

***ISG** Provider Lens™

Network - Software Defined Solutions and Service Partners

June 2020

A discussion on global market trends, unique trends in each region, strengths of leading service providers, and the people in enterprises that should read the Network - Software Defined Solutions and Service Partners ISG Provider Lens™ reports.

Global Summary Report

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About this Report

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The research and analysis presented in this report includes findings from the ISG Provider Lens™ program and ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that was current as of March 2020. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

The lead author for this report is Ron Exler. The editor is Jan Erik Aase.



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EXECUTIVE SUMMARY

GLOBAL MARKET TRENDS

ISG sees several common trends across regions and industries:

Strategic Focus as Enterprises Revisit ICT Roadmaps

Over the past year a large percentage of enterprises restarted their roadmaps for digital transformation and ICT with plans for how software defined (SD) works with security applications of today and tomorrow. This strategic focus shifts the discussions from network technology to solving business problems. Enterprises want to add applications and network resources to meet business and user goals more efficiently and securely without creating silos or depending on vendors. Plus, they want central control. The discussion around software defined networking (SDN) increasingly focuses on improving the integration, automation, orchestration and management of network resources and processes.

SDN Lowers Risks of Enterprise Movement to Global Cloud Deployments

SDN can help enterprises with cloud migration by reducing complexity and enabling a reduced risk migration to single or multi-cloud environments. Enterprises are looking to move IT and network functions into the cloud for cost savings and other efficiencies. This includes hybrid and multi-cloud setups with central controllers and visibility of the entire network infrastructure.

SD WANs Driven by Cost Savings to Cloud-based ICT

The most cost saving is for those organizations moving from, or moving a lot of the current network from, MPLS to IP-based, SD-based, or data center-based hybrid environments including MPLS based on policy usage. Transformations are taking place mainly along WAN optimization for hybrid cloud environments, moving the edge to the cloud with cost efficiency realized at the transport layer.

Technology Provider Landscape Explodes

From a provider standpoint, there has been a shift from telcos and large providers being the providers of choice to expansive groups including system integrators and service providers using network technologies, such as Cisco and Meraki. These providers offer enterprises a one-stop, end-to-end experience for technology plus integration and change management. The technology continues to improve, and these providers' developers partner with many others to get into enterprises faster. There is no longer a discreet network activity – it is a strategic digital transformation play.

Interest Varies by Industry

Software-defined networking offers benefits to applications in some verticals more than others. Retail is a large adopter of small-to-medium SD WAN solutions with rapid agile application rollouts. Banking online and ATM services benefit from the distributed services. For those industries supporting multiple branches or multi offices, SD WAN with SD LAN allows rapid changes to branches, so is a driver of high value. In manufacturing, machines connect into the network and use SD capabilities for improved monitoring and productivity.

Shift from Contract-Based to Consumption-Based Business Model

Enterprises are looking for the ability to consume the network as a service instead of getting into a traditional carrier-based model or a contract model where the network operates in a silo, with a closed CPE environment and a transport tightly integrated into the delivery of the solution. The enterprises are looking at consultative approaches which can customize and analyze the network from an application as well as a security perspective and thus, an end-to-end automation and orchestration of the customer's network is preferred.

Small and Medium Size Businesses (SMBs) Still Looking First to Cost Savings and Agility

The SMB market still focuses its software defined networking thinking on lower costs, flexibility, and speed to market by taking advantage of the abstraction of the hardware from the operating layers, thus reducing reliance on MPLS term contracts, improving quality on IP/Internet contracts for most communications (or hybrid MPLS/IP), and flexible capacity (important during COVID-19). Large enterprises want savings too but are looking to be agile as they serve multiple business units and distributed branches with a need to scale both inward and outward-facing services offerings. In the past year, there is a notable shift to decisions based on agility more so than cost.

UNIQUE GEOGRAPHY TRENDS

Maturity Varies by Region

There are regional differences in adoption of software defined networking. In the U.S., there are more classic early adopters open to making network changes if they can cost justify the improvements. They were early to recognize and consider the benefits of least-cost routing and decongesting networks. Germany is about six months behind the U.S. on the adoption curve. The U.K. has a conservative SDN market because enterprises there put investment protection first. Meanwhile, enterprises in the Nordics region are more open to new technologies and approaches.



GLOBAL LEADERS

This year's Network - Software Defined Solutions and Service Partners study covered 83 number of providers across six quadrants.

Of the total 83 providers, 19 were identified as leaders across regions for multiple quadrants. 5 providers were identified as rising stars for multiple quadrants across regions.

STRENGTHS OF LEADERS

- **Add Significant Consulting and Business Acumen:** The leaders focus aggressively on client business outcomes, not just faster network equipment. The business focus benefits enterprises seeking partners for their digital transformation efforts, not vendors.
- **Business Roadmap Involvement:** Many leading providers address the competitive needs of clients by helping enterprises with how to use software defined networking to address specific requirements of their business roadmaps. Early and ongoing involvement in roadmaps adds value beyond implementation, deployment and management.
- **Implementation and Deployment via Ecosystem of Solutions:** Most leading providers develop and maintain strong partner ecosystems with their own important

wrapper to own the customer relationship. So, the solution often comes via an integration with partner solutions designed to best address the enterprise's specific requirements.

- **Innovations Beyond Software Defined:** Leading providers focus on industry solutions ready to deploy in brownfield environments. Another area of innovation for leaders is in the ever complex and critical security protections. Most of the leaders support development labs to encourage and test innovations. They also offer tools and templates to add strength and speed to implementations, according to niches served.

“A robust sales channel is being developed by the providers to transform the existing managed services engagements to transformation deals since a considerable portion of the SD-WAN migration deals are renewal businesses.”

– Avimanyu Basu, regional analyst – U.K. and Nordics

LEADER BOARD ACROSS QUADRANTS AND GEOGRAPHIES

COMMON LEADERS IDENTIFIED ACROSS GEOGRAPHIES FOR SDN 2020

Service Provider	Managed WAN - Services	Managed SD-WAN - Services	SDN Transformation Services (Consulting & Implementation)	SD-WAN Equipment and Service Suppliers (DIY)	SD Network Technologies (Core - Mobile)	Mobile Network (4G/5G) Additional (non-core) Services
AT&T	●	●	●	●	●	● ●
BT	● ●	● ● ●	●	●	● ●	● ●
Cisco				● ● ● ●	● ● ●	
Computacenter			●	●	● ●	
Deutsche Telekom	● ● ●	● ● ●	● ● ●		● ● ●	● ● ●
Extreme Networks					●	●
GTT	●	● ●				

KEY ● United States ● United Kingdom ● Nordics ● Germany

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HCL	● ●	● ●	● ●		● ● ●	
IBM	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ●
Infosys	●	●	● ●		● ●	● ●
Juniper			●	● ●	● ●	
NTT	● ●	●		●	●	
Orange Business Services	● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ●	● ● ● ●
TCS	● ●	● ●	● ●	●	●	

KEY ● United States ● United Kingdom ● Nordics ● Germany

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Tech Mahindra	●	● ●	● ●	●		
Verizon	● ●	● ●	●	●	●	●
VMware				● ●		
Vodafone	● ●	● ●	● ●	●	● ●	● ●
Wipro	● ●	● ●	● ●	● ●	● ●	● ●

KEY ● United States ● United Kingdom ● Nordics ● Germany

RISING STARS ACROSS GEOGRAPHIES FOR SDN 2020

Quadrants	 US	 UK	 Nordics	 Germany
Managed WAN - Services		GTT	Infosys, Tech Mahindra	
Managed SD-WAN - Services	Logicalis	GTT	GTT, Infosys	
SDN Transformation Services (Consulting & Implementation)			GTT	Extreme Networks
SD-WAN Equipment and Service Suppliers (DIY)		Infosys	Infosys	
SD Network Technologies (Core - Mobile)	Extreme Networks	Tech Mahindra	Tech Mahindra	Logicalis
Mobile Network (4G/5G) Additional (non-core) Services		Tech Mahindra	Tech Mahindra	Extreme Networks

ROLE-BASED SUMMARY

This report is relevant to executives and managers in enterprises that are adding outside networking assistance or changing their existing partnerships with service providers. Readers should also care about digital transformation and the evolution of networks as supported by their service partners to evaluate how the respective enterprises can best leverage these changes. The report is of value to enterprises of all sizes and in all industries, especially the ones in the U.S., U.K., Germany and the Nordics.

Chief Information Officer (CIO)

While businesses often drive digital transformation and the need for network evolution, the lines of business need IT assistance to scale the solutions across the enterprise. This includes integration with the technology infrastructure, developing custom apps, and process automation. The report showcases the differences between providers including their technology proficiencies.

Chief Transformation Officer

This role coordinates the many activities needed for a successful digital transformation, and a critical part of that transformation involves the evolution of the network. This office may not be network native but digital transformation pushes many network initiatives via the business drivers. The report shares business perspectives on the value of a range of software defined technologies and services.

Chief Procurement Officer

The procurement model is completely different for software defined compared to traditional MPLS contracts. Newer pay per use and self-funding options need to be understood to reflect the broader negotiation perspective. The report provides details on how service providers offer software defined networking.

Chief Executive Officer (CxO)

The modern network strategy affects the entire C-suite, so it is important for them to understand if a service provider is just technology focused or also concentrates on business and strategy. The report considers the business perspectives of each of the providers to help CxOs understand the applicability to their business strategies.

“Enterprises with silo thinking need to address that immediately. Leading organizations view their network in context of a digital transformation, and software defined is critical to enable that.”

– Kenn Walters, lead analyst and senior advisor



Further Reading

FURTHER READING

You can access the detailed country-specific reports in the links below.

U.S.

[Managed WAN - Services](#)

[Managed SD-WAN - Services](#)

[SDN Transformation Services \(Consulting & Implementation\)](#)

[SD-WAN Equipment and Service Suppliers \(DIY\)](#)

[SD Network Technologies \(Core - Mobile\)](#)

[Mobile Network \(4G/5G\) Additional \(non-core\) Services](#)

UK

[Managed WAN - Services](#)

[Managed SD-WAN - Services](#)

[SDN Transformation Services \(Consulting & Implementation\)](#)

[SD-WAN Equipment and Service Suppliers \(DIY\)](#)

[SD Network Technologies \(Core - Mobile\)](#)

[Mobile Network \(4G/5G\) Additional \(non-core\) Services](#)

Nordics

[Managed WAN - Services](#)

[Managed SD-WAN - Services](#)

[SDN Transformation Services \(Consulting & Implementation\)](#)

[SD-WAN Equipment and Service Suppliers \(DIY\)](#)

[SD Network Technologies \(Core - Mobile\)](#)

[Mobile Network \(4G/5G\) Additional \(non-core\) Services](#)

Germany

[Managed WAN - Services](#)

[Managed SD-WAN - Services](#)

[SDN Transformation Services \(Consulting & Implementation\)](#)

[SD-WAN Equipment and Service Suppliers \(DIY\)](#)

[SD Network Technologies \(Core - Mobile\)](#)

[Mobile Network \(4G/5G\) Additional \(non-core\) Services](#)

AUTHORS AND EDITORS



Ron Exler

Principal Analyst

Ron Exler is a Principal Analyst with ISG Research, with a cross-industry focus on the disruptive and progressive influences on businesses – and the experiences of their customers - of the Digital Workplace, Internet of Things (IoT), location intelligence, and other digital innovations. Ron has led product management at enterprise software companies, run enterprise research advisory services, and advised, built and deployed innovative technology inside large enterprises. Ron holds a Master of Science degree in Cartography from the University of Wisconsin as well as a Bachelor of Science degree from Oregon State University. Ron also holds the ISG Digital Xpert certification.



Jan Erik Aase, Editor

Director

Jan Erik Aase is a director and principal analyst for ISG. He has more than 35 years of collective experience as an enterprise client, a services provider, an ISG advisor and analyst. Jan Erik has overall accountability for the ISG Provider Lens™ reports, including both the buyer-centric archetype reports and the worldwide quadrant reports focused on provider strengths and portfolio attractiveness. He sets the research agenda and ensures the quality and consistency of the Provider Lens™ team.

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