

Intelligent Industry. Powered by data

# 5G and Edge

## Data-driven digital transformation



5G and Edge computing will be the technologies that catalyse the data-driven transformation towards Intelligent Industry. They will change the way everyone – companies, governments and consumers – interacts and does business, leading to ground-breaking innovations and services.

Across all sectors industrial companies, including communications service providers (CSPs) are transforming themselves digitally, using data to unlock efficiency and innovation. This means that being able to connect devices, collect and exploit this data in real time is becoming business critical. And CSPs will be the backbone of this data-driven transformation.

### The potential of 5G

5G is more than just a faster technology, or an iteration of 4G. It's a new global cellular communications standard, that is bringing a step change in connectivity for the Internet of Things (IoT) and industries. It brings higher speeds and capacity, lower latency, and more reliability – a multipurpose network of unprecedented flexibility. Because 5G is software-driven, its infrastructure is highly agile, adaptable and scalable.

Companies across industries will be able to use this to adopt innovative new use cases, and build entirely new services and business models. For CSPs 5G enables one future-proof infrastructure that can host these different use cases, and being able to deploy bespoke network infrastructures to meet the different connectivity requirements of consumers, as well as different industry sectors – and they can be changed, and upgraded fast and cost-effectively. And being software-driven, 5G infrastructure is highly agile with zero-touch orchestration.

### 5G AND EDGE BENEFITS

- Continuous data flows make it easier to create and optimize value through the useful life of an asset or equipment
- Increased automation and more autonomous operations, thanks to data-driven architectures, robotics, AI and machine learning at scale
- Datasets, proofs of concepts and use cases for training models and algorithms
- Creation of new revenue streams, with monetization of internal and external data and creation of new services and experiences
- Smarter decisions: from activation of accurate, deep and timely data analysis
- Zero distance between companies and their customers, improving customer satisfaction
- Enhanced reliability, ultra-low latency and enhanced security in real time data collection and processing, paving the way for connected and autonomous vehicles and new mobility services

Capgemini will help you seize the opportunities and challenges that are coming with this 5G and Edge computing revolution.

## The journey to the Edge

Edge computing transforms the way connected devices and objects are designed and built. Together with 5G, it's the foundation of data-driven transformation across all industries.

The computing of data in connected devices can be done in the device itself, or via a mass infrastructure that enables many different devices to be connected, and their data processed, compared and correlated together, at incredible speed.

With any product or asset can become smart instantly, telco Edge infrastructure is also both a network optimization lever for CSPs, and an opportunity to offer distributed cloud services to enterprise players and third-party application providers. With computing power much closer to where the data is generated, there will be almost zero latency in connection and processing, offering a key monetization opportunity for CSPs.

Edge is a radically enabling technology that has limitless applications – most of them as yet unimagined. It will be the driver of much more immersive and interactive services and experiences. The true potential of Edge computing will become clearer the more it is deployed, but companies that adopt Edge early, and CSPs that can support them, will be in the innovation driving seat.



## Capgemini – pioneering Intelligent Industry

Capgemini knows the future of industry is intelligent – because we are making it. We have technology consulting and deep engineering expertise, which means we know the technology and how to apply it. We help clients engineer 5G telecom equipment, design and build trains and planes; we help life sciences companies launch new products and patient-centric services, and we help manufacturing clients pursue operations excellence.

We have the engineering and IT capabilities to implement 5G and Edge at scale, so you are ready to take advantage of these technologies. And we will help you strategize, build, transform and deliver business value with 5G and Edge computing, through our six key service offerings:

**Plan & Strategy – Digital Transformation:** we help clients identify 5G and Edge-based use cases tailored to vertical's needs, define business case and build a digital strategy, architecture & transformation roadmap around these.

**5G Network Infrastructure:** we help clients navigate the complex network and technology ecosystem, design and build an end-to-end network, IT and enterprise architecture blueprint and roadmap.

**Strategic Service Platforms:** we help clients design and develop service platforms covering solution frameworks for applications and services, and end-to-end Edge computing / Cloud

**Use Cases & Applications:** we help clients design, develop, set-up, test, and ensure return on investment of specific 5G and Edge use cases and applications (IoT, Edge, Cloud)

**Ecosystem Orchestration & Integration:** we help clients integrate and test end-to-end solutions, to ensure convergence of network and IT based on industry specific process and operations expertise – coordinating integration of leading partners and open source solutions

**5G End-to-end Business & Operational Services:** we help clients transform operational processes; run and manage private / public/ hybrid network / Cloud solutions, monitor use cases and business processes performance, ensure security, quality of service, service assurance and resilience.

Our objective is help you build and monetize your applications, help you make the right investment choices, and critically, activate value on top of your investments.

## WHY CAPGEMINI?

**Ecosystem orchestration:** Capgemini is embedded in the vibrant 5G and Edge ecosystem. We are the single player that can orchestrate the design, transformation, integration and operation of network, IT and migration to Cloud, with our broad capabilities and set of partnerships.

**End-to-end expertise:** From boardroom to shop floor, we have the business, design, technology, systems integration and engineering expertise to bridge the gap between industry needs and connectivity. We develop industry-specific use cases and solutions to make the most of 5G and Edge, using our expertise in processes, IT, OT, networks and tailored services.

**Scale and assets:** In cloud, IT and analytics, to name a few areas, we have unrivalled scale. And we have the assets for accelerated and cost-effective innovation: speeded-up product and service development, that uses our software frameworks, 5G labs and reusable microservices library.

Capgemini provides the depth and breadth of IT and network expertise you need, to design and deploy your 5G & Edge solution fast, cost efficiently and at scale.

● **Get in touch** to discuss how 5G and Edge could transform your business.