

Networks-as-a Service: The New Normal

Why enterprises are embracing online marketplaces and how CSPs must respond

Publication Date: 03 Apr 2020

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Summary

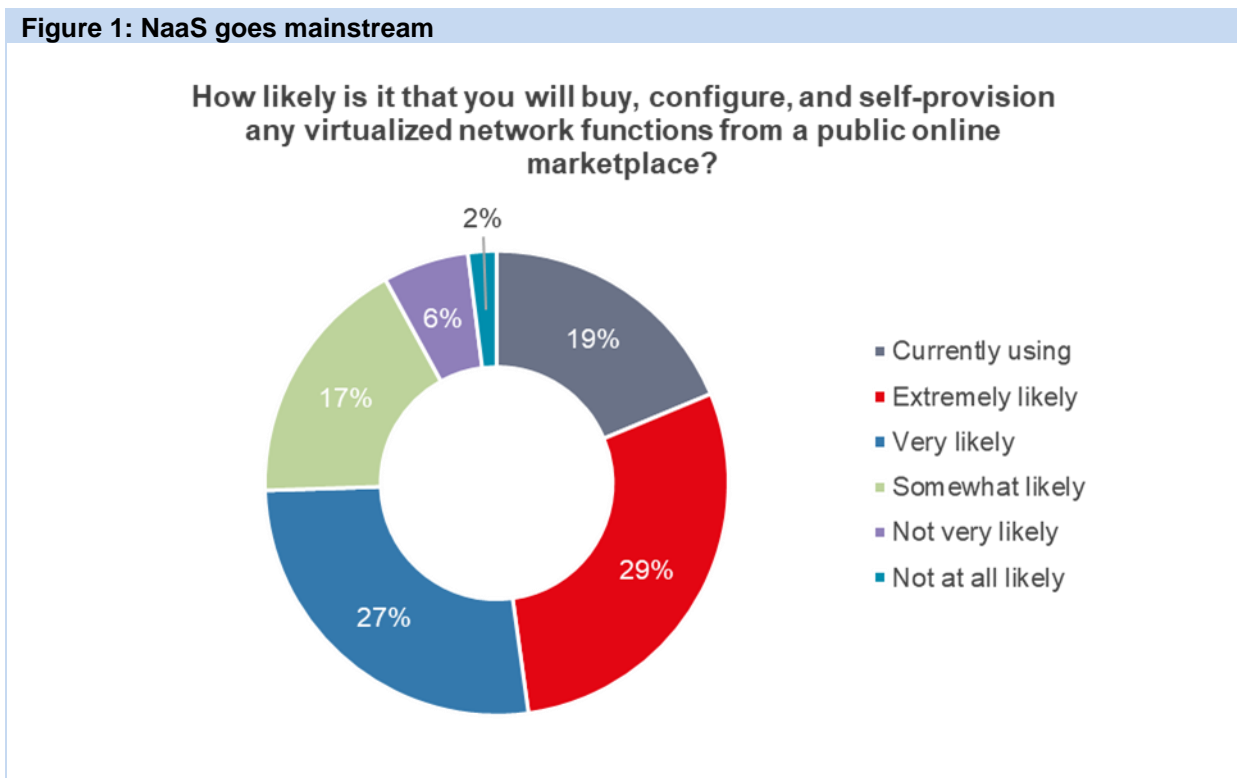
Introduction

Buying networks-as-a service (NaaS) is no longer an if-or-when discussion: enterprises expect this to become a mainstream activity within the next 24 months, according to new global research from Ovum, sponsored by Amdocs (see Figure 1). Six out of ten enterprise IT decision-makers plan to invest in a virtualized network function (VNF), and a fifth already have. Managed collaboration, security, and LAN services top the priority list among the large enterprises and the small and medium enterprises (SMEs) surveyed – and 75% would buy such services from an online marketplace. For service providers navigating the post-pandemic world, empowering business-to-business (B2B) customers with self-serve tools is set to become a key competitive differentiator.

Ovum view

Enterprises have become fluent digital buyers. Online marketplaces are now a credible channel for service exploration, purchasing, and management. This is a profound market transformation and shouldn't be underestimated. Digital maturity raises enterprise buyer expectations of their virtual environments. Not only must NaaS providers offer an excellent navigational experience, but they must also deliver deep service orchestration to support enterprises' changing digital consumption patterns, need for resilience, and network complexity. Whoever does this best is set to win a multibillion dollar global race for control over enterprise budget as purchasing priorities evolve.

Figure 1: NaaS goes mainstream



Source: Ovum 2020 Enterprise NaaS Survey, n=251

Key messages

- **Enterprise size doesn't matter in buying digital services.** Enterprises large and small already buy diverse business and technology services online and are willing to buy more. Decision-maker age is a factor in technology buying behavior, but less so as digital natives grow in number.
- **Enterprises are open to telco NaaS if digital experience improves.** Eight out of ten enterprises would buy NaaS via a telco portal, but seven out of ten are dissatisfied with their current portal experience.
- **Enterprises believe others are more agile in NaaS.** Enterprises currently rank cloud hyperscalers and integrators far ahead of telcos in credibility to deliver and manage virtualized network functions.
- **The coronavirus has turned self-serve and self-management into acute needs.** As enterprises adapt to new working patterns, their networks must adapt to daily changing requirements and calls for increased resilience across more diverse working contexts.

Recommendations

For telco NaaS providers

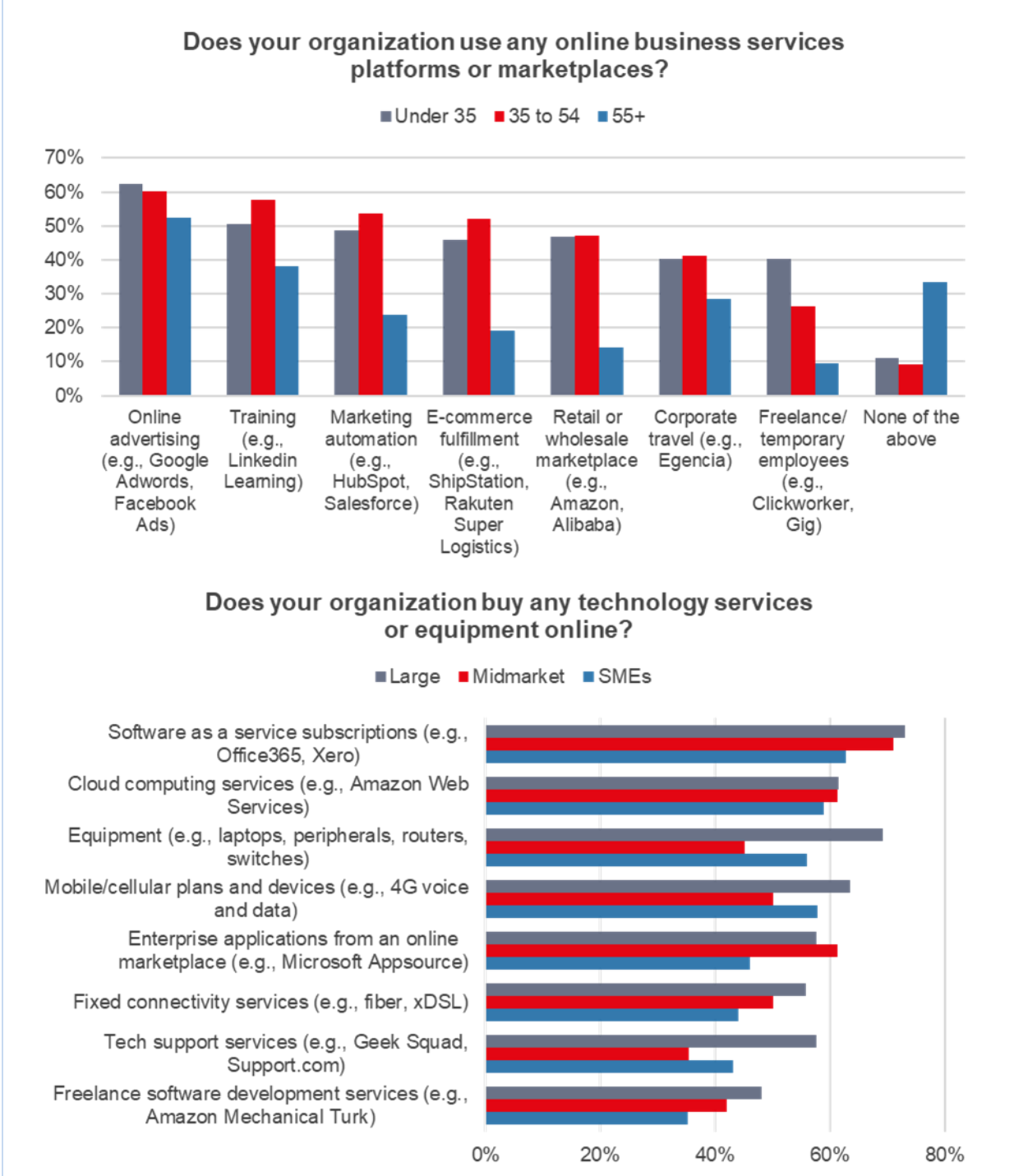
- **Avoid the urge to create another silo.** NaaS is a foundational portfolio element, not a separate activity. Plan for a future where all services are controlled via a NaaS platform.
- **Promote simplicity and convenience to improve image.** Become a digital concierge for enterprise buyers, anticipating their service needs and quality expectations and curating service choices through a blend of virtual and human interactions.
- **Self-service doesn't mean going completely alone.** Enterprises still value and crave human support to guide and validate choices – and it's a premium they'll also pay for.
- **Don't confuse on-demand provisioning with immediate payment.** Fewer than a third of enterprises favor pay-as-you-go pricing; paying monthly for a NaaS service bundle is the top preference, attracting 40% of enterprises.

Why NaaS? The enterprise perspective

For enterprise IT teams, the only true constant is change. There is little time for proactive strategic planning to apply digital technologies more creatively – and addressing this imbalance is an implicit motivation for NaaS. Among the enterprises surveyed, half expected to expand their networked business locations over the next 24 months, with responses particularly high among multinational firms. Dealing with the design, setup, and deployment of new sites comes with the daily background noise of securing digital environments and dealing with routine moves, adds, and changes. No wonder the effortless point-and-click nature of the NaaS proposition is so attractive.

Smoothing the way for NaaS is a change in general enterprise buyer behavior. Experience of purchasing services online is increasingly common among IT and non-IT decision-makers. Six out of ten enterprises have already bought a business, technology service, or product online (see Figure 2).

Figure 2: Enterprises are fluent digital buyers



Source: Ovum 2020 Enterprise NaaS Survey, n=251

Nevertheless, it's notable that even "simple" telco products (e.g., broadband) are still not bought online in equal or superior measure to more complex digital services (like SaaS or cloud hosting). Buyer maturity is manifestly not a problem, nor does service complexity explain this gap. Logically, attention must turn to problems with the effectiveness of communications service providers' (CSPs') digital delivery strategy.

The impact of COVID-19

The coronavirus crisis will only accelerate enterprise flight to digital and heighten the need for tools allowing flexible, on-demand adaptation of network services and applications. Globally, millions of employees have gone home – and to a remote-working existence that they and their IT department have not prepared for. Others have remained in the field with even more stringent monitoring and control over their safety, location, and productivity.

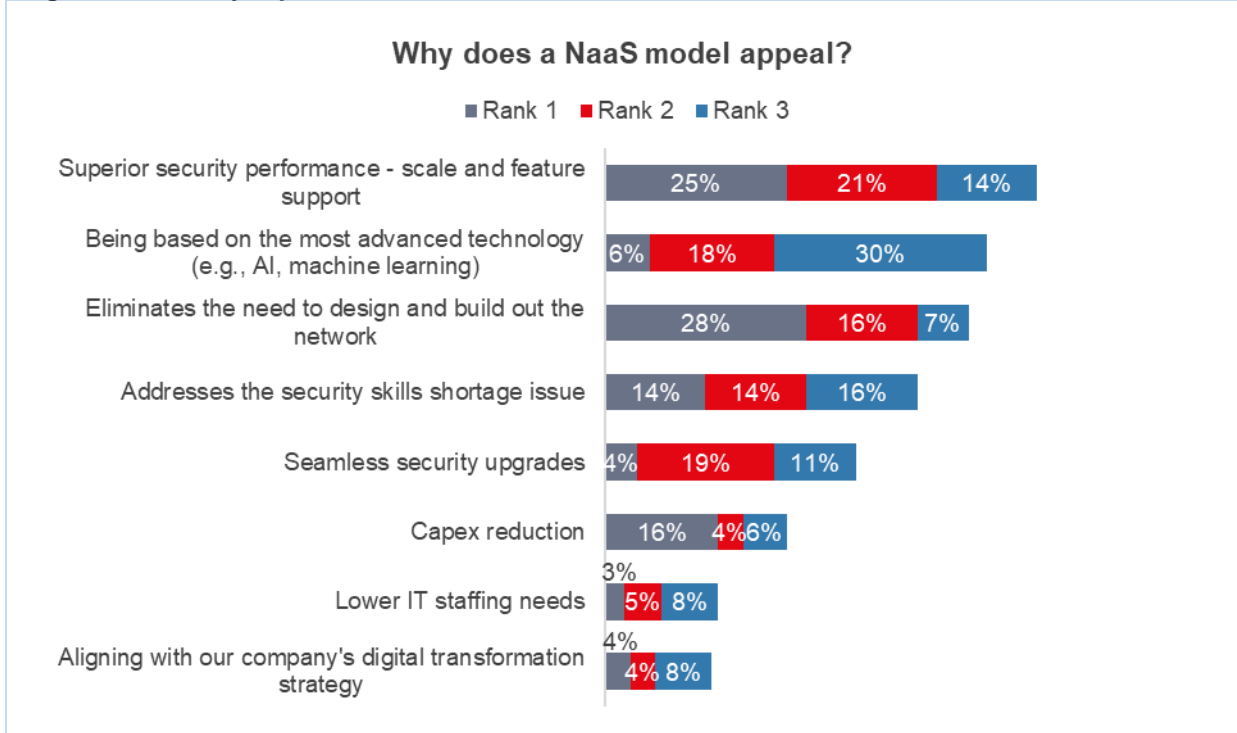
The consequent spike in cloud collaboration and productivity tool usage in fixed and nomadic contexts, demands on network performance, and expanded security challenges have stretched CSPs to their operational limits. But the impact is centered not just on network capacity and performance but also on the orchestration challenges around the volume and diversity of digital services that must be provisioned and managed. However, these are all issues that an effective NaaS strategy can help address.

Expected benefits

It's become even more critical for CSPs to align to what enterprises view as NaaS benefits. But there is a mismatch between what CSPs think enterprises see as benefits and what enterprises say they see as benefits. According to Ovum's companion NaaS research with service providers and VNF vendors, CSPs believe enterprises value capex reduction most. In fact, enterprises are relentlessly focused on securing digital experiences: three of the top five NaaS benefits highlighted by enterprises are security related (see Figure 3) while capex concerns are low in priority.

What attracts enterprises to NaaS is more cohesive, faster, and more effective security in the face of rising responsiveness and skills challenges. Agility and simplification are other leading benefits surrounding a NaaS model, according to the enterprises surveyed. Enterprises believe that the value of NaaS is not about achieving capex reduction per se, but more about security and gaining powerful agility – with ease of upgrades and management strongly highlighted.

Figure 3: Security tops NaaS benefits



Source: Ovum 2020 Enterprise NaaS Survey, n=251

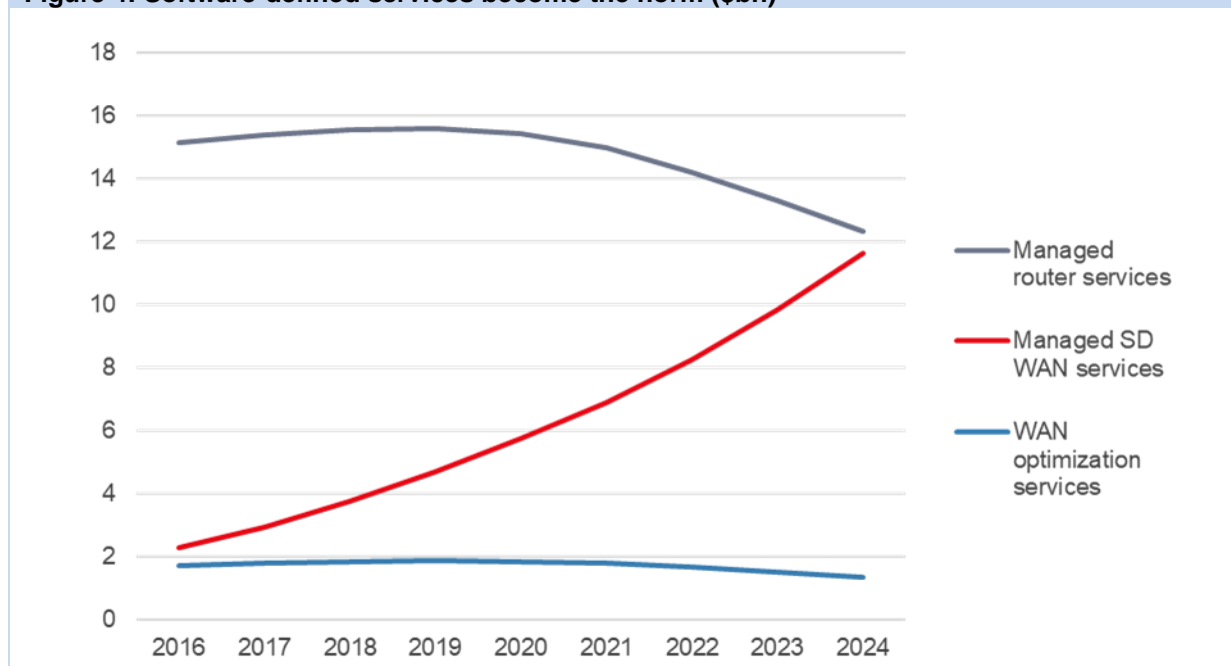
What’s it worth?

NaaS is part of a distinct and global transformation of enterprise network services revenues. Its field of operations will grow to include a wider range of services over time. This transformation will not happen overnight, but it is well underway. Spearheading this change is the global diffusion of SD-WAN services.

Providing a platform for self-serve is only one dimension of the opportunity for service providers. Beneficial one-off professional services and managed annuity offers are other possible revenue opportunities. Enterprises need help to design, configure, install, run, maintain, and secure their networking environments.

Many existing SD-WAN services already include features such as routing, network security, and optimization – and will subsume other standalone services. For example, over time, Ovum predicts that established services such as managed routers and WAN optimization will migrate to SD-WAN platform environments and will be sold via marketplace approaches (see Figure 4).

Figure 4: Software-defined services become the norm (\$bn)



Source: Ovum

Telco NaaS delivery challenges

Despite rising enterprise demand, delivering NaaS presents unique challenges for CSPs. Some of these challenges are cultural, others operational.

Stakeholders in different departments within service providers must be aligned in views, expectations, and timing. In practice, successful NaaS requires an executive sponsor, cross-departmental teaming, and technical and market education as well as the adoption of new modes of working. Many service providers need to speak the language and execute the methodologies of agile and scrum more fluently across departmental divides, just as ITIL once built bridges within service providers and with their enterprise clients.

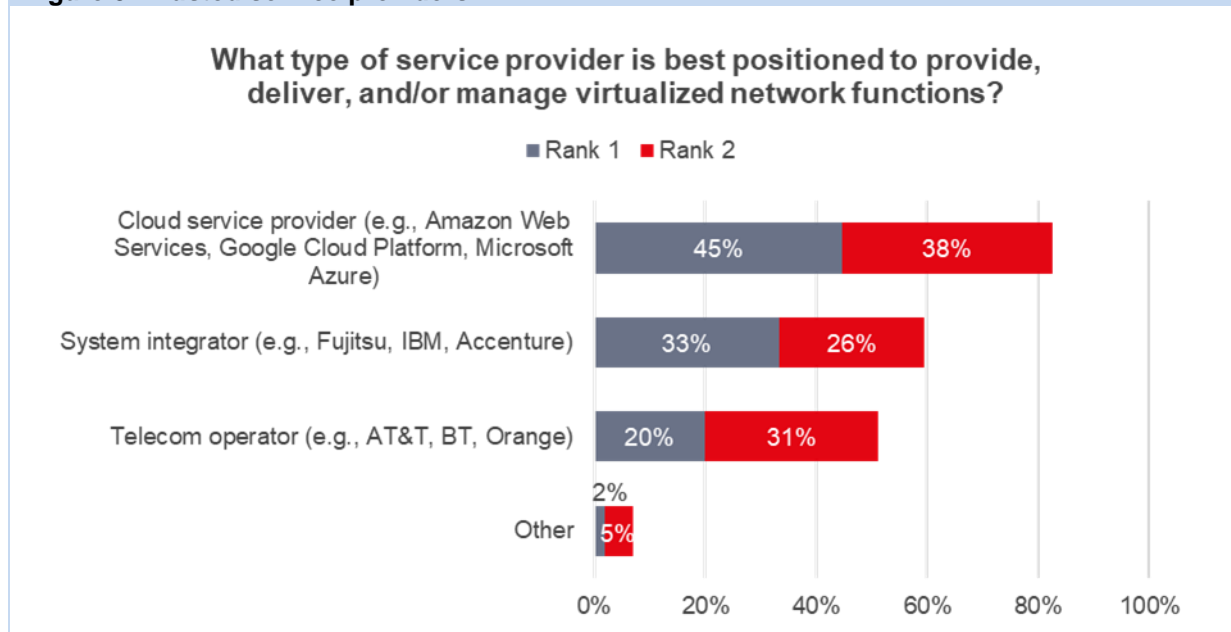
The image problem

CSP image problems are real. Surveyed enterprises look to the cloud hyperscalers – such as AWS, Azure, and Google – as their go-to partners for the widest variety of NaaS. Calling CSPs third rate in the opinion of enterprises sounds harsh, yet the facts speak for themselves (see Figure 5).

For their part, VNF vendors are split in their use of CSPs versus cloud hyperscalers as a channel to the enterprise, according to Ovum’s companion research with VNF vendors. Most VNF vendors are selling direct now, satisfying a need among some enterprises to DIY their own VNF environment.

But VNF vendors recognize the problems with this approach. Commercially, VNF vendors need a partner to achieve scaled reach and credibility in the enterprise universe. Operationally, enterprises adopting VNFs will struggle as their reliance grows; they will need a service management and orchestration platform – which CSPs are aligned to supply. Nevertheless, a key VNF vendor concern is the speed at which CSPs can onboard VNFs.

Figure 5: Trusted service providers



Source: Ovum 2020 Enterprise NaaS Survey, n=251

Despite their strong brand, cloud hyperscalers have weaknesses too. They are expert at scouting and offering choice in online marketplaces that they manage on an industrialized scale. But arguably their VNF expertise is limited: their capabilities of cross domain orchestration and management across multiple vendors have yet to be tested.

Not least, the cloud hyperscalers are also weak in the area of professional services – the personalized advisory and migration services that enterprises need and prize. That’s why hyperscalers are trying to bulk up their channel partnerships with integrators and other IT services providers to shore up this gap.

It’s an area where some CSPs can also step up with a concierge proposition that pairs scaled consultation with a NaaS service delivery platform. For example, consider the offer of a “snackable” unified communications (UC) implementation project for a medium-sized enterprise with strictly codified outcomes versus a complex multi-VNF transformation for a multinational conglomerate. Each is monetizable according to respective CSP skills.

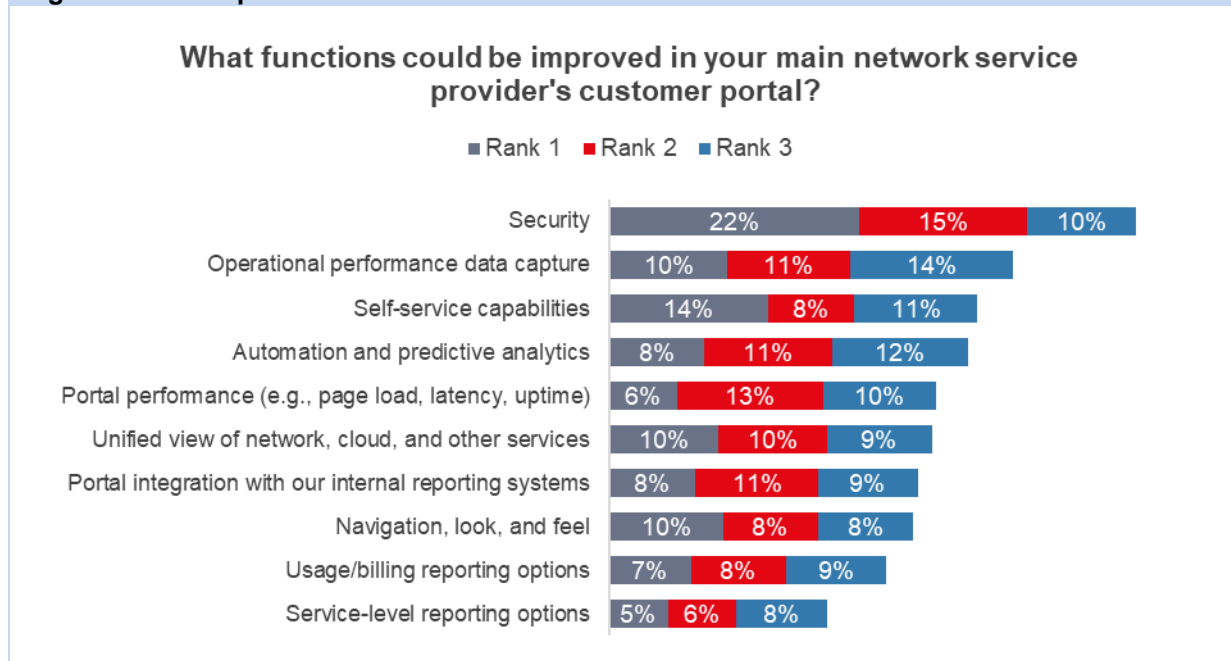
Portals need work

A legitimate question is whether CSPs should provide their own NaaS service delivery platform or be featured on a third party’s marketplace. In our survey of CSPs, 80% agreed that they would need a marketplace that lets clients choose from a variety of vendor-supplied and third-party service provider-supplied VNFs. In our view, this is not a mutually exclusive decision; CSPs can do both. But they have considerable work to do in order to make their operational environment fit for NaaS.

The enterprises surveyed are disappointed. A stunning two-thirds aren’t happy with their current network service provider’s portal – and this is the primary digital interface that they experience as customers. Portal security tops the list of concerns, perhaps an unsurprising finding given the gravity of concerns within enterprises’ own organizations. The list for improvements is clear cut (see Figure 6).

However, CSPs appear less aware of this critical issue. In our companion research, only one in five CSPs believed that their portal was a major stumbling block for NaaS success. It's urgent to realign priorities.

Figure 6: Fix the portal

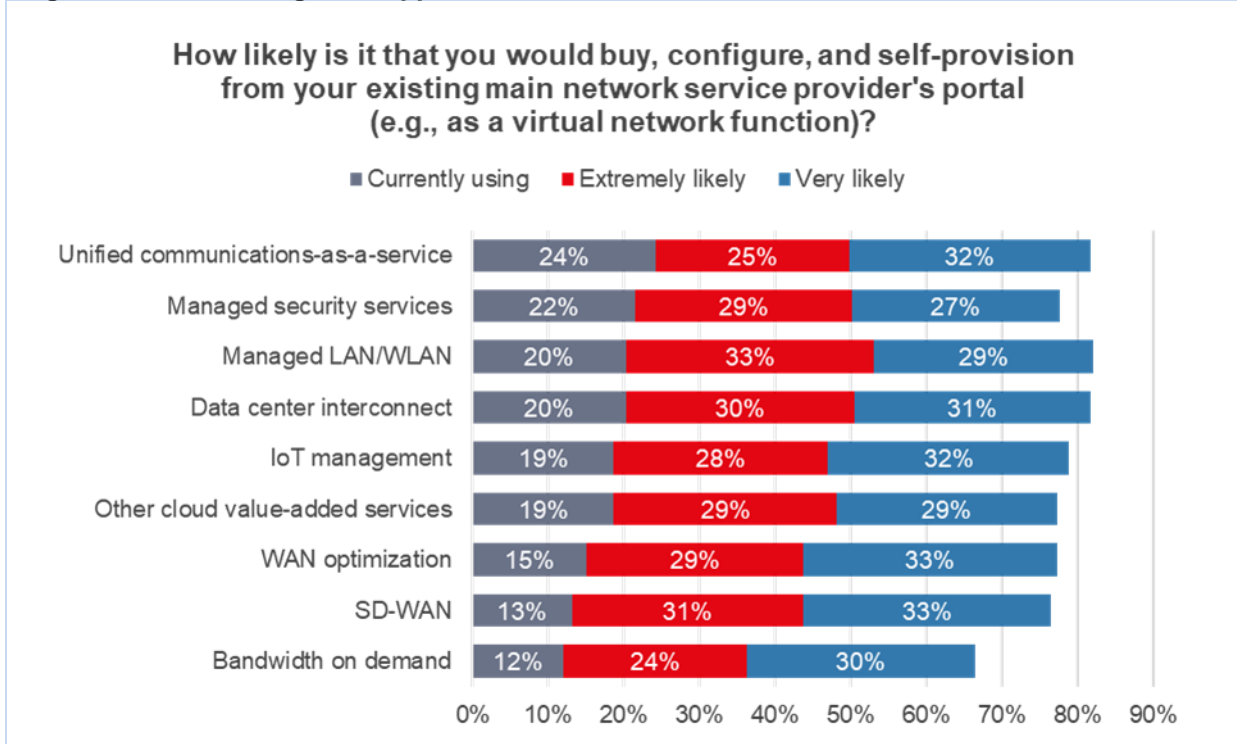


Source: Ovum 2020 Enterprise NaaS Survey, n=251

Trust is building

Customer concerns should be taken seriously. But it's also clear that the benefits of NaaS – and specifically NaaS provided by a telco – are proving an overwhelming attraction, even if enterprises express reservations. On average, one in five enterprises already has a direct experience of NaaS, and the majority intend to get acquainted soon (see Figure 7). What should be a surprise is not the scale of positive feeling, but the sheer diversity of its expression.

Figure 7: Telco NaaS gains supporters



Source: Ovum 2020 Enterprise NaaS Survey, n=251

However, it is worth noting that NaaS priorities for enterprises and CSPs do diverge (see Figure 8). CSPs must keep tabs on what their enterprise clients large and small are concerned about – and be prepared to change emphasis and focus to meet their needs. It's clear that enterprises want CSPs to provide services beyond the WAN and into the LAN, while CSPs do not even rank LAN management in their top five and prefer to keep to their network demarcation point with SD-WAN. Meanwhile, managed security ranks fifth and second for enterprises and CSPs, respectively. This reflects enterprise desire for consultancy around security versus self-serve, rather than its lower importance.

Figure 8: Comparing enterprise and CSP NaaS priorities

NaaS: Priority services	
Enterprise top 5	CSP top 5
1. Managed LAN / WLAN	1. SD-WAN
2. Data center interconnect	2. Managed security
3. UCaaS	3. WAN optimization
4. IoT management	4. Data center interconnect
5. Managed security	5. UCaaS

*Note: Enterprises asked to rank likelihood to self serve NaaS service from CSP portal/marketplace; CSPs asked to rank importance of NaaS service.
N=251 enterprises; N=99 CSPs*

Source: Ovum 2020 Enterprise NaaS Survey and CSP NaaS Survey

Ultimately, however, the key takeaway is this: enterprises believe that the NaaS model is fit for a range of services, from their most critical (e.g., security) to their newest (IoT). It proves the fundamental point that NaaS must be a foundational element in any enterprise service provider's portfolio. It is here – and here to stay.

Appendix

Methodology

In 4Q19, Ovum conducted independent surveys of enterprises, VNF vendors, and CSPs exploring current usage, expectations, and roadmaps for NaaS. The respondents for each survey were made up of the following:

- The enterprise survey included 251 enterprise IT decision-makers from a cross-section of leading industries. Respondents were based in the US, UK, Australia, and Brazil. By size, the surveyed organizations ranged from 100 to 10,000+ employees.
- The CSP survey included 101 CSPs in 29 countries. Respondents were from converged, mobile, fixed, cable operators, MVNOs, and a handful of cloud providers and OTTs.
- The VNF survey included 64 VNF vendors and channel partners in North America, Latin America, Asia-Pacific, and EMEA.

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