Today’s IT organizations are increasingly adopting cloud services for key strategic benefits. Primary among these is the reduction of capital costs through more efficient utilization of network assets, increased agility through automation, and lower operating costs through a flexible consumption model. The realization of these benefits, however, requires significant upfront planning or else they may be easily offset by a new set of challenges and costs.

In response to these needs, AT&T Consulting has developed a Strategy and Roadmap program for next-generation network planning that comprehensively addresses cloud adoption and identifies key impacts on applications, data center infrastructure, network, security, orchestration, automation, and operational discipline.

Network Strategy and Roadmap benefits:

- Provide a fit-for-purpose strategy that accelerates executive consensus and approval for investment, speeding time to value.
- Help mitigate transformation risks with program delivered via a proven methodology and with unparalleled experience.
- Build consensus on requirements across lines of business, ensuring architectural adoption for scale, and more optimal use of assets.
Cloud service adoption challenges

As your organization makes the move toward cloud services, before you reap the benefits, you can encounter challenges like these:

- Cloud migrations create significant changes in application traffic flows, requiring a reexamination of network impacts and capacity.
- Access methods and WAN alternatives also shift, from data center “backhaul” to branch-based communications, requiring a profound shift in security architecture.
- The management of next-generation services including software-defined networks and data centers requires a rethinking of life cycle service management staffing, organizational structure, skills, and operating practices.

A multitude of vendor products are available to address these challenges. But in addition to the technology solutions, organizations need to develop their strategic vision and long-term plan, including integration of cloud-based services into the overall IT service portfolio, and how the entire service ecosystem will be able to scale and deliver on the financial promise of cloud.

Reap benefits faster with help from AT&T Consulting

AT&T Consulting has been a leader in strategic network transformation for more than twenty years. Our team has led some of the largest network engagements on record, and as part of AT&T has unique access to product teams, research and AT&T Labs expertise, global customer experiences, and knowledge capital. AT&T is an innovator in the software-defined evolution, both as an enterprise adopting these technologies as well as an industry leader advancing the work of standards bodies.

Our Network Strategy and Roadmap is part of a lifecycle of services from AT&T Consulting to help clients develop long-term network and operational strategy, and through strategic planning, realize significant benefits from cloud adoption:

- An agile network architecture which intelligently and automatically leverages multiple forms of transport including Internet and Enterprise networks for cloud applications access.
- Automated processes to enable more effective service provisioning, including templates for security policy controls.
- Optimization of existing toolsets and ensuring the integration with next generation platforms for service management and orchestration of virtual functions and cloud workloads.

In addition to strategic planning, AT&T Consulting can assist in the subsequent design, engineering, and deployment of next generation network solutions and the operational concerns.

Flexible engagement scope

The scope of our Network Strategy and Roadmap is fit for purpose, and may include any combination of these four domains:

- **Software-Defined-WAN (SD-WAN)** offers a hybrid approach to securely interconnect end users with cloud-based applications.
- **Software-Defined Data Center (SDDC)** enables private cloud functionality to seamlessly integrate with your public cloud providers, delivering a more integrated hybrid cloud.
- **Network Function Virtualization (NFV)** supports virtualization of network services within server-based platforms.
- **Management and Network Orchestration (MANO)** enables the automation and orchestration of services across multiple IT towers including application, compute, storage, network, and security using the AT&T Consulting Service Lifecycle methodology.
How we deliver the Network Strategy and Roadmap

Our work begins by analyzing the risks, challenges, and issues that your organization is experiencing with the current technologies and solutions in place. We perform a detailed discovery of the current state architecture and the technologies being utilized across the LAN, WAN, WLAN, internet, and data center network environments. We also capture the business vision and key drivers which inform future state requirements. The goal is to identify the risks, gaps, and areas of optimization, then quantify those areas as high, medium, or low priorities.

Technology selection

Myriad incumbent and emerging vendors offer compelling next-generation technology solutions. AT&T Consulting can help identify and determine which of them can sustain both your current and future business requirements. Examples of technologies include MPLS, Internet, 4/5G LTE, Network Function Virtualization (NFV), and automation/orchestration technologies.

Architecture development

A robust architecture is essential to demonstrate how the selected technologies will integrate in support of current and future needs. Examples of architectural decisions include cloud connectivity, the use of communication hubs, internet breakout at the branch through Direct Internet Access (DIA), and the introduction of automation and orchestration to enable agility. The guiding principles of our architecture are to be: Open, Simple, Scalable, and Secure.

Network platform strategy

This is an optional stage of effort, where AT&T Consulting can help identify, compare, and contrast the features, functionality, and costs of each vendor solution in order to determine the best fit. The architecture and technology vision provide a guiding and unifying structure for these decisions. Given the abundance of emerging technologies and new vendor solutions, it is imperative to ensure alignment with business goals, along with consideration of legacy impacts. Depending on customer preference, AT&T Consulting can execute either a "paper-based" analysis during this stage, or a more hands-on lab bake-off with pilot and proof of concept. The outputs of this stage include final determination of vendor
The powerful AT&T network supports integrated systems with a single, highly secure network with nationwide service and redundancies. Take advantage of our progressive and ever-improving network to drive innovation for your business.