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Achieving a Non-Disruptive SD-WAN Adoption Strategy

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As remote collaboration became a necessity for organizations around the world, the technology that powers this new age of hybrid, agile working is now being adopted en masse worldwide. But while technologies such as cloud computing, automation, machine learning and the Internet of Things (IoT) tend to make a lot of headlines, it could be argued that SD-WAN is the unsung hero underpinning everything. Despite the economic slowdown caused by the pandemic, adoption of software-defined wide area networking (SD-WAN) continued to soar. In 2021, sales of SD-WAN solutions generated revenues of around \$844 million, representing 30 percent year-on-year growth for the technology, according to <u>research by Omdia</u>.



By 2025, research analysts predict revenue will more than quadruple and hit a staggering \$5.5 billion. SD-WAN is going places, and it's taking businesses with it. But what is SD-WAN, what are its advantages, and how can businesses adopt it with minimal disruption?

SD-WAN and its advantages

Traditional legacy networks used to rely on proprietary hardware like switches and routers, managed by internal firmware that required a lot of oversight and maintenance. As a result, WAN deployments were cumbersome and rigid, and were more of a hindrance than a help when it came to early cloud migration. SD-WAN uncouples WAN from its underlying physical infrastructure, instead leveraging 4G/5G and broadband connections that can be centrally orchestrated to optimally manage network traffic.

This virtualized approach gives organizations greater control over things like bandwidth, throughput, security, and stability. But more importantly for 2022, it allows businesses to control these network elements on a global scale, linking sites and remote workers from around the

world in a way that prioritizes certain users, applications, or dataflows. A well-implemented SD-WAN solution prioritizes the business-critical applications regardless of the underlying infrastructure, which is a true game-changer for organizations with a global footprint.

If SD-WAN is the engine that powers today's connectivity, the question then becomes *how* can businesses leverage the technology appropriately? What are the primary considerations an organization should have when migrating to SD-WAN to ensure a smooth and seamless transition?

The gap between consideration and implementation

We've already established why companies are transitioning to SD-WAN in droves, not least because of the technology's ability to ensure secure connections and low latency for remote workers. But there's a gap between deciding to get SD-WAN and actively transitioning to it. In a recent <u>survey</u>, more than 90 percent of decision-makers polled said they were evaluating SD-WAN and considering it as a next step, but another survey from the same time said that only <u>40</u> percent of organizations were actively planning to deploy it within the next 12 months. This gap between *thinking* about SD-WAN and *actively pursuing* it is most likely due to hesitancy based on its perceived complexity. Decisions such as choosing the right technology vendors, and the need to assess various underlay or cloud service options can make SD-WAN seem like a stressful endeavor for even the most ambitious of business leaders. But by focusing on specific objectives and asking the right questions, SD-WAN can be implemented in such a way that the only thing a hardworking team will notice are the benefits.

Legacy IT and the road to SD-WAN

Due to SD-WAN's soaring popularity, it's not uncommon for businesses to be inundated with offers from service providers. All will purport to be "long-term partners" and tout the many advantages of SD-WAN, but as with any booming market it can become difficult to select the best option for the present and future needs of the business.

Before knowing what to look for, it's important to stress that the benefits a managed service provider can bring to the table are best served *before* an SD-WAN implementation even begins, rather than during the process. Taking the time to assess an organization's current network solution to recommend the best SD-WAN platform for the job can ease the way forward considerably. They'll also have time to design and validate potential network configurations ahead of the implementation phase, which will help to further minimize disruption and smooth the path to your network goals. Bringing in a partner once an implementation has already begun (and perhaps been fumbled), is far more complex and will turn into an exercise in regression and remediation rather than forward planning.

Choosing the right implementation partner

Selecting the right implementation partner can mean the difference between a seamless transition and one fraught with delays and difficulties. Choosing an SD-WAN vendor will undeniably affect the entire organization, so it's important to get it right. The booming market

offers an increasing number of options, but not all SD-WAN services are created equal. Different businesses will have different needs and priorities, but the key considerations will remain true for everyone: technology, experience, and service.

In such a quickly evolving landscape, futureproofing is becoming increasingly important and the best way to prepare for the evolution of the network is to look for end-to-end solutions with cloud-based, agnostic platforms. The technology needs to integrate seamlessly and operate in unison for it to create the solid foundation on which a business can stand. Managing a network is no simple task; the customer and the vendor will continue to be partners long after the implementation is finished. A highly experienced vendor will understand the existing infrastructure and processes so they can help the organization to select the optimum combination of technologies that will improve user experience levels, cybersecurity, and performance in a cost-effective manner.

Performance checks and internal evaluations

There's a reason SD-WAN implementation partners, whichever combination an organization chooses, are regarded as long-term partners. It's because, as with digital transformation and other IT-based changes, SD-WAN deployments aren't a "one and done" deal. Once design and implementation are out of the way, it's important to assess how the SD-WAN solution is performing and that it's tying in with an organization's overarching network optimization goals.

This can be achieved with regular monitoring and performance checks. For most SD-WAN deployments, this will involve measuring latency and loss from one device to another at the overlay level, ensuring that employees are getting the desired user experience based on which apps they're using or the kind of data they need access to. Latency and loss can be affected by many things, most commonly when a network switches from one underlay connection to another.

If certain network paths are more congested than others or are underperforming, traffic can be rerouted to compensate and reoptimize the network for the end users affected. In many ways, this is the real beauty of SD-WAN: the ability to constantly optimize and course correct for the best user-centric outcome.

To summarize, how can businesses migrate to SD-WAN with minimal disruption? The answer is threefold. First, an organization must engage the right combination of partners at the time, usually with an SD-WAN service provider taking the lead in capturing the needs of the customer in a service design tailored to them. Second, a full evaluation and inventory of legacy networks should take place, giving the business and its SD-WAN partners the best possible advantage when it comes to a smooth and seamless transition. Third, organizations and their partners should make absolutely sure that internal evaluations and real-time performance monitoring are a key part of the overall action plan.

By taking the above three points into consideration, the current gap between the number of organizations considering SD-WAN and those actively pursuing it will eventually close. Connectivity is going to be a crucial pillar in every organization's future, whether they're fully embracing remote working or simply experimenting with a hybrid approach, so there's never been a better time to get it right.