Edgeless Connectivity from IoT to 5G and Data Centers

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Agenda

- Technology Trend 2020
- Global Market
- IoT Connectivity Technologies
- 5G Technology
- Data Center Trend 2024-2525
- Big Data to Data Analytic
- IoT Landscape
- Evolution of 5G to C-V2X
- 5G Case Study and Edgeless Connectivity
- Smart City

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Technology Trend 2020

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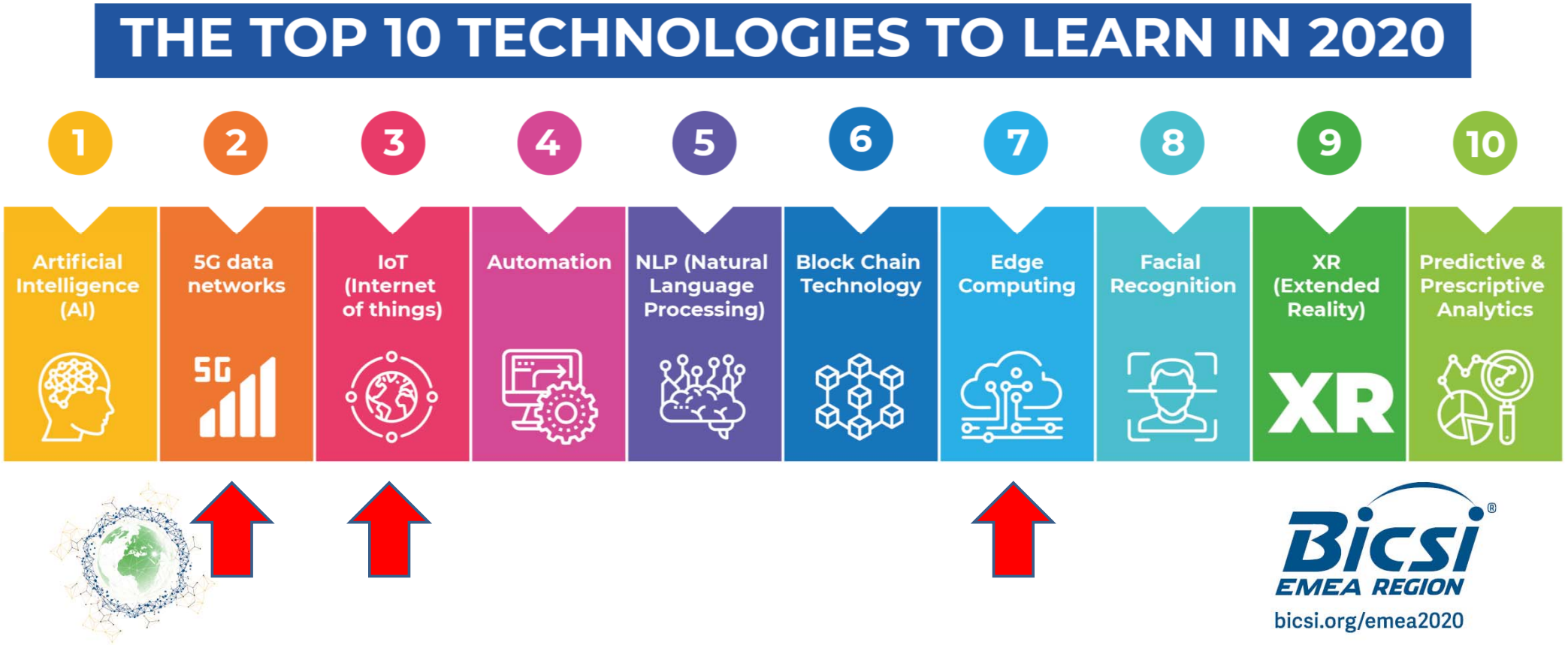
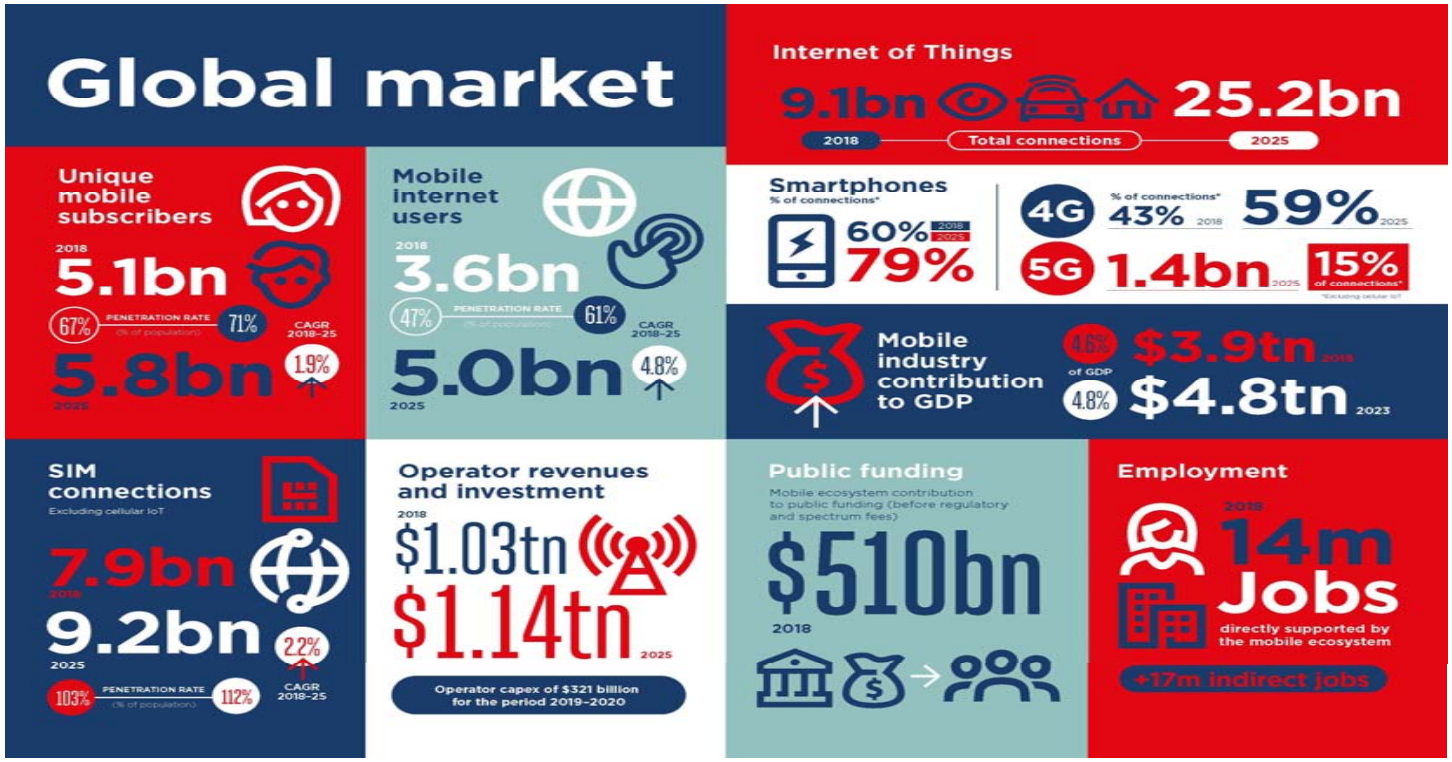


Global Data Center Server Market 2023



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IoT Connectivity Technologies

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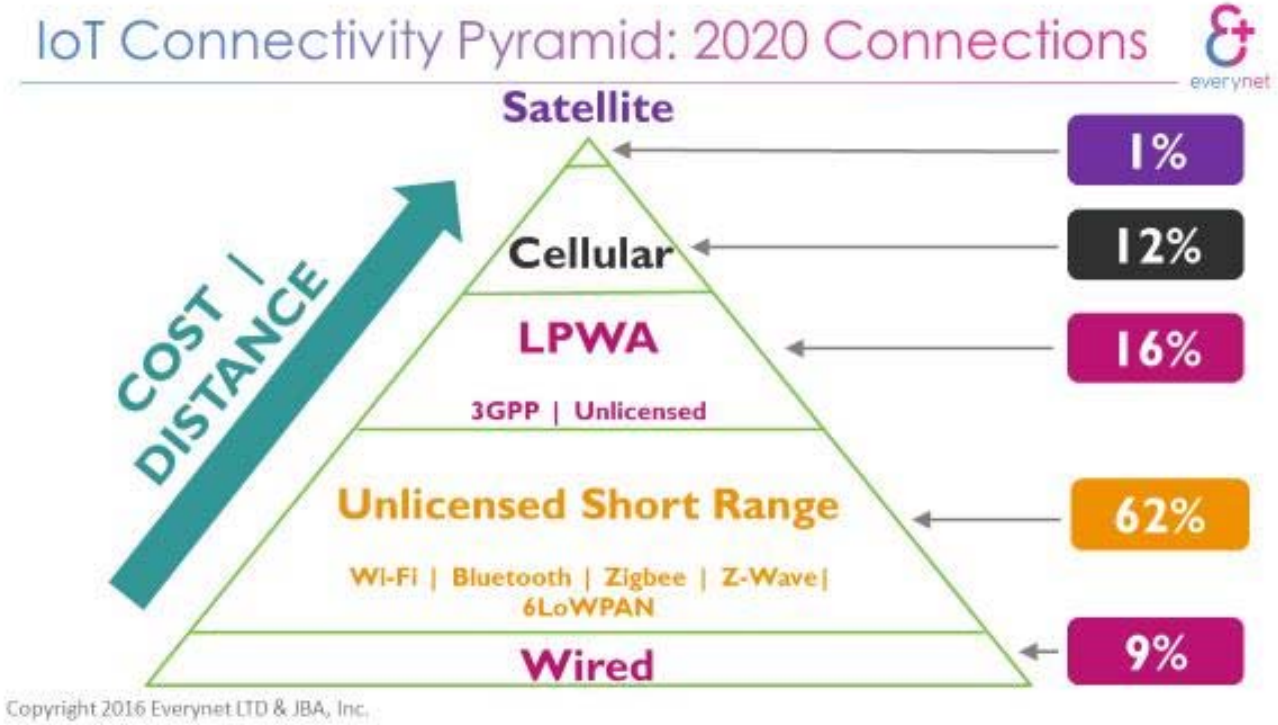

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5G Technology

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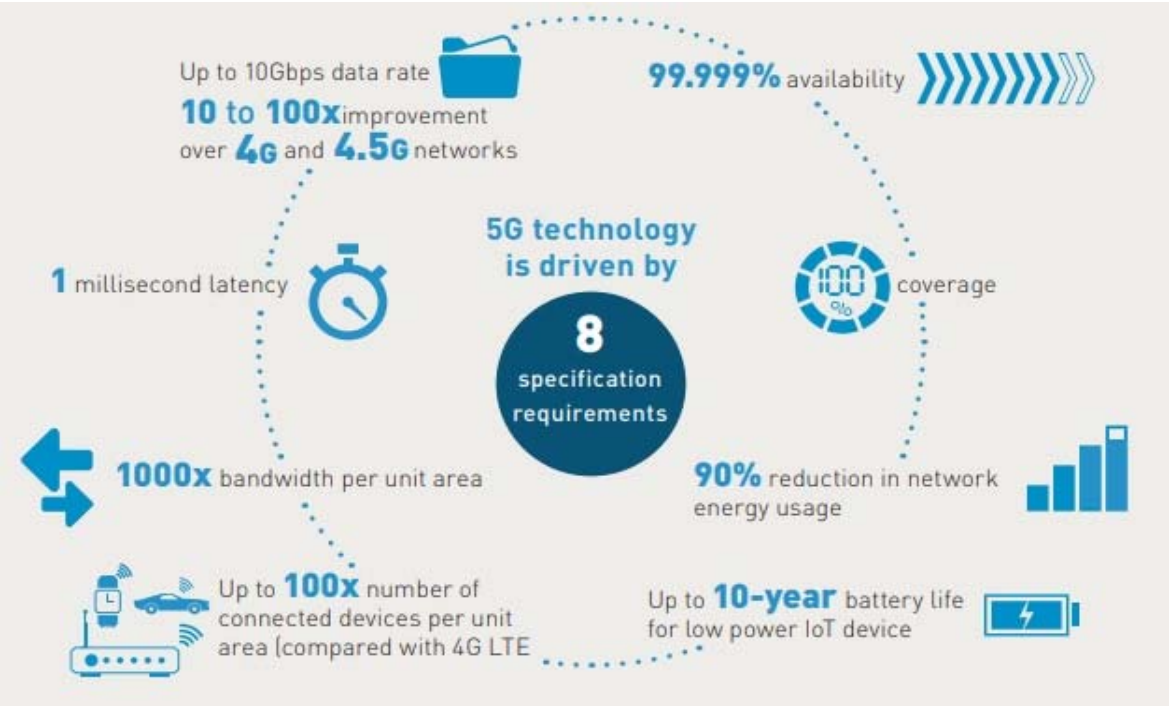

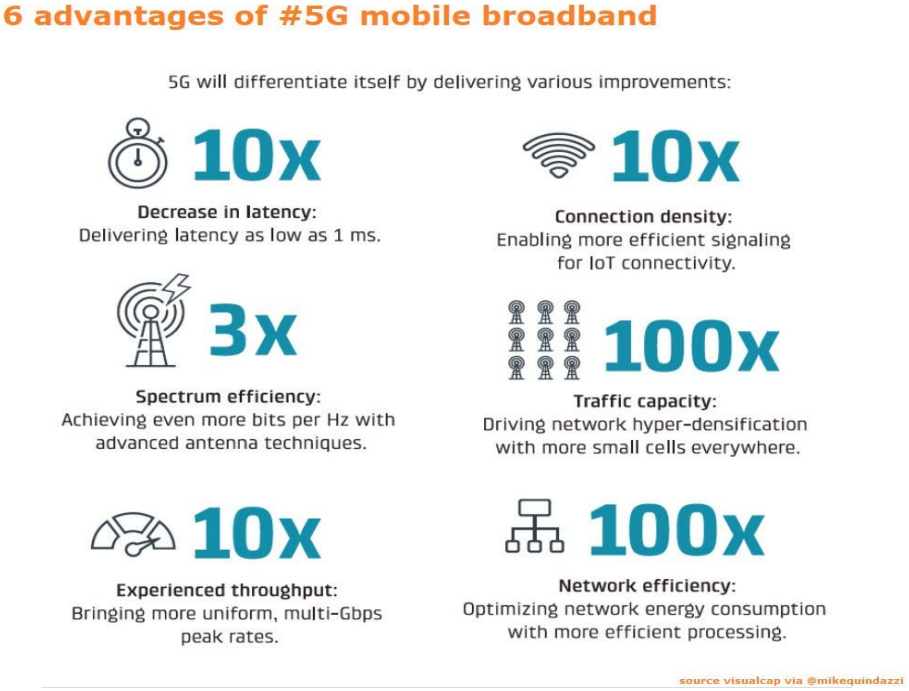

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Data Center Trend 2024

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Data Center Trend 2025

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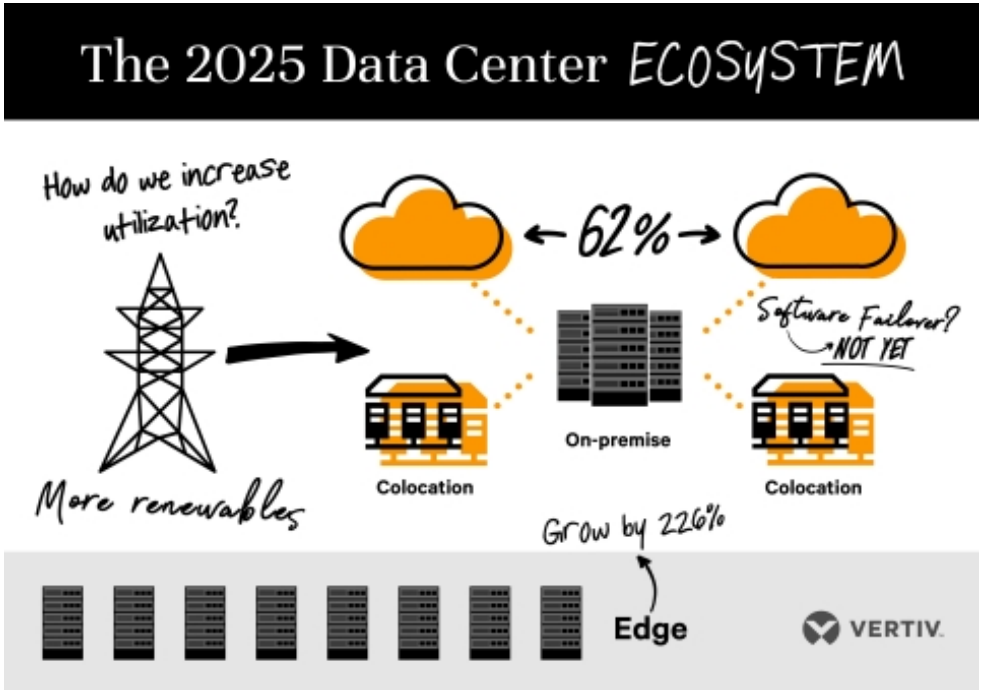

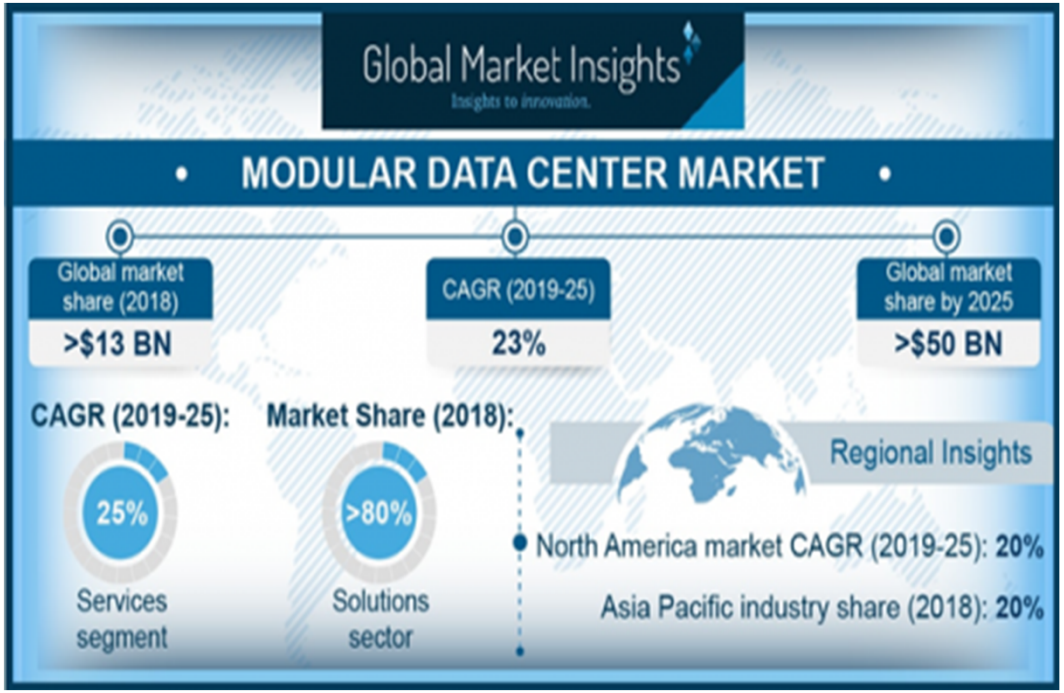

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Data Center Energy Efficiency in 2025

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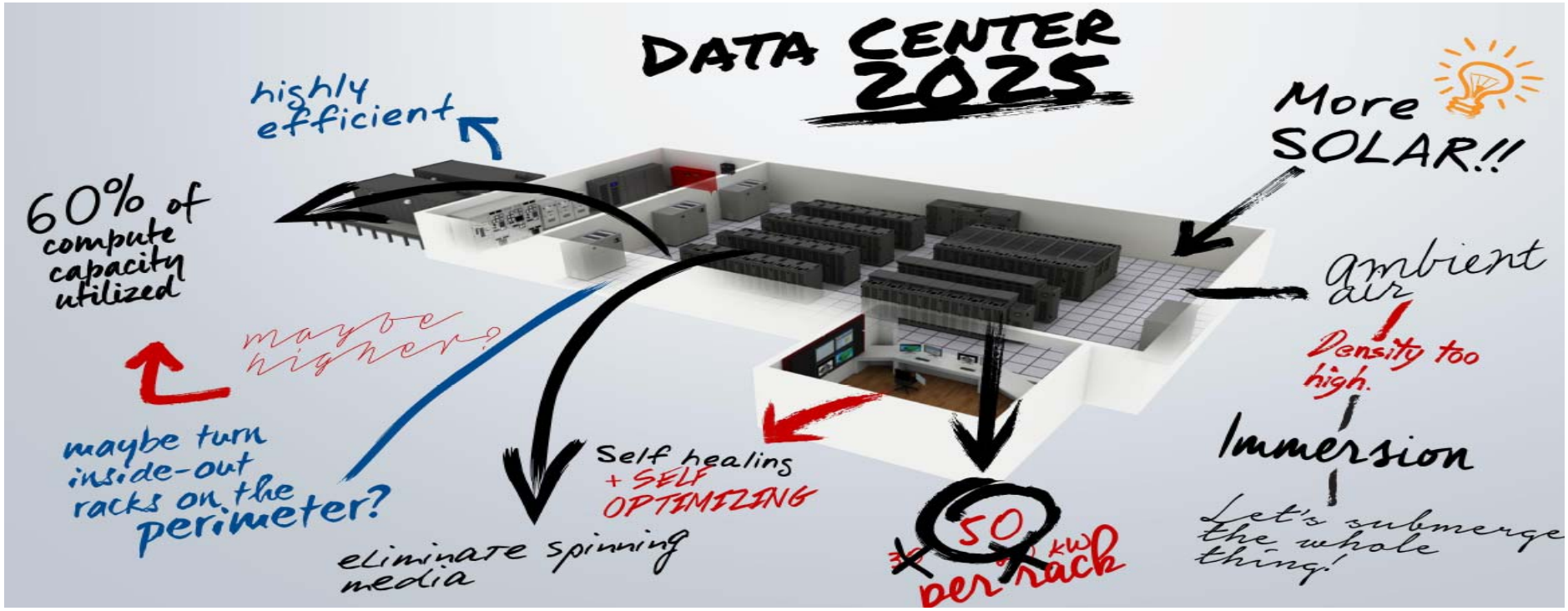

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Big Data to Data Analytic

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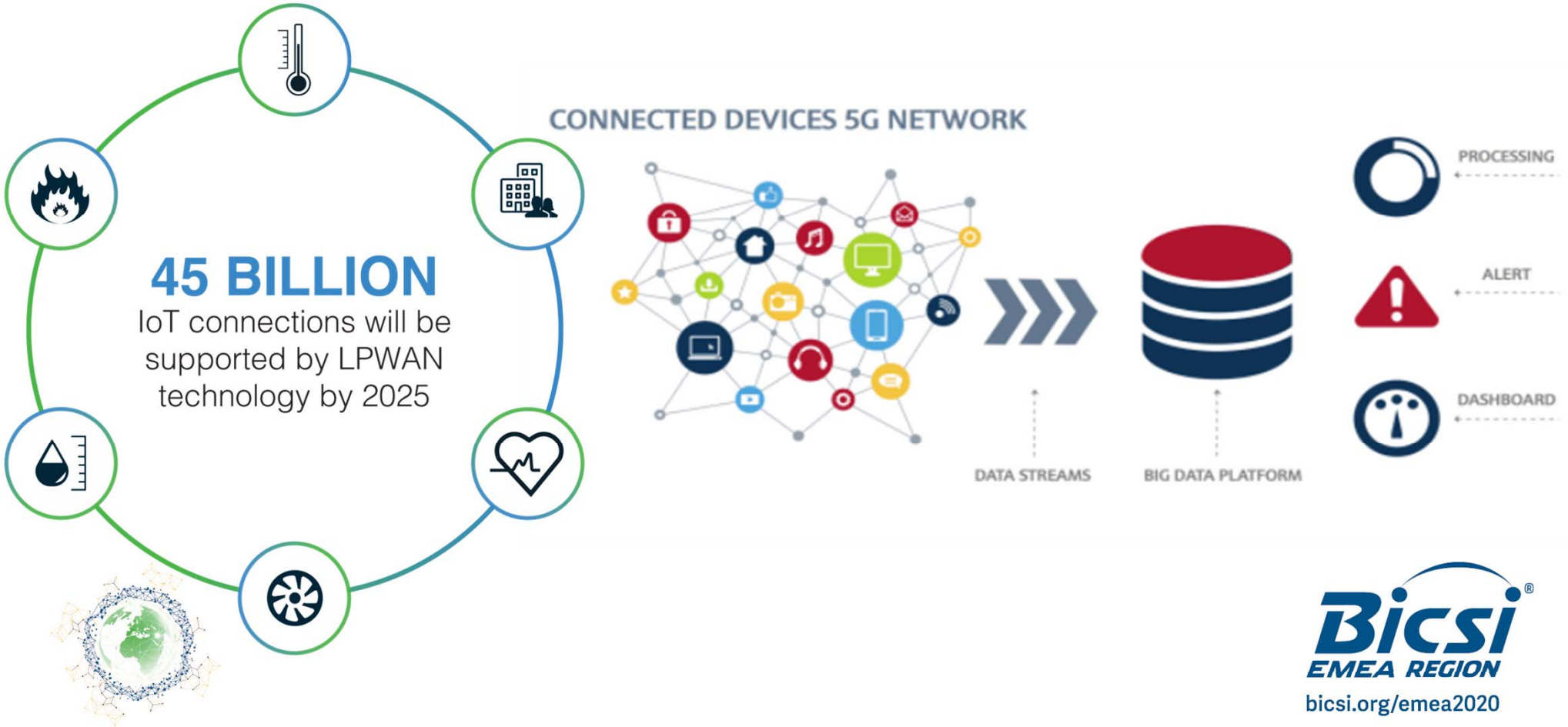

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Edgeless Computing Architecture

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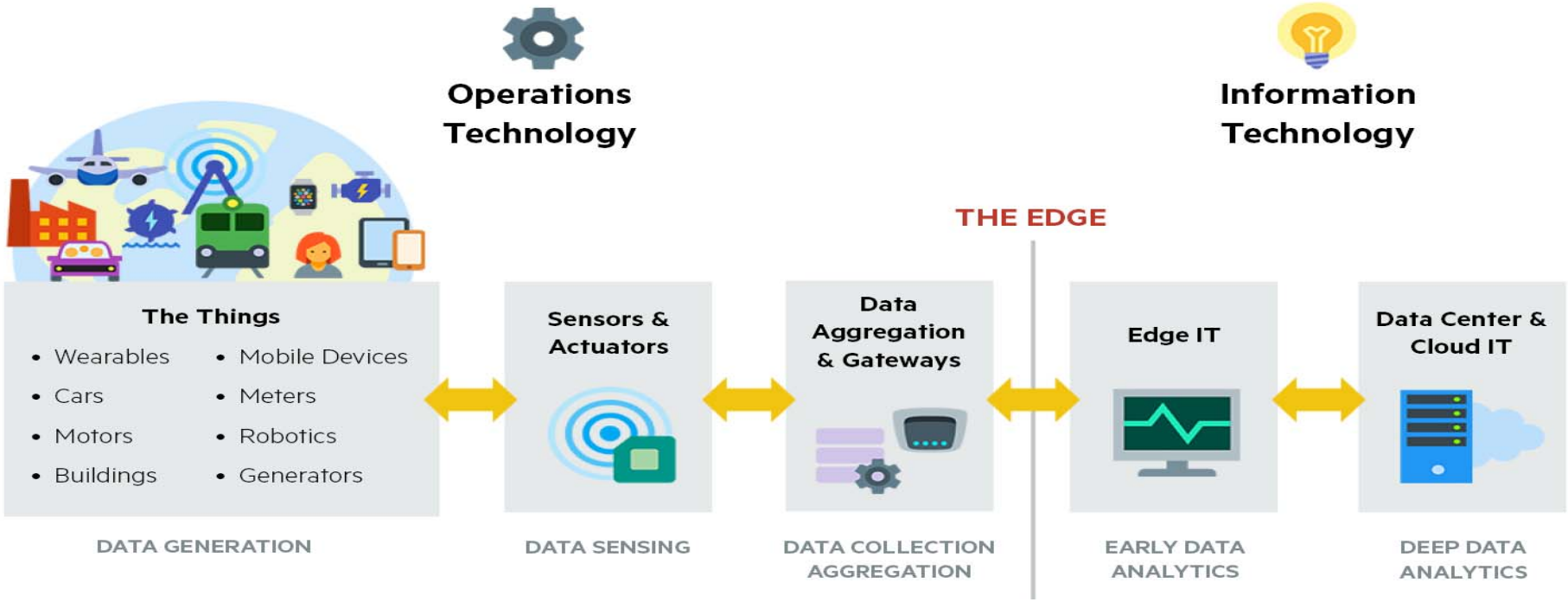

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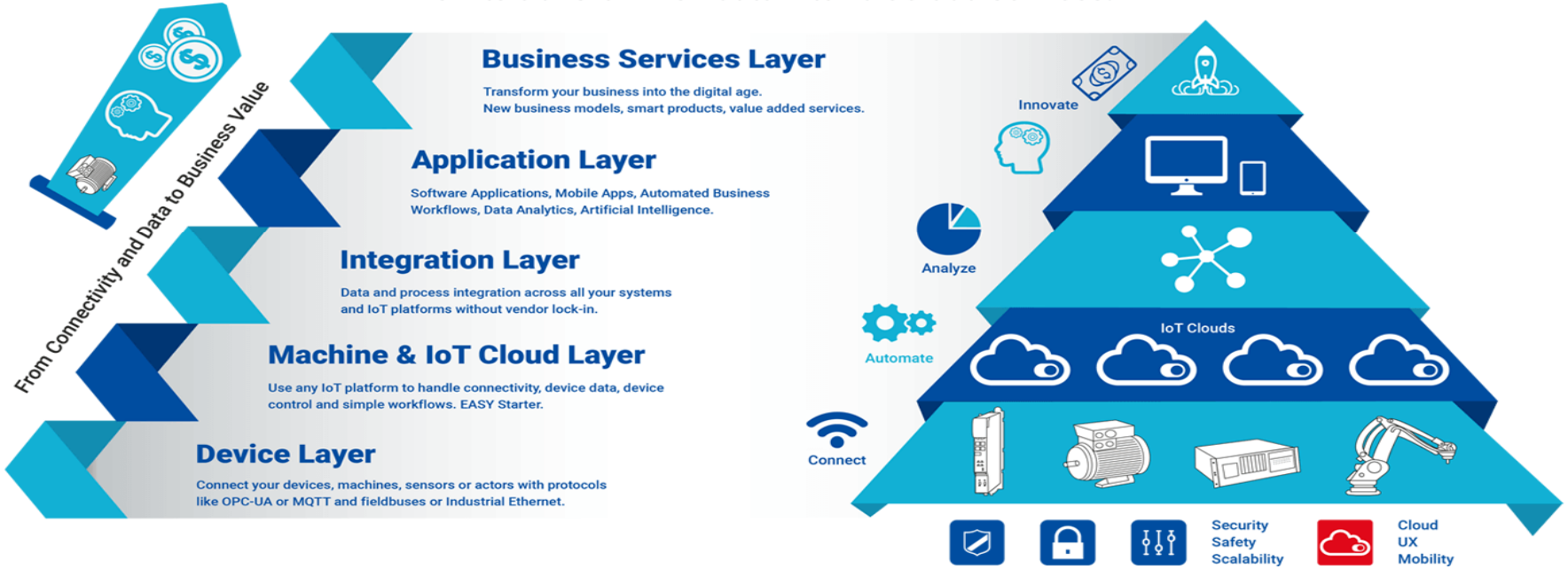
The Industrial IoT Landscape

How to transform IoT data into value-add services.



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3G to 4G Platform Economy: The Big 5

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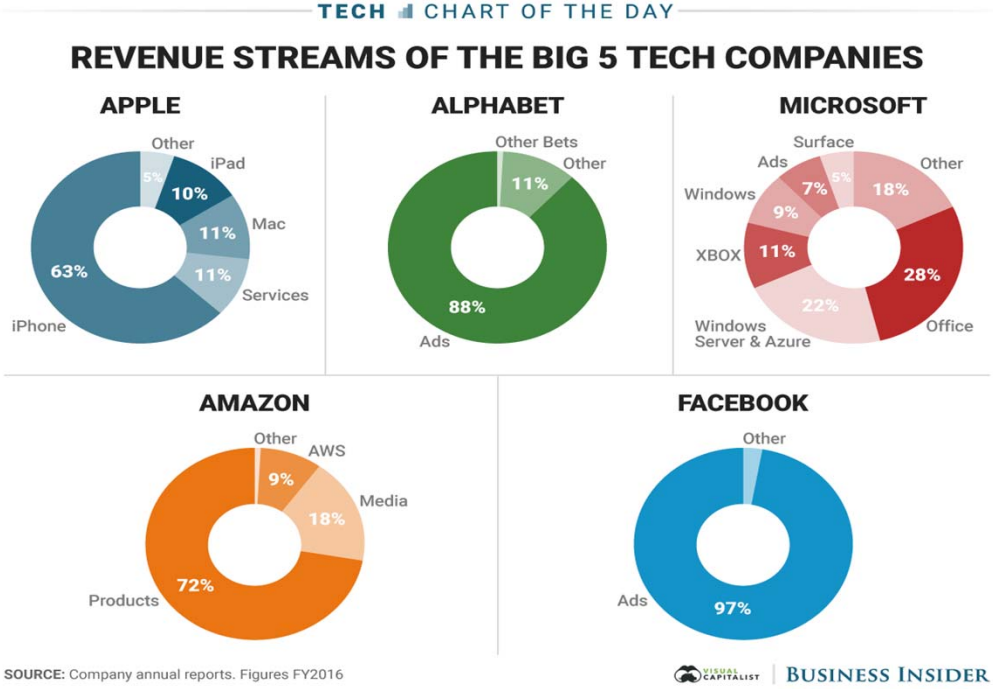
Google

Microsoft

amazon



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Super Unicorn (4G)

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What is in 5G moving?

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Autonomous Vehicle Data Connectivity

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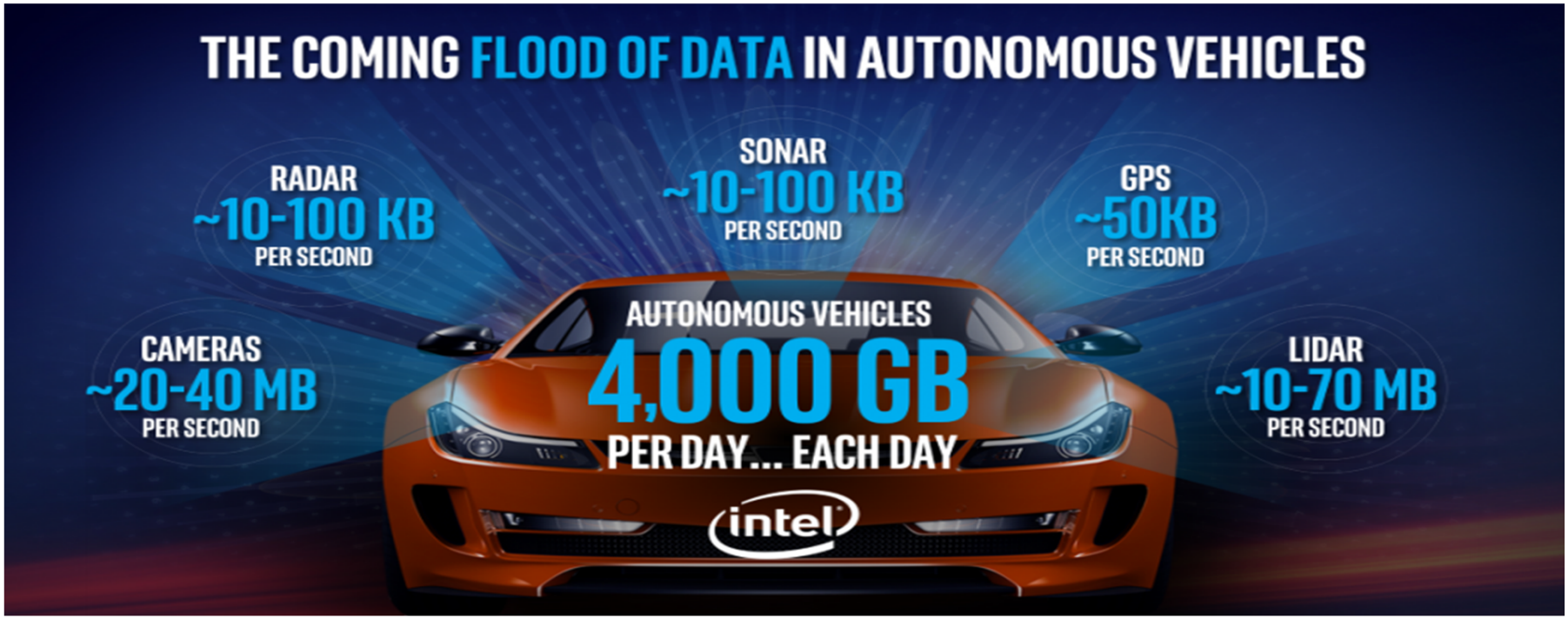

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Cellular Vehicle-to-Everything (C-V2X)

Attributes of 5G – including network slicing and low latency – will make safe public transport using autonomous vehicles a reality

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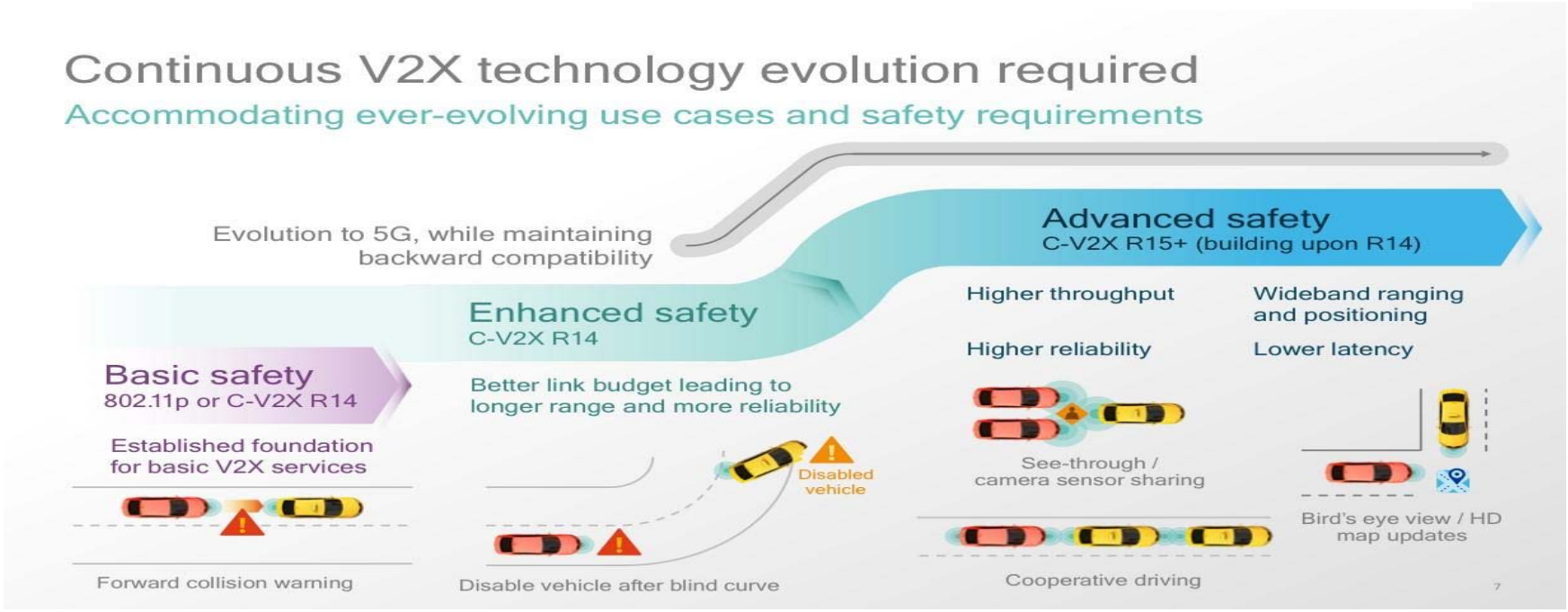

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Cellular Vehicle-to-Everything (C-V2X)

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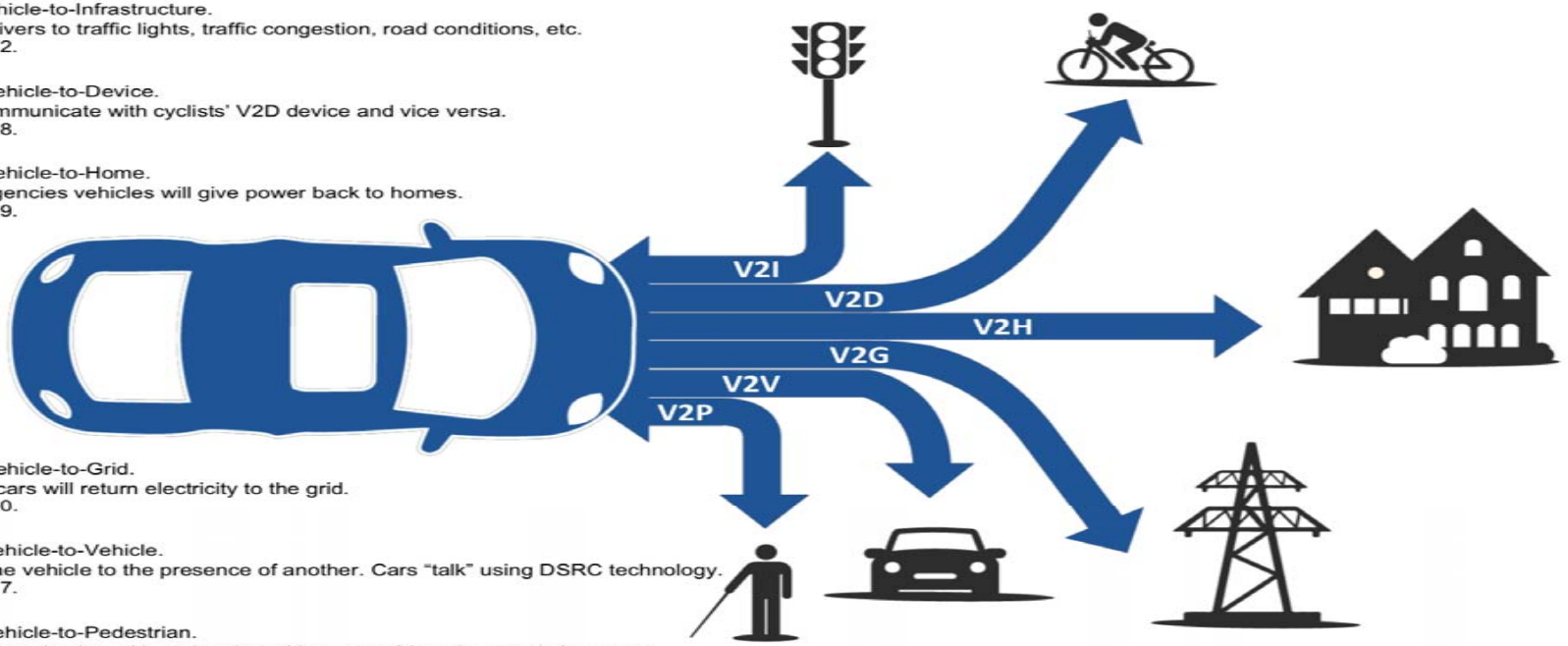
V2I - Vehicle-to-Infrastructure.
Alerts drivers to traffic lights, traffic congestion, road conditions, etc.
Due 2022.

V2D - Vehicle-to-Device.
Cars communicate with cyclists' V2D device and vice versa.
Due 2018.

V2H - Vehicle-to-Home.
In emergencies vehicles will give power back to homes.
Due 2019.



V2G - Vehicle-to-Grid.
Electric cars will return electricity to the grid.
Due 2020.

V2V - Vehicle-to-Vehicle.
Alerts one vehicle to the presence of another. Cars "talk" using DSRC technology.
Due 2017.

V2P - Vehicle-to-Pedestrian.
Car communication with pedestrian with approaching alerts and vice versa.
Due 2018.

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What is in 5G moving: Intel Case Study

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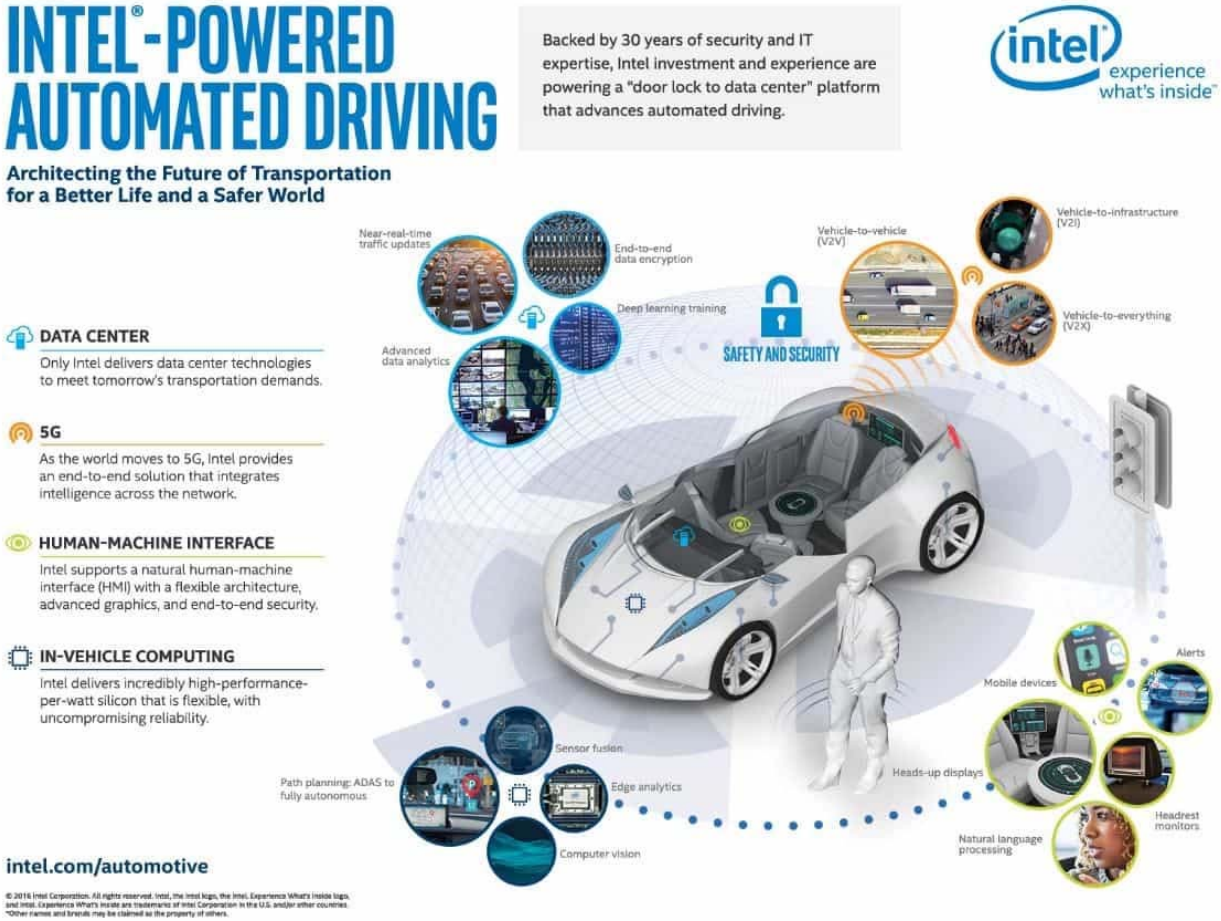
Intel Chip Chat



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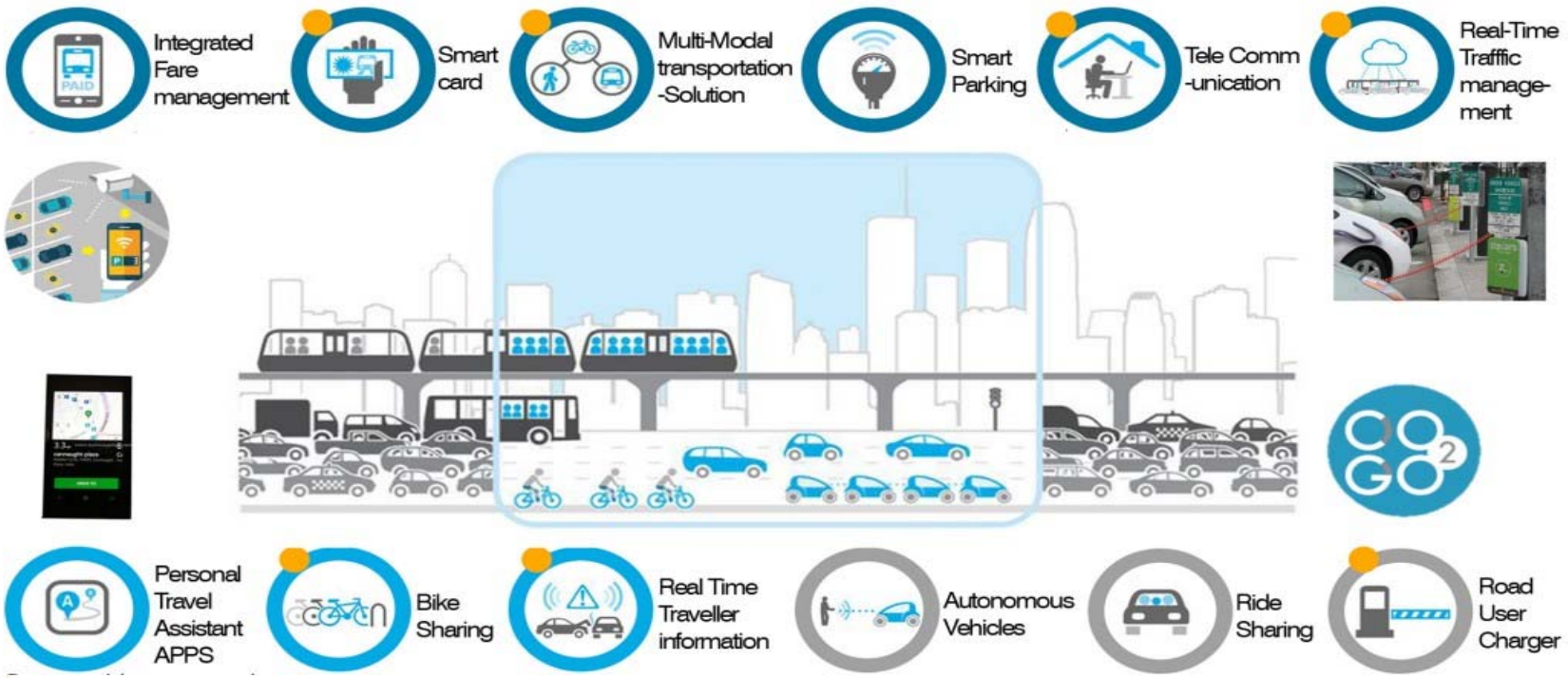
Smart Mobility Technology



Edgeless Connectivity

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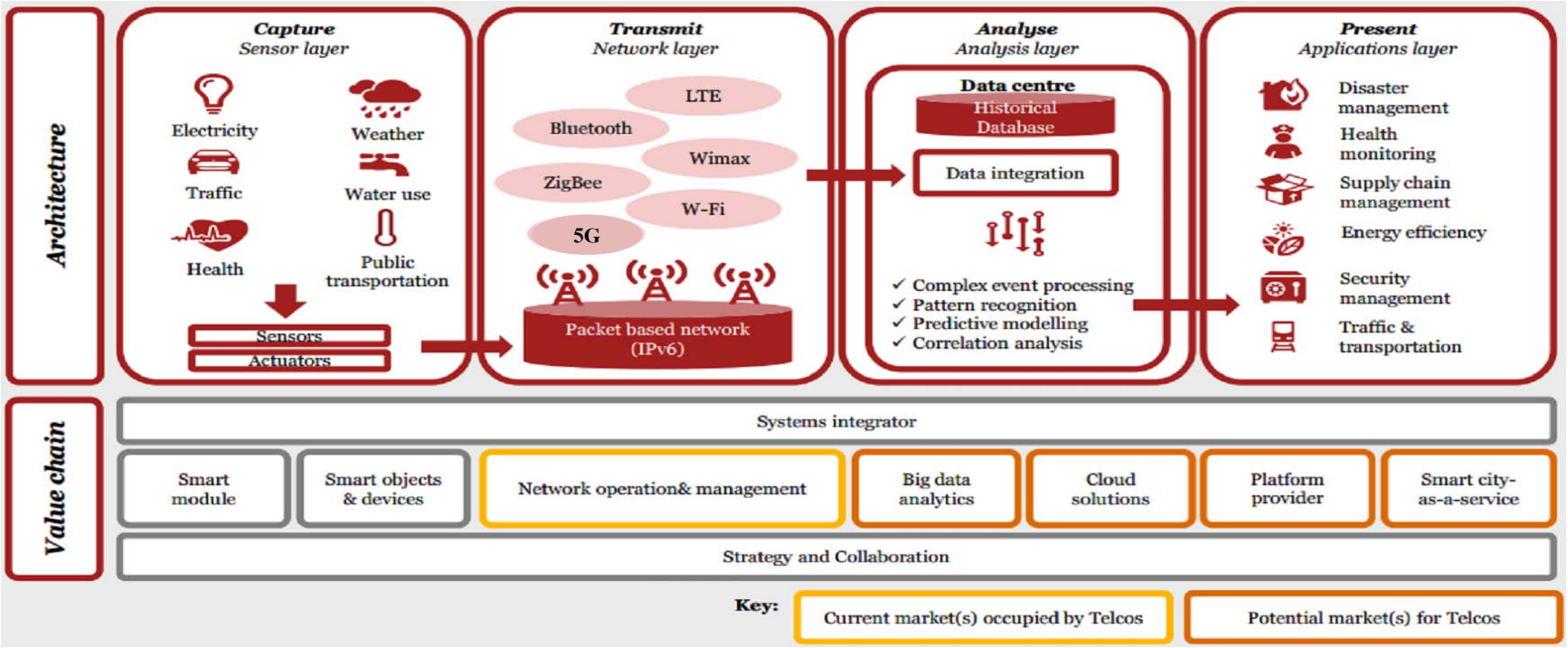

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Smart City Connectivity

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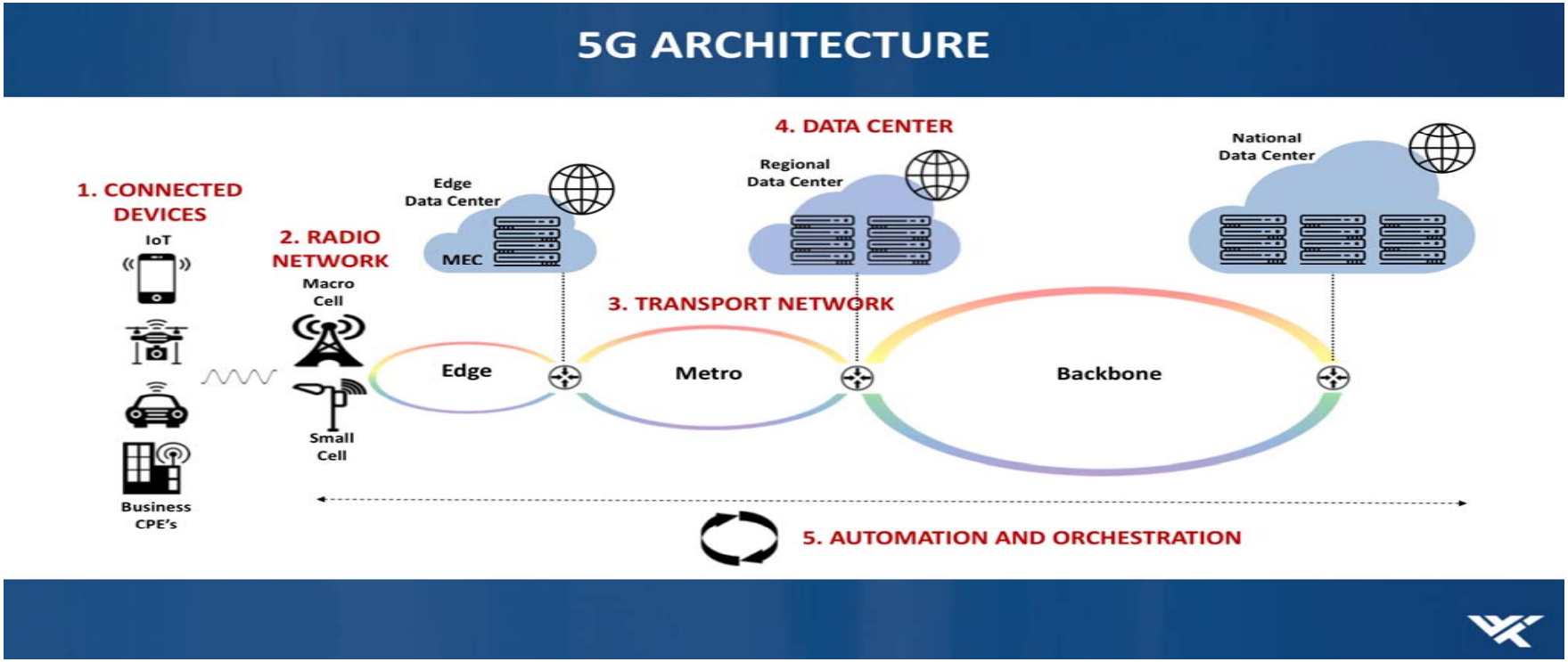
5G and Data Center Inter City Architecture



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