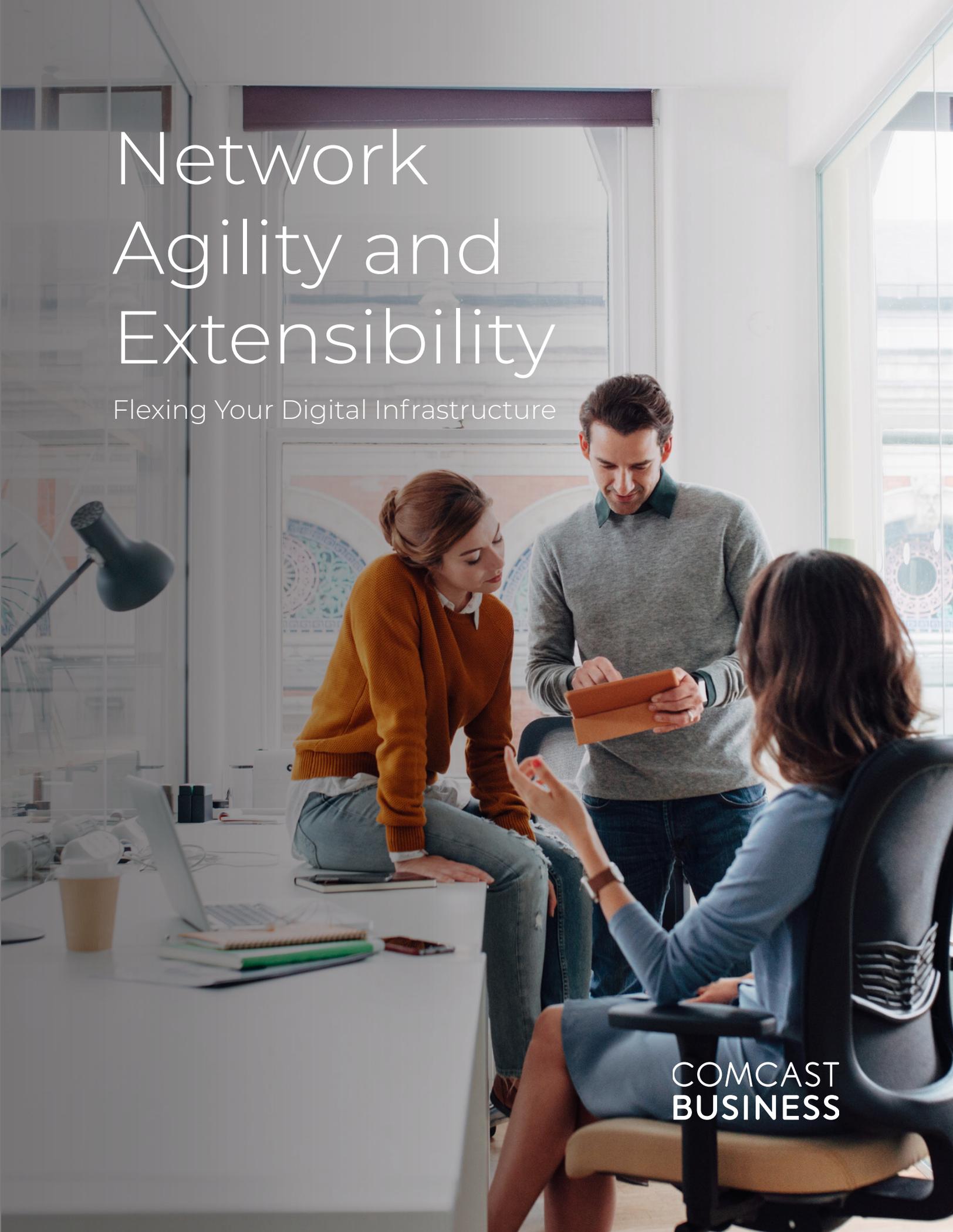


Network Agility and Extensibility

Flexing Your Digital Infrastructure



COMCAST
BUSINESS

The network changes necessary for business continuity during the pandemic and the accelerated adoption of cloud-based models brought with them the need for greater network flexibility, scalability, and accessibility. Organizations have realized that they can transform much faster than they ever thought possible and the pressure to maintain this speed of innovation will persist. To keep up the pace, IT decision makers need to first make sure they have established a strong technology core that provides the network agility and extensibility necessary for growth.





Why is network agility and extensibility important?

For enterprise businesses, when your bandwidth needs, SD-WAN, cloud, edge compute and 5G are all growing at the same time, you have a flywheel effect. The more you are using cloud assets and cloud compute, the more bandwidth you need. With hybrid environments and multiple clouds, you need the ability to segregate and prioritize different types of traffic and applications. SD-WAN solutions provide a way to manage a network of locations and connections to applications and data in the cloud at an affordable cost, with higher visibility at a greater granularity to the data being transferred across those different locations. The network agility and extensibility provided by different modes of high bandwidth transport, coupled with software defined networking, enable companies to use more cloud assets efficiently and effectively.

To address the new digital business demands, IT decision-makers need to address key questions like:

Do you have enough bandwidth to support cloud assets and cloud compute?

Can you support critical applications at the same time and with shifting demand patterns?

Are you delivering the right digital customer and employee experiences?

To help answer these questions we've assembled some best practices and industry commentary to help organizations achieve the best network configuration to scale.

Priority business goals



73%
enhanced
cybersecurity



70%
digital customer
engagement



69%
supporting remote or
hybrid workforce



66%
increasing operational
efficiency



66%
improving employee
engagement

SOURCE: IDG MarketPulse



Assess needs

Bandwidth

Correctly estimating bandwidth requirements can prevent you from paying for more than your business needs. Not procuring enough bandwidth can result in slow connections and poor employee and customer experiences.

Bandwidth = Peak usage time + peak apps + average hours per day on devices in use + scale needed based on expected business growth.

Supporting Cloud Environments

Architecting connectivity to manage direct-to-cloud, multi-cloud and multi-connectivity environments (5G, IoT, etc.).

Prioritization Path

Shifting demand patterns to support more critical applications.
Leveraging SD-WAN to automatically direct traffic to the best path for improved network and application performance.



The first step in determining the best network configuration for your business is to identify and prioritize business needs. Once this prioritization is clear, the network can be configured accordingly. The key to success is the ability to set up flexible and agile architectures that can be adjusted as needs change.

— Jeff Lewis, Vice President, ActiveCore Products and Solutions, Comcast Business



Flexible infrastructure

The ability of cloud to scale up and down quickly in response to changing business requirements will continue to drive cloud migrations. IT departments will also be tasked with moving existing and new applications to secure and easily accessible locations. To support all of these operational and networking shifts brought on by rapid cloud adoption, technologies like SD-WAN will be increasingly utilized to help deliver the necessary application prioritization, optimization and security.

Benefits of SD-WAN

With SD-WAN and agile networking organizations:

Gain network flexibility and control

- Easy deployment and management
- Faster time to service

Improve extensibility and scale

- Deploy connectivity in the right places and supply scalable bandwidth across the network to reliably connect all devices and users.
- Support a distributed apps environment, meet unpredictable business demands and enable remote workforces for business continuity.
- Provide easy expansion to all edges of the network with SD-WAN.

Increase automation

- Automate key elements of the network from traffic prioritization policies to failover rules and performance monitoring to alerting.

The powerful combination of SD-WAN and security

Control all access from one place across multiple connections.

Roll out and enforce policies across all types of access points with software-defined segmentation.

SASE framework enables businesses to upgrade their network edge and security simultaneously, and then managed network and security services to provide much needed expertise and support in a quickly evolving field.



41%

of IT decision makers say skills gaps are the biggest deployment challenge.

43%

say the need for help from strategic partners has increased.

SOURCE: IDC MarketPulse

Planned Strategic Partnerships

41% migration to modern network architectures

38% direct-to-cloud

32% bandwidth increase

SOURCE: IDC MarketPulse

Managed services as an enabler of agility and extensibility

IT departments face many business challenges pursuing their priorities because they just aren't ready or scaled for the challenges of deploying digital technology on the required accelerated timeline. There's an unprecedented level of digital priorities and this time there's urgency as well. IT departments can't do it all by themselves—there's a shortage of resources, they don't have expertise in all areas, and there's too many critical projects. Due to all of these variables, organizations should consider outsourcing foundational areas that require specialized expertise to trusted strategic partners to manage those services.

Measuring success

Measuring the success of network architecture depends on a number of factors. What needs to be a primary focus of IT departments or the managed services providers is the assessment of the security and performance needs of each application and making sure the SD-WAN policies reflect everything correctly in the initial set-up.

When it comes to ongoing operations, IT departments can continue to monitor and measure the level of benefits derived along the following categories:



Drive automation

The application-aware traffic routing and network segmentation of SD-WAN allows IT teams to automate policies and have real-time visibility and control when adjusting to new business needs, managing bandwidth, and prioritizing mission-critical operations.



Leverage insights and improve performance

Understand the who, what, when, where of network usage and how network traffic is flowing.



Initial set-ups are critical. However, those initial setups are only good until something unexpected occurs and you need to pivot. It's a balancing act and the activation of complex networking and cloud access requires ongoing monitoring and adjustment in order to provide optimal and precise performance.

— Jeff Lewis, Vice President,
ActiveCore Products and Solutions,
Comcast Business



Manage security

Trusted partners can provide a strong understanding of your network and find the best solutions for your business.



Managed costs

Establish a more cost effective utilization of existing networking and computing resources.



The goals and needs of every business, no matter the size, are constantly evolving and IT leaders need a network that can be configured in a way that is agile enough to keep up and extensible enough to grow as the organization changes.

See how Comcast Business can help.

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