

THE ELUSIVE BENEFITS OF SD-WAN WHY TRADITIONAL DEPLOYMENTS ARE FALLING SHORT?





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Software-Defined Wide Area Networks (SD-WAN) promised a revolution in enterprise networking, offering agility, cost-efficiency, and improved application performance. However, a recent Omdia survey paints a concerning picture: satisfaction with standalone SD-WAN deployments is declining. This paper explores the reasons behind these shortcomings and proposes a path forward with SD-WAN 2.0, a new approach that emphasises planning, expertise, and a holistic ecosystem.



The disillusionment with standalone **SD-WAN**

The Omdia survey of 320 decision-makers reveals a worrying trend. Satisfaction with standalone SD-WAN implementations has dropped from 7.3 to 6.6 in 2024. The number of dissatisfied adopters has risen from 7% to 12% in the same period. This shift in sentiment indicates that enterprises are not achieving the desired benefits from traditional SD-WAN deployments.

Furthermore, the survey highlights growing impatience among adopters. Previously, they were more willing to work through teething problems. Today, however, they are quicker to switch vendors or platforms if expectations aren't met. With nearly 12% of adopters rating their experience as unsatisfactory, enterprises need to take a critical look at their SD-WAN strategy.



% of enterprises unhappy with their SD-WAN deployment



The SD-WAN reality check: Common challenges and opportunities

Many enterprises adopted SD-WAN to optimise network performance and reduce costs. While initial deployments showed promise, evolving business needs and technological advancements have introduced new challenges. Factors such as multi-cloud adoption, IoT, hybrid work, WiFi/WLAN and emerging compliance regulations have created performance bottlenecks, security risks, and limitations in leveraging SD-WAN's full potential. To address these issues and unlock the true value of SD-WAN, it's imperative to explore the capabilities of SD-WAN 2.0.

Several key factors contribute to the shortcomings of traditional SD-WAN deployments. These include:



Ineffective policy management: Relying

on static policies that are difficult to adapt to evolving network conditions and application requirements. This leads to suboptimal network performance, application latency, and user experience challenges. Enterprises struggle to effectively prioritise traffic and optimise network resources based on business needs.



Complex and costly branch office infrastructure: Legacy branch office

networks were characterised by multiple, disparate devices for firewall, WAN optimisation and routing, leading to increased operational costs, management complexity, and security risks. Enterprises face challenges in consolidating these functions into a unified, efficient, and cost-effective solution.



Limited network visibility and control:

Traditional network management processes from managed services partners offer limited visibility and often no control into network performance and security. Enterprises struggle to identify and resolve issues proactively, resulting in increased downtime and user frustration. Moreover, the lack of granular control over network policies hinders optimisation efforts.



Network management complexity

and skill shortages: With evolved environments, managing complex SD-WAN environments requires specialised skills and expertise. For faster turn-around resolutions, enterprises often lack the necessary resources to effectively manage, optimise, and secure their networks. This leads to increased operational costs and potential performance issues.



Evolving security threats and compliance

challenges: The increasing frequency and sophistication of cyberattacks, coupled with evolving regulatory requirements pose significant challenges for enterprises. Traditional SDWAN solutions often struggle to keep pace with the evolving threat landscape. Enterprises need a comprehensive, integrated approach to security that can adapt to changing conditions.





The imperative of SD-WAN 2.0

It's important to recognise that the evolved needs of enterprises should be considered in the Next-Gen SD-WAN technology which we are referring to here as 2.0. The SD-WAN landscape has seen some exciting innovations in the last 3-4 years which have translatable benefits as enterprise use cases. For instance, leveraging AI/ML for self-healing networks, dynamic path selection, and predictive analytics.

Here are some of the key considerations that enterprises should be mindful when embarking on their SD-WAN 2.0 journey:



Policy optimisation: From definition to

enforcement: Legacy SD-WAN focused on replicating MPLS performance on internet links. SD-WAN 2.0 moves beyond static policy translation. It's about right and timely policy enforcements. This involves a complete review of SD-WAN policies, focusing on application and user priorities. With this granular control, businesses can ensure optimal performance for critical applications and users.



Edge consolidation: Simplify and unify:

SD-WAN 2.0 capitalises on one of its core benefit: edge simplification by leveraging managed service expertise. Enterprises can consolidate firewall, WAN optimisation, and SD-WAN functionalities into a single CPE based on their specific needs. This reduces operational costs by simplifying branch management, and allows for virtualisation of these features. Further consolidation can be achieved by integrating SD-WAN with edge applications, creating a streamlined and unified network security and performance solution.



Co-management: The power of choice

and control: SD-WAN 2.0 understands the need for expert management while offering flexibility. Businesses gain visibility and the ability to co-manage alongside their managed services partner, allowing real-time changes to non-SLA impacting configurations like firewall policies and QoS settings. For critical SLA-related tasks, the partner provides proactive platform management, ensuring optimal performance and security.



Al-powered management: Proactive

insights: SD-WAN 2.0 goes beyond the intelligence at the network edge. A service partner assists with Alpowered management tools for proactive monitoring, seamless fault management, and predictive analytics to proactively identifies bottlenecks, allowing for preventative measures reducing downtime and simplification. This empowers businesses to gain deeper insights into their network, identify potential issues before they occur, and ensure smooth platform operation without human intervention.

SASE readiness: Embracing Secure

access: The lines between SD-WAN and SASE are blurring. SD-WAN 2.0 positions SD-WAN as an enabler of secure access at the branch edge and within cloud environments. Businesses can choose a single-vendor SASE solution or a multi-vendor approach based on their needs. A managed services partner helps seamlessly transition from SD-WAN to a full-blown SASE solution, including integrated SSE, avoiding significant roadblocks. With this futureproof approach he helps activate the necessary security controls, and also manage your network security, ensuring your business is prepared for evolving security landscapes and your compliance requirements.



Tata Communications' advantage

Tata Communications SDWAN Managed Services encapsulated their learnings into a tried and tested AXIOM methodology (Assess, eXecute, Integrate, and Operate and Manage) for ensuring efficient deployment and lifecycle management of SASE solutions.

In the AXIOM methodology, each phase includes specific steps like discovery workshops, pilot validations, configuration management, and continuous policy optimisation, ensuring a cohesive and robust network infrastructure aligned with strategic business goals.

Below are some of our key success metrics, highlighting the effectiveness and efficiency of our solutions:-

- **60% improvement** in cloud application performance through traffic flow redesign.
- >25% reduction in TCO with our standardised architectures, and persona focused designs.
- Al Assisted Assurance technology, to **proactively identify >95%** of severity-one faults and achieved automated fault diagnosis in less than 6 minutes.
- Reduced latency in business-critical applications by **up to 35%.**
- MEF certified provider for deploying 90+ standard SDWAN use cases.
- Delivered over 1000 customer premises equipment (CPEs) every month.
- Operating in 100+ countries with an 99.8% first-time right implementation.

Conclusion

SD-WAN 2.0 presents a clear path to network transformation. To fully realise its potential, enterprises must partner with experienced providers offering comprehensive solutions. By embracing SD-WAN 2.0, organisations can unlock cost savings, enhance user experiences, boost productivity, and simplify network management. Partnering with a trusted service provider like Tata Communications can accelerate this journey, ensuring a future-ready network that drives business success.



For more information, click here



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