2021 Network Modernization Trends

Modern, distributed environments are impacting the network, with the supporting IT organizations contending with new challenges and balancing emerging benefits. In order to understand how key initiatives like cloud and automation are driving today's network strategies, ESG recently undertook a survey of networking IT professionals. This study highlights key trends that are impacting data center, campus, branch, edge, wired, and wireless network environments and measures interest in select new technologies like 5G.

Distributed Environments Responsible for Network **Complexity and Challenges**



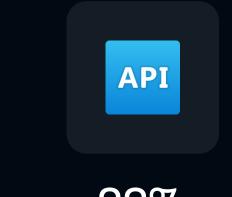
say their network environment is more or significantly more complex than two years ago.

TOP 5 DRIVERS OF NETWORK COMPLEXITY.

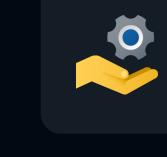


37% New technology

deployments



28% Tighter integration with security solutions



27%

Support for real-time applications at edge locations



26%

Increase in remote workers



26% Ensuring connectivity between on-premises data

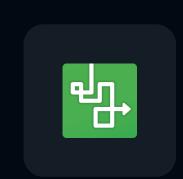
centers and public clouds

Cloud-based Network Management Tops Data Center and Wide Area Network Initiatives

TOP 5 DATA CENTER NETWORKING CHALLENGES.



37% Lack of automation for manual tasks

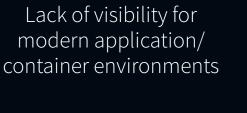


36% Increasing complexity

of environment



35%





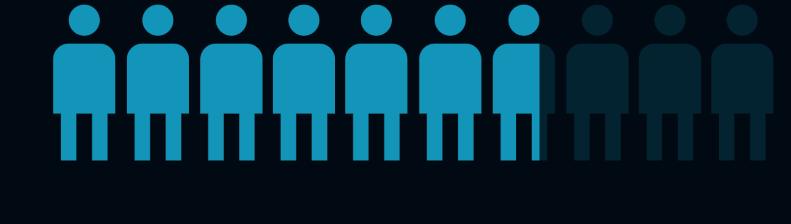
32%

Supporting both on-premises and public cloud-based networks



29% Lack of





69% of organizations prefer a cloud-based location for their network management solution.

TOP 5 INITIATIVES FOR DATA CENTER NETWORK.



37%

Using cloud-based network management solutions



35%





Investing in AI/ML for self-healing and

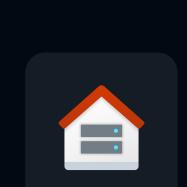
optimizing capabilities





31%

for lifecycle management / manually intensive tasks



30%

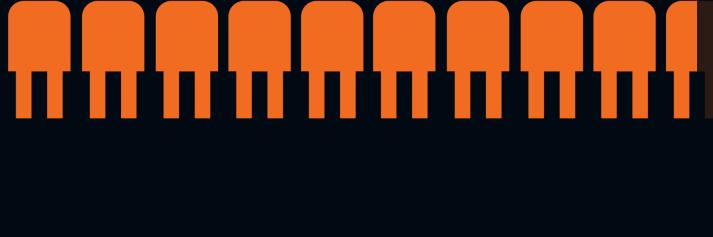
Supporting on-premises

hyperscale environments

Interest in 5G and Accelerated SD-WAN Adoption **Lead Edge Environments**



of organizations have interest in deploying 5G.



use SD-WAN today or plan to

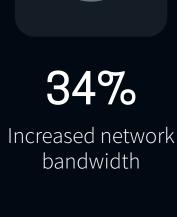
91%

95%

in the next 12-24 months.

TOP 5 SD-WAN BENEFITS.





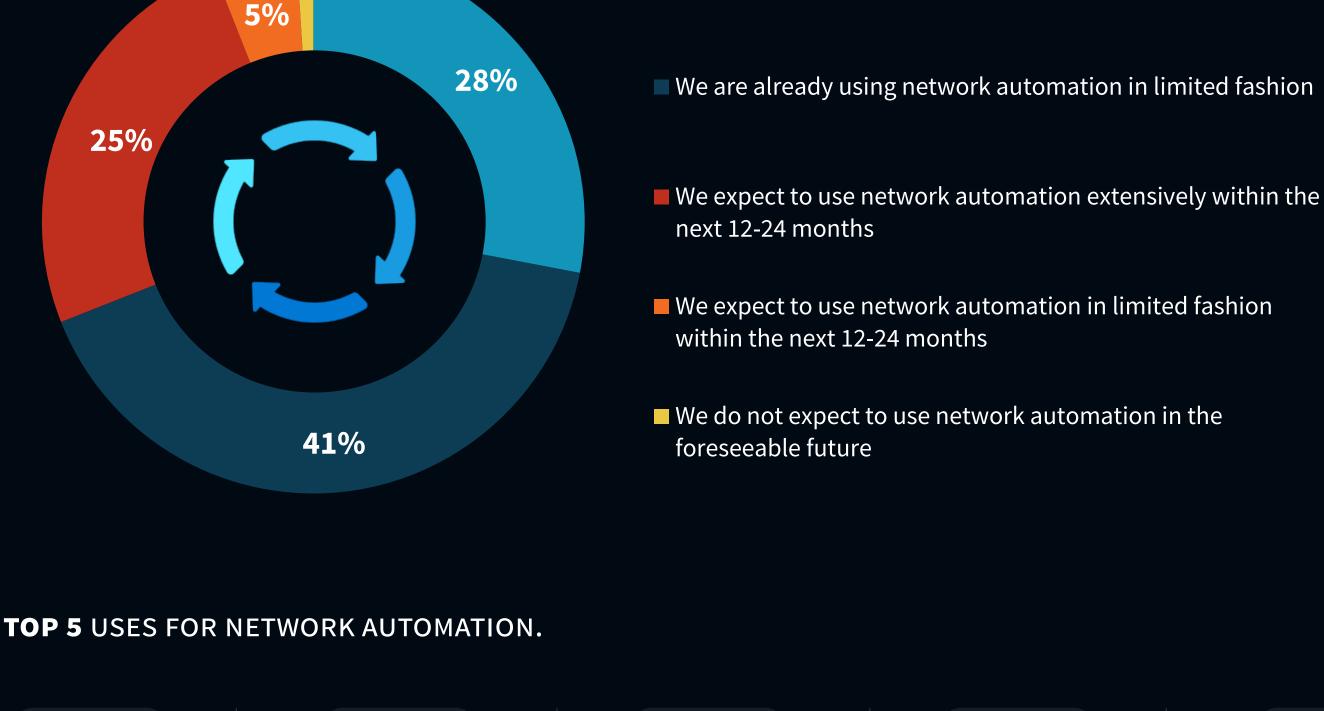






Inventory, Lifecycle Management, and Centralized **Provisioning of IT Assets** 1%

Organizations Increasingly Look to Automation for



next 12-24 months

■ We are already using network automation extensively

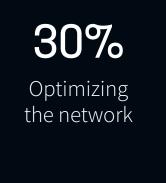
- We do not expect to use network automation in the











For more data and analysis from this ESG research study, including actionable recommendations for mastering the

LEARN MORE

evolving world of networking, read the ESG Research Report, Network Modernization in Highly Distributed Environments.