



Digital Transformation with SDN

KHNOG Event 2023



Network transformation is vital to deliver digital transformation



From the traditional network of the past



To the software-defined future

Enterprise applications

Applications lived in data centres (DCs)

Multi-cloud performance

Underpins a great user experience no matter where the application is

Private networks

Most end points were controlled by the enterprise

Mobile- and IoT-ready

Automated segmentation and encryption enhance security posture

Internet

Was for consumer applications and basic marketing

Network services cost efficiency

Dynamic traffic routing prioritization and utilization of lower cost connectivity

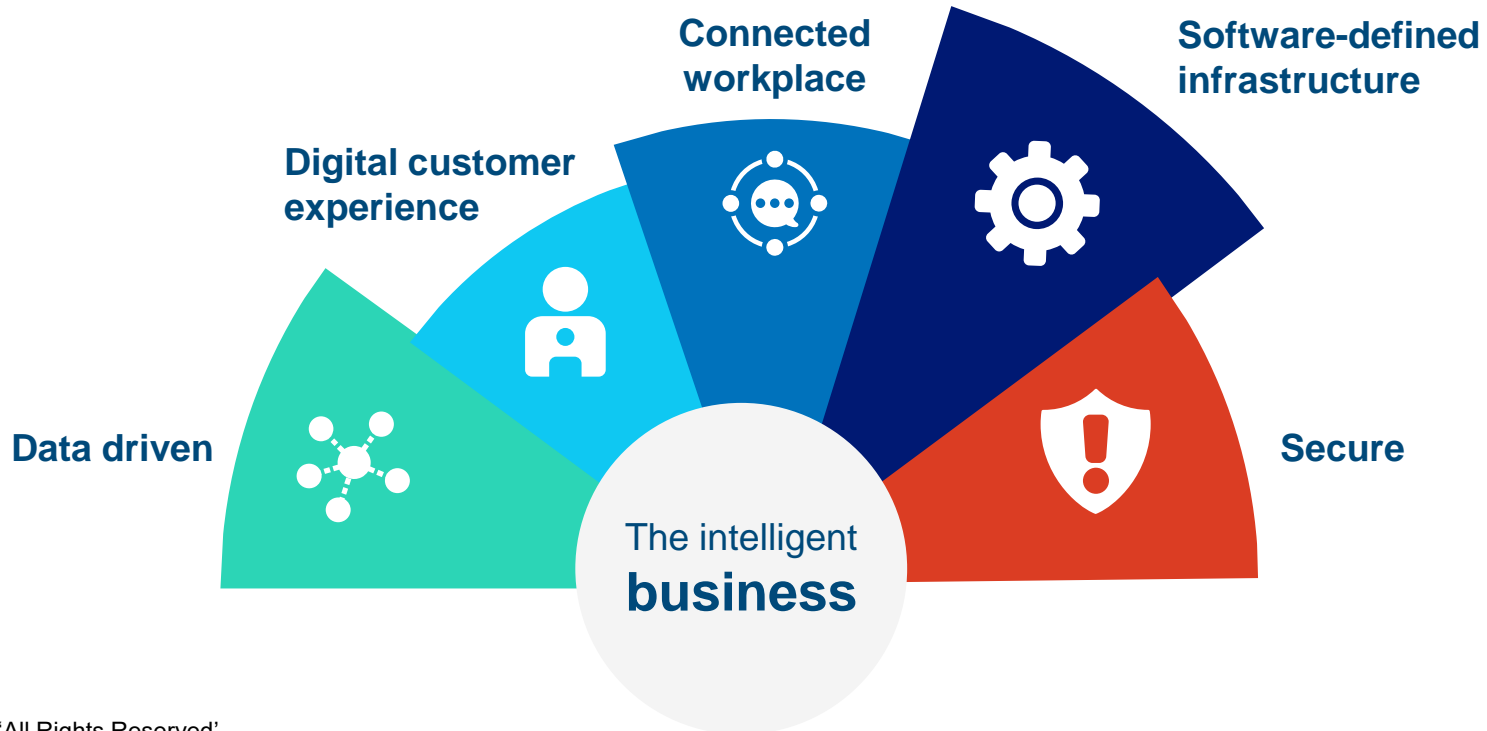
Carrier lock-in

Reliance on a single supplier who could connect every end point

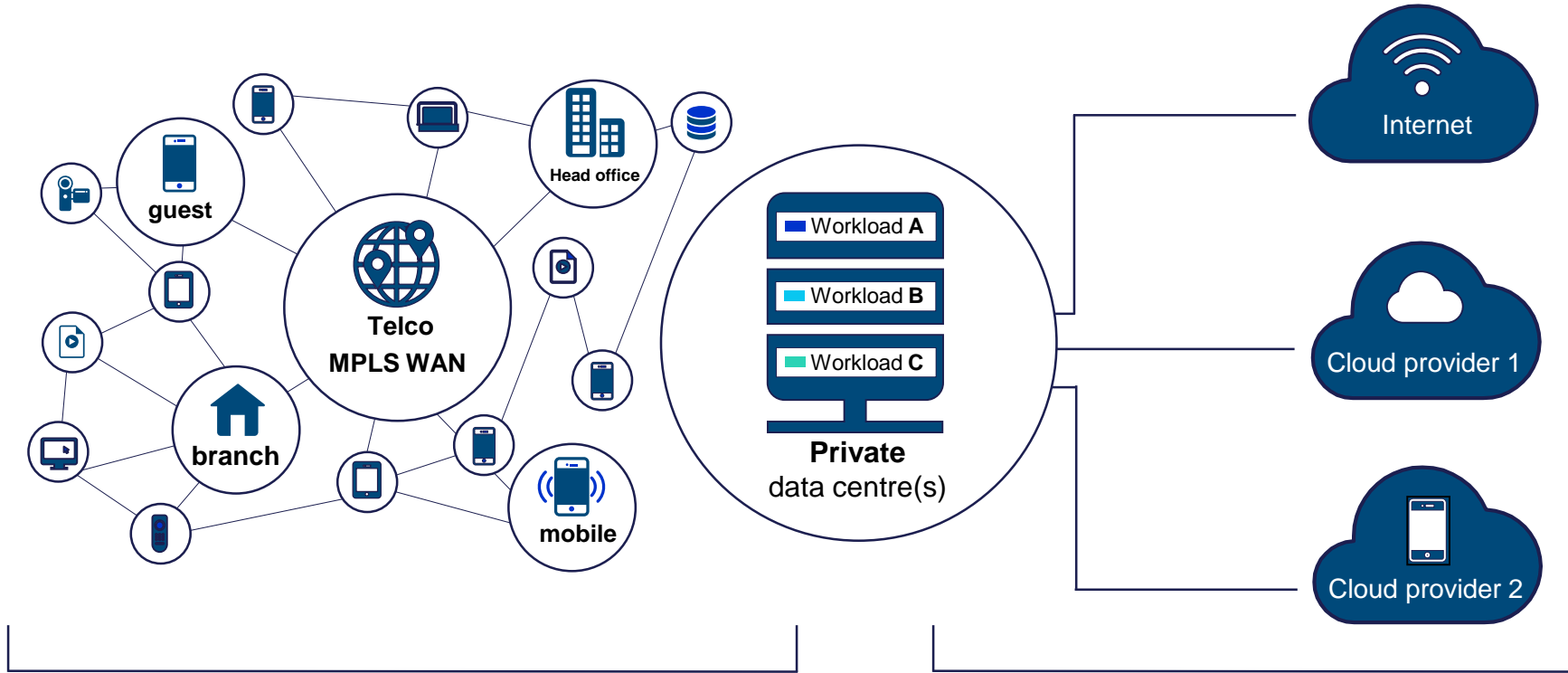
Carrier neutral

An opportunity to pick the best carrier for the site or use case

A new business model for the digital world



Realizing the potential of cloud, mobility, Customer Experience and productivity is a growing management challenge



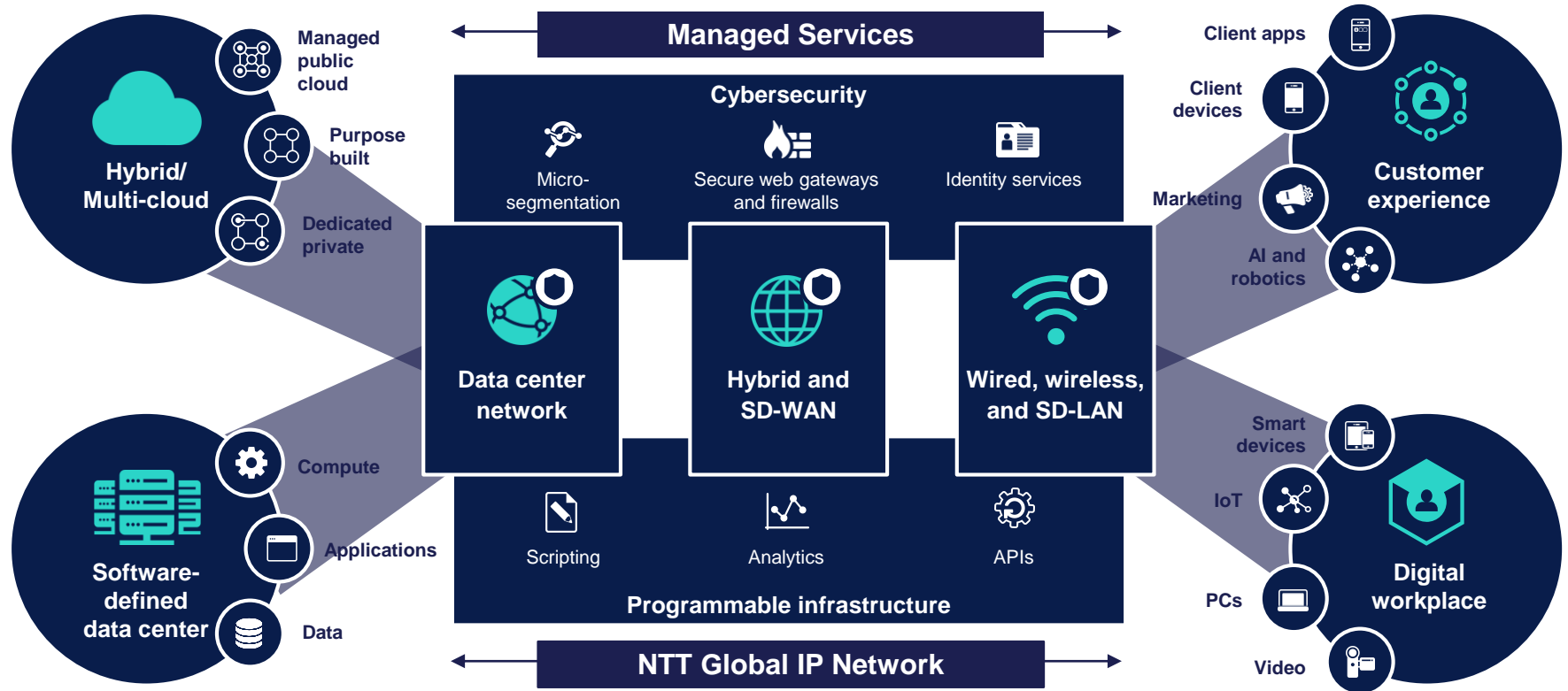
Yesterday

90% of network traffic sourced from private DC

Tomorrow

as much as 50% of network traffic sourced from the internet

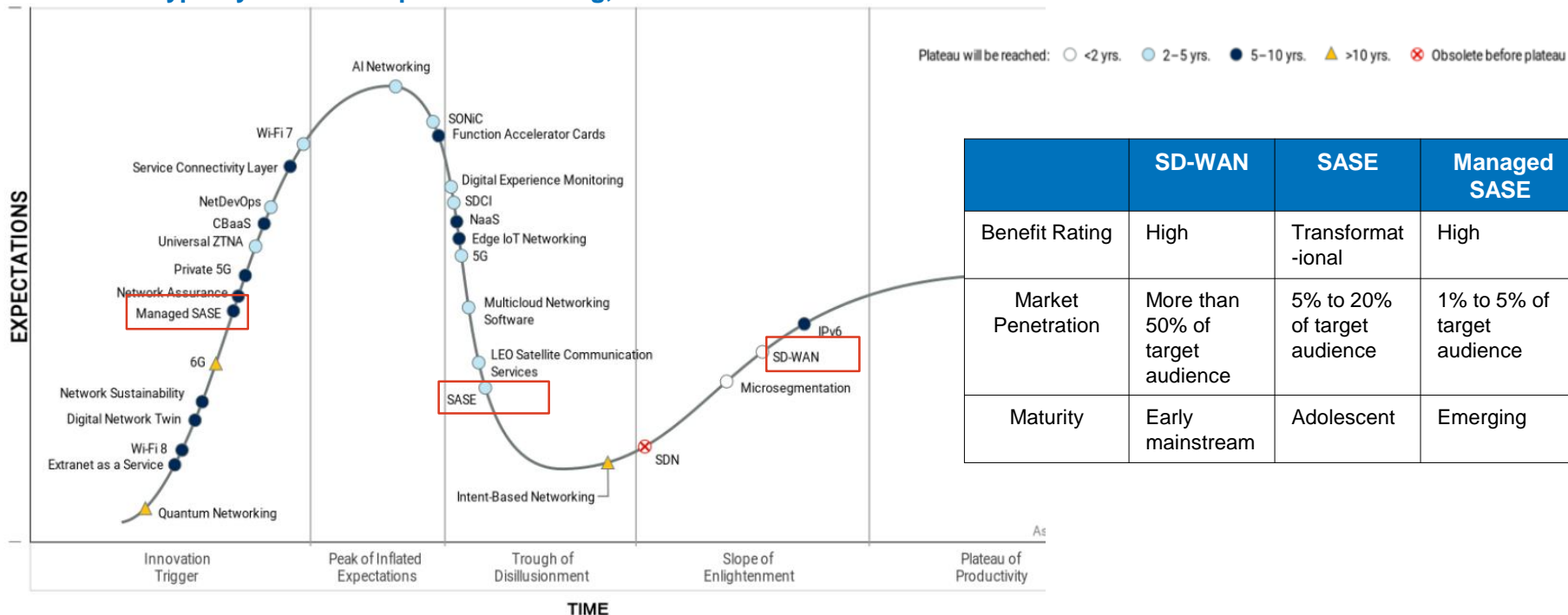
Software defined infrastructure is the foundation of the intelligent business



SD-WAN is already in early mainstream; while SASE will mature in the next two to five years

In recent years, networks have become increasingly complex, leading network managers and architects to seek more adaptable methods for managing their networks and applications. This demand has paved the way for the rapid growth of SD-WAN/SASE

Gartner Hype Cycle for Enterprise Networking, 2023



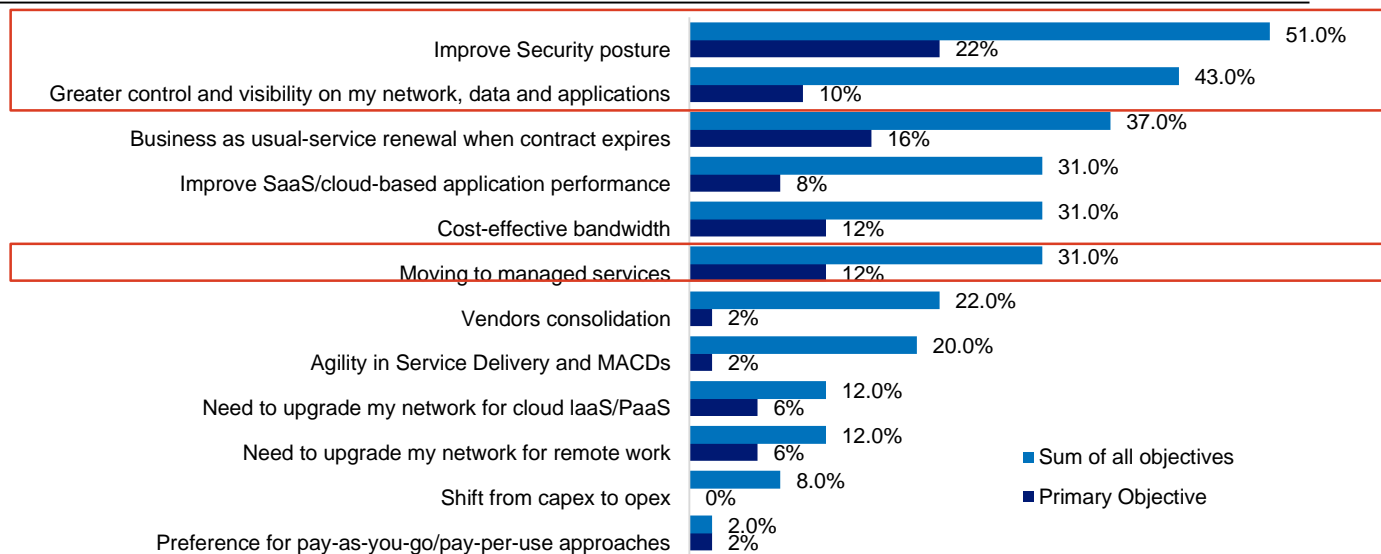
Improve security, contract renewal, moving to managed services are main objectives behind buying network these days (1/2)

What is driving change in network connectivity options?

Pandemic accelerated the convergence of SD-WAN and SASE, but the shift towards remote and hybrid work remains. This necessitated a flexible, on-demand, software-based architecture for delivering network and security services anywhere

- Enterprises also face challenges as they transition from data center-centric networks to cloud-centric networks

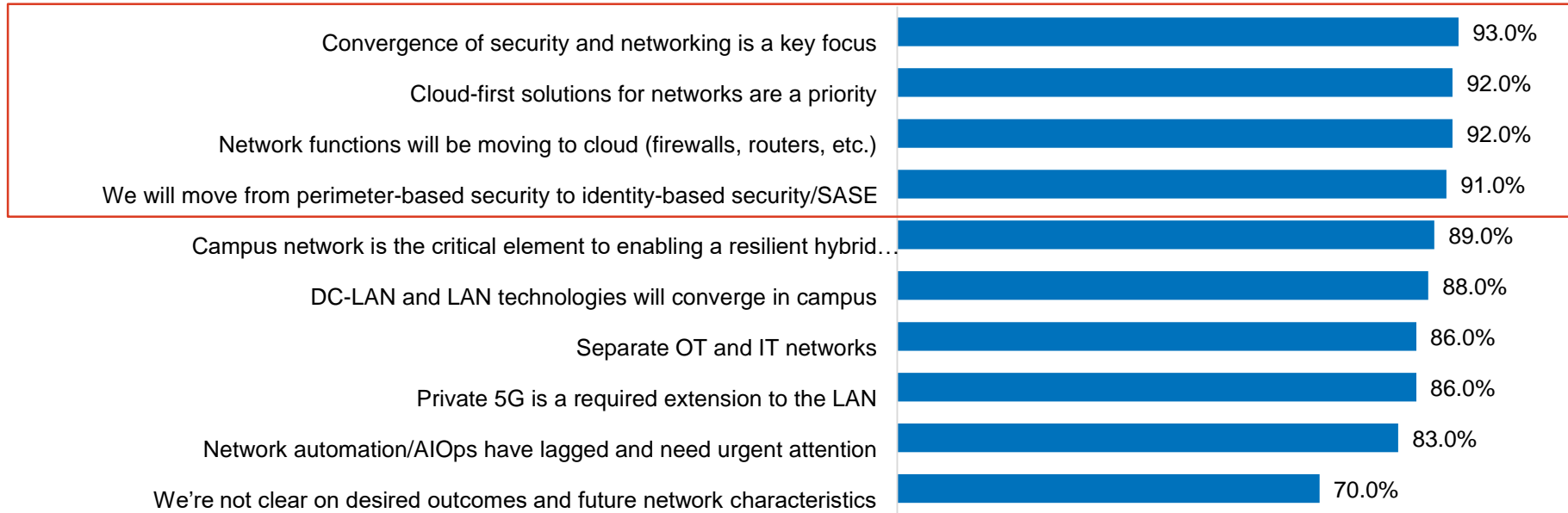
Top objectives of the purchasing network technologies/services , n= 49



Although having greater control and visibility over their network, data, and applications ranks second overall, it is 5th ranked as a “top” priority objective.

Convergence of security and networking, along with cloud-first solutions for networks are the key focus (2/2)

Network-related changes expected in future (n=1,037–1,084, 2023)^



To what extent do you agree or disagree that the characteristics of the network will be changing in future? (Choose one answer per row) Base: All highly technical/technical respondents, excluding decision-makers (n=1,037–1,084)

During the last two years, on-premises network security services have emerged as the frequently cited "most expensive" network technologies and/or services*

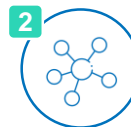
Top two trends driving smarter SD-WAN and SASE

Overall, the integration of new technologies such as cloud, edge, AI, and analytics and SSE with SD-WAN provides connectivity for cloud-delivered branch, simplifying network operations and enhancing user experience




Extending SD-WAN to SASE

- **Many organizations have already implemented an SD-WAN strategy.** SASE is its next evolution, integrating security into the enterprise WAN. This is driven by work from anywhere scenarios and shift to cloud
- **SASE market will grow at a CAGR of 31% (2023-26),** reaching USD 20.9bn by 2026



Next-generation SD-WAN

- **Several innovations will power the next-generation of SD-WANs:** AI, edge, multi-cloud and NaaS
- **Next-generation SD-WAN addresses the limitations of traditional WAN technologies** and offers improved network performance, increased security, reduced downtime and simplified network management
- **SD-WAN equipment market is expected to experience a CAGR of 13.9% (2023-2027),** reaching USD 8.4 bn by 2027
- **Meanwhile, the SD-WAN Managed Services sector is projected to grow at a CAGR of 11.1% (2023-27),** with a projected market value of USD 8.1 bn by the end of 2027



SD-WAN experiences double-digit growth, while traditional and managed connectivity remain flat, making SD-WAN a key driver in the overall network market

“SD-WAN and SSE revenues are expected to see a double-digit CAGR over the 2022 to 2027 timeframe.” - Dell’Oro Group, Feb 2023



NTT

Together we do great things

Q&A