

Intelligent Industry. Powered by data

THE BACKBONE OF A DATA-DRIVEN FUTURE



5G and Edge will be a major lever for business transformation in many, if not all, industries. It opens up seamless connectivity that will drastically change the way products and services are designed and developed and the way technology is consumed across various industry sectors.

To put this into context, let's rewind the clock to the early 2000s. The internet was being widely used on desktop computers, but connectivity was very slow. Then along came iPhones and Android devices, promising internet access from anywhere. However, the introduction of the smartphone did not transform the way people used the internet overnight. It gradually enabled people to access all applications through technological innovation, consequently, shifting use from desktop applications to mobile. It was the gradual growth of the app ecosystem and the simultaneous increase in smartphone processing power and connection speed that really made the smartphone a game changer. Once developers and designers understood what they could really do with technology, it exploded into what we have today – a technology that we rely on for most aspects of our daily lives – from consuming offline music, to attending a live meeting anywhere in the world.

5G and Edge is that significant. The processing power is there and we are currently building the components and the infrastructure – what's next is for the creative, mathematical, and business minds to turn their attention to unleashing its potential.



READY FOR LAUNCH

The differentiation with 5G and Edge is that the convergence of technology and connectivity comes right out of the box. Massive connectivity and throughputs with lower latencies, plus huge processing power, are the baseline.

What makes 5G and Edge exponentially potent is that they can be applied to an almost infinite range of devices – from the smallest sensor, to an entire vehicle, ship, building, or city.

Some use cases that have already been identified as attractive to businesses include, shop floor operations, real-time analytics, video surveillance and control of remote production lines, and remote maintenance and training through AR and VR. In supply chain, they include self-triggering orders based on inventory levels, virtual testing of parts from suppliers, and remote monitoring of shipment conditions such as temperature and humidity during transit. WHAT MAKES 5G AND EDGE EXPONENTIALLY POTENT ARE THAT THEY CAN BE APPLIED TO AN ALMOST INFINITE RANGE OF DEVICES



A REVOLUTION FOR COMMUNICATIONS SERVICES PROVIDERS

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Communications services providers (CSPs) will be the backbone of the data-driven revolution that 5G and Edge will unleash.

The infrastructure for 5G and Edge will be a world away from a "dumb pipe" or static network. CSPs will be able to deploy bespoke network infrastructures to exactly match the requirements of individual customers – and they can be changed, scaled, and upgraded fast and cost-effectively. It's essentially future-proof and capable of anything. And being software-driven, 5G infrastructure is highly agile with zero-touch orchestration.

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.

Edge provides an extra layer on top of the connectivity infrastructure where incredible new innovations can happen – whether it's in industrial Internet of Things (IoT), automotive, consumer products, transport or logistics. It's just a question of shaping CSPs' investment strategy, how to navigate a new and complex technology ecosystem, and making the right choices and right investments. And then activating value on top of those network investments.

EXPERIENCE AND INSIGHT FOR THE FUTURE

The stage is set for 5G and Edge. According to Capgemini research, a majority of business leaders see 5G as essential to their digital transformations because of factors including guaranteed quality of service, enhanced security, low latency and massive machine-type communications.¹ The future of industry is intelligent. We have technology consulting and deep engineering expertise, which means we know the technology and how to apply it. We help clients design and build trains and planes. We help life sciences companies launch new products and patient-centric. We help manufacturing clients pursue operations excellence. We have the engineering and IT capabilities to implement 5G and Edge at scale, to take advantage of Intelligent Industry.



About Capgemini

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