



WORK-FROM-ANYWHERE STUDY

New Business Needs
Increase Urgency for
SD-WANs



ABOUT THE AUTHOR

Zeus Kerravala is the founder and principal analyst with ZK Research. Kerravala provides tactical advice and strategic guidance to help his clients in both the current business climate and the long term. He delivers research and insight to the following constituents: end-user IT and network managers; vendors of IT hardware, software and services; and members of the financial community looking to invest in the companies that he covers.

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Introduction

In a COVID-19 world, business needs are shifting toward continuity. More employees are working from home due to the pandemic, putting a strain on enterprise networks. Organizations are realizing they need longer term solutions to support large numbers of remote workers efficiently and securely.

Productivity has never relied more on the wide area network (WAN) infrastructure than in a time of crisis. For this reason, ZK Research conducted a study that measures the impact of the COVID-19 pandemic on organizations across the United States and Canada from a technology perspective.

Where do organizations encounter problems? What new technologies are they adopting? What is likely to stay in place when businesses go back to normal? Or will anything *ever* go back to normal? These are some key questions the study aims to answer about the future of working from anywhere.

Methodology

Between May 26, 2020, and June 5, 2020, ZK Research conducted an online survey of 500 full-time decision makers for IT strategy at companies across the United States and Canada. Canadian revenues were adjusted to match U.S. dollar amounts more accurately after conversion.

Many of the survey respondents hold C-level titles (41%), and most work in the United States. In addition to being IT strategy and WAN decision makers, the respondents are tasked with making decisions in several other areas. Two in five (40%) are from targeted industries: accounting/finance/banking/insurance, healthcare/medical/pharmaceuticals, manufacturing and professional services.

The respondents work at companies that have 500 or more employees, a median of 67% office workers, a median of \$660 million in revenue and an average of 2,200 employees.

Three-fourths (75%) of the respondents consider their organization “essential” during the COVID-19 pandemic.



62%

of respondents claimed
remote workers deliver
higher quality work

Key Insights

> Business Insights

Revenues Declined but Remote Work Is More Cost Effective

- 56% saw revenue decrease, but 85% are optimistic it will return within a year.
- 64% consider remote work more cost effective and therefore believe it contributes to the bottom line.

Working from Home Will Become More Permanent

- 85% have plans in place for employees to return to work.
- However, working remotely is expected to become permanent for 42% of employees who did not previously work from home.

Remote Work Benefits Organizations and Employees

- 62% claimed remote workers deliver higher quality work, and 60% believe remote workers are more productive.
- Remote workers are perceived to have more job satisfaction (67% of respondents), life satisfaction (66%) and availability (65%) than office workers.

> Technology Insights

COVID-19 Prompted a Rise in Tech Spending

- 47% increased tech spending as a result of COVID-19.



49%

of respondents said improving security is the leading priority for IT decision makers during the COVID-19 pandemic

- Another 45% plan to boost spending even more once employees return to the workplace.

Security Is a Top Priority for Organizations

- 49% said improving security is the leading priority for IT decision makers during the COVID-19 pandemic.
- Cloud security (62%), network security (61%) and endpoint security (57%) are driving the increase in tech spending.

Managing Remote Workers Is Easier

- 62% said it is easier to connect remote workers to the enterprise network compared to a centrally located workforce, and 60% think it's easier to shift them to cloud applications.

> Network Insights

The Use of Virtual Private Networks (VPNs) Continues to Be Widespread

- 87% are using VPNs to enable employees to work remotely, and most are highly satisfied with the cost (74%) and performance (79%) of their VPNs.

COVID-19 Heightened the Value of WANs and the Urgency of Software-Defined WANs (SD-WANs)

- 58% reported that the COVID-19 pandemic has increased the value of WANs.
- 46% claimed the pandemic has accelerated their timeline for SD-WAN deployment.



56%

of surveyed organizations
have seen their revenue drop since
the start of the pandemic

SD-WANs Ease the Transition to Working from Home

- 58% said SD-WANs made the transition to working remotely easier.
- SD-WANs are perceived to help increase network speed (83% of respondents) and also improve security (82%).

Business Impact

Business Revenues Declined During the COVID-19 Pandemic

COVID-19 has had a significant effect on business revenues. Since the start of the pandemic, more than half (56%) of the organizations surveyed have seen their revenue drop. Only 39% reported an increase in revenue, and 5% noticed no change.

More organizations in every segment experienced a drop in revenue than an increase as a result of COVID-19. The hardest hit organizations reporting the biggest decline are those with \$1 billion in revenue and 1,000 to 4,999 employees. Target industries also have had a larger than average (median) decline in revenue. The median change in revenue among those surveyed is a 2.4% decline.

Nevertheless, 36% of employers are optimistic that revenue will return to a “normal” level within four months, while most (85%) expect that to happen within a year. The largest firms in terms of revenue and the number of employees are more skeptical about post-pandemic business recovery. Although none of the survey participants anticipate their revenue to



85%

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place for employees to return
to the workplace

recover in less than 30 days, all expect to regain their revenue at some point.

As organizations adjust to the “new normal,” employers are focusing their attention on improving security and maximizing worker productivity as the top priorities. For 64% of organizations, remote work is considered more cost effective and therefore is perceived to directly contribute to the bottom line.

Working from Home Will Become More Permanent

Three in five employers (62%) expect a critical mass of workers, including their own employees, to return to the office within four months of the work-from-home orders being lifted. In comparison, 22% of employees worked remotely prior to the COVID-19 outbreak. The numbers jumped to 53% during the stay-at-home period and have now dropped to 46% as some employees have returned to the office.

The majority of organizations (85%) have plans and processes in place for employees to return to the workplace, with the smallest companies most likely to have started planning. However, not all employees intend to go back to the office.

Post-COVID-19, working remotely is expected to become permanent for approximately 42% of employees who did not previously work from home. Those employees will continue working remotely instead of returning to the workplace, while 40% of office workers will maintain their work-from-home capabilities into the future.

For those who plan to return to the office, social distancing will be practiced by 81% of organizations. At many of the respondents' companies, only essential employees will return first (74%), employees will be offered flexible hours (72%) and meetings will be virtual (70%).

Remote Work Benefits Organizations and Employees

As more employees work from home, maintaining productivity remotely becomes a concern for employers. Worker productivity became a leading management priority during the pandemic, and it was ranked in the top three by 35% of organizations. Productivity (16%) and employee welfare (10%) were named as the biggest challenges by employers managing remote workforces.



Biggest Challenge for Respondent's Organization as More Workers Work from Home

Despite some concerns, employers believe remote workers are more productive than a centralized workforce (60%) and deliver higher quality work (62%).

Working remotely benefits employees as well. Employers believe remote workers have more job satisfaction (67%), life satisfaction (66%) and availability (65%) than office work-



47%

of those surveyed
increased tech spending as a
result of COVID-19

ers. Additionally, many employers think it's easier to maintain a high level of collaboration (61%) and a high level of morale (59%) with a remote workforce.



Remote Workers Compared to Those Working in the Office

Technology Impact

COVID-19 Prompted a Rise in Tech Spending

Overall technology spending increased when the stay-at-home order was initiated in March, although the pandemic had less of an impact on large organizations. Almost half (47%) of those surveyed increased tech spending as a result of COVID-19, while 30% stayed the same and 23% decreased spending.

Impact of Stay-at-Home Orders on Technology Spending When Initiated

Technology Spending Increased When Stay-at-Home Orders Initiated - by Segment

Another 45% of organizations plan to boost spending even more once employees return to the workplace. Those that will be impacted most are mid-level organizations with \$500 to \$999 million in revenue and 1,000 to 4,999 employees.



Expected Impact on Technology Spending When Stay-at-Home Orders Are Lifted
Technology Spending Will Increase When Stay-at-Home Orders Are Lifted - by Segment

Security Is a Top Priority for Organizations

Improving security is the leading priority for 49% of IT decision makers during the COVID-19 pandemic. When asked how the pandemic will change their organization's spending on various technologies compared to what was planned before the outbreak, most respon-



Top Three Priorities for Managing Business During Stay-at-Home Period



87%

of surveyed organizations
are using VPNs to enable
employees to work remotely

dents cited increased spending on security.

More specifically, the three areas where COVID-19 is driving organizations to increase tech spending are cloud security (62%), network security (61%) and endpoint security (57%). Maintaining security at the endpoint has been a “constant struggle,” according to one survey respondent whose organization had to send technicians to employees’ homes to fix problems.

● Impact of Pandemic on Spending Compared to Planned Spending

Managing Remote Workers vs. Office Workers

In some ways, employers believe managing remote workers is easier than managing those who are centrally located in an office. For example, employers said it is easier to connect remote workers to the enterprise network (62%) compared to office workers and easier to shift them to cloud applications (60%). Broadband connectivity and consistent application performance were also key benefits named by employers as being easier to manage for remote workers.

Network Impact

Widespread VPN Use Continues

Nearly all of the surveyed organizations (87%) are using VPNs to enable employees to work



58%

of respondents believe that
COVID-19 has increased the
value of WANs

remotely. Among the small number of organizations (13%) that are not using VPNs, two in five (40%) require their employees to connect to an SD-WAN.

Organizations using VPNs are highly satisfied with their cost (74%) and performance (79%), saying VPNs are meeting their remote networking needs. There is little difference in VPN usage among organizations. However, there is a correlation between satisfaction with the cost and performance of VPNs based on organization size, with larger firms being less satisfied.

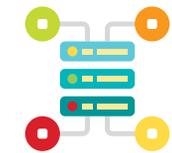
Some survey respondents noted that WAN scalability and reliability has affected their VPNs during the pandemic, as companies previously never had to scale to remotely connect 99% of the workforce to the enterprise network.

COVID-19 Heightened the Urgency of Deploying SD-WANs

58% of respondents believe that COVID-19 has increased the value of WANs. Agreement is highest among larger organizations with revenue of \$500 million or more (60% to 61%) and 1,000 or more employees (55% to 61%) that the pandemic has increased the business value of WANs. Only 25% believe COVID-19 has had no impact on WAN value.



Opinion About How Pandemic Is Impacting Value of WANs
Pandemic Somewhat/Significantly Increased WAN Value - by Segment



66%

of respondents
will use a managed or
co-managed service

The survey findings show that the pandemic has elevated the urgency of deploying an SD-WAN. While relatively few organizations (26%) have actually utilized an SD-WAN, nearly all others (70%) are either evaluating or in the process of implementing one. Only 4% do not plan to deploy an SD-WAN. 31% of the largest firms in terms of revenue and 33% with the largest number of employees have deployed an SD-WAN already.

● Current SD-WAN Deployment Current SD-WAN Deployment - by Segment

Most of the organizations (74%) currently using an SD-WAN were already fully deployed prior to the COVID-19 outbreak. Almost half of organizations (46%) that have not yet deployed an SD-WAN claim COVID-19 has accelerated their timeline for deployment. Approximately the same number of respondents (49%) expect to use a managed service provider when they do implement an SD-WAN.

● Impact of Pandemic on SD-WAN Investment Timeline Deployment Model for SD-WANs



58%

of respondents reported that SD-WANs made the transition to working from home easier

● When SD-WAN Deployment Took Place Having SD-WANs Made Transition to Work-from-Home Model...

SD-WANs Ease the Transition to Working from Home

Employers whose organizations have already deployed an SD-WAN cited many benefits. For 58% of survey respondents, having an SD-WAN installed made the transition to remote working easier.

One of the biggest advantages of an SD-WAN is the ability to link up sites using multiple connections from different providers and different types of transport, such as 5G wireless or Long-Term Evolution (LTE), Multiprotocol Label Switching (MPLS) and broadband. SD-WANs connect users anywhere to apps, whether they're housed in a data center or in the cloud.

Most respondents believe deploying an SD-WAN will help increase network speed (83%) and improve security (82%)—which, as noted earlier, is a major concern for organizations with remote workforces. Some of the other key SD-WAN benefits named by IT decision makers are increased speed of network operations, alignment with cloud, greater WAN agility, better

● Likelihood That Organization Will Realize Benefits from SD-WANs



Any shortcuts previously taken to quickly deploy remote workers should now be reviewed with an eye toward cost effectiveness and long-term sustainability for those who will continue working from home

work-from-home support, improved application performance, increased business continuity and lower cost of running a network.

What It Means for IT Leaders and SD-WAN Investors

Remote work is accelerating digital transformation (DX) initiatives and shifting IT priorities.

The business impacts of the COVID-19 pandemic have companies shifting their personal interactions to digital channels, which in turn shifts IT priorities. More employees are working from home than ever before, with some planning to do so permanently. Technology complexity is the leading barrier to remote work and productivity, which explains why most organizations have boosted their tech spending as a result of COVID-19. IT decision makers see many benefits of remote work—including greater job and life satisfaction—but also worry about ongoing security risks. Remote workforces create a security nightmare for IT, as attack vectors increase exponentially.

Recommendations for IT leaders:

> **Reevaluate DX initiatives.** Now is the time to restructure IT spending at the strategic level. Review and rethink any rapid pivots made by the company. Any shortcuts previously taken to quickly deploy remote workers should now be reviewed with an eye toward cost



Organizations no longer see their network as just a pipe but as a foundation for digital transformation, unified communications and digital business

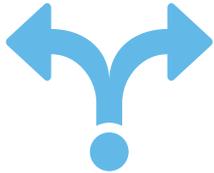
effectiveness and long-term sustainability for those who will continue working from home.

> **Converge security and the network.** Sustaining a large remote workforce requires the convergence of network and security. The WAN edge is now the remote worker, and security must shift to the edge in sync with the network. Rather than connecting a branch to the central office, organizations can connect individual users and devices to a centralized cloud-based service. With this model, the endpoint is the individual user, device or application, not the data center. Organizations looking to implement simple, scalable, flexible networks with endpoint security need the following:

- Secure access service edge (SASE), which combines the elements of SD-WANs and network security into a single cloud-based service and supports all types of edges
- Endpoint detection and response (EDR) with threat monitoring and response
- Identity-based WAN analytics
- Cloud access security broker (CASB)
- Cloud-based security (firewall as a service [FWaaS])

The network matters more than ever before, and SD-WANs smooth the work-from-home transition.

One of the biggest takeaways from the survey is that the value of the network has increased dramatically, as organizations are more reliant on it than ever before to connect workers to



SD-WANs have evolved from a “nice-to-have” to a “need-to-have” in order to meet the needs of today’s enterprise networks

applications to things and to each other. Organizations no longer see their network as just a pipe but as a foundation for digital transformation, unified communications and digital business. Because of the COVID-19 pandemic, organizations are shifting to the cloud and virtual IT models that offer speed and accelerate change. This puts an emphasis on network evolution, WAN modernization and SD-WAN deployments.

The pandemic has increased the value and urgency of deploying SD-WANs, which address existing problems of traffic management from physical devices and enable software-based provisioning from the cloud. SD-WANs have evolved from a “nice-to-have” to a “need-to-have” in order to meet the needs of today’s enterprise networks, which now include offices, branches, every remote worker, all Internet of Things (IoT) devices, cloud connectivity and corporate resources. As noted by survey respondents whose companies have already deployed an SD-WAN, it provides many benefits for supporting remote workers. Whether an organization is connecting multiple locations or just a few, having an SD-WAN in place makes the work-from-home transition easier.

Recommendations for SD-WAN investors:

> **Focus on productivity gains and solution flexibility over cost savings.** Most organizations choose SD-WANs as an MPLS replacement to lower WAN costs. But focusing on network agility and security options instead allows organizations to deploy remote workers and

sites faster and to make networks more efficient while ensuring that apps and data are protected. Working from home also calls for more managed and co-managed SD-WAN services that can take on the time-consuming burdens of network management as business needs change and digital maturity demands more strategic work of the IT team.

- **Co-management options:** Will you have the ability to share in the bandwidth management and network policy management? How easy is it to transition between a co-managed service and a fully managed service?
 - **Security options:** Can the provider help you manage firewall alerts and 24/7 threat monitoring and response? Will you add on more cloud security technologies and a fully managed security service should you need it?
 - **Access-agnostic solutions:** Can you mix and match network access types in a hybrid connectivity model or use an internet-only connectivity strategy?
 - **Network-agnostic solutions:** Are you locked into your provider's network or the provider's list of internet service providers? Can you bring your own network?
 - **SD-branch for remote workers:** How do SD-branch solutions work, and how can you use them to enable a remote workforce?
- > **Support VoIP and video conferencing with a high-performance SD-network.** Unified communications as a service (UCaaS) is a key enabler of digital collaboration and remote work. Pairing today's collaboration applications with an SD-WAN purchase can create a

more reliable and globally consistent user experience for corporate communications.

> **Don't forget about AI-based automation.** With artificial intelligence for IT operations (AIOps), AI moves from "foe to friend" and helps calm the chaos. SD-WANs generate a tremendous amount of data that can be used to improve IT operations. However, there is far too much data to be analyzed manually. AI can be used to perform analytics and pull key insights from the data, which can automate network operations and security remediation.

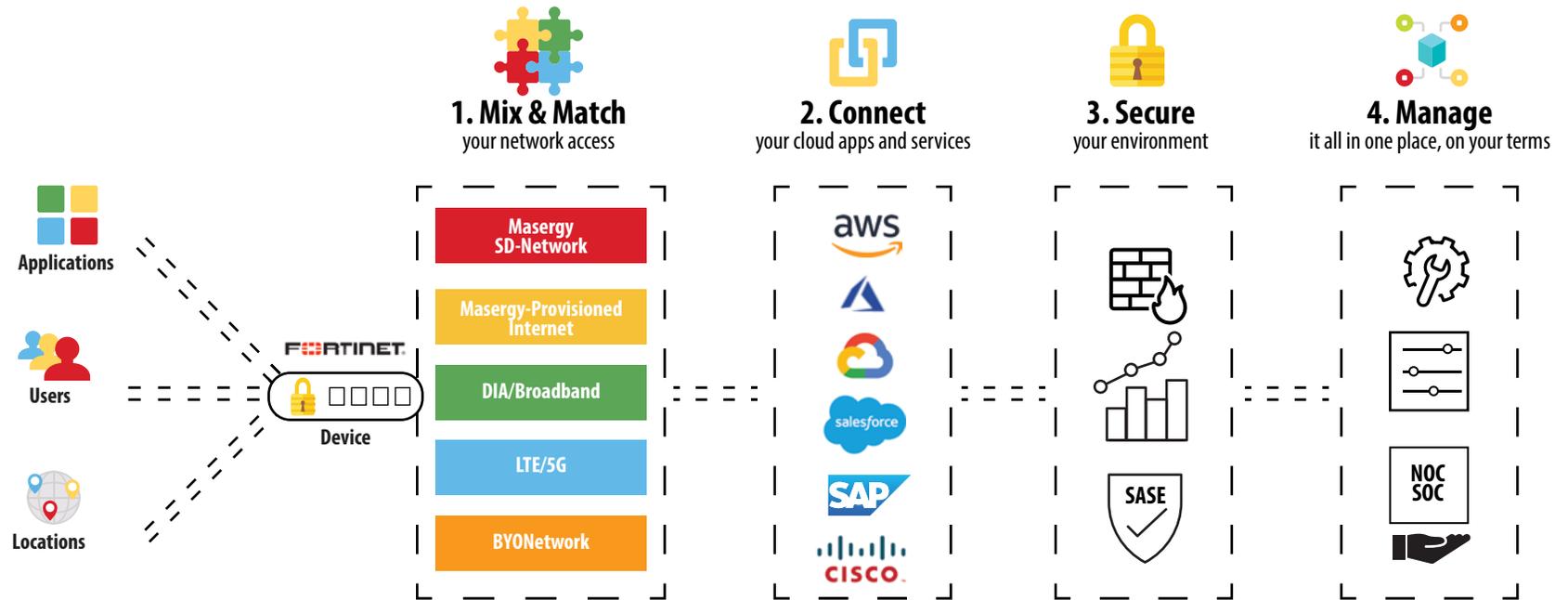
Conclusion

The future is unpredictable, so it's important to have technology in place that can scale and adapt. In times of uncertainty, the mean time to change is everything, and not all SD-WAN solutions are created equal. With changing times and shifting IT priorities, an SD-WAN partner that offers the widest menu of options and the freedom to design and redesign the network environment will best facilitate your digital transformation journey. End-to-end visibility and control of the network are also paramount, as IT decision makers will continue to face pressure to provide greater visibility into enterprise networks and to deliver on the expectations of remote workers beyond the COVID-19 pandemic.

About Masergy

Masergy is the software-defined network and cloud platform for the digital enterprise. Recognized as the pioneer in software-defined networking, Masergy enables unrivaled, secure appli-

Your Network, Your Way: Masergy's SD-WAN Secure



cation performance across the network and the cloud with SD-WAN, UCaaS, CCaaS and Managed Security solutions.

Designed with the broadest choice and flexibility in network, access, management and security, Masergy's SD-WAN Secure solutions give businesses of all sizes the freedom to choose the right configuration for their cloud and network needs while also helping them deliver the key tenets of Gartner's SASE model.

Get the cloud application performance you want with the industry's most competitive service level agreements guaranteeing 100% availability on both network and cloud connec-

tions. All this coupled with Masergy's unparalleled customer experience empowers global enterprises to achieve business outcomes with certainty.

Schedule your free consultation with Masergy's SD-WAN experts and learn more at Masergy.com/SD-WAN.

