

Part of the Wavenet Group

SD-WAN 101

INTRODUCING SD-WAN

A practical toolkit

Demonstrate the benefits of SD-WAN to colleagues, stakeholders and other influencers in a way that resonates with your organisation's vision and objectives.



HOW TO USE THIS TOOL

You've decided that your business needs SD-WAN - for the sake of your customers, colleagues and future success. Now it's time to get your fellow decision-makers on board.

The benefits and applications that are most relevant will, of course, depend on the unique needs and features of your business. So too will the way you present those benefits to key stakeholders. This guide provides a structured, jargon-free and comprehensive menu of SD-WAN benefits designed to chime with the priorities of key executives from CEO and CFO to Sales and Marketing Directors and beyond. It allows you to "mix and match" these benefits to create a tailored, coherent business case for your organisation.

SD-WAN: A clear and obvious choice

Our partnership with Cisco, the most trusted and innovative name in network technology, goes back over two decades. Choose us to design and deploy your SD-WAN solution and be fully confident of:

- Cutting-edge networking know-how from Cisco Meraki, a Leader in the 2024 Gartner Magic Quadrant for WAN Edge Infrastructure
- Over 25 years of **expertise** in empowering organisations through integrated technology
- A combined solution driven by the needs, vision, and future potential of your business

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THE BACKSTORY

The world before SD-WAN...

Sizeable businesses of all types need ways of connecting their various local networks together to create a secure, reliable, accessible and global whole – usually referred to as a Wide Area Network (WAN). Connections between separate networks are made either via the internet or MPLS. At an enterprise level, the main technology for making this work is **MPLS**, while smaller businesses might use **VPN**.

Although effective,
MPLS connections can
be complex to install
and maintain. They also
make it expensive and
cumbersome to upgrade
capacity as your business
grows and changes.

These challenges increase as businesses move more of their vital software applications to the cloud. With MPLS, complex and rigid connectivity structures can lead to routing inefficiencies, traffic overload and a poor user experience, reducing the dynamism of your business.

Software-defined WAN (**SD-WAN**) technology offers a transformative solution to these issues.

HOW IT WORKS:

The SD-WAN difference

"Air traffic control for your networks"

Software-defined WAN (SD-WAN) makes the connections between your different networks far more flexible and efficient, as well as easier to view and control.

- How does it do this? By providing a cloud-based "software overlay" that allows you to control all your individual network infrastructures from anywhere, through one central portal
- You can now see all your WAN connections right around the world - through an intuitive, web-based Cisco Meraki dashboard
- Network traffic can thus be more actively and smartly
 directed, keeping data speeds high so your apps
 perform better
- Having this much control also allows you to design simpler, and more streamlined network structures, with all the cost savings and ecological benefits these bring
- Even if your networks include a complex mix of separate clouds, on-premises data centres and Software-as-a-Service, SD-WAN allows you to manage them efficiently
- SD-WAN can work with all your existing WAN connects and comes with inbuilt, cutting-edge security that can be easily and centrally updated



AGILITY AND PERFORMANCE

Say goodbye to network congestion, slow-working apps and failed links.

More agility

SD-WAN gives you a simpler, more agile IT infrastructure at an organisational level...

Powerful security

...and a single, centrally managed security framework for all users and applications.

Service choice

Depending on your needs, it's available as a fully managed service or a selfmanaged solution.

Any business

Works for global enterprises and smaller businesses alike.

Total control

Monitor the health and performance of all your networks through your Cisco Meraki dashboard.

Greater visibility

With total visibility, you can now direct network traffic more smartly to optimise performance, "steering around" any network problems or outages.

Optimised capacity

Does a specific department need increased bandwidth at regular times? Maybe your finance team at month-end? With SD-WAN, you can deploy policies to make sure they get it.

Managed centrally

Urgent updates and fixes can be made centrally and often instantly.

Better performance

You'll enjoy better performance from vital applications like Internet Voice, video conferencing and streaming, and irtualised desktops.

STRATEGIC ADVANTAGES

Respond to opportunities and challenges quickly, while enhancing your brand reputation.

- With super-agile network management at your disposal, you're better able to grow and adapt in line with your business objectives
- Be more effective: better application performance across all locations means happier, more productive colleagues
- Stay relevant: your tech teams can respond more quickly to board-level requests, implementing upgrades and innovations that enhance efficiency or customer experience
- Quickly exploit new tech: digital transformation becomes much easier, putting you ahead of the game and "future-proofing" your business. If you're implementing Software-as-a-Service or Infrastructure-as-a-Service, handling the increased network traffic will be a breeze
- Network policy changes take moments, not months.

 No need to tag every network device just deploy changes right down to app level, instantly and on a global scale



COST EFFECTIVENESS

Expect a seamless, hardware-light installation followed by ongoing cost efficiencies.

- A simpler, more flexible infrastructure can quickly deliver substantial cost savings (IT man-hours, data costs, helpdesk tickets and more)
- Greater **end-user productivity** can help to **increase revenue** while reducing timescales
- The improved performance and continuity of your applications makes your business as a whole more efficient

- Vital new applications take less time to deploy (e.g. **Software-as-a-Service** options like Office 365)
- Zero-touch provisioning and template configuration save countless man-hours by configuring devices and infrastructure remotely
- Even if your business is investing in SD-WAN to advance a specific strategic objective, the cost benefits of this technology are likely to be felt throughout the organisation

IMPROVED SECURITY

Consistent, integrated next-generation security across your entire infrastructure.



Powerful security capability is **embedded** in your SD-WAN solution. There's no need to source and deploy a separate security solution, device or router. It's all **integrated** and **seamlessly, centrally** updated.



Centralised policy control for firewalls and all other security solutions gives greater consistency, efficiency and lower risk.



With end-to-end **IPsec encryption** across your whole network infrastructure, your **client data** and **business data** are always safe.



By controlling centrally how your WAN links interconnect and how any "failover" protocols work, you can make **business continuity** more robust.



Segment your WAN in a way that works for you, allowing you to compartmentalise your critical business assets, control partner access to the network, optimise firewall policies and ensure primary network routes are reserved for critical applications.



MAKING IT HAPPEN

Choose SD-WAN for an incredibly easy, cost-effective set-up.

- Our SD-WAN is powered by Cisco Meraki and comes as a single packaged end-to-end solution including multiple network connection types. There's no need to source and deploy separate security or other vital features. It's all integrated and centrally updated
- Our SD-WAN is powered by Cisco Meraki and uses a single appliance, "no-touch" configuration, making it easy and quick to deploy
- Our managed SD-WAN services include comprehensive support and proactive troubleshooting, leading to reduced downtime and faster resolution of issues. If you're aiming to stay agile and competitive, managed SD-WAN presents a strategic advantage by delivering robust, scalable, and secure networking capabilities tailored to your specific needs

SD-WAN: SAMPLE APPLICATIONS

With its agility and reliability, SD-WAN empowers organisations to deliver dynamic performance in countless ways across a range of sectors.

Here are some examples.

Establish speedy connectivity at "pop-up" sites and locations

Whether you're a construction company setting up a new wave of sites or rapidly expanding your estate in retail, healthcare or another sector, SD-WAN can help you do so efficiently and securely. Standardised configuration makes it easy to establish quick and reliable connectivity for large numbers of sites in parallel. Meanwhile, tactical use of VPN technology can keep your site separate from your main enterprise WAN while accessing its core services.

Deliver secure, controlled connectivity to third party sites

Want to provide internet and IT services to a distribution partner or even to a customer? SD-WAN allows you to see activity on the affiliated network while shaping traffic in-line with your company policy. This helps to create a more joined-up and efficient way of doing business that reflects your wider values and objectives.

Route all applications appropriately for your business

Ensure your most business-critical applications get priority over less important ones, by ensuring they always use a primary network route. Additional protocols may be set to ensure less critical applications (e.g. streaming services) always follow a secondary route.



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For a tailored assessment of how SD-WAN can help you meet your organisation's own unique goals and challenges:

Call



