

Private 5G as a Reinvention Platform

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Thursday 5th
October 2023

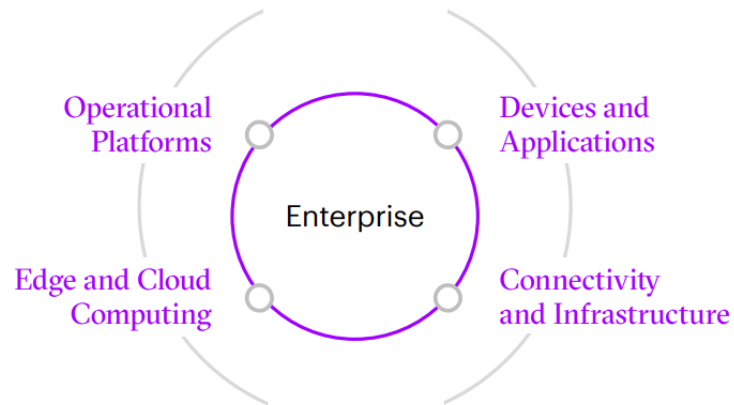


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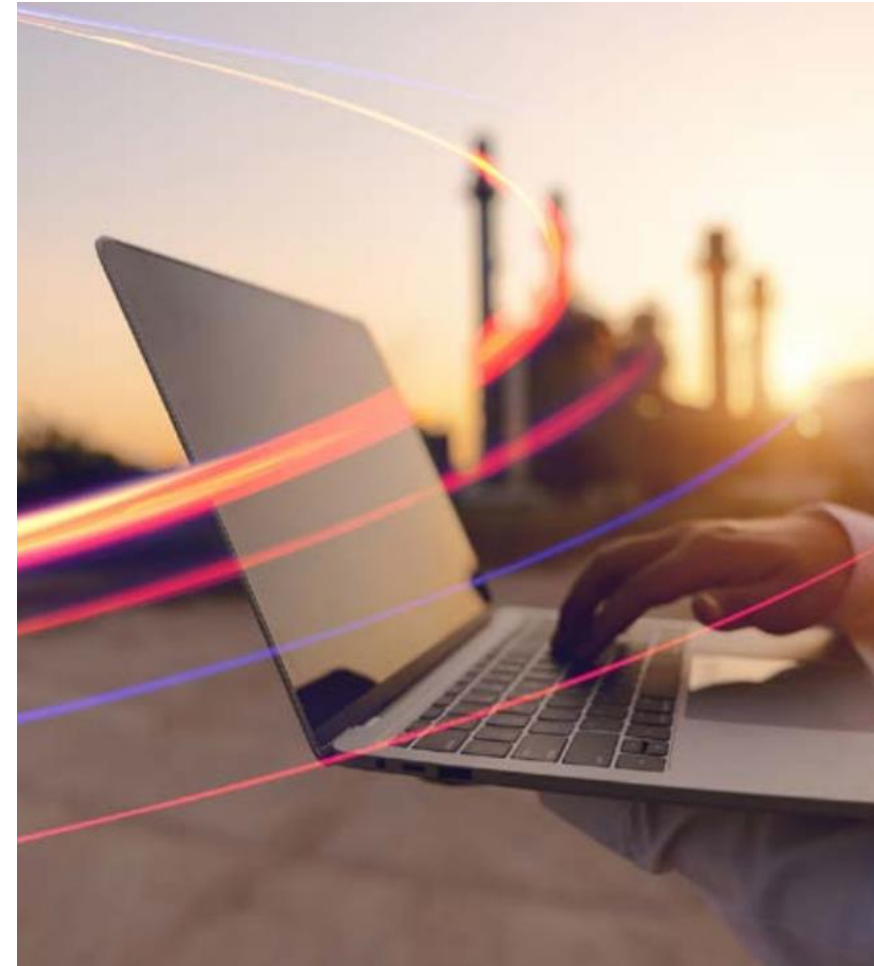
The need for reinvention

A network led transformation is key to achieving the full potential of industrial new digital capabilities.

CSPs continue to invest billions in networks, both fixed and wireless. The challenge at hand is how their current network transformation can go beyond a generational upgrade, and in turn reinvent the organization to continuously improve and leverage new technology.

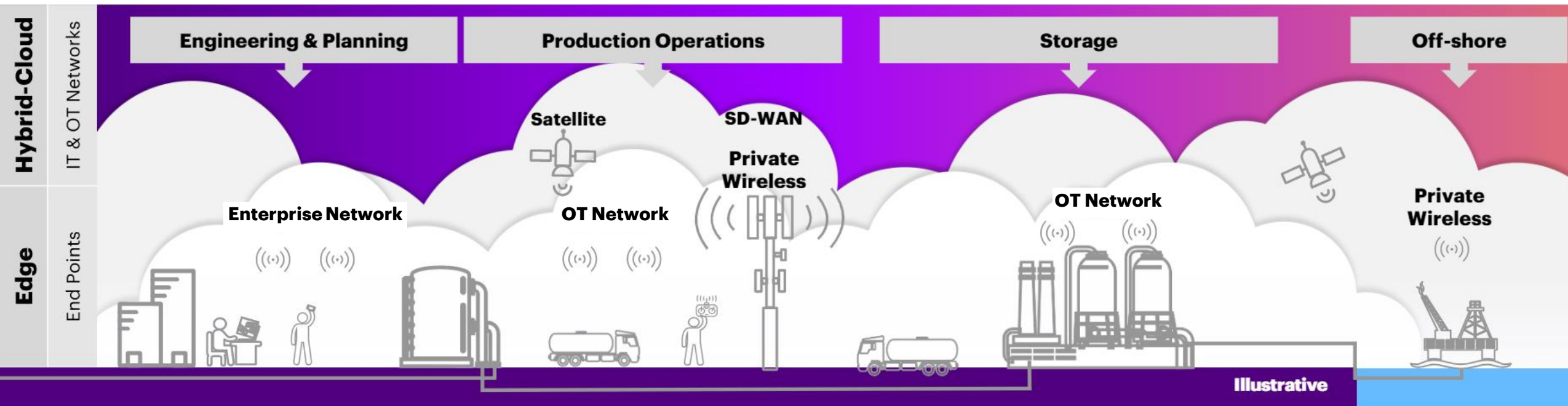


Outside of telecommunications, industries have been also transforming themselves by moving to the cloud, changing the rules of speed, agility, flexibility and the way their products and services are consumed and deployed.



5G is today's industry enabler

Enabling AI, Big Data Analytics, Private cloud services and IoT requires a strong digital core and a beyond-connectivity digital platform



Private 5G and the new possibilities

Private 5G networks are:

Accessible and open

Flexible, always-on networks provide reliable coverage across all industrial sites. These networks support an “anywhere and everywhere” approach to digital consumption, integrating multiple vendors and protocols.

Secure and trusted

Enterprises using private wireless networks can rely on enhanced security across IT and OT. Critical business data can be authorized, encrypted and wrapped in zero-trust security protocols.

Scalable

Private wireless networks offer a change-ready, automated and highly adaptable platform able to scale in place, support innovation and grow with business needs.

High performing

These networks provide high availability with low latency, which are key for mission-critical industrial applications. They also allow enterprises to monitor and prioritize traffic.

Private 5G networks allow industrial companies to reliably upgrade and extend their connectivity, while unlocking new digital innovations across their products. They also offer both IT and OT a new fabric for reliable service delivery.



What's holding industrial companies back?

To accelerate private 5G implementations, several organizational and technological barriers must be overcome.

A coherent end-to-end vision.

Most industrial sites have brownfield legacy networks, comprised of point solutions, which take time to displace. Companies can struggle to lay out a holistic network transformation strategy, as it must detail the true value potential of the change and explain how new private wireless technologies will work with legacy systems.

Decentralized funding.

Many industrial sites control their own funding for a whole range of operations, from IT to safety to human resources, as well as networking. This decentralization can make it difficult to see the holistic business case (including the value potential of individual use cases) for enterprise-wide network transformation. Individual sites end up purchasing network solutions that solve their own unique pain points without seeing the bigger picture.

Integration skills.

Network transformation requires a complex integration across both IT and OT. Companies need to be able to see how everything comes together—network design and deployment, integration and managing an ecosystem of network equipment providers, civil engineers, network operations. These essential integration skills are scarce and in high demand.

Ecosystem complexity.

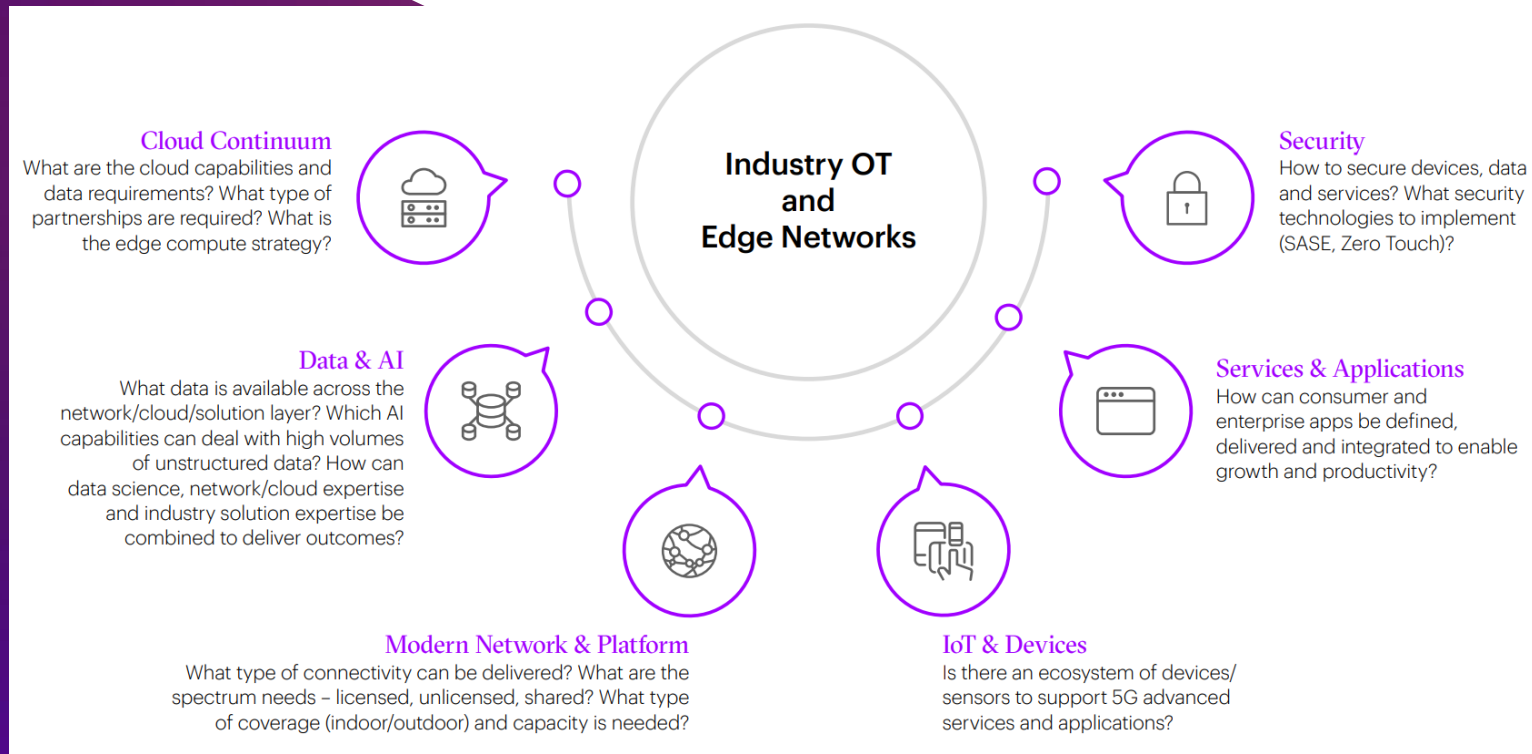
With so many tech solutions and deployment options available in the market, designing a network transformation can be a complex and confusing process. This is often the case, for example, when it comes to deciding between future-focused 5G technology or more established LTE solutions.

Resilience, reliability, security.

Networks in industrial settings have demanding requirements for resilience, reliability and security. For example, traffic to-and-from industrial control systems and process control networks need Zero Trust security and redundancy for added reliability. But industrial companies also have typical enterprise connectivity requirements for handheld devices. The ability to segment traffic to meet these different needs is vital.

Industry needs more from its networks

By developing an end-to-end vision and plan, industrial companies can overcome the barriers to network transformation, across both IT and OT.



Oil & Gas

- » Mission critical push to talk
- » Industrial IoT
- » Worker safety with video analytics



Mining

- » Worker monitoring and critical communications
- » Emergency broadcast alerts
- » Environmental monitoring



Agriculture

- » Condition monitoring/prediction
- » Massive data download
- » Tele-remote operation



Chemicals

- » Predictive maintenance
- » Digital forms
- » Asset management



Manufacturing

- » Legacy Interworking/PLC bridging
- » Collaboration
- » Edge analytics



Utilities

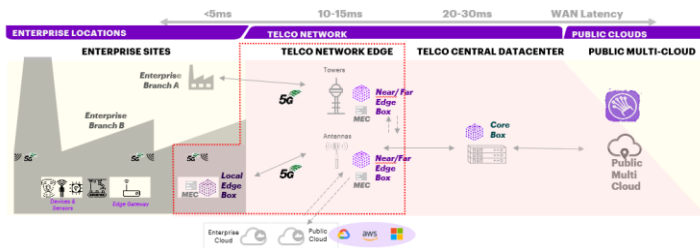
- » Push-to-talk
- » Wild fire resiliency
- » Gas measurement collection
- » VoLTE and Text Services



Case Study

Creating the first connected warehouse

A leading healthcare solutions company needed to implement automated solutions in its warehouse to improve efficiency, inventory visibility, worker safety and, crucially, throughput



5G powered AR Vision

Custom augmented reality goggles to select items for shipping

30%

improvement in pick productivity

100%

pick accuracy, plus overall increase in safety

Drone Inventory Management

5G-enabled drones to conduct inventory counts

95%

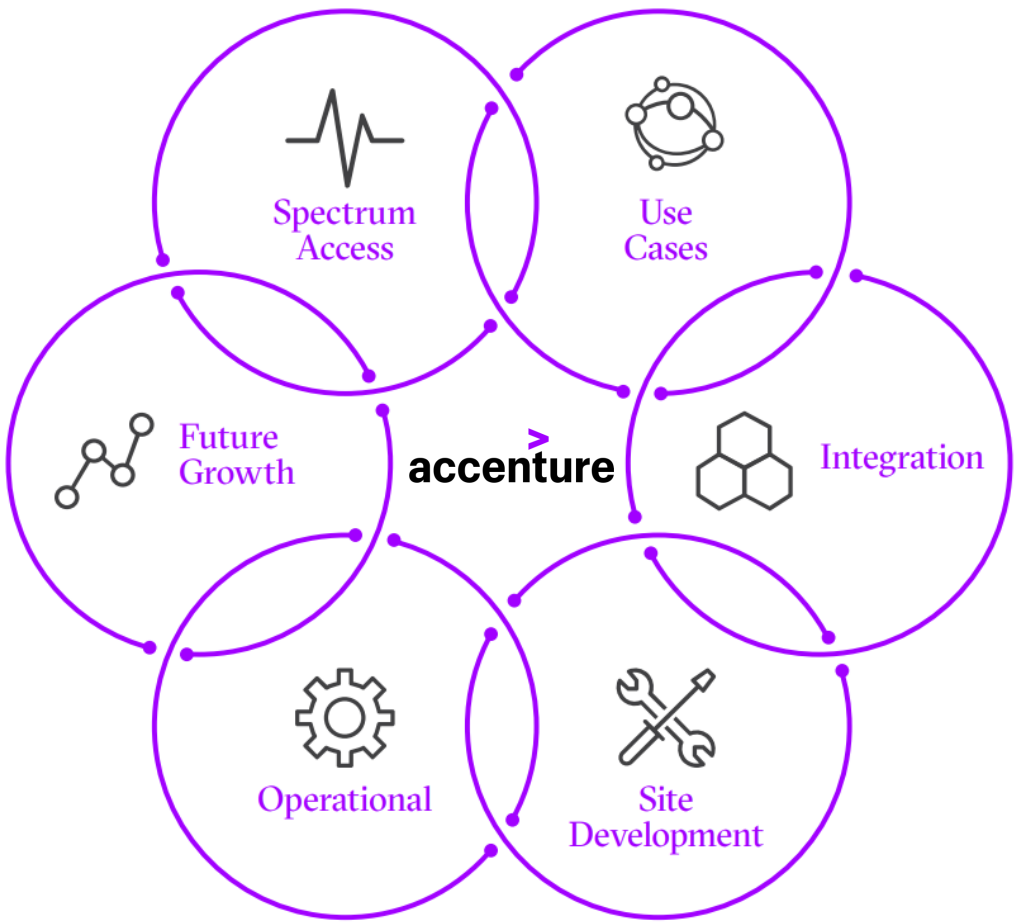
counting accuracy

9

faster counting speed



Network-led transformation needs the right vision, the right plan, and the right partner



Shape the right strategy.

This includes defining the vision, blueprints, use cases, devices and spectrum for a private 5G transformation that will deliver maximum value to the business.

Accelerate the value.

Enterprises looking to de-risk and speed up a private 5G transformation should consider setting up a complete delivery management capability, including a value realization office.

Run & optimize the network.

Implementing and integrating a private 5G network is only the start. How to run that network in the most efficient and effective way and maximize the value for the business is key as well.



Thank You



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