Upgrading to a New Digital Network that Empowers Hybrid and Multi-Cloud Applications

As digital infrastructure becomes virtual and hybrid work styles become commonplace, organizations must have a secure SD-WAN platform to deliver the wide-area connectivity necessary to operate. Without a dependable, agile, secure, efficient, and ubiquitous network, it is impossible to succeed in the pandemic-altered world. A recent Cisco Survey[1] found that meeting two of the top three challenges (security 65% and application performance 43%) is dependent on the digital network (*see figure 1*).

With global teams and distributed work styles becoming the norm, the demand for secure SD-WAN will continue to grow. Research and Markets found that spending on secure SD-WAN will increase nearly 40% annually through the decade. Resiliency and reliability are essential, since any downtime can be disastrous. In addition, consistency is critical. Working from different locations cannot change how apps perform or connectivity is provided.

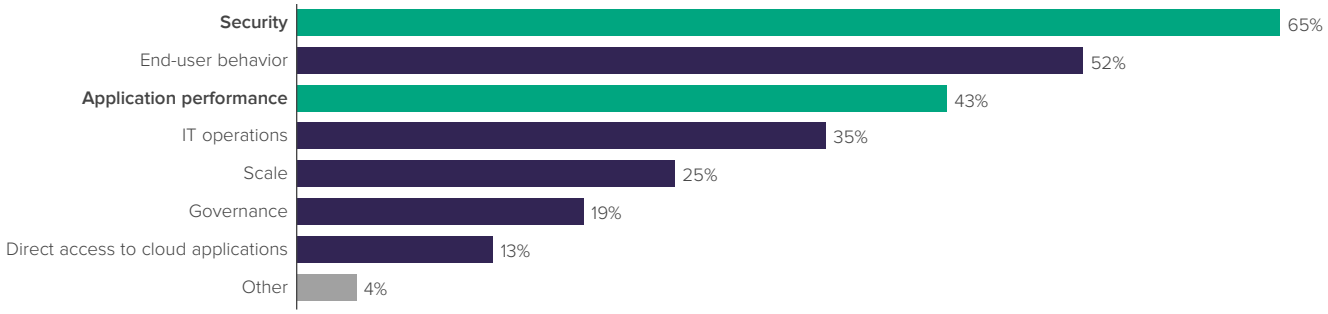
The right SD-WAN solution has to be flexible enough to address the connectivity needs of new branch locations, growing bandwidth needs, and increasing security threats, while delivering cost advantage through an intelligent carrier-agnostic mode of operations and end-to-end automation.

Legacy SD-WAN deployments can hold the organization back

The dynamic nature of digital transformation (DX) and the rapid move from physically defined business structures demand highly capable SD-WAN. Legacy designs and strategies, conceived in a different time, no longer measure up. Perhaps the most limiting factor is that most legacy SD-WAN deployments just don't have the ability and agility to meet current and future business demands. As traffic patterns change based on new apps, timings, events, or even projects, an older SD-WAN cannot adapt fast enough. IT infrastructure is only as agile as the least dynamic component, and in some cases, the SD-WAN is the limiting factor.

[1] "2020 Cisco Business Resilience Networking Survey"

Fig. 1: When thinking about enabling your remote workforce, what are the biggest challenges you're facing?



Source: TechValidate survey of 313 global IT professional respondents between 7/29/20 and 8/11/20

Another strong argument for an SD-WAN upgrade is the reduced costs, eliminating the inefficiencies and higher costs of older implementations. The problems with older SD-WANs in these areas are multi-faceted. First, the lack of standardization and consistency among the components of the SD-WAN create complexity, inconsistency, and visibility problems. The result is too many manual tasks for managing the SD-WAN and numerous unicorn tasks, all of which raise costs. Mistakes are more common with manual processes. And when costs are high, delivering a timely return on investment becomes impossible. In many scenarios, these operational problems continually push out the breakeven point.

Ensuring that the SD-WAN is highly efficient and cost effective is another important element to consider. If the SD-WAN is deployed incorrectly or legacy approaches are used without optimizing the links, costs are higher, defeating the purpose of deploying the SD-WAN.

Next-generation SD-WAN solutions: Delivering the key benefits organizations demand

With new demands for supporting a modern business, next-generation SD-WAN is becoming a priority. The most important and impactful characteristic of an advanced SD-WAN is a design that utilizes orchestration: supporting the ability to deploy, manage, use, and reposition network resources in real time. This approach enables the IT team to deliver a fluid connectivity resource that is as agile as the organization and results in effective utilization of resources that continually brings down costs.

Orchestration delivers a single point of control for all aspects of the SD-WAN, which supports the dynamism and flexibility a modern business needs. With a single management console that controls all aspects of the SD-WAN, operational efficiency is greatly improved. And with the ability to orchestrate across all domains (network, cloud, and data center), it is now possible to manage the environment holistically. The elimination of silos and unique network segments dramatically improves daily operations, security, and the ability to optimize the use of all network resources. Reducing complexity through orchestration enables the network management and IT teams to simplify daily processes and eliminate errors that can occur when manual methods or inconsistent processes are required. Using a single orchestration platform also makes it possible to implement consistent policies for all aspects of operations. This can include security, application performance, access, and more.

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The business benefits of an orchestrated SD-WAN

The biggest advantages of using an orchestration platform for SD-WAN are the business benefits it delivers. The true measure of any digital solution is how it enhances business results, not the elegance of the underlying technology. A system integrator that has an independent perspective of the entire SD-WAN and can orchestrate it most effectively delivers several benefits.

• One of the most important business benefits of SD-WAN orchestration is improving the **speed of the business**. With the ability to provide connectivity that supports new digital processes and delivers performance, the organization can deploy new digital business processes much faster. The second business advantage is agility. The pandemic showed organizations just how quickly and fundamentally an unexpected change can impact the business. To meet the demands of remote and hybrid work, an agile network is a necessity. And an orchestrated SD-WAN delivers. In addition to reaction to the unexpected, this new solution provides agility for planned changes. With this technology, organizations don't have to wait for the network to be changed/upgraded/enhanced to support a new digital business process; the network is ready when the business is.

• **Improved security** may be among the most important benefits. The orchestrator provides complete visibility and a platform for implementing consistent security policies across the network. Orchestrated SD-WAN enables secure access service edge (SASE), providing both access and security as a cloud service directly to the source of the connection. This makes access and security automatic.

• Orchestrated SD-WAN also supports **improved employee experiences**. Constant performance monitoring and remediation of bottlenecks keeps employees working at speed, thereby improving their work experience and productivity. In addition, the orchestrator can translate business intent into network language, enabling the orchestrator to abstract the complexities of different network components such as LAN, WAN, and cloud network.

• **Network dependability** is critical, since downtime can literally stop the business. With a unified dashboard that monitors both applications and network segments, any interruption or potential issue is flagged immediately and can be remediated. This single console also provides more routing options. The orchestration approach eliminates unique elements that result in human errors.

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Wipro and Cisco deliver next-generation orchestrated SD-WAN-as-a-Service

Industry leaders Cisco and Wipro have joined together to offer an improved approach to modern SD-WAN deployments. Wipro's #WANFreedom integrates the company's comprehensive lifecycle services for SD-WAN and the highly regarded Viptela SD-WAN solution from Cisco. This is a managed SD-WAN service in a flexible manner. This managed service can leverage multiple "best of breed" providers to ensure optimal performance and efficiency. The combination of Wipro's Multi-Domain Orchestrator with Cisco's SD-WAN components provides an SD-WAN solution that meets current and future challenges. It provides improved agility, speed, security, employee experiences, and network dependability. For more information, please click here.