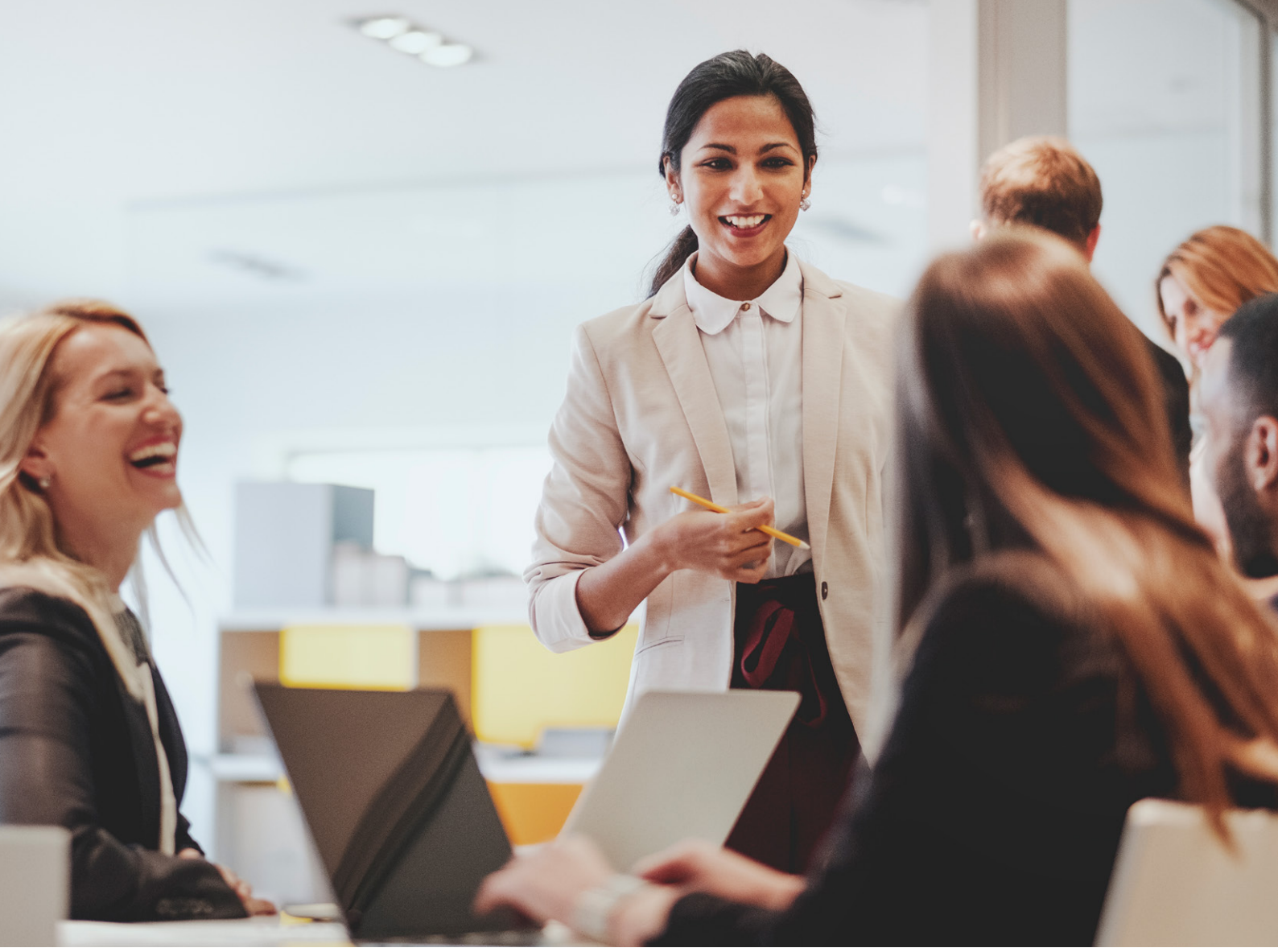

Achieving operational excellence in the public sector

Optimising performance for increased efficiency and productivity

Alcatel·Lucent Enterprise

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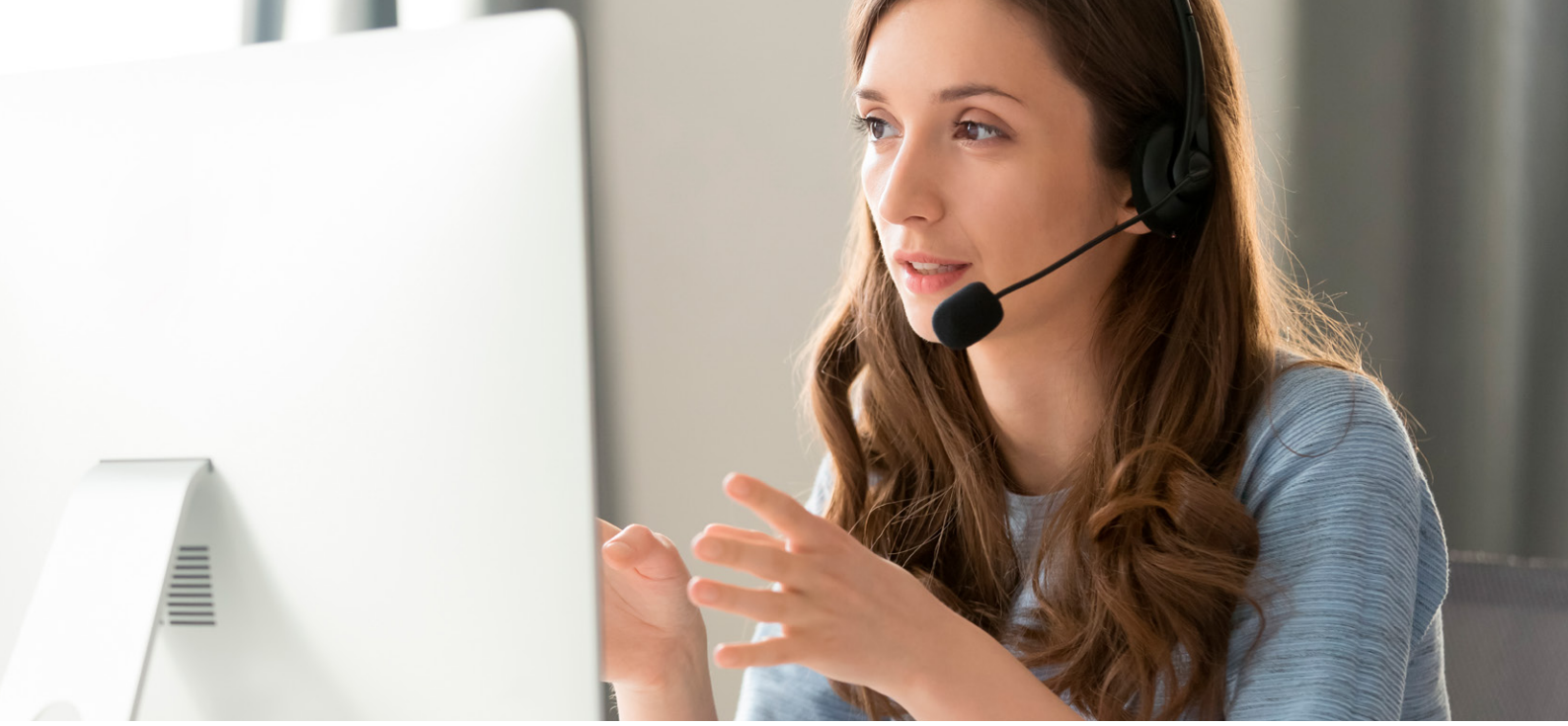


Technology innovations drive operational excellence

Expectations for what the public sector should deliver have never been greater. And neither have the challenges. Supply chain, geopolitics, climate change, a mobile workforce, a widening threat landscape and narrowing budgets. All of this makes the delivery of public sector services more demanding.

The good news is that technology has never been as advanced and universal as it is today. With the right technology solution, public sector organisations can achieve much greater operational efficiency and become more:

- **Agile,** to cost-effectively manage their way through challenges created by high inflation, rising energy costs, geopolitical tensions, climate change and supply chain disruptions
- **Efficient,** by simplifying and accelerating workflows, which increases performance while securely supporting a dispersed and mobile workforce
- **Resilient,** to quickly adapt to the ever-evolving cyberthreat landscape and the potential risks posed by new technologies such as IoT
- **Sustainable,** by keeping costs, complexity and environmental impact at acceptable levels while continuing to accelerate operations

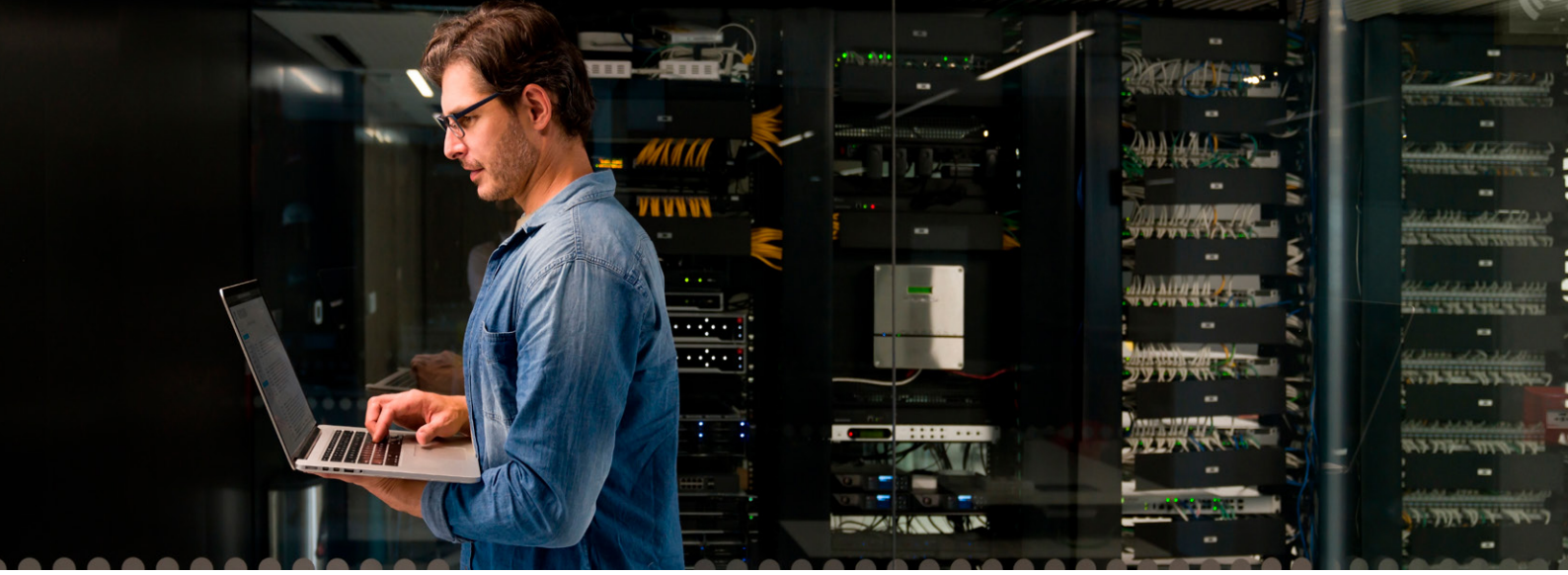
The crucial role technology plays in success

Improving operational excellence is so important it was the top priority for customer service and support leaders across industries in a 2023 Gartner survey.[1]

The relationship between operational excellence and digital technologies is also accepted and discussed globally by management consultants,[2] at events focused on the topic[3] and in industry briefs.[4] That acceptance is visible as organisations across industries invest in advanced analytics, artificial intelligence, automation and other technologies to improve performance.

With the urgent need to improve operational excellence, the public sector recognises that investing in technologies to increase efficiency and performance is equally pressing.

1 Top Customer Service Trends, Priorities, and Predictions for 2023. Gartner, 2023.
2 Operational excellence: How purpose and technology can power performance. McKinsey & Company, April 2023.
3 Digital Transformation and Operational Excellence Summit. Evnoia Group, March 2023.
4 Asia-Pacific Healthcare Delivery: Operational Excellence in the Digital Age. Bain & Company, September 2019.



Justifying technology investments in the public sector

Technology innovations must be seen as enablers that deliver measurable results rather than as a means to an end. Organisations must understand how the right mix of technologies:

- Increases agility, efficiency and productivity
- Ensures resilience, responsiveness and sustainability
- Reduces operational complexity and costs
- Improves the citizen and employee experience

None of these benefits stands alone; the outcomes are intertwined and influence one another. Here are just a few examples of how investing in innovative technologies can help overcome challenges, achieve key goals and accelerate the journey to operational excellence.

Agility addresses fast changing needs

Institutions must factor agility and flexibility into their operations. With technologies that increase agility, they can:

- Quickly and easily scale their operations and respond more effectively to unexpected events
- Support in-office and remote work models and mobility to meet employee demands for flexibility while empowering them to increase customer satisfaction from anywhere
- Take advantage of subscription models that provide technologies "as a Service" to free up cash, increase spending predictability and accelerate access to more advanced capabilities

Efficiency increases productivity

Technologies that automate routine operations accelerate processes and responses, allowing staff to focus on top priorities rather than mundane tasks. When technology solutions provide autonomous operations, it can also reduce the time, effort and resources required to manage and maintain solutions. These efficiencies minimise the burden on IT teams, so they are also free to drive higher value initiatives.

Infrastructure and operations leaders around the world recognise the value automation provides. In a global survey, Gartner found that 85 percent of infrastructure and operations leaders that don't currently have full automation expect to increase automation by 2025. The research firm predicts that by 2025, 70 percent of organisations will implement structured automation to increase flexibility and efficiency.[5]

5 Gartner Survey Finds 85% of Infrastructure and Operations Leaders Without Full Automation Expect to Increase Automation Within Three Years. Gartner, October 2022.

CEOs and CFOs also believe automation investments are key to driving down costs. Based on the results of separate 2022 surveys, Gartner confirmed that CFOs plan to protect digital investments as they cut costs elsewhere, and have prioritised back-office automation as a key to driving down costs in the face of ongoing inflation.[6]

Resilience protects people, assets, data and reputations

Every institution must invest in technologies that reduce the risks associated with unauthorised access, theft, or destruction of assets and data. These investments are essential to prevent, protect against and quickly respond to data breaches, network attacks and other malicious activities that could threaten operations or tarnish reputations.

As the risk of cyberattacks increases, so does the need to leverage technology solutions to strengthen resilience. In 2022, organisations globally experienced unprecedented threats and successful attacks that brought swift and severe consequences:

- In the U.S., a ransomware attack on 157-year-old Lincoln College led the institution to close its doors permanently[7]
- In Costa Rica, a nationwide cyberattack forced government officials to declare a national emergency and call on help from other countries to deal with the crisis[8]
- In India, the healthcare industry reported nearly 1.9 million cyberattacks through a variety of vulnerabilities[9]
- In Europe, the war in Ukraine has led to a substantial increase in cyberattacks, and has reshaped the threat landscape[10,11]

Sustainability can increase compliance while cutting costs

Cutting-edge technology solutions make it easier to comply with environmental regulations and cut costs in multiple ways:

- Compact hardware, software-driven solutions and cloud-based applications reduce space and heating, ventilation and air conditioning (HVAC) requirements to minimise environmental footprint and real estate costs
- Energy-efficient solutions reduce power consumption and energy costs
- Automation, remote access and advanced collaboration solutions reduce travel requirements and minimise the carbon footprint
- Technology solutions that are designed to evolve and have a long lifecycle reduce waste and extend investments

6 Gartner Says CFOs Are Focusing on Automation Investments to Drive Down Costs. Gartner, August 2022.
7 Ransomware attack shutters 157-year-old Lincoln College. CBS News, May 2022.
8 2022 In Review: An Eventful Cybersecurity Year. Forbes, December 2022.
9 1.9 million cyberattacks against Indian healthcare recorded in 2022. Healthcare IT News, December 2022.
10 Infographic - Top cyber threats in the EU. European Council, 2022.
11 From Ukraine To The Whole Of Europe: Cyber Conflict Reaches a Turning Point. Thales, March 2023.

Transportation sector sees link between networks and operational excellence

After upgrading its network, the Nevada Department of Transportation in the U.S. has increased safety by offering drivers real-time information on road, traffic and weather conditions. And it has laid the foundation for its next-generation Intelligent Transportation System (ITS), making it easier to connect and manage the growing mesh of IoT devices on the state's highways.

In the UK, the Liverpool City Region Combined Authority (LCRCA) upgraded to flexible, resilient and reliable network infrastructure that allows it to efficiently run its services 24/365 and support future applications. With a consolidated network and unified management, LCRCA was able to maximise Return on Investment (ROI) while enhancing the traveller experience.

Technology solutions contribute to organisational goals

Network and communications solutions help achieve the outcomes described in the previous section. To ensure each solution adequately contributes to the targeted outcomes, it's important to look beyond features and functionality and compare total cost of ownership (TCO) across technology providers and brands.

Evaluating network and communications solutions based on TCO provides a clear view of how each solution helps make money, save money, or both. Public sector leaders have the insight needed to choose solutions that:

- **Reduce operational costs.** Solutions that consume less power reduce energy costs, while solutions that are robust and highly reliable minimise the costs associated with network downtime, equipment maintenance and repairs.
- **Eliminate hidden costs.** Some vendors take an all-inclusive approach to pricing, while others charge additional fees for key elements such as training, supplementary licenses, maintenance and support contracts, particularly for complex systems. These unplanned costs extend ROI timelines and strain budgets.
- **Reduce infrastructure costs.** The less equipment that must be purchased, the lower the capital and operating costs associated with it. Unified infrastructure solutions that autonomously execute functions, keep costs down by reducing equipment requirements and simplifying network management.
- **Reduce IT and manpower costs.** Autonomous networks and artificial intelligence streamline IT resource requirements. They can be used to automate network and services provisioning, monitor the network 24/7, identify and mitigate potential issues, and optimise network performance with minimal human assistance.
- **Increase continuity and employee productivity.** Solutions that support predictive maintenance and anomaly detection mean issues can be proactively addressed. These actions minimise network downtime and ensure a consistent, high-quality user experience.
- **Increase efficiency.** Platforms and applications that automate processes and workflows enable real-time communications and collaboration and accelerate customer responses. There are even solutions that support real-time location-tracking for key assets to help everyone in the organisation eliminate wasted time searching for items.

As institutions consider how technologies can be used to drive operational excellence, they must take a holistic approach that allows them to connect people, objects and corporate applications across the organisation. This is the only way to give all staff access to real-time insights and automated workflows while avoiding the high costs associated with standalone, isolated technologies.

Agility supports public sector strategies and objectives

The past few years have proven that flexible working arrangements are essential for organisational continuity. This means institutions must continue to improve the ability for both IT and Operations teams to seamlessly work on- and off-site.

Technologies that can be securely deployed on premises or in the cloud empower staff to collaborate and share data. All relevant teams have full access to relevant information while remaining fully compliant with data and privacy regulations, no matter where they are.

Purchasing equipment, applications and services on a subscription basis can mitigate impact on budgets and provide an organisation the financial flexibility to progress their digital transformation plans.

End-to-end cybersecurity reduces risks

Network and communications solutions that implement an end-to-end approach to cybersecurity helps manage the ever-evolving threat landscape. These solutions implement six key security measures:

1. **A Zero Trust Network Access (ZTNA) security model** provides no implicit trust to any user, device, or application, no matter where it is located, to reduce the risks of both external and internal threats
2. **Macro- and micro-segmentation** to specify which users, devices and applications can communicate with one another to prevent unauthorised interactions that could spread attacks
3. **Embedded network access control** to define which users, devices and applications can access specific functionality to limit exposure and maintain regulatory compliance
4. **Encryption capabilities** that are approved by security agencies and are natively built into all hardware and software elements protect communications and information from origin to destination
5. **Integration with firewalls and intrusion detection systems** enables implementation of a cohesive and context-aware approach to cyberthreat mitigation and responses across systems
6. **A secure-by-design approach** considers security at each step of product definition, development and delivery to ensure all solution components implement the best practices in cybersecurity that are most critical for the industry

A comprehensive approach to sustainability simplifies compliance

There are several ways network and communications solutions can help organisations comply with environmental regulations.

Hardware solutions must be designed to be reused, repaired, or recycled, rather than thrown away. Functionality must be virtualised wherever possible to reduce the amount and size of equipment, physical space and environmental systems required to operate the solution. Where physical equipment is required, it must include innovations that minimise power consumption. Finally, solutions must be designed and built to reliably operate for many years to avoid the need for premature replacement. Together, these measures help to reduce TCO.

CSU The California State University

California State University reduces operational complexity to save more than $100 million

By upgrading to standardised network technologies, centralised management and enhanced security, California State University was able to significantly simplify IT operations and save more than $100 million in infrastructure costs.

Choose a partner that drives operational excellence

Alcatel-Lucent Enterprise partners closely with the public sector to bring them the network and communications expertise, experience and solutions they need to work smarter and faster with higher security and lower TCO across their operations.

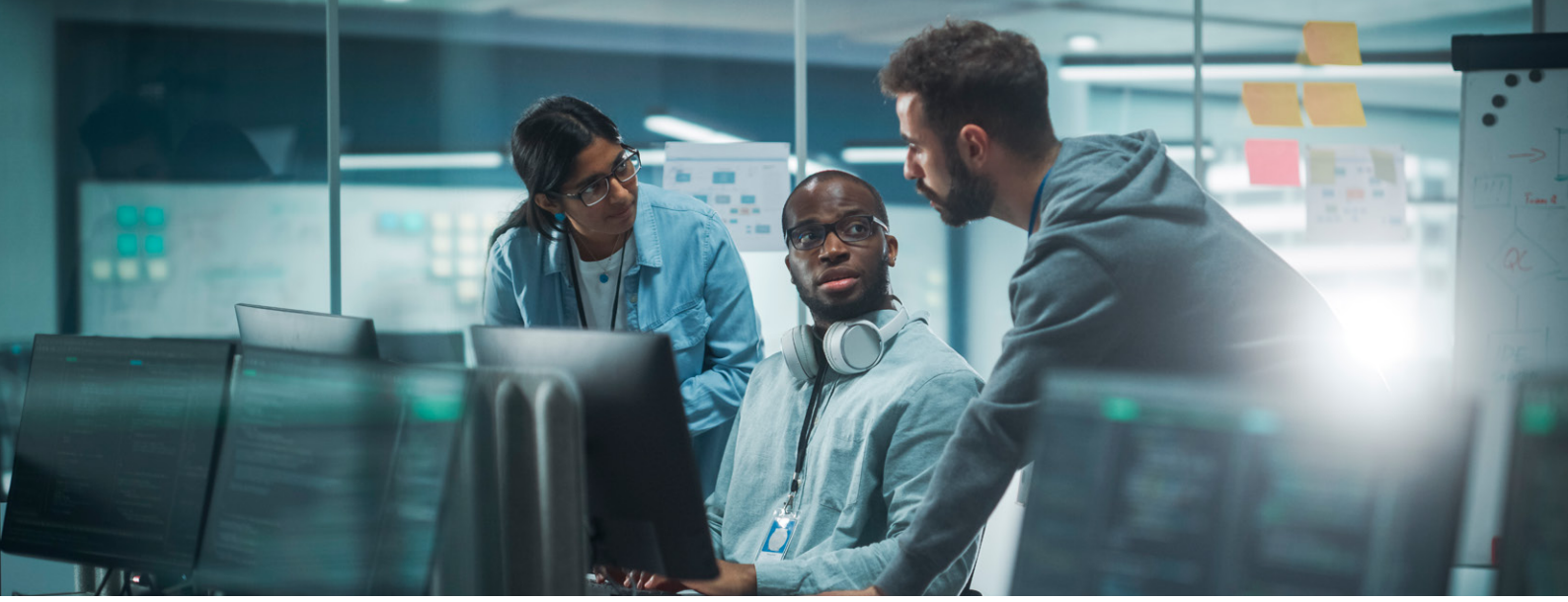
Our holistic approach to networks and communications can eliminate the need to purchase and support multiple and disparate systems. They can simplify IT by taking a more unified and consistent approach to security and network policies. This will drive operational excellence from multiple perspectives.

Tie technology strategy to organisational strategy

Our robust and secure autonomous network solutions provide the foundation required to increase efficiency and resilience with minimal equipment and minimal IT intervention. We build on this secure foundation with integrated communications and collaboration platforms that connect people, objects and corporate applications. This approach accelerates access to real-time information in a cost-effective way.

To maximise resilience and flexibility, we provide our technology solutions in any combination of on premises, private cloud, public cloud and hybrid deployment models. We also offer our solutions "as a Service" to help optimise budgets and stabilise expenditures.

Our solutions increase sustainability by respecting environmental legislation, reducing power consumption and minimising travel and maintenance truck rolls. To support a circular economy and minimise waste, our solutions are designed for long life, and to be reused, repaired and recycled. We also offer second-hand hardware for cost-effective technology investments.



Leverage our proven success in increasing operational excellence

Leading organisations across industries rely on Alcatel-Lucent Enterprise to accelerate their journey to operational excellence. Here are just a few examples:

Metz Eurometropolis in France. The metropolitan area has improved IT efficiency with simultaneous configuration of devices on wired and wireless networks, and a single point of network management and control. With a futureproof, converged network, Metz Eurometropolis has the ideal foundation to support digital citizen services and smart city projects.

FH Campus Wien in Austria. The largest university of applied sciences in Austria quickly and smoothly brought its newest building online thanks to uniform network infrastructure and management solutions that simplify configuration and operations.

Energy One in Australia. Energy One has simplified network management and maintenance across its sites to reduce the burden on their IT team so they are free to focus on higher priority tasks. Better network performance and Wi-Fi coverage have also increased employee productivity and mobility.

Medcare increases medical excellence and patient safety across sites

"The Alcatel-Lucent Enterprise solution helps us to deliver a five-star patient care and healthcare experience. By facilitating access to information for doctors and medical personnel, it supports staff productivity and helps our team make the right decisions every time."

—Naushad Mohammed, General Manager, IT, Medcare in the United Arab Emirates

Learn more

To learn how we can help your organisation increase operational excellence, visit our website or contact us today.

Alcatel·Lucent Enterprise