

ANALYST PERSPECTIVE

FIVE CONSIDERATIONS FOR CHOOSING AN SD-WAN VENDOR

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INTRODUCTION: THE TIME HAS COME TO TALK SD-WAN

Part of managing technology well requires following thoughtful vendor selection processes. Yet each technology comes with its own considerations, making the software-defined wide area network (SD-WAN) no different in that regard. This Analyst Perspective report guides enterprises through the unique aspects to take into account when vetting SD-WAN vendors. Organizations then will be able to connect the dots more easily and emerge confident they have made the right choice. Vendors may use this report to show prospects and clients how they align with the considerations. IT management department will remain heavily involved in the process, but the vendor – ideally with multiple implementations under its belt – will provide guidance and the expertise of experience. This will apply not just during deployment, but also in the management and maintenance stages.

Keeping all that in mind, then, the first aspect when choosing an SD-WAN vendor starts with understanding the configuration variations, because not every solution type will fit every enterprise.

HYPE BECOMES REALITY

After about a decade of discussion and hype, SD-WAN is coming to the forefront with proven capabilities and solutions. And while many enterprises may not complete their deployments in 2019 – it's best to roll out SD-WAN in phases – AOTMP® Research & Advisory predicts 2019 will stand out as the year of widespread SD-WAN adoption. SD-WAN has become a viable alternative to the traditional WAN as enterprises consume ever greater amounts of bandwidth, shift toward cloud resources and support more endpoints than ever before.

The technicalities of SD-WAN are complicated, and the details can get so consuming that it's easy to lose sight of the actual value and benefits of the technology. In short, SD-WAN allows enterprises to use different types of network connectivity for applications and services for their branch offices, and control and manage bandwidth, traffic and policies, including security, through one interface. This eliminates the need for legacy connectivity, on-site manual configurations and individual administration, resulting in what many refer to as the next-generation WAN.

The particulars, of course, are much more complex. However, the aim of this report is to offer insight into some key considerations for choosing the vendor that will remove some, or even all, of the burden of SD-WAN's complexity. The telecom/mobility/



FIVE CONSIDERATIONS FOR CHOOSING AN SD-WAN VENDOR

SELECT THE RIGHT SD-WAN CONFIGURATION BEFORE VETTING VENDORS

Not every vendor offers SD-WAN in the same way, which is why it's important to understand the differences. Knowing where to start, though, requires understanding of what the enterprise wants and needs from its SD-WAN deployment. Once those objectives are defined, then the telecom/mobility/IT management group can move into the configuration-selection stage. To that point, it's generally agreed in the industry that there are three broad categories of SD-WAN configurations, and those are as follows:

• **On-Premise/Edge:** A router that shapes traffic and enables load balancing and failover for multiple circuits sits at each customer site and connects only to an enterprise's sites, not to the cloud. Best for organizations that do not host applications in the cloud.

• **Cloud:** Takes the on-premise configuration a step further by connecting to a virtual gateway that directly touches providers such as AWS, Salesforce, Office 365 and so on. Best for enterprises hosting applications in the cloud.

• **Over-the-Top (OTT):** Provisioned by carriers and network service providers. The SD-WAN operates over the public internet, relying on VPNs to keep the enterprise's traffic separate from public. Usually costs less than its counterparts, but potentially at the expense of security and availability.

When considering these options, understand that there are vendors that combine some or all of these configurations to create their own unique business models. For example, one vendor pairs its proprietary appliances with various carriers' LTE, MPLS, Ethernet and cable connectivity to give enterprises failover capabilities in case a primary link fails. In other words, as with other technologies, SD-WAN configurations come in a range of possibilities. Enterprises must do their homework, and this is one area where enlisting AOTMP Research & Advisory analysts for guidance eases that burden.

We kicked it off with a sixsite pilot where the security and network teams could evaluate the proposed solution and tweak it to better meet our needs.

> - AOTMP® RESEARCH & ADVISORY ENTERPRISE RESPONDENT

2 IDENTIFY THE VENDORS THAT FALL INTO THE CHOSEN SD-WAN CONFIGURATION

Once the enterprise has narrowed down the type of SD-WAN it wants, then it can start deciding which vendor will best fit its needs. Not every SD-WAN vendor is the same and distinguishing among them takes some work.

Network Service Providers: These comprise carriers/telcos, cable companies and over-the-top providers. The first two combine third-party edge appliances with networks that include last-mile reach. The latter, OTT vendors, own the core parts of their networks but lease the last mile from another carrier or cable company that reaches the customer site. This reduces the service and availability issues such as jitter, latency and outages that can arise when using the public internet. These vendors also use third-party edge appliances.

Hardware/Edge Providers: In many cases, legacy vendors have added SD-WAN to their portfolios and updated their appliances and platforms to accommodate that. Some of these providers team up with carriers to offer a complete solution.

Cloud-Native Providers: These vendors were "born in the cloud," which means they did not begin with a reliance on on-premise equipment for their offerings. Rather, they operate from data centers directly. Enterprises do not have to have on-site data centers to take advantage of these SD-WAN solutions.

Resellers/Aggregators: These third parties work with a variety of vendor types to create the ideal solution for an individual enterprise. Resellers/aggregators sometimes private-label those platforms so the brand appears to be directly from them, but the solutions are backed by the actual, originating vendors.

Independent Agents/Brokers: These third parties work with a variety of vendor types to create the ideal solution for an individual enterprise and often rely on the vendor(s) for co-sales, deployment and administrative help. Agents/brokers typically do not private-label vendor platforms.

Managed Services Providers: MSPs handle everything for the enterprise, from consulting and procurement to implementation and management. Some of them white-label vendor platforms, some have proprietary technology and data centers, and most provide their own help desk support.



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- AOTMP®'S KELLY TEAL

3 EVALUATE CRITICAL ASPECTS OF THE RELATIONSHIP

Service level agreements (SLAs) – Jitter, latency, outages and more can impact the reliability of an SD-WAN, depending on the different types of connectivity and equipment in place. Check the vendor's performance guarantees and make sure they align with the business's needs and goals.

Security – Look for capabilities including firewall protections with intrusion prevention; secure web gateway services; SSL inspection; anti-malware; web filtering; and so on. Insufficient security measures expose an enterprise to threats that tend to start in a branch office and spread to the rest of the organization.

Account management team – A vendor is only as strong as its people. Thus, the enterprise must be certain that sales, engineers, delivery and support personnel are knowledgeable, experienced and responsive.

M&A impact protections – As SD-WAN grows in popularity, vendors inevitably will consolidate. Such activity can benefit enterprises because the vendor will have more resources and financial backing, but the integration period can hurt. When considering an SD-WAN vendor, then, check for any assurances it may offer to alleviate any pain it could encounter in potential M&A. Keep communication open.

ASSESS MANAGEMENT TOOLS AND SUPPORT

Unless the enterprise selects a full-fledged managed services provider, it must understand the interface and support it will receive. The MSP that takes on all work for the client generally will administer all tasks and provide reports and updates. Otherwise, chances are the enterprise's telecom/mobility/ IT management department will oversee ongoing management activities, and make decisions based on individual policies and circumstances. Therefore, the prospective SD-WAN buyer will want to investigate the friendliness of each potential vendor's end-user interface. Look for simple, easy-to-navigate portals that display all pertinent information and allow for report creation and data customization.

In terms of support, check help desk hours for any limitations in hours and personnel. Such constraints may not bother some enterprises but may prove an obstacle for others.

Above all, make sure the telecom/mobility/IT management team and the vendor both know which party is responsible for which aspects of managing the enterprise's SD-WAN. That way tasks are less likely to fall through the cracks.



5 SEEK PILOT OPPORTUNITIES

Sometimes the only way to know if a certain SD-WAN approach and vendor are right is to give them a pilot run. This is ideally done in the final stages of the evaluation process. Not every provider will offer pilot capabilities, and that could edge out one vendor over another. If the enterprise wants to ensure a successful SD-WAN implementation and mitigate its risk, tests are the way to go. One enterprise respondent told AOTMP Research & Advisory its migration to SD-WAN involved that exact strategy. "We kicked it off with a six-site pilot where the security and network teams could evaluate the proposed solution and tweak it to better meet our needs."

CONCLUSION: WHAT'S THE SCORE?

Not every vendor offers SD-WAN in the same way, which is why it's important to understand the differences.

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Once an enterprise has fleshed out the above five areas, it will be time to create a standardized scorecard for consistent evaluation of each SD-WAN vendor it's considering. AOTMP Research & Advisory highly recommends implementing the following best practices to nail down the right fit the first time, thus avoiding the pain of choosing the wrong vendor:



Institute a common scorecard for each vendor. This list must contain all criteria related to the enterprise's goals and objectives for SD-WAN. As part of the goals and objectives, it may prove useful to check whether the vendor offers a stabilization or "hypercare" period after installation to monitor for service quality, integrity and functionality. If building the scorecard and going through the evaluations calls for help, look to AOTMP for assistance.



Rank each candidate according to the scorecard categories. The leaders will emerge quickly.



Conduct face-to-face presentations with the top three vendors. This will give the enterprise a chance to go deeper and make sure the vendor's products, services and people match the capabilities presented on paper.



Select the vendor that stands out above its peers. Even though this approach demands more time and effort than a Google search, it will yield dividends in terms of downtime saved and productivity gained.

No two organizations are alike, which means not every vendor will suit all needs. Take the time to follow the recommendations in this report. Combined, these prescribed actions should empower an enterprise to choose the SD-WAN vendor that best meets its needs.

ABOUT THE AUTHOR



KELLY TEAL Senior Research Analyst

Kelly Teal authors many of AOTMP Research & Advisory's reports, from Analyst Perspectives and Market Landscapes to vendor whitepapers, Anatomy of a Decision insights and more. Thanks to a background diverse in technology journalism, Kelly is able to write with versatility across AOTMP Research & Advisory's practice areas. This has cultivated a skillset that allows her to speak to the range of issues enterprises and vendors face amid the everchanging telecom, mobility and IT management climate.

ABOUT AOTMP[®] RESEARCH & ADVISORY

AOTMP® Research & Advisory support enterprise and vendor telecom, mobility and technology management initiatives and objectives with actionable data and insight. To that end, AOTMP® Research & Advisory focuses on the management of multiple practice areas, including IoT, cybersecurity, enterprise mobility, telecom expense, mobile application development, BI/ data analytics, enterprise telecom/mobility/technology environments, telecom/mobility/technology ecosystem and IT services.

Enterprises take advantage of AOTMP® Research & Advisory's targeted research, analysis and advisory services to boost telecom/mobility/technology management efficiency, performance and productivity. This brings greater value and impact to the overall business – including reducing costs. For vendors that impact the performance, productivity and efficiency of an enterprise's telecom, mobility or technology environment, following AOTMP® Research & Advisory's proven approach leads to higher revenue, more market share, competitive differentiation and happier customers.

One key distinction about AOTMP® Research & Advisory stems from our extensive reach and relationships with telecom, mobility and technology management business professionals. Thanks to a variety of sources and advanced statistical methods, we extract information from end users that helps enterprises measure themselves against their peers and gives vendors unprecedented views into their clients' and prospects' business pains and goals. Overall, AOTMP Research & Advisory sets the standard for telecom/mobility/technology management expertise, guiding enterprises and vendors alike to positive, measurable outcomes.

ABOUT AOTMP®

Telecom/Mobility/IT Management Best Practices and Industry Standards

AOTMP[®] is a leading global information, services and advisory firm for next generation Telecom / Mobility / IT Management best practices and industry standards for organizations and the vendors who support them. Best practices cover network services, carrier services, mobility and IoT solutions, cloud solutions, software, hardware, and emerging technologies that impact the performance and business value of technology. Using information, data and compiled analytics from thousands of enterprise environments worldwide, AOTMP® solutions help enterprises drive performance, efficiency and productivity while significantly reducing costs and help vendors provide a new level of value to their customers. AOTMP's solutions are based on its patented Efficiency First® Framework methodology and are the foundation for Telecom / Mobility / IT Management Centers of Excellence being built across the globe.

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