

#### INTRODUCTION

Thank you for completing the NTT Communications Next Generation WAN Advisor, with research and analysis by IDC. As organizations implement digital transformation strategies they are faced with accelerating network requirements and the need for a network that supports the business outcomes they are aiming to achieve. As such digital transformation should go hand in hand with network evolution.

IDC has developed the Next Generation WAN Advisor to help organizations assess the state of their WAN, and benchmark this performance against their peers. This interactive self-assessment tool is backed up by independent end-user research and IDC's in depth understanding of this market. The research draws upon input from 300 network experts and decision makers to understand how advanced different organizations are in terms of their WAN investment and approach.

IDC has built a comparison framework in which individual responses from the survey are scored to group organizations into 3 levels of WAN maturity, based on their approach to:

- WAN Infrastructure addressing usage and strategy with regards to connectivity and SD-WAN
- WAN Intelligence covering usage of data and analytics to improve the performance of network and applications
- . WAN Operations focusing on operational tasks such as configuration and security policy management

Based on your responses, this report provides you with a benchmark of your organization's WAN. It gives essential and tailored guidance to help you prepare for the requirements of tomorrow and plot your course to a Next Generation WAN: a network that delivers the scalability, flexibility, manageability, cost effectiveness and security that your organization needs to drive digital transformation.





# **OVERALL PERFORMANCE**



Organizations can only reap the full benefits of digital transformation if this goes hand in hand with an evolution of their WAN. IDC has created the Next Generation WAN Advisor to help organizations assess the readiness of their WAN for the digital future. It scores organizations on their approach to WAN infrastructure, intelligence and operations. Based on a survey of 300 network influencers and decision makers we class organizations into three levels of maturity: Followers, Generalists and Leaders. Few organizations at the top end of the curve, with the majority considered as WAN Generalists.



Based on your responses to IDC's Next Generation WAN Advisor, your organization has been positioned as a WAN Leader (Level 3 of 3), which means your organization is generally ahead of its peers.

These results indicate that there is plenty of room for improvement for most organizations when it comes to their WAN. To turn your WAN into a driver of digital transformation, you should aspire to outperform your peers and progress on the maturity ladder.









Network requirements are accelerating as organizations are embracing digital transformation. At the same time the strategic importance of the WAN is increasing, as the business becomes more and more reliant upon it. There are a number of building blocks that can help improve the WAN infrastructure to address these requirements. These include hybrid architectures, local Internet break-outs, cloud connectivity and SD-WAN.

Based on your responses, your organization is ahead of its peers when it comes to WAN infrastructure capabilities, which means your organization is quite advanced in this area compared to its overall performance as a WAN Follower.

You mostly buy WAN infrastructure on an ad-hoc basis, which is common for WAN Followers. In order to move up to the next level, you should start to develop a long term technology roadmap for your WAN infrastructure and purchase consistently. This will help you improve performance, interoperability and cost effectiveness.

SD-WAN has emerged as one of the key building blocks of the network of the future, with the promise of improved network and application performance and visibility, particularly in a cloud environment. At the same time it aims to drive flexibility, while providing cost effective bandwidth and reducing complexity. You are already extensively deploying SD-WAN, which is advanced for your rating of WAN Follower. With a head start on others, you can start exploring how you can build on this as a launching pad towards a further virtualization of your network, in order to drive further benefits in terms of performance, flexibility and cost efficiency.









Network intelligence can play a key role to optimize the network and to ensure application performance expectations are met. Intelligent services like WAN optimization, application performance management, real time monitoring and replay functionality can drive visibility into network and application and significantly improve performance.

Based on your responses, your organization is in line with its peers when it comes to the use of Network Intelligence, which is behind its overall ranking as a WAN Leader.

You have an advanced approach to network optimization, which is automated leveraging predictive analytics. This puts you among the most advanced WAN leaders in this area. To stay ahead, you should now direct your efforts to driving automation and orchestration across different WAN domains.

At the same time you are at the forefront when it comes to meeting application performance expectations. Performance and user experience SLAs are ensured by an automatically adaptable network, as can be expected from a WAN leader. You should continue to push the boundaries and look for ways to further drive automation and orchestration across domains that allow you to raise your overall WAN maturity level.





## **WAN OPERATIONS**



As organizations progress in the digital era the business demands they place on their networks are typically accelerating. They want their networks to empower innovation, increase agility, improve efficiency and drive competitive differentiation, but these networks have often become too complex from an operational perspective to deliver this easily. Task like connecting new sites, provisioning new functions, updating policies or connecting partners or cloud providers can prove quite challenging and stand in the way of delivering the desired business outcome.

Based on your responses, your organization is ahead of its peers when it comes to WAN operations, which is in line with its overall ranking as a WAN Leader.

Self-optimizing network orchestration that integrated analytics, policies and automation has taken a lot of complexity out of your operations. This puts you among the most advanced WAN Leaders in terms of WAN management and enables you to look beyond WAN management, and focus your efforts on other tasks, and the integration between them.

Security plays a critical role in WAN strategy and operations. It is seen as the #1 WAN challenge and the vast majority of companies indicate they are improving network security in response to accelerating requirements. This makes managing security an increasingly important part of WAN operations. Your security policy management, which automatically reconfigures to prevent emerging threats with predictive analytics, is state-of-the-art, as can be expected from a true WAN Leader. However, you should not be complacent, as you will need to continuously reassess what you do and investigate how security can be integrated more closely with the rest of your WAN management.





## **CONCLUSION**



Digital transformation, with cloud at its heart, is changing the networking paradigm and driving requirements to unprecedented heights. The WAN needs to change to cope with these requirements and enable organizations to reap the full benefits of digital transformation. Organizations will need networks that provide more flexibility, manageability, scalability, cost effectiveness and security.

#### **Essential Guidance**

- You should focus on further developing a strategic roadmap for the evolution of your WAN. Assess the current status of your network, and where you want it to be in the future. Prepare a gradual migration path that leverages the existing infrastructure where possible. Hybrid architectures, cloud connectivity, local Internet break-outs and network virtualization should feature prominently on this roadmap.
- Prom an operational perspective the WAN is increasingly hampered by complexity, inefficiency and tedious processes which can make everyday tasks such as adding sites, updating policies or connecting to cloud services a real struggle. This prevents the network from delivering the desired business outcomes, like gaining agility, increasing productivity, and improving differentiation. Explore how centralization and automation can help you streamline your WAN operations.
- SD-WAN has emerged as a solution that can integrate much of the above. The promise of SD-WAN is to deliver improved network and application performance, availability and visibility, particularly in a cloud environment, driving flexibility, while providing cost effective bandwidth and reducing complexity. Looking ahead, SD-WAN should go hand in hand with virtual network services. Explore how you can leverage SD-WAN as the launching pad of a more widespread use of network virtualization that can help you reap the benefits in terms of flexibility and efficiency

