

A woman wearing safety glasses and a dark shirt is working on a large, blue industrial machine. The machine has several green lights on top and is emitting a blue glow. The background is dark and industrial.

# Evolución Tecnológica de Redes Móviles

## Y su aporte para el crecimiento ágil de las empresas

**Daniel Martello**  
Strategic Network Evolution Manager  
South Latin America

# From copper wire to artificial intelligence



+140

Years of  
enabling  
communication

95%

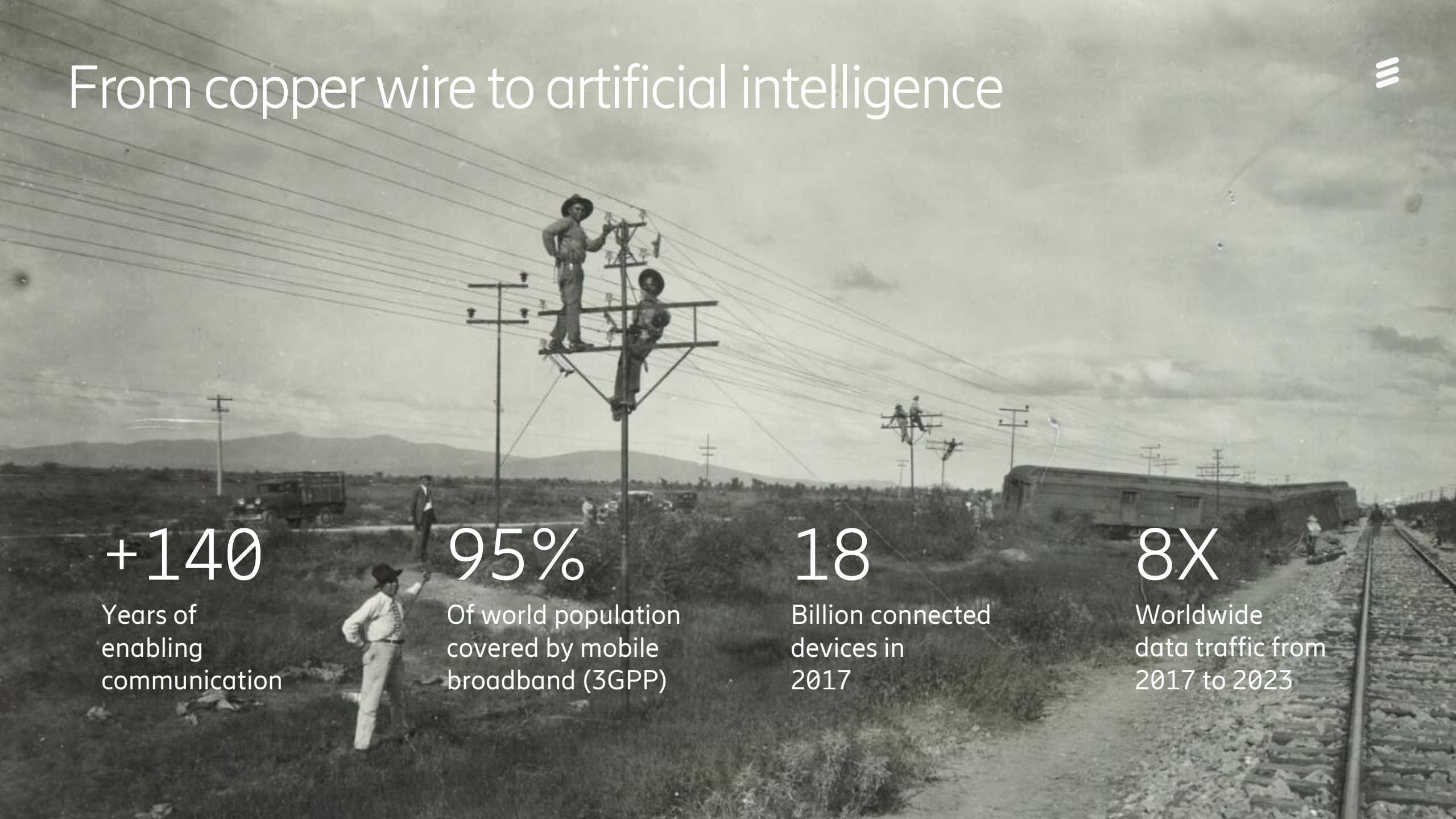
Of world population  
covered by mobile  
broadband (3GPP)

18

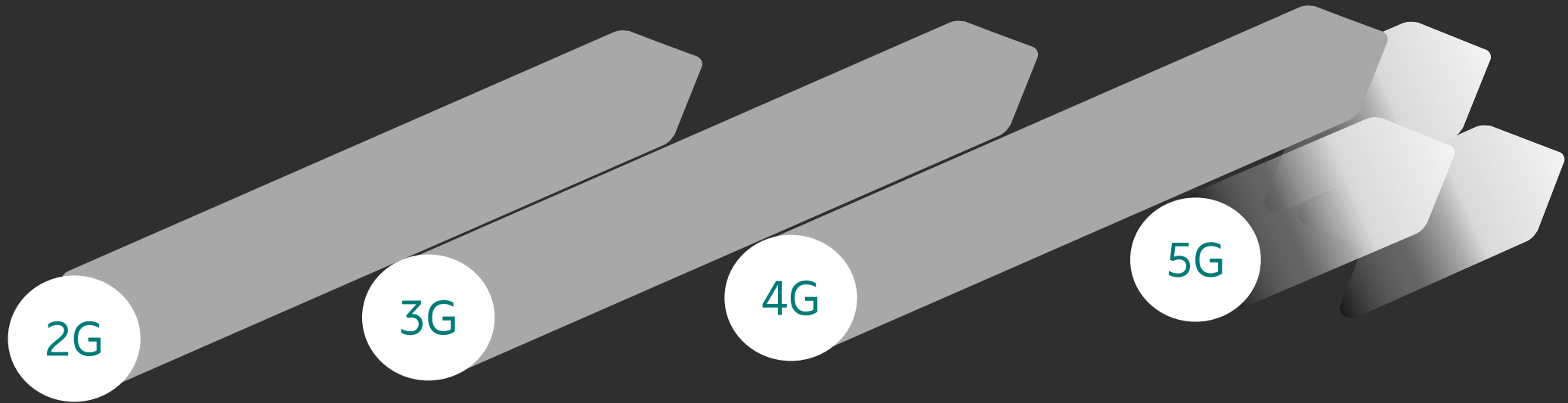
Billion connected  
devices in  
2017

8X

Worldwide  
data traffic from  
2017 to 2023



# The G evolution from voice to industry 4.0



2G

**VOICE**  
Massive mobile voice communication

3G

**BROWSING**  
Feature phones and mobile broadband introduction

4G

**VIDEO**  
Smartphones popularization and mobile data traffic exponentially increase

5G

**MULTIPLE INDUSTRIES**  
Any device can provide access to the content and enable new business opportunities across industries

# 5G is use case driven

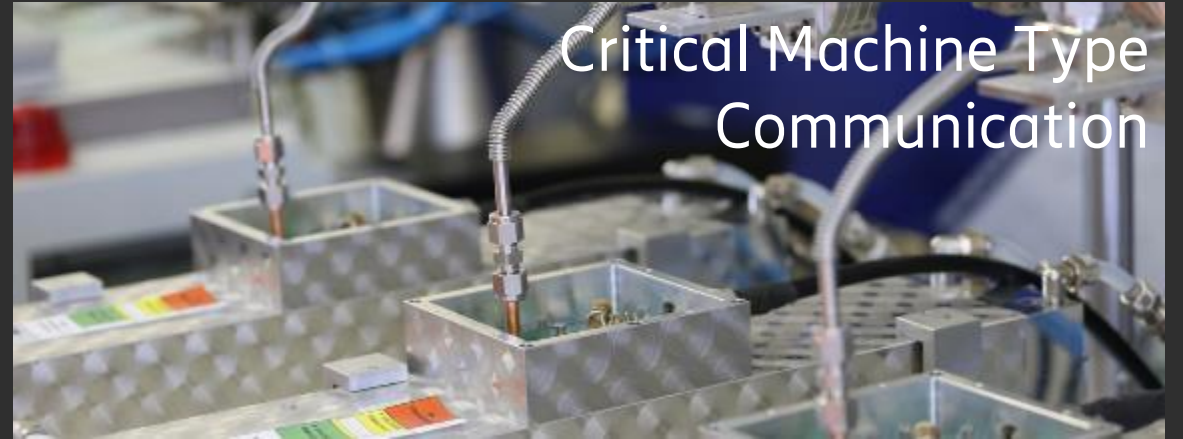


## Massive Machine Type Communication



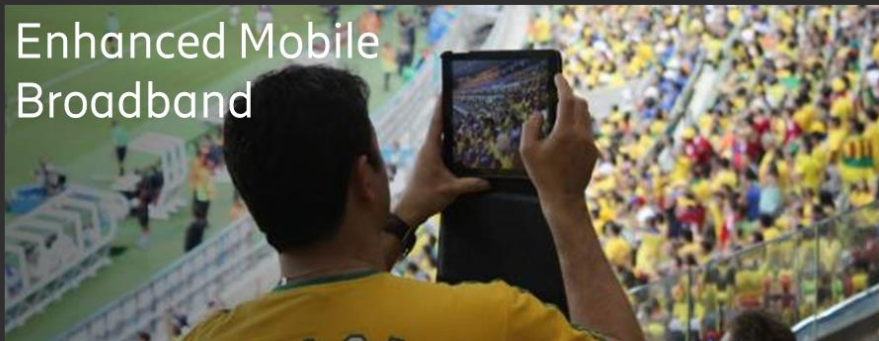
Low cost, low energy, small data volumes, massive numbers

## Critical Machine Type Communication



Ultra reliable, ultra low latency  
Very high availability

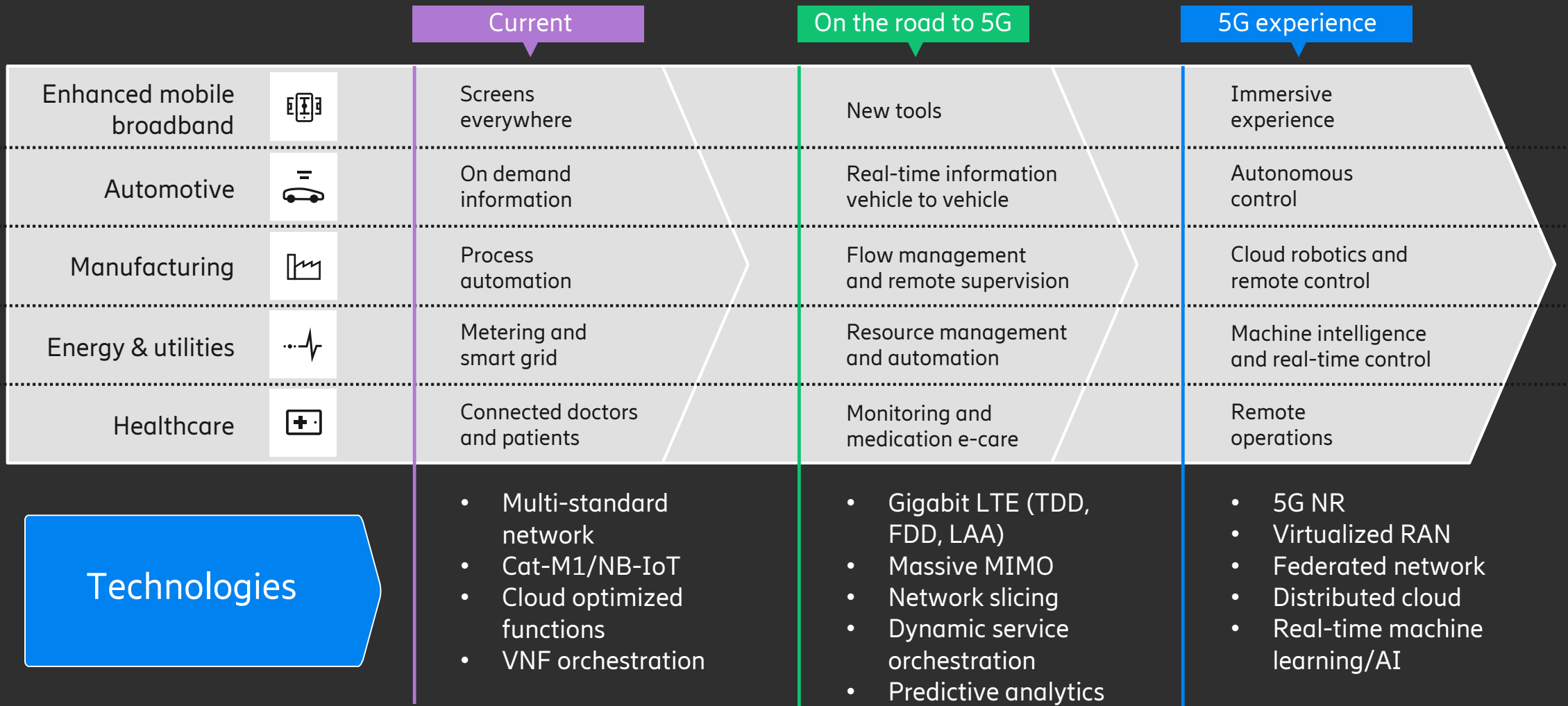
## Enhanced Mobile Broadband



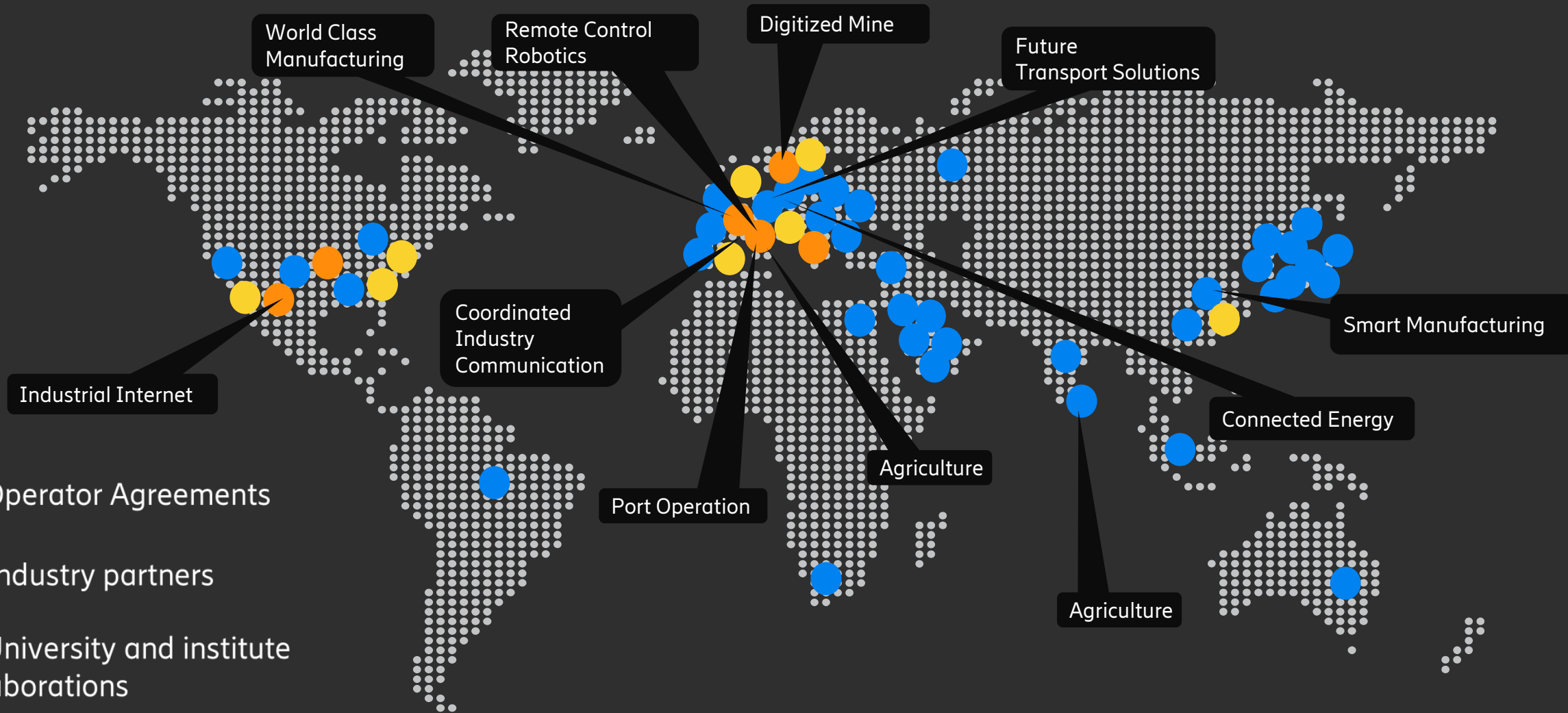
## Fixed Wireless Access



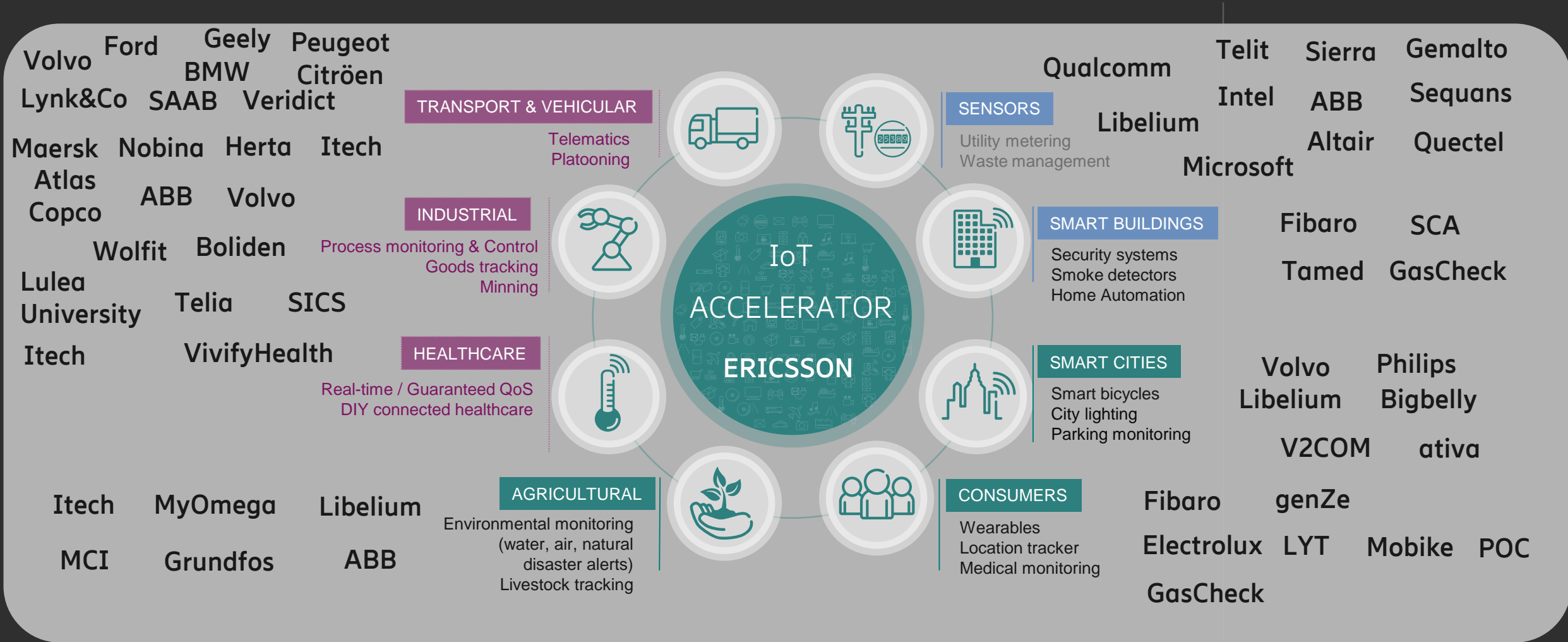
# Use case evolution with supporting technologies



# Ericsson 5G industry collaborations examples



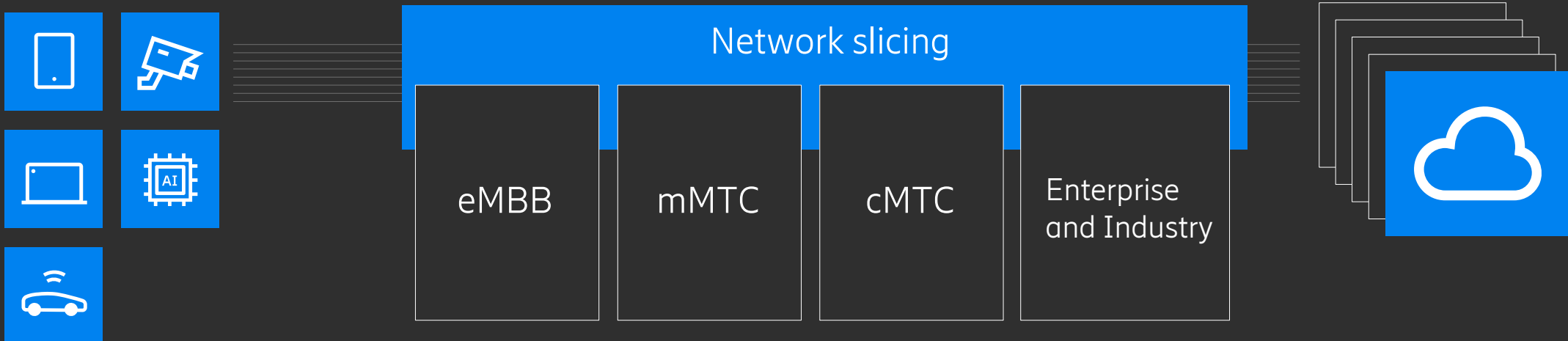
# Ericsson IoT ecosystem evolving every week



# 5G – One network for multiple industries



10-100x End-user data rates	1000x Mobile data volumes	50x Lower latency	100x More devices
Low cost Device cost reduction	5x NW energy efficiency	3x Spectral efficiency	





# Technologies that drive industry changes



## Radio evolution

- mm Wave and massive antenna technologies
- Multi-purpose, multi-characteristic radio
- Flexible spectrum assignment and utilization

## Programmable networks

- Software defined networking
- Network slicing
- Network abstraction



## Cloud technologies

- Distributed cloud and edge computing
- Micro services running on virtual containers



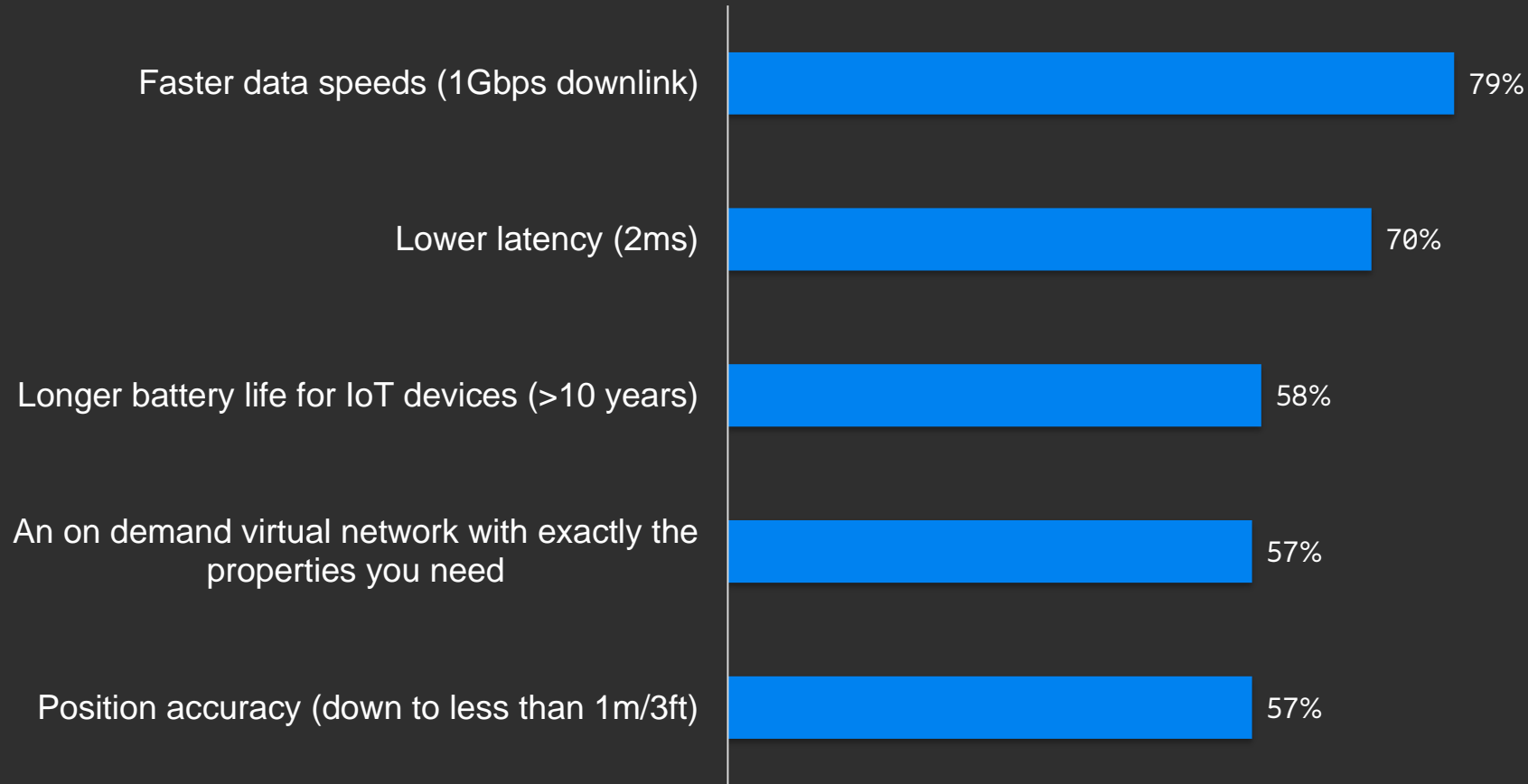
## Automation

- Model driven
- Automated life cycle management
- Autonomous systems

## Machine intelligence

- Cognitive technologies and deep learning
- Responsible machine intelligence
- Capsule networks

# 5 valuable 5G attributes businesses are prepared to pay a premium for



5

solid 5G attributes to be exploited with business model innovations

# Use cases in production by 2021, by industry sector



On average, over  
**70%**  
of companies aim to  
have use cases in  
production by 2021



Fastest scaling  
technology ever



The 4<sup>th</sup> industrial  
revolution is coming

