

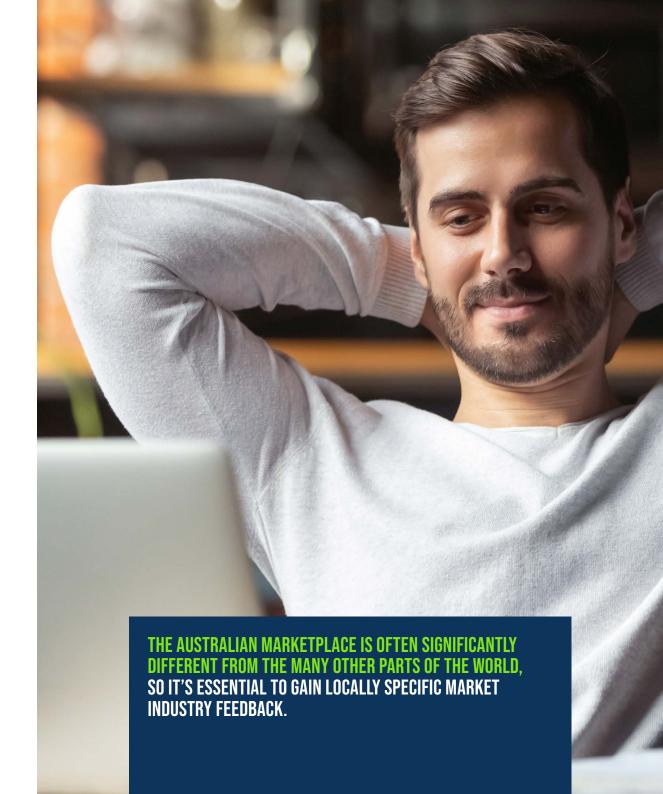




# **SD-WAN: A TECHNOLOGY** WHOSE TIME HAS COME

The Australian marketplace is often significantly different from the many other parts of the world, so it's essential to gain locally specific market industry feedback. This report, conducted by Telsyte and sponsored by Vertel, provides valuable insights into how COVID-19 has sparked a mini cloud boom, stretching the capacity of wide area networks (WAN), and creating an increase in remote working demands. At the heart of all of this is the user experience, which is measurably affected by the quality, speed, and reliability of an organisation's connectivity to networks and data centres.

While the world looks considerably different today compared with the same time last year, the reality is that the pandemic has largely accelerated digital and cloud initiatives rather than precipitating entirely new initiatives. Technology such as virtual and augmented reality, artificial intelligence (AI) and machine learning was already becoming more widely adopted in organisations. They offer potential for organisations to dramatically improve the customer and user experience, deliver new services and advance different operating models. However, these technologies demand high-performing, reliable corporate WAN, home networks and public networks. They also make it even more essential to manage network security and mitigate the risk of breaches.





As organisations continue to prioritise cloud investment, build for the future, and focus on business resilience, software-defined WAN (SD-WAN) has come to the fore as a critical technology. SD-WAN is a network overlay that dramatically improves the responsiveness, dynamism, and performance of the WAN. It helps the WAN more effectively cater for vastly increased loads. Essentially, SD-WAN is the crucial component that guarantees a strong user experience.

Given the global pandemic has accelerated the need for investment in digital technologies, SD-WAN is positioned to deliver better network operations and support rapid change and flexibility. This report reveals that most organisations see SD-WAN as critical, and almost all are planning to make significant or expanded investments in SD-WAN.

Modernising the network is essential to providing a desirable user experience. This includes improving cybersecurity, better integrating security and operational policies, and delivering better performance. This requires a strategic and proactive approach to setting security and policy controls. Automation is essential in this endeavour. Using automated policies and controls, organisations can minimise the effect of a network outage, for example, by implementing failover policies before the end user is even aware that there has been an interruption. This dramatically improves the user experience and reduces the risk that network downtime will affect the business's ability to operate.

SD-WAN also offers significant benefits in terms of carrier-independence. There is a loyalty tax that often

comes with being locked into one provider; costs are higher, and flexibility is restrained. It's important for businesses to look at a wide range of potential providers to avoid being caught in the trap of a single provider. With a carrier-independent SD-WAN, organisations have more freedom and flexibility to manage their connectivity in the way that makes the most sense for the business.

For some organisations, perceptions around the initial cost of SD-WAN plus a lack of awareness and knowledge are seen as barriers to introducing SD-WAN. Working with a managed services provider can overcome these barriers and let organisations reap the benefits of SD-WAN sooner and with less initial outlay and ongoing expenditure.

As we move beyond 2020 and into the new normal, business networks must deliver a strong user experience. This means having flexibility in providers and the capability to manage multiple environments. The world will never look the way it did this time last year; the communications environment is more critical than it's ever been.

This report outlines the communications environment as it stands and examines the role of cloud, WAN and SD-WAN in enabling business in 2020 and beyond. I hope you find it useful.

TONY HUDSON
Commercial director
Vertel



### **EXECUTIVE SUMMARY**

In September 2020, Telsyte surveyed 216 business decision-makers in Australia to canvass their opinions on cloud, WAN and SD-WAN. Each of the respondents had more than 100 employees and more than three external sites. and represented the gamut of industries from agriculture, mining, and manufacturing, to construction, accommodation and food services, education and training and healthcare and social assistance.

#### **RESULTS SNAPSHOT**

**52 per cent** of organisations have seen increased need to access cloud applications and services due to COVID-19.

46 per cent of organisations are providing more support for working from home since the start of COVID-19.

36 per cent of organisations see their WAN capacity stretched due to increased traffic due to COVID-19.

34 per cent of organisations are prioritising an increased investment in cloud for the next 12 months.

76 per cent of large organisations are already using SD-WAN.

63 per cent of organisations using SD-WAN have it all or partially managed by a telco or IT service provider.

91 per cent of organisations see SD-WAN as imperative for their network.

90 per cent of organisations intend to further invest in or adopt SD-WAN.

36 per cent of organisations adopted SD-WAN to modernise their network for better scalability and security.

33 per cent of organisations see initial cost as a top challenge for adopting SD-WAN; 29 per cent cite lack of knowledge as a top challenge.

FROM SD-WAN ARE:

1. INCREASED CYBERSECURITY

2. BETTER PERFORMANCE

3. BETTER INTEGRATION OF **SECURITY AND POLICY CONTROL** 

## **CLOUD USAGE IS** ON THE RISE

COVID-19 has changed how companies work and the cloud has emerged as a key business enabler. More than half (52 per cent) of respondents said the pandemic had increased the need to access cloud applications and services. A further 46 per cent said their organisations needed more support for working from home

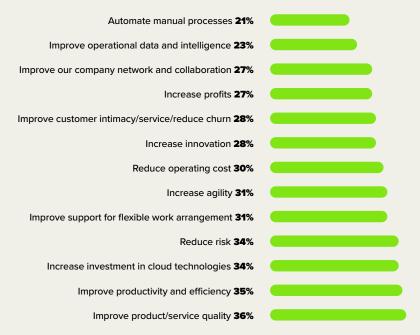
Increasing investment in cloud technologies is a top priority for 34 per cent of organisations. Businesses are also looking to reduce risk, improve product/ service quality, increase profits, and improve productivity and efficiency.

Cloud plays a key role in all these aspirations. However, the value of cloud is only realised if organisations can access cloud-based services, applications, data, and workloads reliably, with fast speeds, and with a strong user experience. SD-WAN is the key to unlocking the value of cloud by delivering these benefits and more without requiring a major infrastructure upgrade.

#### O. HOW HAS COVID-19 IMPACTED YOUR ORGANISATION'S IT SERVICES SINCE THE BEGINNING OF THE PANDEMIC? (MULTIPLE CHOICE)



#### Q. WHAT ARE THE BUSINESS PRIORITIES FOR YOUR ORGANISATION IN THE NEXT 12 MONTHS? (SELECTED AS TOP 5 PRIORITIES)



Selected as top priority (rank)	
Reduce risk	1
Increase investment in cloud	2
Improve product/ service quality	3
Increase profits	4
Improve productivity and efficiency	5

## INVESTMENT IN SD-WAN IS SET TO GROW

Of the organisations currently using SD-WAN, 91 per cent want to increase their investment in SD-WAN services. Of those not using SD-WAN, only 15 per cent aren't yet looking to invest in SD-WAN, with the remainder (85 per cent) planning to adopt SD-WAN.

Almost all organisations see SD-WAN as an imperative for their network; it's front and centre for business continuity. Generally, the reasons for companies to invest in SD-WAN focus on modernising networks for better scalability

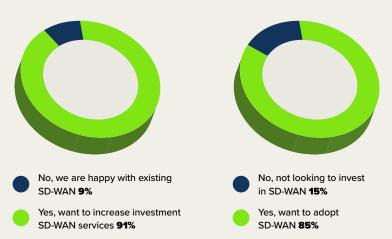
and security (36 per cent). This will help make organisations more resilient in the face of further disruptions.

Other reasons for investing in SD-WAN include:

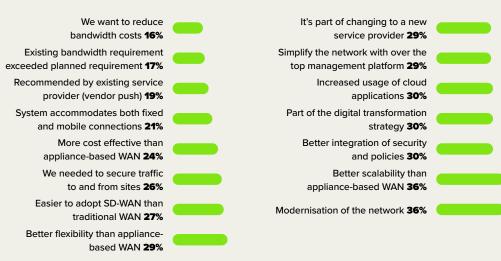
- Better scalability (36 per cent).
- Better integration of security and policies (30 per cent)
- Part of the digital transformation strategy/ increased use of cloud applications (30 per cent)

Cost was also a key factor, with 40 per cent of respondents citing cost as a key benefit. Nearly one quarter (24 per cent) said SD-WAN would be more cost effective than appliance-based WAN, while a further 16 per cent said they wanted to reduce bandwidth costs.

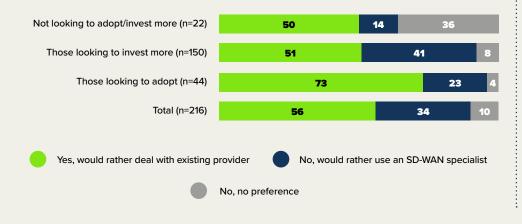
# Q. IS ADOPTING OR INVESTING MORE IN SD-WAN SERVICES CURRENTLY ON YOUR ORGANISATION'S PRIORITY LIST?



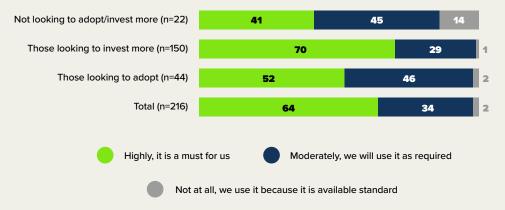
#### Q. WHY DID YOUR ORGANISATION PURCHASE SD-WAN SERVICES? (MULTIPLE CHOICE)



#### O. DOES YOUR SD-WAN SERVICE HAVE TO BE TIED TO YOUR REGULAR WAN PROVIDER?



#### O. HOW STRATEGIC DOES YOUR ORGANISATION VIEW **SD-WAN TECHNOLOGY?**



There is a strong preference among the survey respondents to work with their existing providers for SD-WAN (56 per cent). However, this can create risk for organisations who may end up locked into carrier contracts that don't benefit the organisation in the long term. There may be opportunities for better service or innovation, or a lower risk, by working with new providers. Just over one-third (34 per cent) of respondents would rather use an SD-WAN specialist, while 10 per cent had no preference.

Often, technology adoption is slow in the early stages, and SD-WAN is no different. The pandemic has acted as a trigger for organisations realising that SD-WAN is,

in fact, critical technology and investment is essential. Technology adoption tends to speed up significantly in the latter stages, and SD-WAN is on the cusp of this.

The survey bears this out: 64 per cent of respondents said they view SD-WAN as highly strategic. That number grew to 70 per cent of the respondents who were looking to invest more in SD-WAN. Interestingly, of those not looking to adopt or invest more in SD-WAN, 41 per cent still viewed SD-WAN technology as highly strategic.

This imperative won't disappear when the threat from COVID-19 recedes, so organisations are likely to continue to prioritise SD-WAN investments into the future.

THE COST BARRIER SHOULD ALSO BE **EXAMINED THROUGH THE LENS OF** POTENTIAL SAVINGS THAT CAN BE **ACHIEVED WITH SD-WAN.** 

## **OVERCOMING THE BARRIERS TO INVESTING** IN SD-WAN

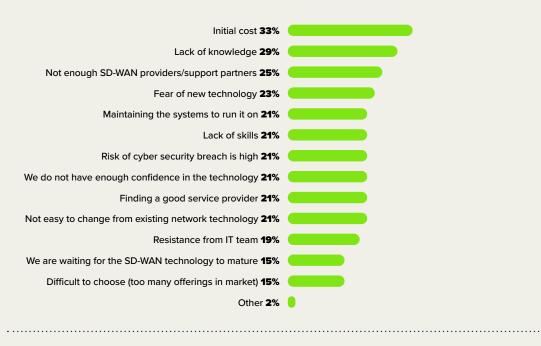
Just 33 per cent see initial cost as a barrier to adopting SD-WAN, while 29 per cent cite lack of knowledge.

Organisations would be encouraged to adopt SD-WAN if there were an easy migration path from their current network (42 per cent), lower ongoing costs (41 per cent) or confidence in a provider to deploy a solution (40 per cent).

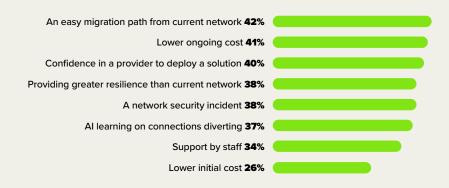
These barriers are typical of the barriers often seen with any new technology. Most organisations can see that investing in SD-WAN is now a must-do.

IS NOW A MUST-DO.

#### O. WHAT ARE THE CURRENT CHALLENGES OR BARRIERS TO ADOPT SD-WAN SERVICES IN YOUR ORGANISATION? (MULTIPLE CHOICE)



#### Q. WHAT WOULD ENCOURAGE YOUR ORGANISATION TO MAKE INVESTING IN SD-WAN A TOP PRIORITY (OR INVEST MORE IF IT IS ALREADY A TOP PRIORITY)? (MULTIPLE CHOICE)



When it comes to managing costs, it can be advisable for an organisation to consider a managed services provider to deliver SD-WAN. This reduces initial outlay and ongoing costs, while ensuring the SD-WAN is competently managed by a capable provider. The costs can be streamed into operational expenditure and are nowhere near as high as they would be if the organisation had to purchase equipment, for example.

The cost barrier should also be examined through the lens of potential savings that can be achieved with SD-WAN. One of these comes through the ability to be carrier-independent through SD-WAN. Using SD-WAN means organisations can choose a combination of

providers and services to deliver the best value and/or service at each location without being captive to one overarching provider. This is important because not all providers offer services at all locations and many use SD-WAN platforms that are proprietary and, therefore, not based on open standards. SD-WAN platforms that meet the Metro Ethernet Forum (MEF) industry standards can work together, which puts power back in the customer's hands to choose the best-of-breed services for their unique location or requirements.

The knowledge barrier is similarly relatively easy to address. Asking the right questions of multiple providers can often provide comprehensive initial

education and help organisations start to develop a clear picture of where their knowledge gaps are and how to address them.

THE COST BARRIER SHOULD ALSO BE EXAMINED THROUGH THE LENS OF POTENTIAL SAVINGS THAT CAN BE ACHIEVED WITH SD-WAN.





# THE IMPORTANCE OF USER EXPERIENCE

In the next 12 months, organisations will be looking to ensure commercial sustainability in a COVID-19 economy. Organisations need to adapt and innovate their business models to survive, and experience will be the key differentiator. Organisations can deliver this with cloud-based systems and applications, underpinned by strong communication networks managed by SD-WAN.

Vertel SD-WAN offers four key benefits: visibility and control; agility; reliability and security; and flexibility. Together, these benefits deliver an exceptional experience for end users. Customers who implement SD-WAN gain better visibility and control of link and application utilisation across all sites.

Public and private clouds are viewed as just another branch site on the organisation's network, while application-aware routing (AAR) deploys policies to direct application-specific traffic over specific WAN links or links conforming to pre-set service level agreements (SLAs). Operational efficiencies deliver cost reductions across the board.

The bottom line is a dramatically improved level of performance with the network fully supporting digital transformation initiatives including the use of emerging, bandwidth-hungry applications.

## **ABOUT VERTEL**

Vertel is a privately owned Australian company with more than 40 years' experience designing, building, and operating business- and life-critical networks for customers. The first in the world to offer MEF-certified Ethernet services over wireless technology, Vertel has been offering carrier-grade Ethernet and high-capacity internet since 2000.

Vertel SD-WAN is built using technology from Nuage Networks, from Nokia. It is MEF 3.0 SD-WAN-certified and meets the requirements defined in the MEF 70 SDWAN Service Attributes and Services standards. Vertel SD-WAN is built on open standards. It overcomes issues around: network complexity, reliability, and outages; bandwidth shortages; security concerns; WAN dependence on a single telco; and long and complex change control times.

Vertel SD-WAN is a turnkey deployment which lets organisations deploy new sites and applications with zero-touch provisioning.

To find out more about Vertel's MEF-certified SD-WAN offering and how it can benefit your business, contact us today or visit sdwan.vertel.com.au

Copyright ©2020 Vertel. All rights reserved. Vertel and the Vertel logo are trademarks or registered trademarks of Vertel.



