



Red River

MANAGED SD-WAN:

THE FUTURE OF DISTRIBUTED
WORKFORCES



Technological disruption happens all the time. Organizations need to be on top of the changes that are happening within their industry if they are to remain competitive. Across all industries, companies of all sizes are seeing their workforce become more readily distributed. Employees are working from home — whether from across a city or across the globe. Not only are employees required to connect to their organization's network, but they also must be able to connect with each other.

A distributed workforce presents many unique and largely unprecedented challenges, relative to the way that employees connect to and interact with their networks, as well as relative to greatly increased security concerns.

Software-defined networking in a wide area network (SD-WANs) are able to facilitate distributed workforces without increasing the financial or administrative burden on the organization. Through managed SD-WANs, organizations are able to take advantage of economical broadband connections, track and consolidate their network traffic and generally improve upon their application availability and user experience. Managed SD-WAN will make it easier for organizations to adopt and experience the benefits of SD-WAN without the need to learn a new technology.



GROWTH OF THE DISTRIBUTED WORKFORCE

About 70 percent of employees worldwide work from home once a week. In the future, it will be even more likely that organizations will maintain small or nonexistent brick-and-mortar locations — creating digital infrastructures and tapping into resources across the globe.

According to Buffer, nearly 100 percent of the workforce would prefer remote labor.

This trend is only growing. Organizations have discovered that they can engage with and sustain talented professionals all over the world, rather than having to rely upon their geographic locations. This additionally makes it possible for organizations to position themselves physically in the locations most financially advantageous to them.

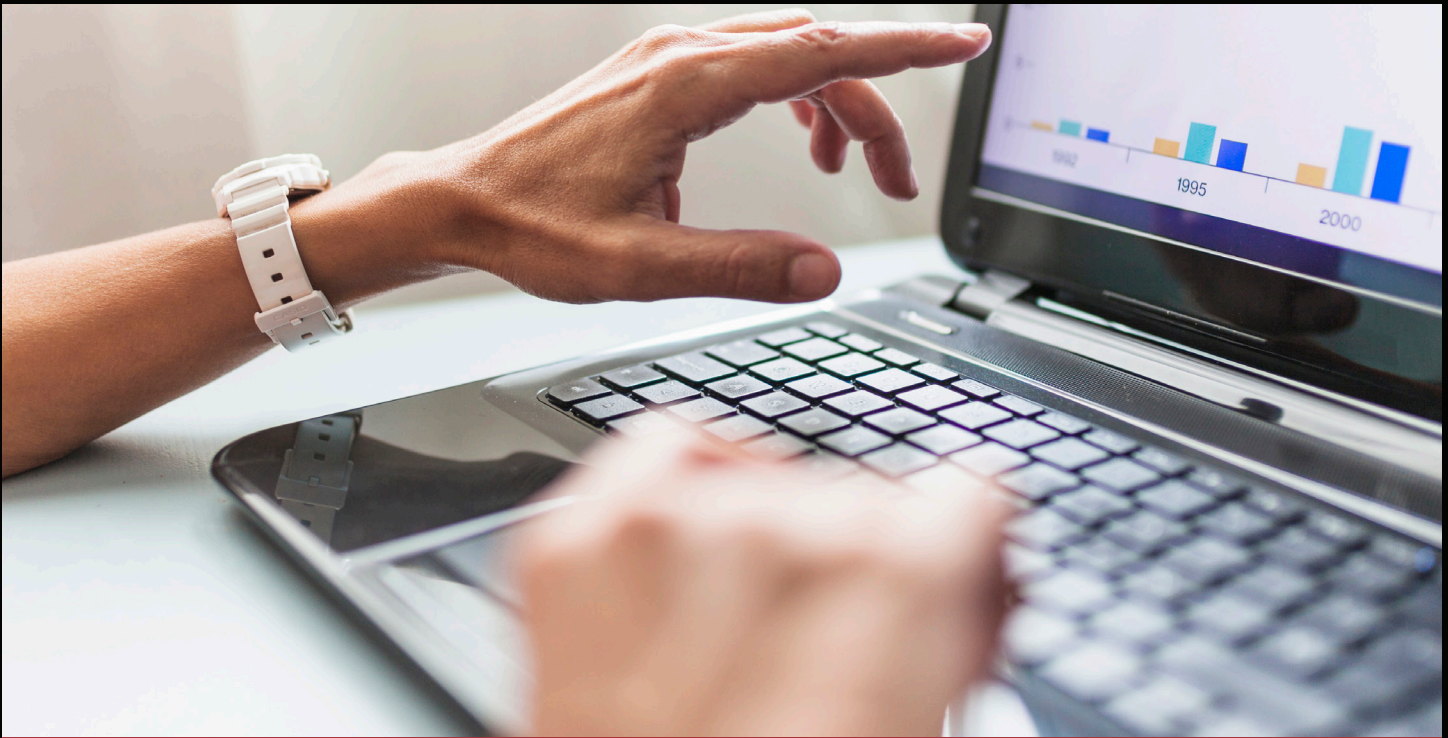


A distributed workforce provides the following advantages:

- **Larger pools of talent.** Rather than simply having to choose employees that are nearby, the employer can instead hunt for talent anywhere in the world. Moreover, talented employees are now looking for superior work-life balance, and are now declining jobs where they don't have the opportunity to work from home. Larger pools of talent can help companies in many ways, making it so that they are able to secure exactly the specialization that they need at a cost that is right for their budget.
- **Economic advantages.** Employers are able to pull talent from areas that may not have as high of a cost of living, thereby saving money on salaries. On a technical level, employers are able to leverage low-cost broadband connections to create a reliable and high-speed network that can work together and consolidate traffic — an SD-WAN. This improves the organization's budget.
- **Reduced overhead.** Distributed workforces mean that it's no longer necessary for employers to keep large physical offices. Rather than maintaining a large brick-and-mortar presence, companies can instead invest in revenue-generating activities such as additional advertising. This increases sales, which can then be used to further improve the resources the organization needs.

It's easy to see why employees and employers alike are moving toward distributed workforces. In the past, employers were often hesitant to engage in remote labor because they were concerned about productivity and focus. Today, it's become more obvious that employees will work harder if they are given benefits and allowed to have a better work-life balance.

A distributed workforce isn't without hurdles to overcome, though; there are technological challenges.



CHALLENGES OF THE MODERN BUSINESS

With the distributed workforce growing, companies are now having to address unprecedented challenges. Organizations need to be able to create processes and invest in technology that allows for complete accessibility — while still managing their own security and reducing the amount of self-service IT.

First, organizations must be able to consolidate their network traffic. Companies are seeing their employees connecting to their internal networks through a multitude of devices, not all of which may be secured. Employees may check in from virtual offices, coffee shops, airports or otherwise on the go. Companies need to be able to control this traffic; if they cannot, it represents a serious security risk.

There has been a 91 percent growth in remote work over the last decade.

Further, organizations must be able to boost productivity by providing employees with the connectivity and accessibility they need to do their jobs right. Employees may be in rural locations without reliable internet access, or they may have slow internet access; either way, it will become difficult for them to connect.

Security is one of the most significant concerns for a modern business. Organizations today collect large volumes of information that have to be protected, such as employee data, client data and vendor data. Further, organizations rely upon their data for their operations. A single compromise could lead to the organization being unable to operate. And while the organization can hire more IT personnel to protect their security, the ultimate goal is that the organization will not need to substantially increase its overhead.



This breaks down to a few major challenges:

- **Accessibility.** Employees within a distributed workforce need to be able to work effectively from wherever they are. They need to be able to connect with multiple types of platforms ranging from smartphones to tablets. They should have a unified and consistent experience through all of these, rather than having to adjust to a new environment each time. Cloud-based applications can help with this process, but they are only one part of the network's consistency.
- **Security.** Connections between employees and the network need to be as secure as possible. A single malicious attack could cost an organization millions of dollars, not only in raw financial costs but also in lost opportunities and a damaged reputation.
- **Cost.** Organizations need to find the most cost-effective methods by which they can provide network technology. But they also need to be able to provide support to their employees at the same time. This is often where managed services come in, due to the economies of scale by which they operate. Organizations can get the best of both worlds with managed SD-WAN solutions.
- **Support.** The systems that organizations must manage have to be simple enough that they are sustainable. Organizations don't want to have to expand their IT permanently; they want the support they need through outsourcing. And they need to be able to access support and training throughout.



THE ADVANTAGES OF MANAGED SD-WAN

Organizations across all industries are now adopting SD-WAN technology for the purposes of digital transformation. SD-WAN technology can be used to improve on privacy, speed and reliability. Through SD-WAN, organizations are able to centralize their communications, encrypt all traffic and leverage real-time cloud solutions. Companies are able to build better, more reliable systems that are less likely to go down, and that are more likely to be able to provide high-speed access.

Companies can save up to \$11,000 for each employee who works remotely at least half of the time.

SD-WANs ultimately reduce costs for an organization and aid in the management of traffic flows. Industries such as education, healthcare, finance and manufacturing are all learning to rely upon SD-WAN technology to broaden their networks. Top benefits include:

- **Increased application performance within the WAN.** Today's organizations run on their apps, and app accessibility and performance are incredibly important. Applications will perform with improved efficiency and reliability across the WAN, making it easier for employees to do their jobs, and making it less likely that the system could go down or the organization's operations could be disrupted.
- **Enhanced connectivity across the distributed network.** Employees will be able to connect to the network faster, easier and with greater levels of reliability overall, making it easier for them to coordinate and communicate with each other. The ultimate goal for remote work is to make working together online as easy as it is to work together offline; this is something that SD-WAN technology can achieve.
- **Reduced network downtime and improved accessibility.** Downtime for a modern organization can mean the loss of tens of thousands or even millions of dollars. But with an SD-WAN, redundancy can be backed in so that the system doesn't fail — it just fails over. Reduced network and improved accessibility improve what the organization is able to achieve, making it easier for employees to work and clients to get what they need.
- **Robust security and micro-segmentation.** Security is increasingly important, with many organizations falling prey to malicious attacks every year. Small-to-mid-sized businesses are by far the most common targets of malicious attackers. Improved security and the ability to micro-segment the network reduces the chances that the entire network could potentially be compromised.
- **Lower cost of ownership and improved resource management.** Lower cost of ownership is always a boon to an organization, allowing for the allocation of budgetary resources to other areas. With lower cost of ownership (and improved resource management) organizations can spend less time trying to micro-manage their network and more time increasing their revenue generation.
- **Heightened scalability and flexibility.** Organizations always have an eye toward growth. But growth can be the most dangerous time for an organization. Heightened scalability makes it easier for an organization to grow in a structured and reliable way. Organizations won't need to invest in wide-scale technological disruption; instead, they will be able to scale consistently with their needs.

Together, these benefits are what make SD-WAN technology ideal for most organizations. When managed services are provided, SD-WAN technology becomes far superior to many other options — providing robust, reliable and cost-effective technology for companies that are moving toward distributed workforces.



TRANSITIONING TO MANAGED SD-WAN TECHNOLOGY

SD-WANs aren't perfect; there are still challenges. Often, these challenges are relative to management and troubleshooting. SD-WANs can make it difficult to troubleshoot performance issues, may not be able to track end-user experience and can be complex to initially launch. These issues, however, can be addressed through managed SD-WAN. Managed service providers are able to reliably and completely transition organizations to an SD-WAN architecture without disruption, providing critical support and end-user care throughout the transition and beyond.

Key Takeaways:

- Organizations are increasingly turning toward distributed workforces.
- Employees prefer remote work; many employers will need to provide remote options if they want to secure the best talent.
- A distributed workforce means a distributed network and disorganized, disparate technology.
- SD-WANs are able to consolidate an organization's network traffic, improving reliability and visibility.

Many companies are going to be transitioning to either partially or entirely distributed workforces. Moving forward, companies are going to need to aggressively pursue technology that can future-proof them against these changes. SD-WAN technology provides for broader access, greater reliability and superior connectivity — but it may require a professional hand to set up and to maintain.



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