

## 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. Digital transformation should therefore 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 networks 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.

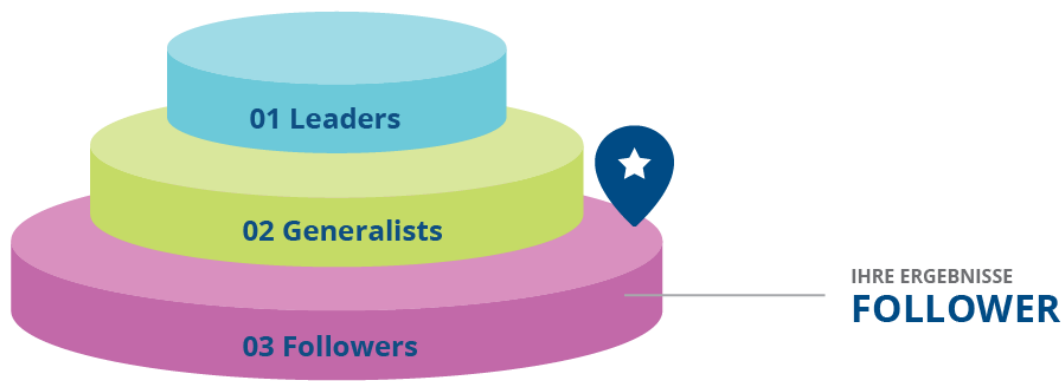
**Figure 1 – Next Generation WAN Assessment**



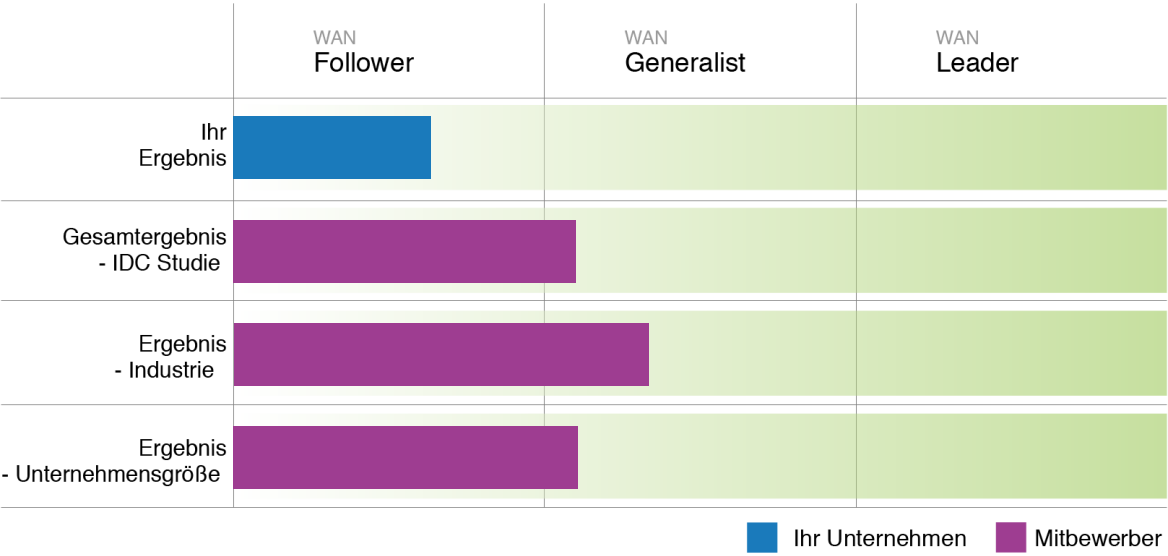
Figure 1 shows that IDC classes 16% of organizations as WAN Leader. These organizations typically differentiate themselves from others with their strategic approach toward the WAN, and a widespread usage of intelligence and automation. 41% of organizations are WAN Generalists, while 43% are considered as WAN Followers.

# 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.



Based on your responses to IDC's Next Generation WAN Advisor, your organization has been positioned as a WAN Follower (Level 1 of 3), which means your organization is generally lagging behind its peers.



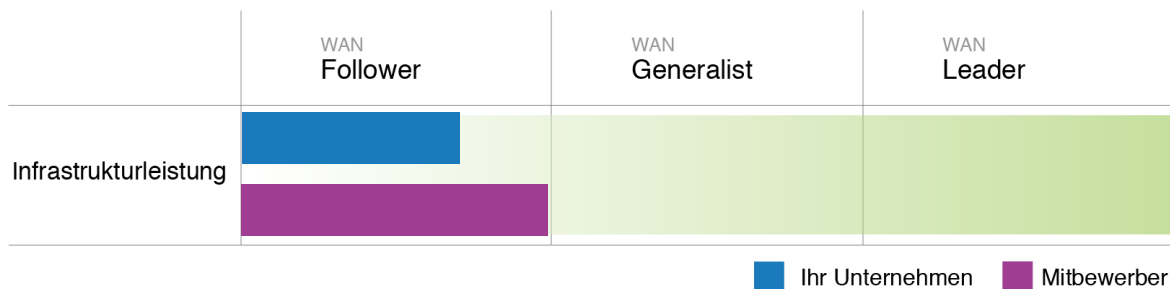
These results indicate that there is plenty of room for improvement for most organizations when it comes to their WAN. To turn your WAN into a driver of digital transformation, you should aspire to outperform your peers and progress on the maturity ladder.

## WAN INFRASTRUCTURE



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 increasingly reliant upon it. A number of building blocks 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 lagging its peers when it comes to WAN infrastructure capabilities, which is consistent with your 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.

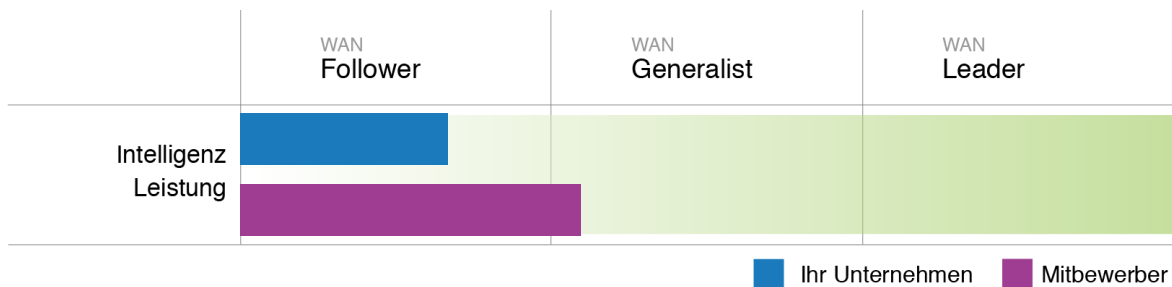
SD-WAN has emerged as one of the key building blocks of the network of the future, with the promise of improved network and application performance and visibility, particularly in a cloud environment. At the same time it aims to drive flexibility, while providing cost-effective bandwidth and reducing complexity. Your deployment of SD-WAN is in its early stages, and this is advanced given your rating of WAN Follower. You should take the learnings of these first deployments to devise a migration plan and site priority list to expand the coverage.

## WAN INTELLIGENCE



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.

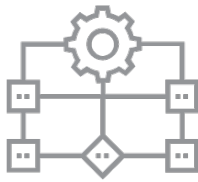
**Based on your responses, your organization is behind its peers when it comes to the use of Network Intelligence, which is consistent with your overall ranking as a WAN Follower.**



You already take structural measures to optimize your network, which puts you among the most advanced WAN Followers. You could build on this by exploring a more proactive and forward-looking approach. Predictive analytics can help you pre-empt performance issues and improve optimization.

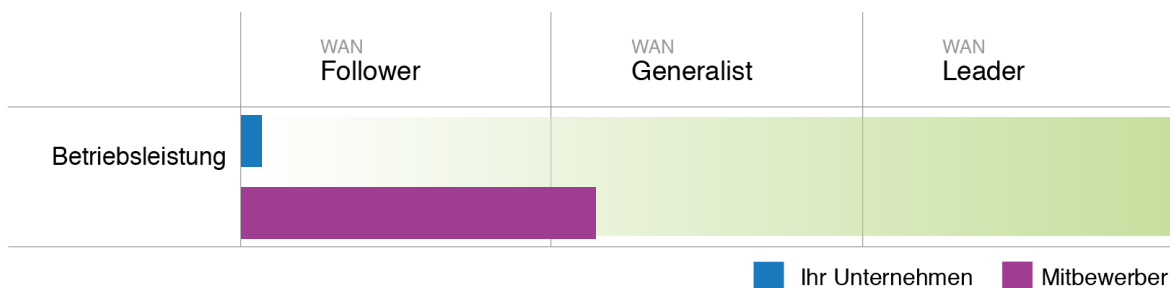
At the same time you separate traffic classes by virtually segmenting the network, which is good for a Follower. You should investigate how traffic prioritization solutions may help you improve application performance further to meet expectations.

## 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. Tasks 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 in line with its peers when it comes to WAN operations, which is consistent with your overall ranking as a WAN Generalist.**



WAN configuration is a manual process that you do if and when the need arises. This is likely an increasingly tedious and time-consuming part of your operational efforts, as it is for many WAN Followers. You need a more systematic way forward. Solutions that let you centralize and automate these tasks can come to your rescue. They will certainly help you take some complexity out of your operations, freeing up time and increasing agility in the process.

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. You dynamically enforce security policies across the network, which is certainly not bad for a WAN Follower. Nevertheless manual tasks can be quite a strain on your resources, while longer response times to threats can leave your WAN exposed. Solutions that combine analytics and automation to rapidly detect and contain threats will improve your efficiency and response times and reduce risk.

## 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

- 1 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.
- 2 From 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.
- 3 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. Build on your early deployments of SD-WAN, and start plotting a roadmap toward a more widespread use of network virtualization that can help you reap the benefits in terms of flexibility and efficiency