5G Era
Evolution of advanced wireless connectivity

By Peerapol Chatanantavej
VP – Device Portfolio and Device Expert
dtac TriNet Co., Ltd.
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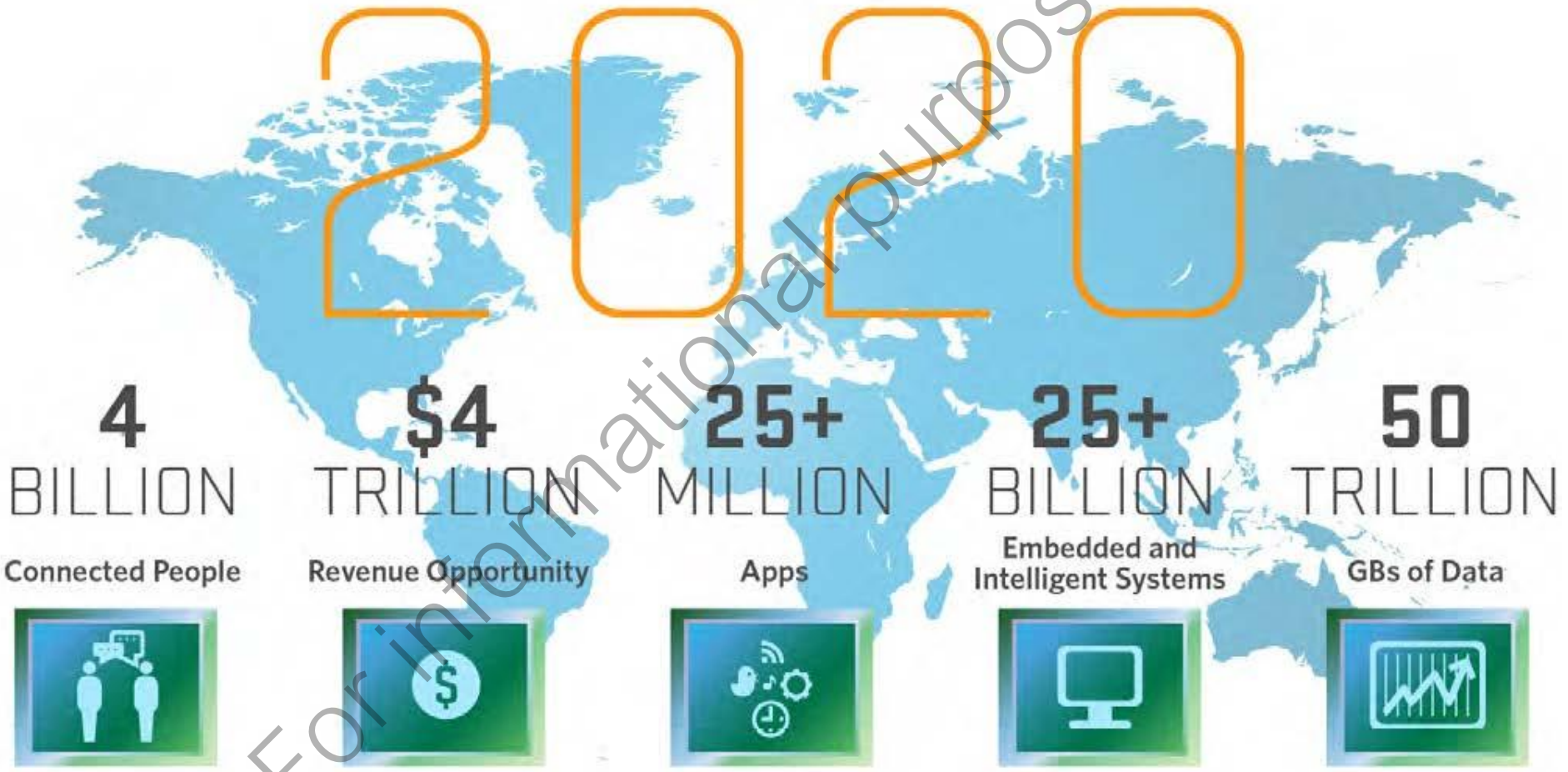
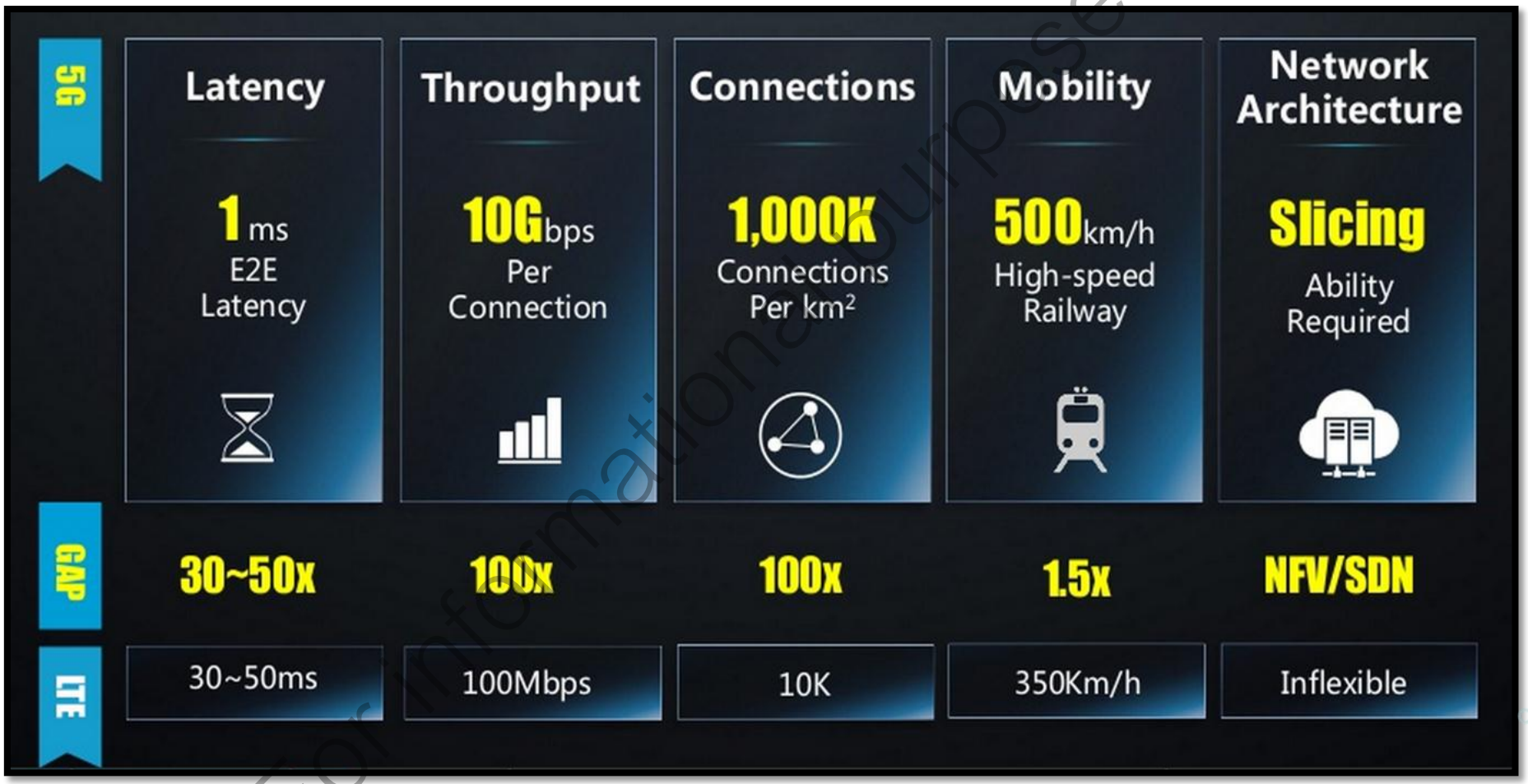
Evolution from Analog to LTE

An explosion of connected device, bandwidth never enough



Source: Mario Morales, IDC

Jump to the most advanced connectivity



5G – A unifying connectivity fabric

5G

Enhanced Mobile Broadband

- Extreme data rates
- Extreme capacity
- Deep awareness

Mobile devices

Networking

Mission-critical services

- Ultra-low latency
- Ultra-high reliability
- Extreme User Mobility
- Strong security

Automotive

Robotics

Health

Massive Internet of Things

- Ultra-low complexity
- Ultra-low energy
- Deep coverage
- Ultra-high density

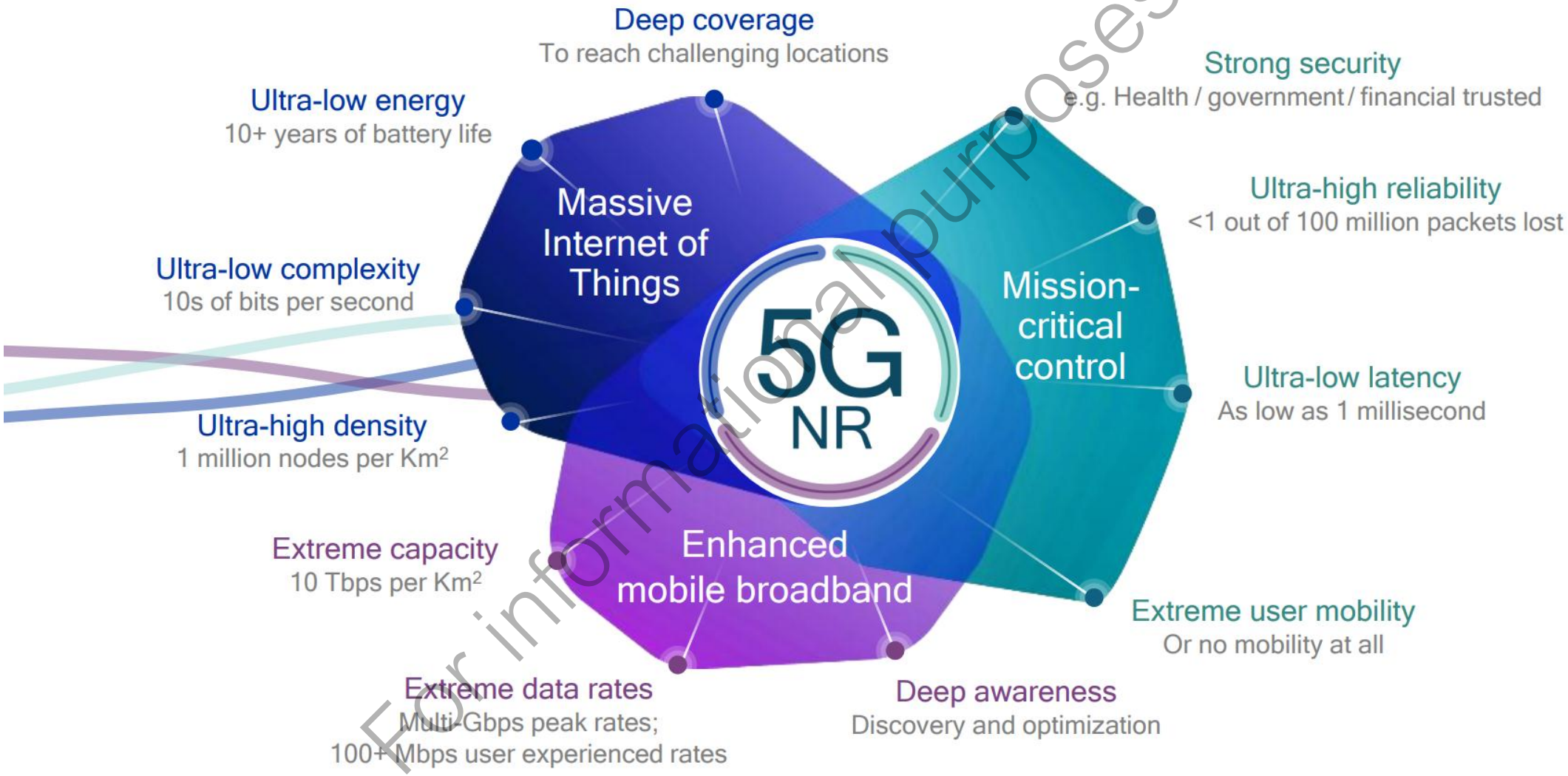
Wearables

Smart cities

Smart homes

Unified design for all spectrum types and bands from below 1GHz to mmWave

Scaling across diverse services and devices



Coming more devices with IoT

Vehicle,asset,person & pet monitoring & controlling

Agriculture automation

Energy consumption

Security & surveillance

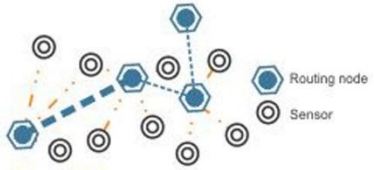
Building managment

Embedded

Mobile

Internet of things

Everyday things get connected for smarter tomorrow



M2M & wireless sensor network

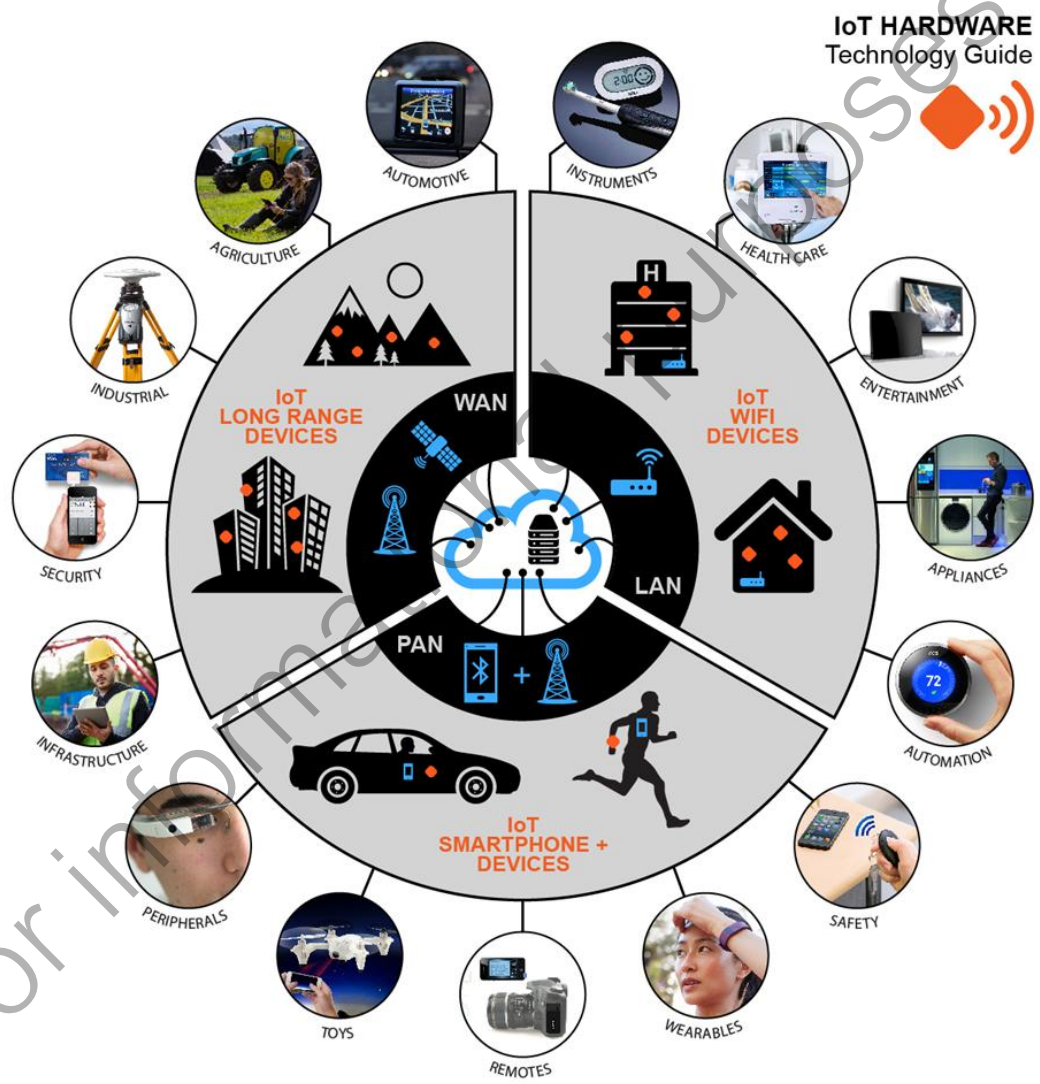
Everyday things

Smart homes & cities

Telemedicine & helthcare

eSIM enable IoT to 5G era

5G – IoT – Connected Life



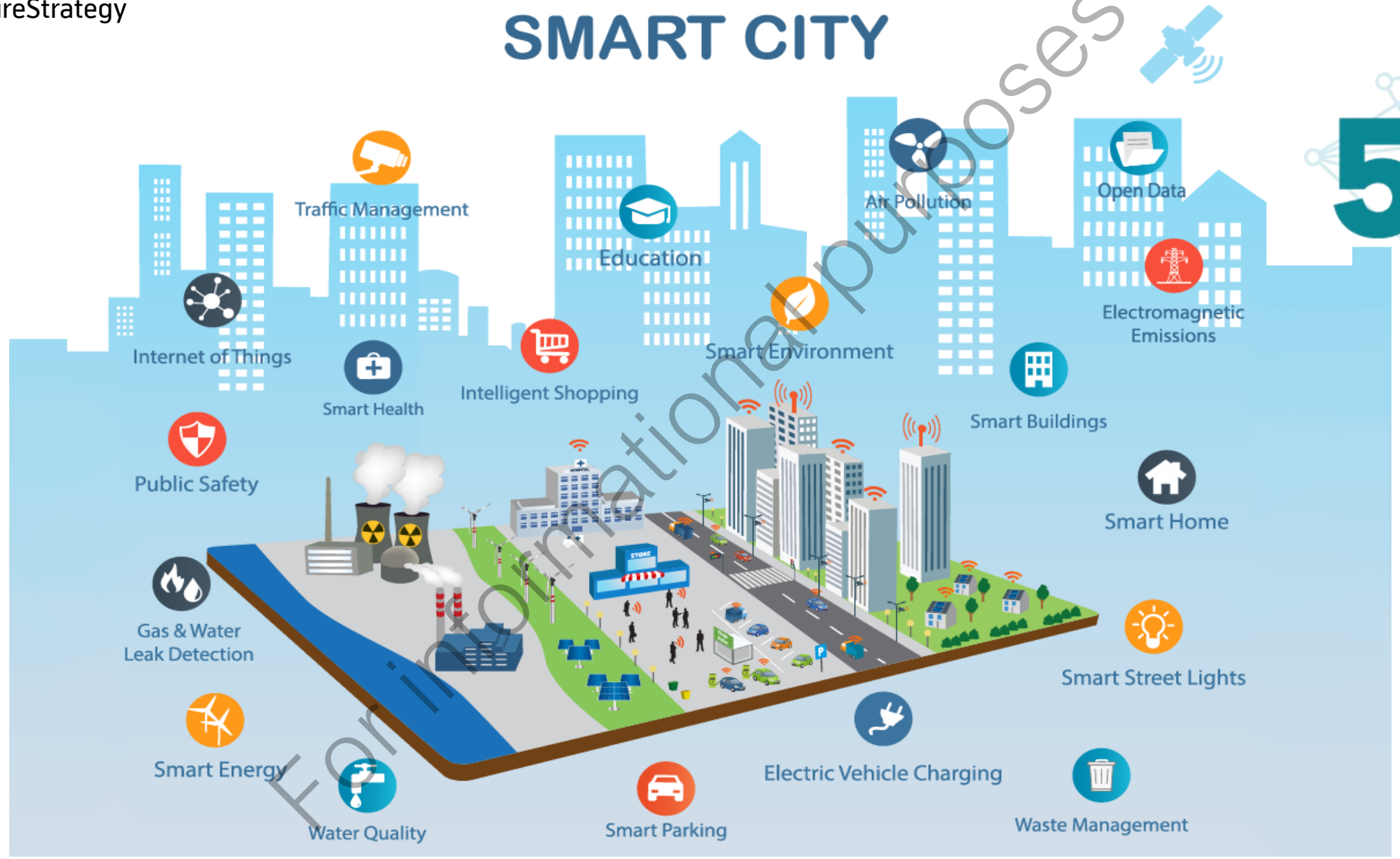
IoT Units Installed Base by Category (Millions of Units)

Category	2016	2017	2018	2020
Consumer	3,963.0	5,244.3	7,036.3	12,863.0
Business: Cross-Industry	1,102.1	1,501.0	2,132.6	4,381.4
Business: Vertical-Specific	1,316.6	1,635.4	2,027.7	3,171.0
Grand Total	**6,381.8**	**8,380.6**	**11,196.6**	**20,415.4**

Source: Gartner (January 2017)

Coming to life and community – Smart City

Source : AccentureStrategy



5G NR

5G Economic Impacts

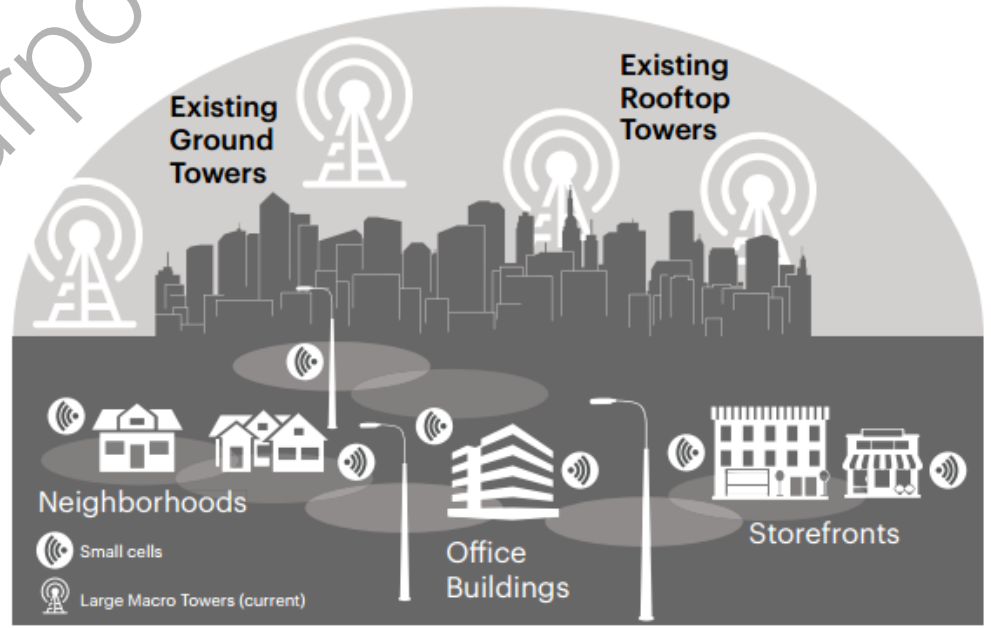
Investment $275 Billion

Jobs Created 3 Million

GDP Growth $500 Billion

Smart City Growth Will Be Accelerated by 5G

5G: Technology to Meet the Growing Demands of Smart Cities



Existing towers will provide coverage for miles, while small cells will support the increased needs of a Smart City.

Small cells could be discretely installed on lamp posts, utility poles or sides of buildings.

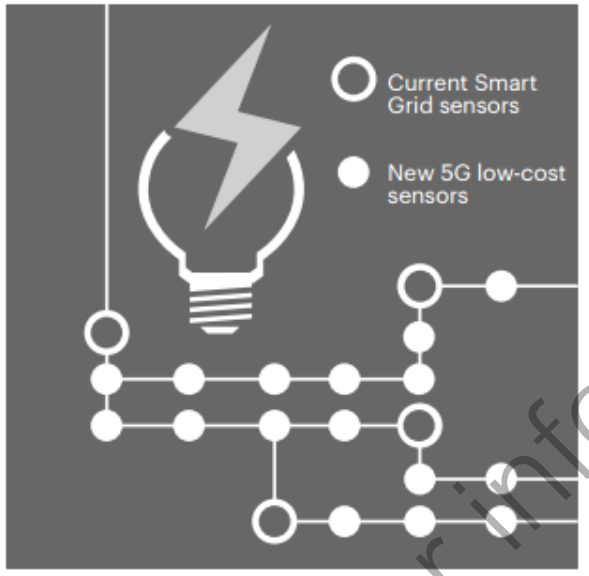
Source : AccentureStrategy

Smart City solution : Energy & Utilities

Source : AccentureStrategy

Smart Energy Grid

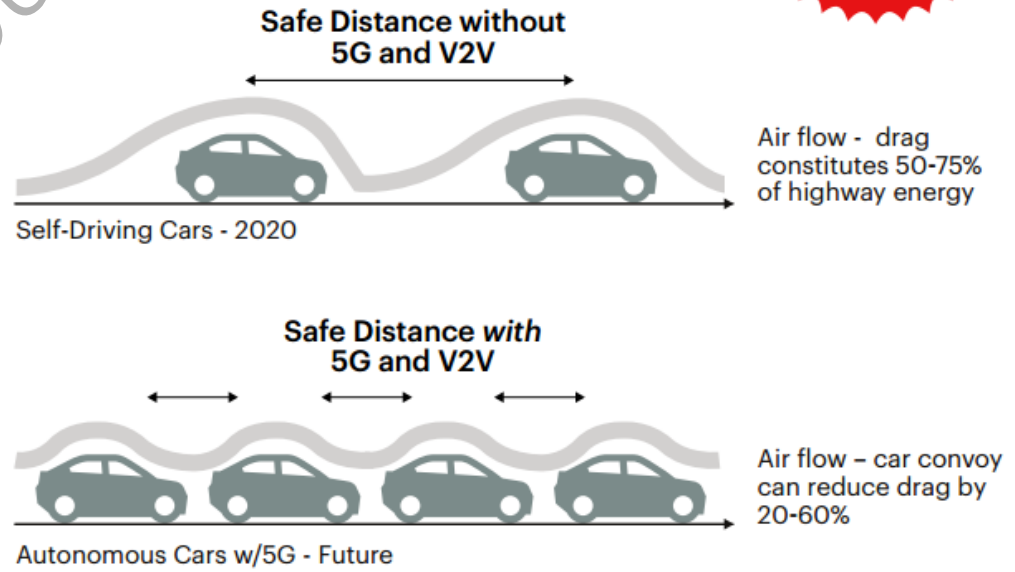
$1.4* Million Savings



5G enables additional low-cost connections to provide comprehensive coverage of the energy grid.

Smart Car Convoys

Fuel Savings of 25%[9]



5G vehicle-to-vehicle communications (V2V) could allow lead cars to communicate hazards to following cars, increasing reaction time and safely allowing car convoys.

Smart City solution : Public Safety & Transportation

Source : AccentureStrategy

Gun Shot Detection

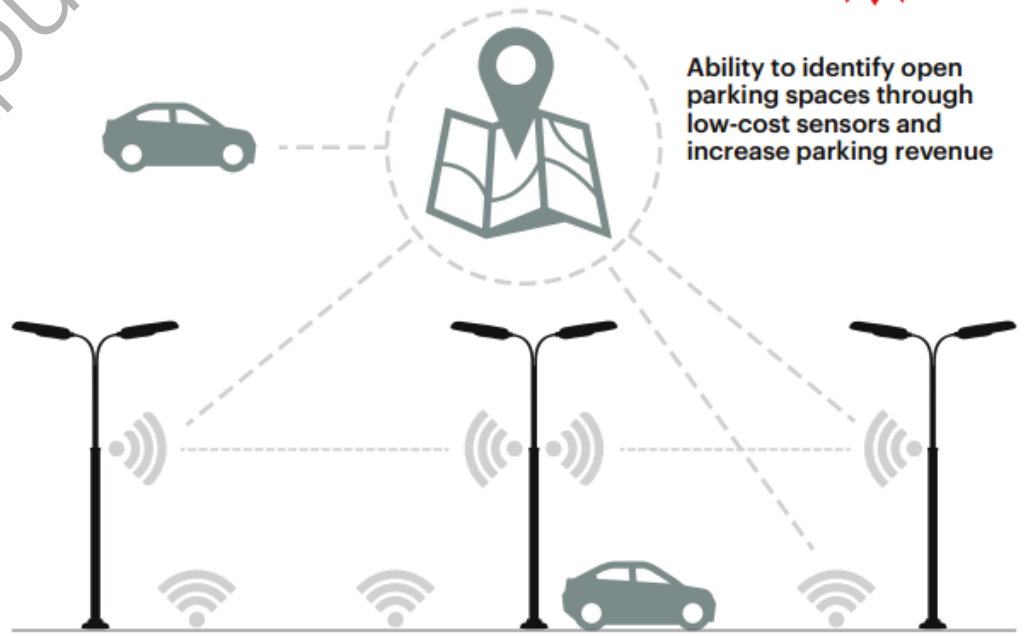
Reducing Gun Crime By Up To 50%*

Real-time monitoring of gunshots provides police and first reponders with exact location, speeding up response time.

Smart Parking + Metering

↑27% Parking Revenue

Ability to identify open parking spaces through low-cost sensors and increase parking revenue



Reduce time to find parking and congestion benefits all commuters and encourages traffic to commercial areas, boosting economic activity.

End

THANK YOU