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Extreme networks

THE FUTURE OF INTELLIGENT NETWORKS

5 Key Insights to Shape Your WAN Edge Strategy

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Getting your WAN edge strategy right

Traditional WAN infrastructure connected branches to a central data center, creating a connectivity choke point and introducing inefficient routing. With cloud services now a fundamental component of most network topologies, it has become necessary to adopt a more flexible and automated WAN edge that provides direct access to the main cloud providers.

For organizations looking to deliver digital services from the cloud to employees or customers at the branch or wanting to deploy connected machines in their operations, an intelligent WAN edge is vital.

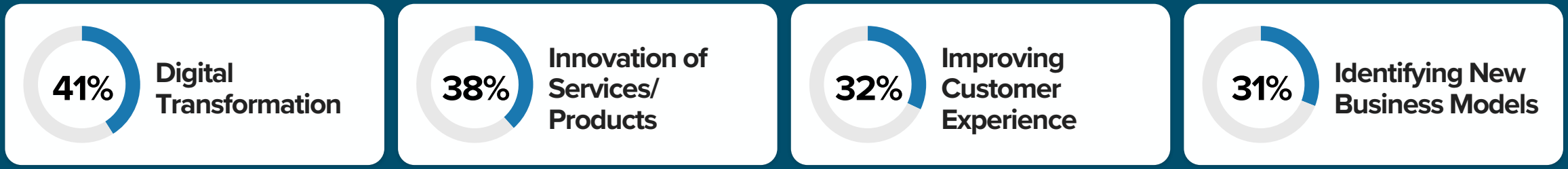
HERE ARE 5 INSIGHTS THAT WILL HELP YOU SHAPE YOUR WAN EDGE.

#1 The WAN edge is getting wider

As organizations focus on digital transformation, deploying Industry 4.0 technologies and offering digital services to customers at the branch, the WAN edge is widening.

Application performance at the WAN edge is now a critical influence on user experience, necessitating the ability to prioritize customer-facing services. Latency-sensitive workloads, such as video and augmented reality (AR), will require smarter networks to ensure consistent delivery. Similarly, in factories, warehouses, and in the field, IoT applications will require network resiliency to avoid downtime in operations. Flexible WAN solutions that incorporate a range of transport types, such as 5G, are enabling the development of innovative mobile and smart machines at the edge.

TOP BUSINESS PRIORITIES, 2022-2023



Source: Ecosystm Digital Enterprise Study, 2022

#2 Automation enables digital services at the WAN edge

Data and AI strategy has become the key focus for technology modernization. Networks have become more complex and distributed, making automation of the WAN edge essential for any digital business.

Automation built into the WAN edge can improve scalability, performance, availability, and manageability for organizations already struggling to recruit and retain talent. Zero-touch appliances can be rapidly deployed at the branch and managed without the physical presence of a technician. Application aware routing, path optimization, and error correction are now important tools to boost performance and ensure resiliency. WAN edge devices can also be centrally managed using failure correlation, what-if analysis, and noise reduction.

TECHNOLOGY MODERNIZATION STRATEGY FOR 2022-2023

44%
Data & AI Strategy

42%
IT Operations

40%
IT Organization Design

40%
Infrastructure Modernization

37%
Cloud Strategy & Architecture

Source: Ecosystm Digital Enterprise Study, 2022

#3 The WAN edge supports the Future of Work

Many knowledge workers have now realized that they can be productive in the office, at home, or from anywhere. The mainstream adoption of videoconferencing has also allowed them to remain connected.

This extension of the WAN edge from the office to remote locations and the sharing of home LANs are placing a strain on traditional network architectures. The advent of small, low-cost WAN edge devices can ensure power users, such as executives or those with external-facing roles, have quality of service when they need it. Although most home networks rely on a single transport type, application prioritization and error correction can boost performance. Centralized management and security policy enforcement also provide organizations with control in an increasingly distributed environment.

EMPLOYEES WANT MORE CHOICE IN THEIR WORK LOCATIONS

50%
Want to choose work location

21%
Prefer to work entirely remotely

15%
Have fixed days to go to the office

14%
Prefer working entirely from the office

Source: Ecosystm Voice of the Employee Study, 2022

#4 Integrated security not an add-on at the WAN edge

A data breach is inevitable according to 69% of organizations. This not only emphasizes the need for prevention but also the ability to limit the impact of any breach.

As organizations shift more critical workloads and data to the cloud, the need for network and security convergence is increasing. One of the key features of a modern WAN edge is that it comes integrated with the necessary slice of the security stack rather than routing all traffic to a centralized data center. This allows secure, local breakout to cloud services without circuitous backhauling. Moreover, SD-WAN service providers that allow traffic to traverse their own private backbone connecting directly to the major clouds, reduce reliance on the public Internet.

MAJORITY OF ORGANIZATIONS EXPECT A DATA BREACH

69%	27%	5%
Yes	No	Not Sure

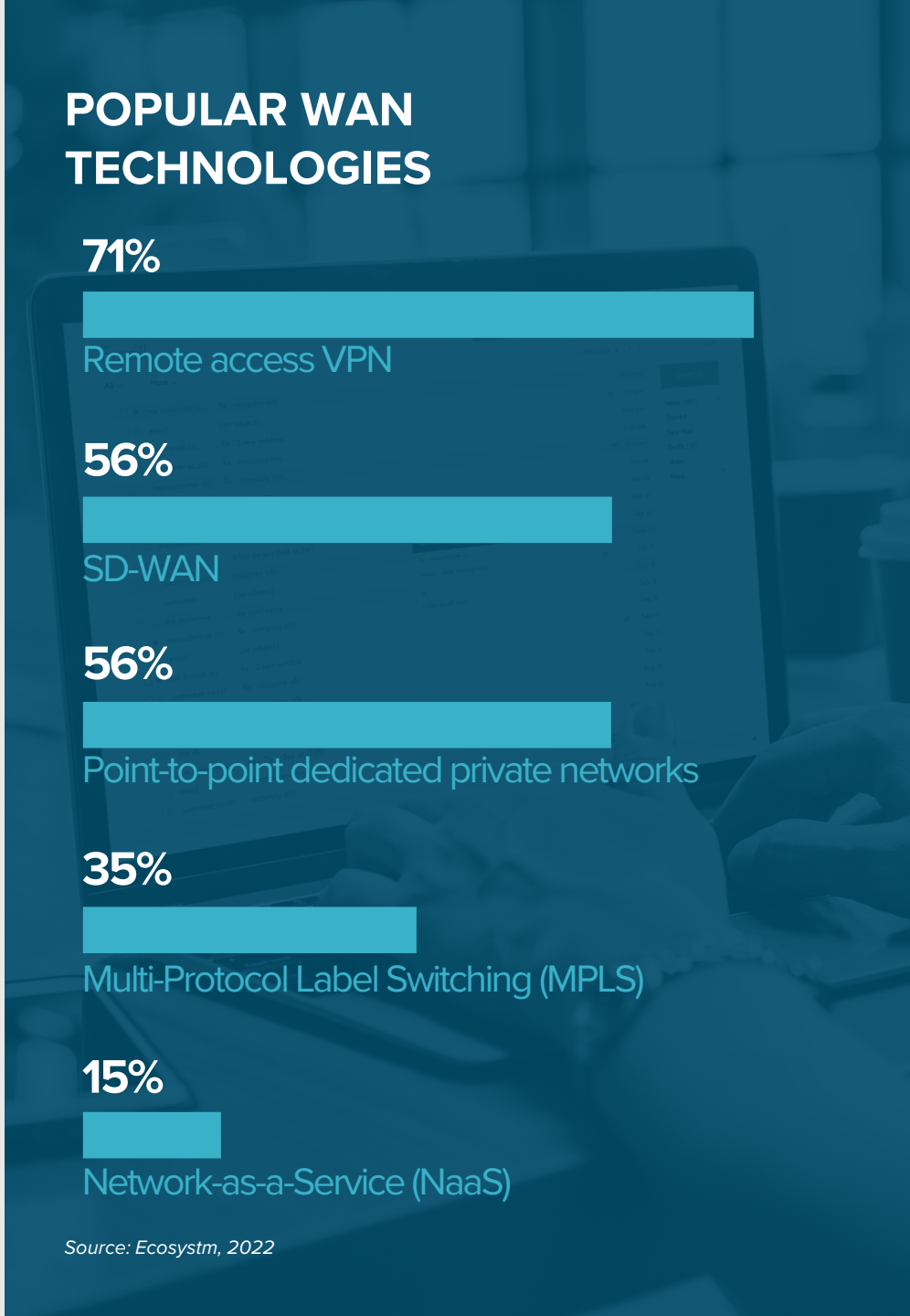
Source: Ecosystm Digital Enterprise Study, 2022

#5

SD-WAN is the first step to building an intelligent WAN edge

SD-WAN adoption has seen an uptick as organizations look to modernize their networks and take advantage of cloud services at the WAN edge.

While early SD-WAN implementations were focused on cost-cutting by reducing reliance on expensive MPLS circuits, the new generation looks to improve performance of latency-sensitive, cloud applications. Deep packet inspection enables application recognition, ensuring critical services are prioritized for performance and availability during times of network congestion or downtime.



Ecosystm Opinion

Any organization looking to digitize its branches, warehouses, factories, or campuses should consider how to infuse intelligence into its ever-widening WAN edge. Cloud will play an increasingly important role and growing volumes of data will traverse the network, requiring automation and security.

CIOs, CISOs, and network architects should begin evaluating the various delivery models of SD-WAN, namely DIY, managed, and particularly cloud-native subscription services. Consider the provider's management features to ensure the SD-WAN can grow at the same pace as your organization.

About the Author

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Darian helps businesses navigate the path towards digital transformation, providing insight into cloud, automation, data management, and telecommunications. He has spent two decades advising business leaders on using technology to enter new markets, improve client experience, and enhance service delivery.

Previously, Darian spent ten years at IBM, where he was a principal advisor for infrastructure services and hybrid cloud in Europe, with a focus on the telco and energy industries. Prior to this, he was a research manager at IDC, gaining emerging markets experience in Asia Pacific, Central Eastern Europe, Middle East, and Africa. In his final position, Darian headed up IDC's ANZ offshore research team based in Kuala Lumpur.

Originally from New Zealand, Darian holds a Bachelor of Business, majoring in marketing, from the University of Auckland. Outside of the office, Darian enjoys running up mountains, biking with his young daughters, and researching his family tree.

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