



How Midmarket Businesses Can Accelerate their Digital Transformation Journey with a Cloud-delivered SD-WAN Solution

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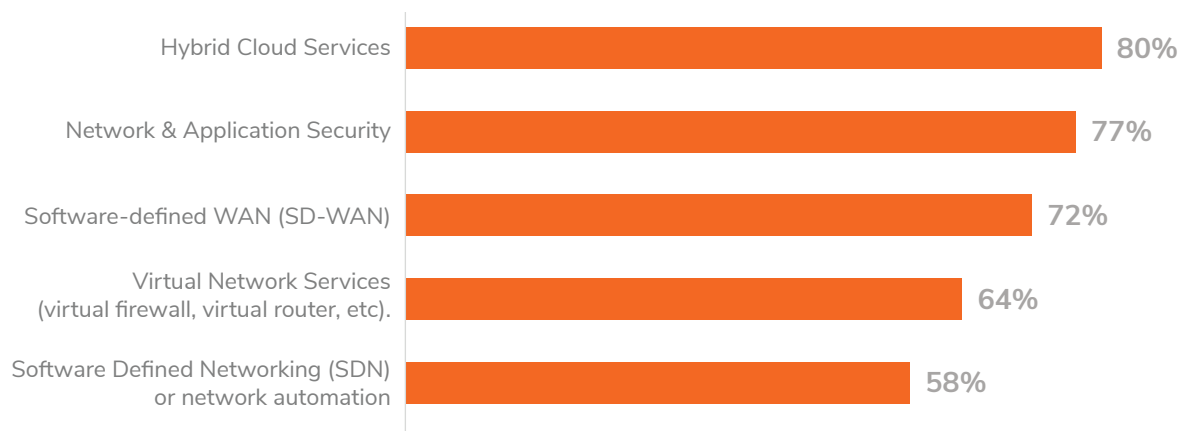
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Introduction	3
Why Choose Software-defined WAN?	4
<i>Support Hybrid Cloud/Multi-cloud Connectivity</i>	4
<i>Faster Deployment of Global Branch Sites</i>	4
<i>Support Mobility, Big Data and IoT Trends</i>	5
<i>Achieve Superior WAN Performance</i>	5
SD-WAN and the Midmarket Business Segment	6
The Value of Cloud-delivered SD-WAN to Midmarket Enterprises	8
<i>Pre-packaged, Low-touch Solution to Expedite Branch Site Deployment</i>	8
<i>Optimized Connectivity to Hybrid/Multi-cloud</i>	8
<i>Simplified User Experience through Cloud-based Network Management</i>	9
<i>Future-proofed Investment that Sets the Stage for a SD-Branch</i>	10
Conclusion	10

INTRODUCTION

In a recent Frost & Sullivan enterprise survey, 85% of the business decision-makers surveyed said “improving customer experience” was the top-rated driver for digital transformation initiatives, followed by “improving compliance” and “improving operational efficiency.” In the same survey, IT decision-makers indicated hybrid cloud, network and application security, and software-defined WAN (SD-WAN) as the top three technology trends in the next two years (see Figure 1). There is a significant correlation between the business drivers and the tech priorities indicated by enterprise IT decision-makers as technology investments are increasingly tied to the business goals of an organization.

Figure 1: Top five technology trends of priority to organizations currently or in the next 12-24 months



Cloud computing has revolutionized the enterprise IT architecture. The 2019 Frost & Sullivan Cloud Survey results indicate that nearly 60% of the enterprises are using public cloud IaaS, and 37% of the enterprises are using hybrid cloud, currently.¹ As enterprise applications get distributed among hybrid cloud deployments, the focus is shifting toward enabling reliable, optimized and secure connectivity to cloud-based applications in a seamless and efficient manner for distributed stakeholders (employees, suppliers, and partners). The traditional WAN architecture, however, is highly static in nature as the network is configured using dedicated proprietary hardware (routers and switches) at all the sites that need to be on the WAN. The static nature of the architecture adds to lengthy circuit provisioning times and complexity in configuring and manually managing connections across thousands of enterprise sites.

SD-WAN technology provides a fast-track approach to virtualizing WAN links by creating an overlay network and abstracting the control plane into software, enabling enterprise IT to make centralized, policy-based network administration. SD-WAN solutions available in the market today come integrated with key network functions (basic routing and security function, for example), setting the stage for a transition toward a software-defined branch.

¹ Frost & Sullivan defines hybrid cloud as any combination of cloud, hosting and private data center resources that are managed and controlled as a single pool of resources to run a workload. In a hybrid cloud, workloads generally can operate seamlessly across environments; for example, applications may burst across environments or workload components may be hosted in different environments.

WHY CHOOSE SOFTWARE-DEFINED WAN?

Following is a summary of key trends driving adoption of SD-WAN.

Support Hybrid Cloud/Multi-cloud Connectivity

According to a recent Frost & Sullivan Cloud User Survey of IT decision-makers, businesses use an average of 4.5 deployment models for their workloads, including premises-based servers, managed services, and cloud. They also use, on average, 2.2 public cloud providers. The use of multiple environments reflects a business's decision to implement a flexible, hybrid, multi-cloud strategy. To meet enterprise needs for agility, cost-effectiveness, and application performance, the networks connecting the hybrid IT environment should keep pace with the IT infrastructure.

As with the choice of cloud for enterprise applications, where no one size fits all, the networks connecting the various IT models do not have to be one type. For example, while MPLS could be the right choice to connect to an ERP application in a hosted private cloud, for reasons of security and compliance, internet links could suffice for accessing a less-critical SaaS application. SD-WAN enables businesses to flexibly use and seamlessly integrate multiple transport networks (MPLS, internet, Ethernet, DIA, 4G/LTE, satellite). The pre-defined business policies in SD-WAN determine which cloud applications are routed directly to the internet, based on application performance requirement and experience, versus backhauled to a hub site.

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Faster Deployment of Global Branch Sites

Global branch site connectivity and management is time-consuming and complex for large distributed enterprises. Most large enterprises have a hybrid WAN in place today, wherein they may use MPLS to connect critical locations and IPsec VPNs to connect less-critical branch sites. However, the current hybrid WAN architecture they have in place is static and manual in nature. Any change in network configuration involves truck rolls and requires network engineers to make the changes—which is time-consuming and expensive.

SD-WAN solutions simplify hybrid WAN deployments and management in a major way. The SD-WAN CPE comes with simplified zero-touch deployment and provisioning capability that any non-technical office personnel can install. Businesses can use any readily available network links—internet or 4G services—to get the branch started while waiting for private network services (MPLS or Ethernet) to become available at the site, thereby improving productivity. Alternatively, they can choose to continue using dual broadband links or broadband and wireless links.

The centralized, policy-based application steering and traffic conditioning using forward error correction (FEC), mean opinion score (MOS)-based steering, or packet cloning capability of SD-WAN can increase the performance and reliability of branch networks, as real-time monitoring of traffic paths ensures that the chosen network (MPLS, internet or LTE) meets the quality of service (QoS) requirements for each application.

Support Mobility, Big Data and IoT Trends

The new business environment is highly mobile and requires IT resources to be available 24/7 so that geographically dispersed teams of employees, partners and customers can do business around the clock. Mobile users are using their own smartphones and tablets to access corporate resources. Furthermore, Big Data and IoT applications, distributed across cloud and on-prem data centers, are putting immense pressure on WAN bandwidth, which MPLS alone cannot fulfill in a cost-effective manner. The traditional WAN architecture—with traffic passing back and forth from remote sites into central data centers and back via MPLS—does not work well for distributed deployments. In contrast, SD-WAN enables remote offices or nodes to connect directly to the internet via high-speed broadband while ensuring that the links adhere to QoS and compliance requirements defined by the controller corporate policies.

Achieve Superior WAN Performance

SD-WAN solutions leverage real-time performance monitoring of transport networks to make application-aware, policy-based dynamic and real-time network selections. Real-time monitoring of network services ensures that deviations from policy parameters related to availability (sufficient bandwidth), reliability (latency, jitter, and packet loss) and application experience are sensed before they affect end users. Traffic can be routed to a different network service or other traffic-handling techniques can be applied (e.g., throttle less-critical application traffic). All of these features ensure a high level of resiliency and superior WAN performance for enterprises.



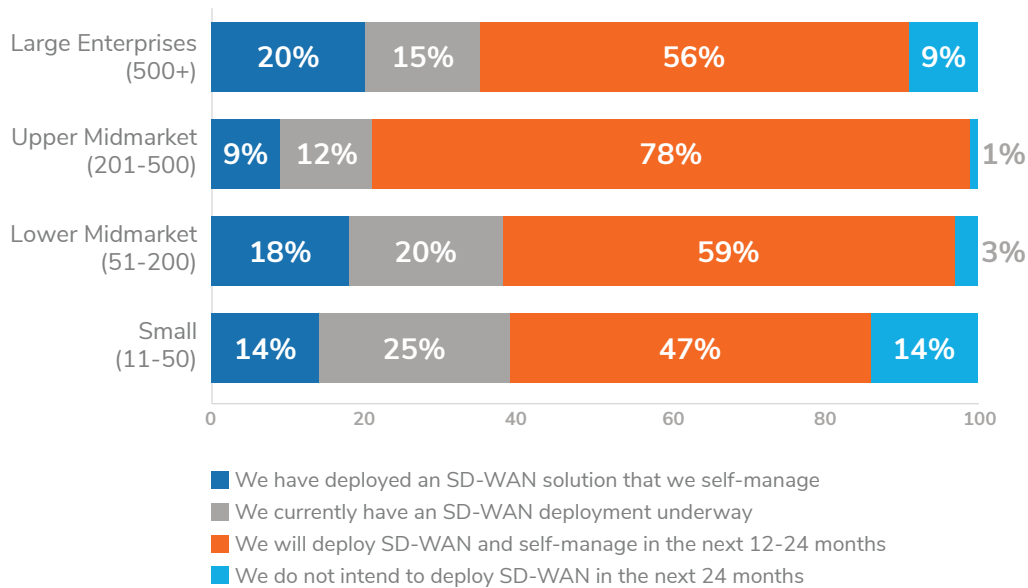
SD-WAN AND THE MIDMARKET BUSINESS SEGMENT

The business goals and technology trends to achieve those goals remain the same across small, medium and large business segments. However, the midmarket firms have unique challenges when it comes to technology adoption—lean IT budget and IT resources being key among them.²

In the 2018 Frost & Sullivan SD-WAN user survey, 15% of respondents indicated their organization has deployed SD-WAN, and a whopping 61% of the respondents indicated they would deploy SD-WAN in the next 12-24 months.

As shown in Figure 2, when we dissect the results by branch sites, businesses with 11-50 sites and 500+ sites constitute a majority of the SD-WAN deployments.³ Organizations with 201-500 sites seem to be lagging behind other segments in terms of adoption. This segment is the upper midmarket segment, from where the highest growth is expected to come in the next 24 months, with 78% of the respondents indicating they plan to deploy SD-WAN.

Figure 2: SD-WAN Adoption Trends Across Business Segments



The midmarket segment has always presented a challenge to service providers and vendors as providers find it easy to invest in products and high-touch support programs for their largest customers, who represent the greatest revenue per sale. They are attracted to the aggregate revenue opportunity represented by the small office/home office (SOHO) market, which can be addressed through the same mass-market distribution channels as consumers (e.g., telemarketing, web sales).

² Midsized businesses tend to be defined by what they are not: they are not large businesses, and they are not small business. In size, they fall somewhere between Exxon Mobil and Frank’s Pizza Parlor. Definitions that are more precise vary, with each company segmenting its potential market in a way that makes sense for its products and go-to-market strategy. Some firms segment customers and prospects by total company revenue, others based on potential spending; still others based on products consumed. Dun & Bradstreet defines the midmarket as any company with annual sales between \$10 million and \$1 billion.

³ In the Frost & Sullivan 2018 SD-WAN end-user survey, the businesses were segmented based on the number of branch sites: small (11-50), lower midmarket segment (51-200), upper midmarket (201-500) and large enterprises (500+).

However, midmarket businesses are too complex to be treated like consumers and highly price-sensitive to be treated like enterprises. The midmarket firms differ from small and large enterprises, requiring providers to package and market their solutions differently.

- Midmarket businesses require the same functionalities as large enterprises, but on a smaller scale. That includes a high-performing network, advanced security features, and feature-rich enterprise applications such as unified communications, all of which are easily accessible to remote employees, partners, and a worldwide customer marketplace.
- Midmarket businesses, like large businesses, seek to safeguard their business processes and data through compliance, security, and business continuity tools.
- Midmarket businesses are willing to invest in technology, even in an economic downturn. They embrace technology solutions that increase revenue and decrease costs, such as cloud, because they perceive technology as essential to business survival.
- Midmarket businesses continually examine their investments against total cost of ownership and return on investment metrics. They look for reporting and management tools that evaluate effectiveness of the solutions on an ongoing basis.
- Midmarket businesses expect more from their technology providers in terms of planning, design, and management services as they have limited personnel and expertise for evaluating and implementing new technology.
- Midmarket businesses have limited capital budgets and tight operating budgets. The tight margins introduce more urgency surrounding the need to closely align expenditures with revenues. Hence, the segment prefers the OPEX model versus CAPEX investments on technology.
- Midmarket firms have significant security requirements, especially given that the cost of a breach can be financially devastating, which makes cloud-managed security with automated policies and real-time updates an attractive value proposition.

SD-WAN vendor solutions available in the market have addressed the increasingly complex wants and needs of midmarket companies to some extent, with a majority of them continuing to focus on their enterprise and small-business units. However, Versa Networks announced the availability of Versa Secure SD-WAN as a cloud-delivered solution via its Versa Titan service, which holds promise for the midmarket segment.

THE VALUE OF CLOUD-DELIVERED SD-WAN TO MIDMARKET ENTERPRISES

For midmarket organizations considering an SD-WAN solution, a fully managed SD-WAN service from a large service provider may be too expensive, and a do-it-yourself SD-WAN, while inexpensive, may be too complex to deploy and manage. With the recently announced Versa Titan Secure SD-WAN service, Versa Networks has created a powerful cloud-delivered SD-WAN solution that elegantly packages the company’s Secure SD-WAN in a way that meets the criteria for delivering powerful value to midmarket firms.

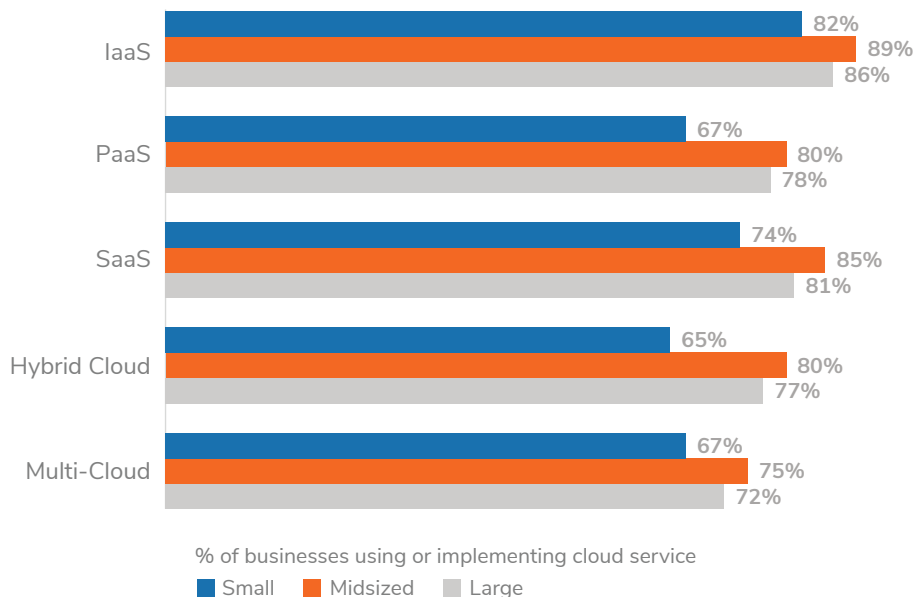
Pre-packaged, Low-touch Solution to Expedite Branch Site Deployment

To be useful to a midsize business, an SD-WAN solution needs to be sophisticated enough to provide business value, yet simple enough for non-technical employees to deploy. Versa Secure SD-WAN via the Versa Titan service is delivered over a pre-packaged CPE that comes pre-configured with dynamic multi-path, full-mesh and spoke-n-hub VPNs, routing, security (NGFW, URL Filtering, AV and NG-IPS), and SD-WAN functionalities with LTE backup. Businesses can deploy Secure SD-WAN over any available WAN links (MPLS, internet, cellular) by using the one-touch provisioning capability from an Android or IOS mobile app. Once provisioned, the CPE automatically connects to the cloud-based management platform to self-provision the functionalities. The default configuration is optimized for enhanced performance of voice, video and cloud applications. For a resource-crunched midmarket business, the ability to deploy sites in a matter of minutes as opposed to multiple months is invaluable while trying to grow their business.

Optimized Connectivity to Hybrid/Multi-cloud

Migrating to a cloud-based model for key enterprise applications such as email, CRM, ERP, unified communications, etc., is immensely valuable to the resource-constrained midmarket segment. Our end-user survey results confirm that midmarket users recognize that. As shown in Figure 3, in the Frost & Sullivan 2019 Global Cloud Survey, **midmarket firms are consistently among the highest adopters of services across the cloud stack.**

Figure 3: Midmarket Firms Cloud Adoption Trends



On average, midsized firms run 14 business applications in the cloud, across all deployment models. This is similar to other sectors (large businesses also use 14 cloud apps; small businesses use 13). Nevertheless, in the same survey, mid-sized businesses expressed less allegiance to the cloud model than other sectors as 57% of the respondents agreed with the statement, “Cloud is appropriate only for less-critical or less-sensitive workloads.” While security risks or unauthorized access to data and challenges migrating workloads were cited as key constraints to cloud adoption, unavailability of networks connecting cloud centers was a concern for 77% of the respondents. With the self-activated Versa Titan Secure SD-WAN solution, midmarket companies are now able to define policies for automated, optimized path selection and security policies to various clouds.

Simplified User Experience through Cloud-based Network Management

Limited IT resources means that the Secure SD-WAN solution has to be easy to deploy and manage for the midmarket users. The centralized, software-based, templated network management feature of an SD-WAN solution is a huge shift from the traditional router-centric management. With centralized orchestration and management that can be hosted in a cloud, on-prem, or procured as-a-service, templated network and application policies can be defined and populated to edge appliances quickly via a GUI-based portal. Versa Secure SD-WAN via the Versa Titan service is a cloud-managed SD-WAN solution with all network management, monitoring and control hosted in the cloud, which the IT administrators can access through a web portal. Network admins can log into the portal to activate, monitor, configure, troubleshoot and access technical support via the Versa Titan Dashboard. The Versa Titan service also provides IT with the same functionality of the web dashboard in a mobile application for IOS and Android to enable anywhere, anytime management, configuration, and support access to the Versa Secure SD-WAN.



Future-proofed Investment that Sets the Stage for a SD-Branch

Currently, the WAN network functions residing in businesses' branch locations—e.g., router, WAN optimization, firewall, LAN switches, VPN concentrators—are hardware-centric. Manual and CLI-driven SD-WAN solutions available in the market today come integrated with some of these network functions (routing and security functions, for example), thereby setting the stage for a transition toward a GUI and automated provisioned edge. An SD-WAN appliance can consolidate multiple functions on a single device, thus bringing immense operational and cost-efficiencies to the enterprise WAN edge as network administrators can centrally manage and orchestrate the WAN. The pre-packaged CPE with Versa Secure SD-WAN via the Versa Titan service comes with native SD-WAN, scalable advanced routing and comprehensive integrated security functionalities built into it. Midmarket businesses can choose to activate traffic steering and conditioning (FEC, MOS-based steering, packet cloning), routing and full functionality security features (next-generation firewall, IPS, and unified threat management) built into the platform to transition to an SD-Branch at their own pace. Versa Secure SD-WAN native security features are superior to the cloud-based virtual security offered by most other SD-WAN vendor solutions.⁴

CONCLUSION

SD-WAN technology is doing to enterprise WAN what cloud did to datacenters more than a decade ago. The WAN transformation to a software-centric architecture is critical for businesses to embrace new technologies to accelerate and succeed in their digital transformation journey. As your organization evaluates SD-WAN solutions, a cloud-managed SD-WAN solution may be the right choice to get started on that journey.

For more information on Versa Titan, visit: <https://titan.versa-networks.com>

⁴ Versa's SD-WAN with security received a "Recommended" rating by NSS Labs in July 2019, making the company the only SD-WAN vendor to receive this rating.

NEXT STEPS

- ① [Schedule a meeting with our global team](#) to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.
- ② Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.
- ③ Visit our [Digital Transformation](#) web page.
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