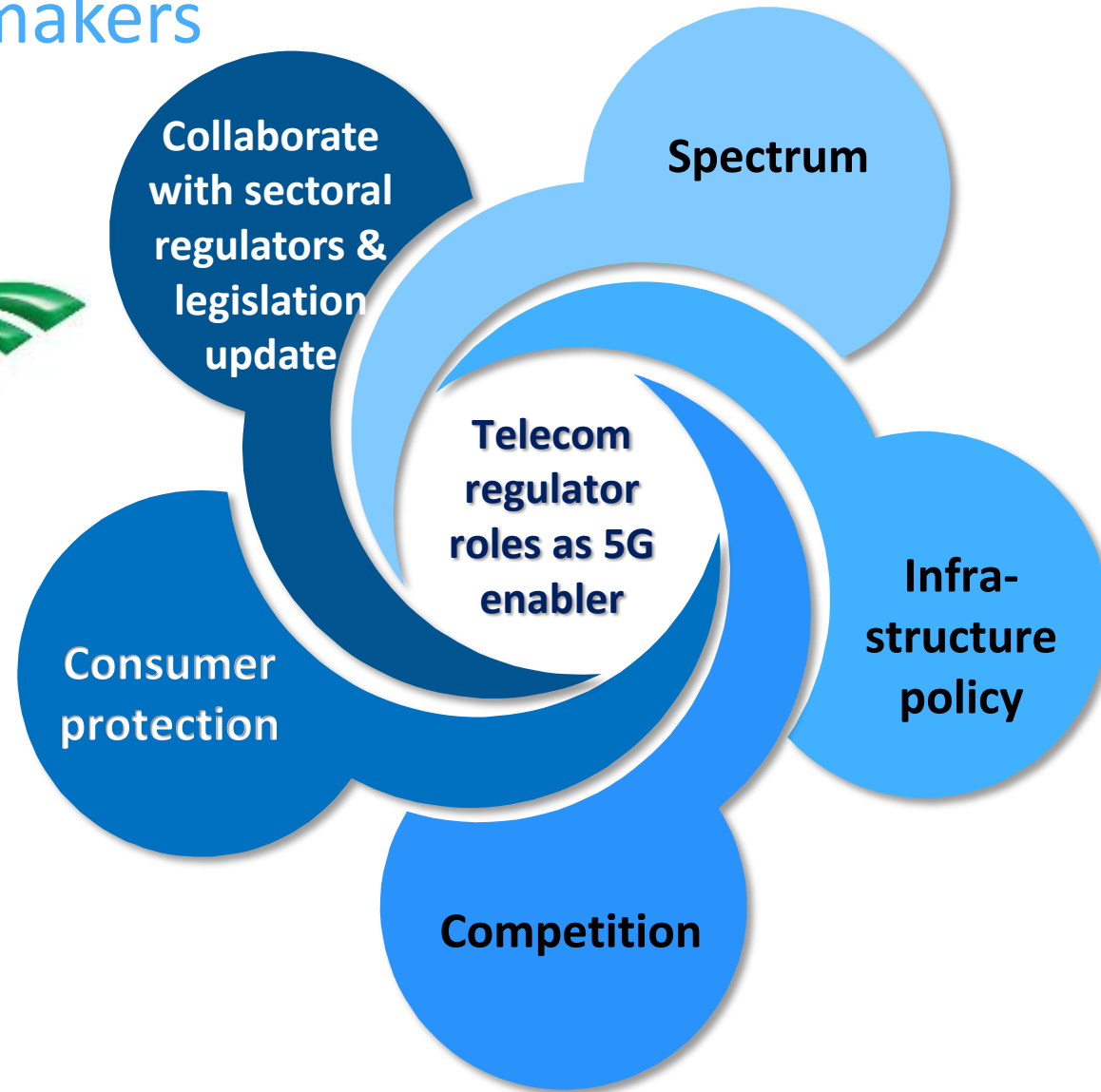
# Mobile subscriptions by country and technology (%) 2019-2024



Source: Omdia

# To Do List for Policymakers

Deploying a 5G network involves large sunk costs and long payback periods; therefore, prospective investors seek certainty and clarity about the legal and regulatory landscape.



Source: Omdia

COVID-19 may have postponed 5G to 2021 in Latin America, but it will come, and telcos need to get ready to use its full potential.

Experience has shown that new technologies enable new business models and open new economic opportunities, most of them are still unknown.



# Thank you! ¡Gracias!

**Sonia Agnese**

Senior Principal Analyst Latin America

Sonia.agnese@Omdia.com

## Disclaimer

The Omdia research, data and information referenced herein (the “Omdia Materials”) are the copyrighted property of Informa Tech and its subsidiaries or affiliates (together “Informa Tech”) and represent data, research, opinions or viewpoints published by Informa Tech, and are not representations of fact.

The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are subject to change without notice and Informa Tech does not have any duty or responsibility to update the Omdia Materials or this publication as a result.

Omdia Materials are delivered on an “as-is” and “as-available” basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in Omdia Materials.

To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees and agents, disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial or other decisions based on or made in reliance of the Omdia Materials.

### Get in touch

Americas

E: [customersuccess@omdia.com](mailto:customersuccess@omdia.com)

08:00 – 18:00 GMT -5

Europe, Middle East & Africa

E: [customersuccess@omdia.com](mailto:customersuccess@omdia.com)

8:00 – 18:00 GMT

Asia Pacific

E: [customersuccess@omdia.com](mailto:customersuccess@omdia.com)

08:00 – 18:00 GMT + 8

# Copyright notice and disclaimer

The Omdia research, data and information referenced herein (the “Omdia Materials”) are the copyrighted property of Informa Tech and its subsidiaries or affiliates (together “Informa Tech”) and represent data, research, opinions or viewpoints published by Informa Tech, and are not representations of fact.

The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are subject to change without notice and Informa Tech does not have any duty or responsibility to update the Omdia Materials or this publication as a result.

Omdia Materials are delivered on an “as-is” and “as-available” basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in Omdia Materials.

To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees and agents, disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial or other decisions based on or made in reliance of the Omdia Materials.

Connecting the dots  
across the entire tech  
ecosystem.

Brought to you by  
Informa Tech



OMIA