

Prepared for:



Network as a Service:

Understanding the Cloud Consumption Model in Networking

July 2024 EMA Research Report Summary By Shamus McGillicuddy, VP of Research Network Infrastructure and Operations



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Introduction: Applying the Cloud Delivery Model to Networks This market research report explores the concept of network as a service (NaaS), which until now was a loosely defined term to describe a variety of networking solutions delivered via a cloud-like service model. Cloud computing transformed the IT industry by delivering software and infrastructure as a service, allowing customers to offload capital expenditures and operational overhead around software, software development platforms, security, compute, and storage. The cloudification of networking was slower in coming, but the concept of NaaS earned more prominence in recent years.

NaaS Confusion

Many kinds of vendors and service providers embraced the NaaS concept recently, but there is no industry consensus on what NaaS is or what kind of networks are involved when one talks about NaaS.

For instance, Enterprise Management Associates (EMA) has encountered solutions marketed as NaaS in the following areas:

- Campus and branch networking (switching and Wi-Fi)
- Data center networking
- Software-defined WAN (SD-WAN) and secure access service edge (SASE)
- Cloud and WAN interconnectivity services
- Managed WAN connectivity (MPLS, etc.)

Providers have also varied in how they define the NaaS service delivery model. For instance, some vendors provide campus networking NaaS that is primarily leased hardware. The customer still handles implementation and ongoing operations. Other NaaS providers deliver a true campus network as a service, packaging implementation and ongoing operations as core components of the offering.

Research Goals: Understand Buyer Perceptions and Requirements

EMA conducted this research to refine the concept of NaaS and reduce buyer confusion over what it is and how it can offer value. We asked research participants to tell us what NaaS means to them, what they want from it, and how they want to consume it.

In the context of our research survey, we defined NaaS for participants as the following: A network infrastructure solution that offers a cloud consumption model (pay as you go) in which the NaaS provider can manage all aspects of network engineering and operations, from design and build to monitoring and troubleshooting.

From there, we let research participants tell us what they think NaaS should deliver. The following pages explore our findings.



Research Methodology

EMA surveyed 250 employees of enterprise organizations for this research. As **Figure 1** reveals, these respondents primarily worked in IT organizations or cybersecurity. A smaller number were in finance and purchasing departments, while some worked in general business management. Respondents hailed from

a mix of small to very large enterprises across North America and Europe. More than one dozen industries were represented, including the six most numerous ones listed in Figure 1.

Job titles

- 27% IT or security executive
- 27% IT or security middle management
- **29%** IT or security technical personnel
- 17% Finance executives/managers

Departments/Functional groups

FIGURE 1. DEMOGRAPHICS

- 47% Information technology
- 28% Cybersecurity/Information security
- 11% Accounting/Finance
- 7% Purchasing
- 7% Executive/General management

Top industries

- **26%** Finance/Banking/Insurance
- 26% Manufacturing
- 16% Construction
- 10% Retail/Wholesale/Distribution
- 4% Transportation/Logistics
- 4% Health care

Company size (employees)

- 27% Small enterprise 250 to 2,499
 50% Midsized enterprise 2,500 to 9,999
- **23%** Large enterprise 10,000 or more

Region

61% North America39% Europe



Key Findings

Staffing issues

- Only 32% of companies have sufficient skilled networking personnel
- Network security and network monitoring & troubleshooting are the top two skills gaps

Defining NaaS

- Most respondents associated NaaS with cloud and WAN interconnectivity, SD-WAN and SASE, and WAN connectivity; only 28% associated NaaS with campus networking
- Respondents believe NaaS solutions should offer integrated managed security services, a cloud-like consumption model, comprehensive observability, and APIs and integrations with other systems

Consumption models. Companies prefer to pay for NaaS primarily by:

- 1. Total number of network devices or interfaces enabled
- 2. Service-level agreement data
- 3. Total number of applications supported

NaaS operations

• 64% prefer a hybrid operating model in which a NaaS provider and the internal network team share responsibility for day 2 operations

Roadblocks: Top barriers to NaaS adoption

- 1. Higher total cost over time
- 2. Lack of visibility into service quality
- 3. Security concerns

Potential benefits of NaaS adoption

- 1. Quick access to new technology
- 2. Skills gap mitigation
- 3. Improved and predictable performance
- 4. Aligning capacity and services with fluctuating demand and requirements





The State of Enterprise Networks

Before investigating NaaS, we wanted to understand the current state of the networks that support the companies represented in our research survey. We asked respondents to characterize the quality of their networks and the state of the team responsible for building and operating these networks.

Quality of Network Services

Figure 2 reveals that 29% of organizations have excellent networks that differentiate their businesses. Nearly 58% describe their networks as good and meeting their needs, if not necessarily exceeding expectations and differentiating their companies. Only 13% believe their networks are failing to meet requirements. Large enterprises (10,000 or more employees) tended to have better networks.

FIGURE 2. WHICH OF THE FOLLOWING DESCRIBES THE QUALITY OF THE NETWORK INFRASTRUCTURE AND SERVICES THAT YOUR IT ORGANIZATION DELIVERS AND MANAGES?

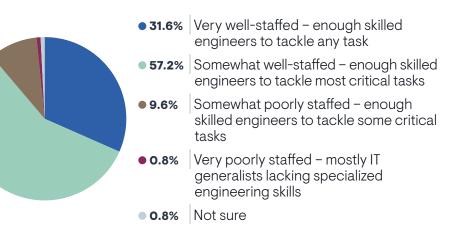
	• 29.2%	Excellent – our networks differentiate our business
	• 57.6%	Good – our networks serve the needs of our business
	● 12.0 %	Fair – our networks support our business, but sometimes hold it back
	● 1.2%	Poor – our networks fail to meet the needs of our business

Respondents who work in the CIO's suite or data center operations were more optimistic about network quality than members of IT architecture and cybersecurity groups. Europeans were more pessimistic than North Americans.

Network Staffing Challenges

EMA research consistently finds that IT organizations struggle to hire and retain skilled networking personnel. **Figure 3** confirms this ongoing issue, revealing that fewer than 32% of companies have sufficient staffing on their network infrastructure and operations teams to address any requirements. Midsized (2,500 to 9,999 employees) and large enterprises (10,000 or more employees) reported more staffing gaps than smaller (250 to 2,499 employees) companies.

FIGURE 3. WHICH OF THE FOLLOWING BEST DESCRIBES THE STAFF CAPABILITIES OF YOUR NETWORK INFRASTRUCTURE AND OPERATIONS GROUP?



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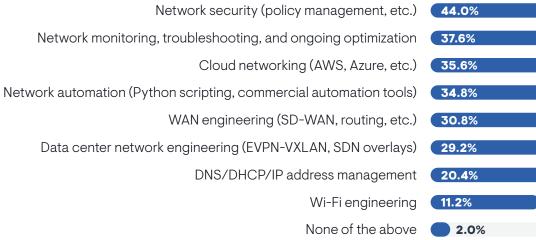
Networking Skills Gaps

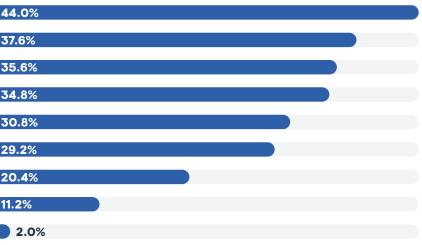
Figure 4 reveals the networking skills that IT organizations lack currently. Network security is the biggest issue today. Many organizations lack people who know how to design network security policies and manage firewalls and other network security devices. Respondents who work in cybersecurity groups were the most likely to perceive this gap. IT executives tended to be unaware of this issue.

Network monitoring and troubleshooting, cloud networking, and network automation are also prominent skills gaps for many organizations. Monitoring and troubleshooting were especially lacking in midsized companies (2,500 to 9,999 employees) and in North America rather than Europe. IT middle managers were particularly concerned about cloud networking skills. Respondents who reported having poorly staffed network teams were more likely to perceive gaps in cloud networking and DNS/DHCP/ IP address management (DDI), suggesting that they are two technology domains that are especially critical to a successful network. Although DDI skills gaps were relatively rare overall, technical personnel (engineers, architects) were three times as likely as IT executives and IT middle managers to perceive this gap. DDI is often underappreciated and poorly understood by IT leadership, and EMA suspects that skills gaps with DDI are much higher than suggested by these numbers.

Network security is the biggest issue today. Many organizations lack people who know how to design network security policies and manage firewalls and other network security devices.

FIGURE 4. WHICH OF THE FOLLOWING ARE THE BIGGEST SKILLS GAPS IN YOUR NETWORK INFRASTRUCTURE AND OPERATIONS TEAM TODAY?







What is Network as a Service?

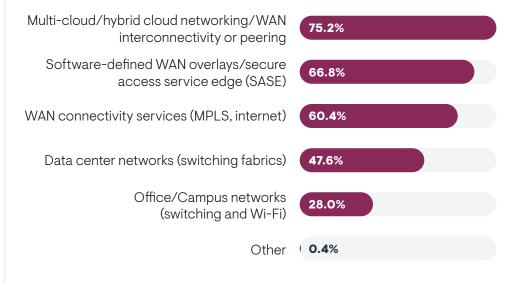
Network Connectivity and Infrastructure Associated with NaaS

In its interactions with the IT industry, EMA has found that there is no consensus on what kinds of networks are delivered through a NaaS offering. **Figure 5** reveals the thinking of research respondents. More than three-quarters believe that NaaS refers to cloud and WAN interconnectivity services. Most also believe that NaaS refers to managed SD-WAN/SASE services and WAN connectivity services.

Fewer respondents perceived that NaaS referred to data center and campus networking solutions; however, respondents in large enterprises (10,000 or more employees) were more likely to believe this. IT executives were more likely to associate campus networks with NaaS than network and security subject matter experts or financial personnel. Campus networking also resonated with Europeans more than North Americans. North Americans were more likely to associate NaaS with SD-WAN/SASE services and WAN connectivity services.

Increasingly, some companies see local area connectivity (switching and Wi-Fi) as infrastructure supported by owners of commercial real estate, which creates an innate demand for NaaS. "Every time I look at a building for a new office, I'm going to lean toward a building that has Wi-Fi in place already. No one is ever happy with Wi-Fi, which puts any company that does its own Wi-Fi in a difficult position," said an IT manager at a midsized software company.

FIGURE 5. WHEN YOU HEAR THE TERM "NETWORK AS A SERVICE," WHICH TYPES OF NETWORKS COME TO MIND?



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Sample Size = 250

Features and Characteristics Associated with a NaaS Offering

Figure 6 shows how companies define a NaaS offering for themselves. Primarily, they expect networking solutions with integrated managed security services and cloud-like service delivery models with rapid and agile delivery of innovation. The focus on managed security services especially makes sense when one considers the fact that this research previously revealed that network security skills gaps are especially challenging for 44% of enterprises. Secondarily, they want comprehensive operational visibility, APIs and integrations with other IT systems, and solutions that are packaged to appeal to specific vertical industries. Integrated AI, automation technology, and zero trust security capabilities are also important to many.

FIGURE 6. WHICH OF THE FOLLOWING CHARACTERISTICS DO YOU EXPECT FROM A NETWORK AS A SERVICE OFFERING?

Integrated managed security services (e.g., NAC, firewalls, threat protection, etc.)	38.8%
Cloud-like service delivery (rapid and agile delivery of innovation)	36.4%
Comprehensive operational dashboards and reporting on services	26.8%
APIs and integrations with other IT systems and services	24.0%
Industry-specific networking solutions (e.g., health care, banking, manufacturing, etc.)	21.2%
Integrated AI and automation capabilities	20.8%
Zero trust network segmentation and access control	19.6%
Pay as you go or subscription payment model (no CapEx)	18.4%
Enforceable service-level guarantees	18.0%
Outsourced network design/implementation	17.2%
Per feature/capability consumption	15.6%
Outsourced day 2 operations (monitoring/troubleshooting/change management)	14.8%
Free/no-cost hardware upgrades	9.2%
Don't know	0.4%
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Sample Size = 250



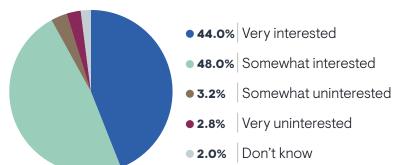
Interest in NaaS Adoption

This research found that the majority of respondents had at least some interest in adopting a variety of NaaS offerings. We asked respondents to indicate their interest in consuming four types of NaaS solutions

Campus and Branch Networking as a Service

Although most respondents in this survey didn't necessarily think of campus and branch office networks as something that is offered through a NaaS service, **Figure 7** reveals that 44% of respondents have strong interest in adopting such a solution.

> FIGURE 7. TO WHAT EXTENT IS YOUR ORGANIZATION INTERESTED IN CONSUMING CAMPUS AND BRANCH OFFICE NETWORKS (SWITCHING AND WI-FI) AS A NAAS OFFERING?

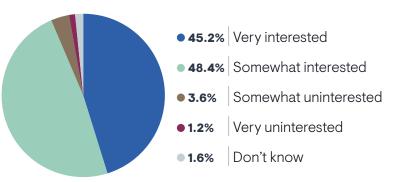


"If I were to use NaaS for anything, it would be for offsite things, like branches of our networks," said a network engineering manager at a large university. "It might suit new startups that lack the capital to build a network, too." Campus NaaS interest was particularly strong among organizations that have high-quality network infrastructure in place today and have well-staffed networking teams. These findings suggest that campus NaaS interest isn't primarily a response to inadequate networking capabilities. Instead, companies are interested in enhancing existing networks with managed security services, cutting-edge network technologies, and other opportunities.

SD-WAN/SASE as a Service

Previous EMA research revealed that enterprises were steadily moving away from self-managed software-defined WAN (SD-WAN) and secure access service edge (SASE) solutions. The complexity of implementing and managing these technologies drove the majority of companies to seek out managed service offerings instead. Thus, it's no surprise that 45% of respondents in this research have strong interest in a NaaS solution for SD-WAN and SASE, as **Figure 8** reveals.

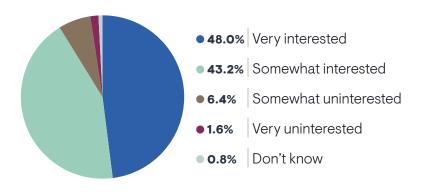
> FIGURE 8. TO WHAT EXTENT IS YOUR ORGANIZATION INTERESTED IN CONSUMING SOFTWARE-DEFINED WAN OR SECURE ACCESS SERVICE EDGE (SASE) AS A NAAS OFFERING?



Cloud and WAN Interconnectivity as a Service

Awareness of NaaS solutions for cloud and WAN interconnectivity was higher than other NaaS varieties, so it is unsurprising to see interest in such NaaS offerings to be higher than others, as **Figure 9** reveals. In particular, previous EMA research studies found that interest in NaaS offerings for interconnectivity increases as enterprises adopt hybrid and multi-cloud architectures because network engineers struggle with the complexity of provisioning and managing individual direct connections between their data centers and cloud providers.

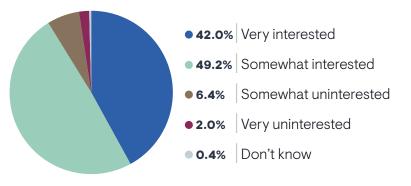
FIGURE 9. TO WHAT EXTENT IS YOUR ORGANIZATION INTERESTED IN CONSUMING CLOUD INTERCONNECTIVITY OR WAN CORE SERVICES AS A NAAS OFFERING?



Data Center Networking as a Service

Figure 10 reveals that data center networks are the least appealing type of NaaS, with only 42% expressing strong interest. Interest was especially weak among Europeans. IT architecture teams were very uninterested in such offerings, but cybersecurity teams (which typically have less networking expertise than IT architecture groups) saw potential value.

FIGURE 10. TO WHAT EXTENT IS YOUR ORGANIZATION INTERESTED IN CONSUMING DATA CENTER NETWORKS AS A NAAS OFFERING?



Sample Size = 250

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Emerging NaaS Requirements

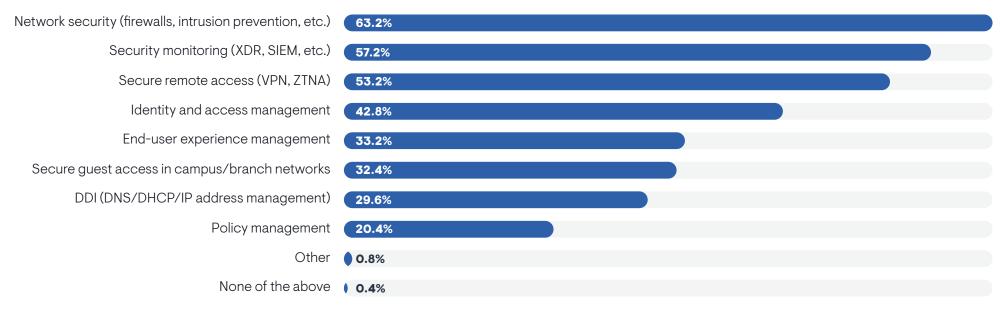
Regardless of their interest in NaaS offerings, EMA asked all research respondents to tell us what kinds of requirements they might have for a NaaS solution.

Add-On Managed Services

Figure 11 reveals what additional managed services organizations would like to bundle with the basic network infrastructure and connectivity that they get with a NaaS offering. Clearly, security is the priority. Most respondents selected

network security, security monitoring, and secure remote access as managed services they want to bundle with NaaS. The top secondary requirement was integrated identity and access management services. All four of these appealed more to small (250 to 2,499 employees) and medium enterprises (2,500 to 9,999 employees) than larger enterprises. Organizations with less effective networks were more likely to bundle security monitoring and network security with NaaS. However, respondents who associated campus networking with NaaS offerings made bundled network security services a low priority.

FIGURE 11. ASIDE FROM MANAGED NETWORK INFRASTRUCTURE AND CONNECTIVITY, WHAT KINDS OF ADD-ON MANAGED SERVICES WOULD YOU LIKE TO CONSUME AS A PACKAGE WITH A NAAS OFFERING?



Sample Size = 250

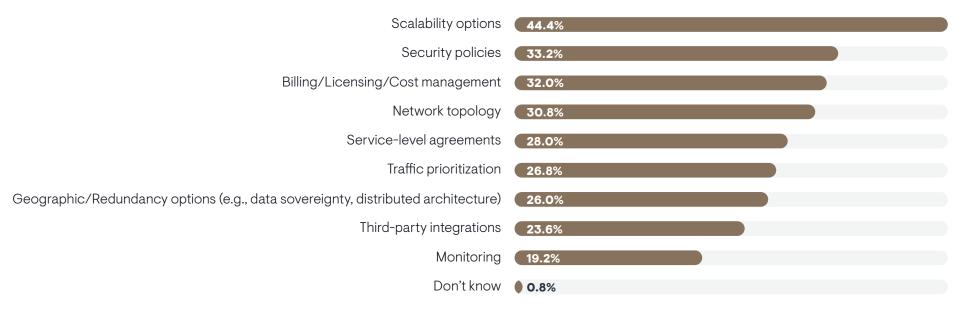
Customizability Requirements

When a service provider or vendor develops a NaaS offering, economies of scale are essential to profitability. NaaS providers must make aspects of a service uniform from one customer environment to another to minimize overhead. Some customers might expect this to lead to cookie-cutter NaaS solutions that lack customization. In EMA's experience, this isn't the case. In fact, most potential buyers expect customizability along multiple aspects of NaaS offerings. **Figure 12** reveals their priorities.

The biggest priority is scalability customization. For instance, a company with diverse networking requirements won't want a one-size-fits-all NaaS offering that might over-deliver WAN bandwidth or local connectivity speeds. They want to right-size scalability to optimize cost performance.

Secondarily, respondents want to customize security policies, billing and licensing terms, and network topology. Third-party integration customization is a low overall priority, but technical personnel (engineers and architects) were more likely to select it, especially cybersecurity professionals and members of IT architecture groups and IT tool engineering teams. Integration customization was also important to respondents who associate the concept of NaaS with data center networking and WAN and cloud interconnectivity. It was less relevant to respondents who associate NaaS with campus networks.

FIGURE 12. WHICH OF THE FOLLOWING ASPECTS OF A NAAS SOLUTION DO YOU THINK SHOULD BE HIGHLY CUSTOMIZABLE?



Sample Size = 250



Buying NaaS Services

There are a wide variety of service providers and vendors offering NaaS today. They also vary in how they price and sell such solutions. EMA asked research respondents to share what preferences they have for how they wish to consume NaaS and from whom.

Consumption and Payment Models

Given that NaaS is an emerging model for consuming networks, providers vary in how they charge for services. Some charge by devices installed or interfaces enabled. For campus network offerings, many charge by the size of a site or the number of users connecting to the network. **Figure 13** reveals how buyers want providers to charge them.

Exactly half of respondents expressed a preference for consuming NaaS by total number of devices installed or interfaces enabled. Technical personnel and IT middle managers were especially interested in paying by device or interface.

Secondarily, many respondents wanted to pay according to service-level agreement (SLA) data, total number of applications supported, and aggregate bandwidth.

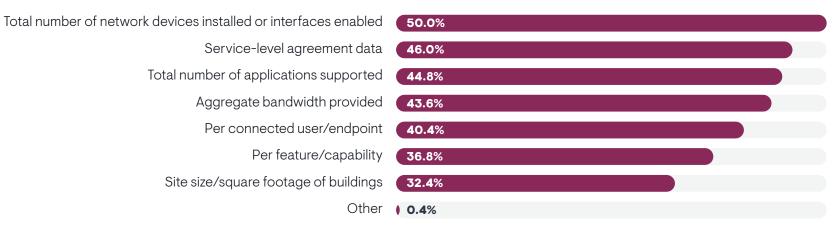


FIGURE 13. WHICH OF THE FOLLOWING VARIABLES WOULD YOU LIKE YOUR PROVIDER TO USE WHEN CHARGING YOU FOR A NAAS SERVICE?

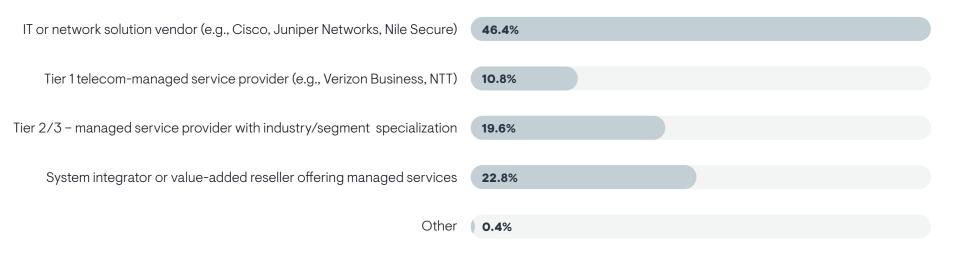
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Vendor Preferences

Figure 14 reveals the kind of NaaS suppliers that organizations want to work with. The most popular potential source is an IT or network solution provider, such as incumbent networking providers, like Cisco and Juniper, or newer startups, like Nile. Nearly one-quarter prefer system integrators or technol-ogy resellers. Fewer than 20% sought managed service providers with industry

specialization. Tier 1 telecommunications service providers were the least popular source of NaaS, which is surprising since most respondents believe that cloud and WAN interconnectivity services and WAN connectivity are the typical types of offerings available via a NaaS consumption model.

FIGURE 14. WHAT KIND OF PROVIDER WOULD YOU LIKE TO DIRECTLY ENGAGE WITH WHEN PURCHASING A NETWORK AS A SERVICE SOLUTION?





NaaS and Internal Network Operations

Providers of NaaS vary in how much of day-to-day network operations they take over. Some providers take on 100% ownership of change management, monitoring and troubleshooting, and other responsibilities. Others simply manage software updates and patching on hardware and leave the bulk of daily

Only 21% want to outsource 100% of NaaS operations. operations in the hands of the IT organization. **Figure 15** reveals how much responsibility respondents want for daily network operations. Only 21% want to outsource 100% of NaaS operations. Only 15% want to keep all operations in house. The rest (64%) want a hybrid operating model in which the NaaS provider and the IT organization share responsibility for ongoing management. Some highly regulated industries will be reluctant to outsource any network operations. "It would have to come down to our information security organization," said a network engineer with a Fortune 500 aerospace and defense company. "It would be about how much of the data is encrypted and how we can make sure foreign entities aren't seeing and misusing the data we are sending to them."

FIGURE 15. FOR PARTS OF YOUR NETWORK THAT YOU MIGHT CONSUME AS A SERVICE, WHICH OF THE FOLLOWING BEST DESCRIBES HOW YOU WANT TO HANDLE DAY-TO-DAY OPERATIONS (MONITORING, TROUBLESHOOTING, CHANGE MANAGEMENT) FOR THAT SERVICE?

• 21.2% Outsource – NaaS provider handles 100% of operations

- 14.8% In house Our team handles 100% of operations
- 64.0% Hybrid We share operational responsibility with the NaaS provider

Sample Size = 250

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NaaS Adoption Roadblocks

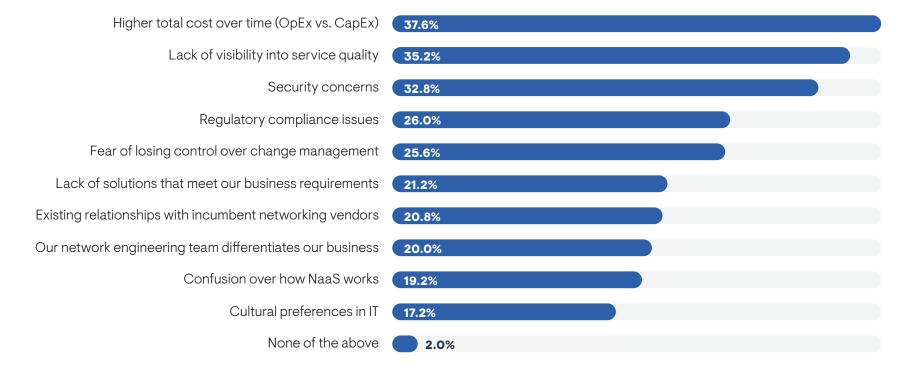
Network technology is complex and very critical to digital operations. Thus, most IT organizations are extremely conservative and slow to embrace a change as potentially fundamental as NaaS, despite the strong interest reveaed by this research. **Figure 16** identifies the key inhibitors are NaaS adoption. Notably, cultural resistance and a lack of understanding of NaaS were nonfactors.

Instead, many companies are concerned about the shift in cost structure with NaaS. Network infrastructure is usually a capital expenditure, with some

switches and routers staying in production for a decade or more. Many NaaS solutions convert networking to an operational expense, with recurring subscription fees. IT organizations see the potential for total cost of ownership to be higher over time. European respondents were more likely to cite this concern than North Americans.

Many companies are concerned about the shift in cost structure with NaaS.

FIGURE 16. WHICH OF THE FOLLOWING CONDITIONS MIGHT PREVENT YOUR ORGANIZATION FROM EMBRACING A NETWORK AS A SERVICE SOLUTION?



Sample Size = 250

NaaS Adoption Roadblocks . 25

The second major adoption barrier is a lack of visibility into service quality. EMA perceives two potential issues here. First, companies are concerned about their ability to monitor and enforce service-level agreements (SLAs) if their NaaS providers offer limited visibility into the network service. Second, IT organizations might struggle to address end-user complaints with limited visibility. Rather than troubleshoot problems themselves, the IT team has to open a ticket with the NaaS provider and await a resolution. Organizations that intend to outsource 100% of day 2 operations to a NaaS provider were especially concerned with this issue. Visibility into service quality and network problems is a major issue for a network engineering manager at a large university, which converted part of its campus network to a NaaS solution. "We don't have more or fewer trouble tickets now, but the tickets we do get take three or four days to troubleshoot because I'm just playing the middle man between [users] and the NaaS provider."

The third major roadblock is security. IT organizations may be concerned about how a NaaS provider will integrate into their existing security architecture. They may also worry about the data that NaaS providers collect from their networks to support service management. Notably, cybersecurity professionals were the least concerned with this issue. Instead, the CIO's suite and the IT architecture group had more concerns about security.



Potential Benefits of NaaS

So, what's the point of NaaS? What benefits does it offer to companies? **Figure 17** reveals that respondents perceive a bevy of potential value. First, they see NaaS as an opportunity to quickly access and use new technologies. With no commitment to hardware, organizations believe they can push their NaaS providers to install the latest and greatest technology as it becomes available, such as faster WAN connections, faster Ethernet speeds, and more powerful Wi-Fi access points. Europeans were more likely to select this benefit than North Americans.

Given that NaaS is fundamentally a managed service, many companies also anticipate that they can mitigate skills gaps by outsourcing aspects of network engineering and operations to NaaS providers. Organizations with poorly staffed network teams were unsurprisingly more likely to anticipate this benefit. Thirdly, companies believe that they will enjoy better and more predictable network performance because they will have enforceable SLAs.

Many respondents also recognized that the flexibility of NaaS services will allow companies to align network capacity with actual demand. For instance, a university could scale down capacity (and cost) during the summer when most students are off campus. Accounting firms could scale up capacity at retail locations during tax season. Retailers could scale up during the holiday seaon. Respondents who associated the concept of NaaS with SD-WAN and SASE were more likely to perceive the value of this alignment. Poorly staffed network teams also had an affinity for this benefit.

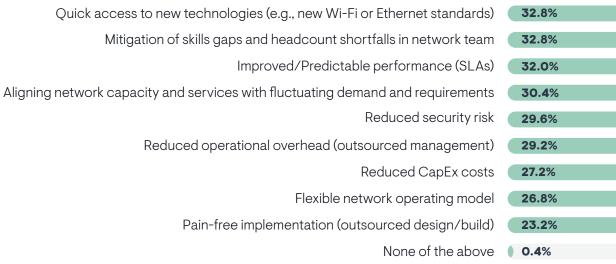


FIGURE 17. WHICH OF THE FOLLOWING POTENTIAL BUSINESS BENEFITS OF A NETWORK AS A SERVICE OFFERING ARE MOST COMPELLING TO YOU?



Sample Size = 250

"For a company that lacks expertise and CapEx, NaaS is an easy way to get a business-level solution without having to invest a lot of time and suffering a lot of headaches," said a network engineering manager at a large university.

Reduced capital expenses were a minor overall opportunity with NaaS, but respondents who associated the concept of NaaS with campus switching and Wi-Fi were more likely to see the benefit of this cost avoidance.

Unlocking the Value of Network Teams

In most cases, a NaaS solution allows IT organizations to outsource some aspects of network engineering and operations. Given that most organizations believe they need additional skilled personnel, any solution that reduces network management overhead has potential value. EMA asked respondents how their organizations would reallocate the time of their networking teams if they did outsource to a NaaS provider. **Figure 18** reveals that many respondents expect that such outsourcing will enable network teams to enable and accelerate four key initiatives:

- End-user experience optimization
- Artificial intelligence projects
- Cloud transformation
- IT and network automation

The chart also shows that organizations are less likely to reassign or subtract personnel from network teams in response to NaaS adoption. Only 38% believe they would reassign networking pros to other groups and only 28% expect to reduce headcounts. IT executives were the least likely to anticipate a reduction in personnel.

FIGURE 18. IF YOU WERE TO OUTSOURCE A SUBSTANTIAL AMOUNT OF NETWORK OPERATIONS TO A NAAS PROVIDER, HOW WOULD YOUR ORGANIZATION REALLOCATE THE TIME OF THE NETWORK ENGINEERING AND OPERATIONS PERSONNEL IMPACTED BY THIS CHANGE?

Enable/Accelerate optimization of end-user experience	47.2%
Enable/Accelerate AI projects	45.6%
Enable/Accelerate migration of applications to public/private cloud	44.4%
Enable/Accelerate IT/network automation projects	43.2%
Reassign personnel to augment other groups	38.4%
Reduce network team head count	28.4%
Not applicable – this won't unlock substantial free time	2.4%

Sample Size = 250



Conclusion

This research found that enterprises are positioned to benefit from NaaS solutions. While most companies have networks that meet the basic needs of the business, very few consider their networks to be differentiators. This is due in part to the fact that network teams are often stretched thin, with not enough skilled personnel to tackle critical projects. Strategic use of NaaS solutions could mitigate this issue, allowing network engineering teams to focus on enduser experience optimization, AI projects, and more.

IT buyers recognize that there are many different kinds of NaaS. Most associate NaaS with WAN and cloud interconnectivity and peering, WAN connectivity services, and SD-WAN and SASE overlay technology. Awareness of data center and campus NaaS solutions is lower. However, interest in all styles of NaaS is robust.

Through their responses to our survey, research respondents defined NaaS as a networking solution based on a cloud-like service delivery model, with integrated managed security services, comprehensive observability, and APIs and integrations with other systems and services.

The types of networking delivered through NaaS, whether its cloud interconnectivity or campus connectivity, is beside the point. The research shows that companies are open to all types of NaaS solutions if buyers see potential benefits. Will interest translate into adoption? The perception is that NaaS remains a niche offering today, especially when one compares it to the market dominance of IaaS. PaaS. and SaaS solutions. Traditional consumption models persist in certain sectors, like data center switching, campus switching and Wi-Fi, and routing. However, other sectors of the networking industry have shifted hard toward NaaS. For instance, NaaS for cloud interconnectivity is growing rapidly by all accounts, especially with the rise of multi-cloud architecture. Also, most enterprises now prefer to consume SD-WAN and SASE as a managed service. NaaS is here to stay, but enterprises are still determining how to integrate it into endto-end digital architecture and operations. This research should serve as an early NaaS roadmap for decision-makers.

Research respondents defined NaaS as a networking solution based on a cloud-like service delivery model, with integrated managed security services, comprehensive observability, and APIs and integrations with other systems and services.



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