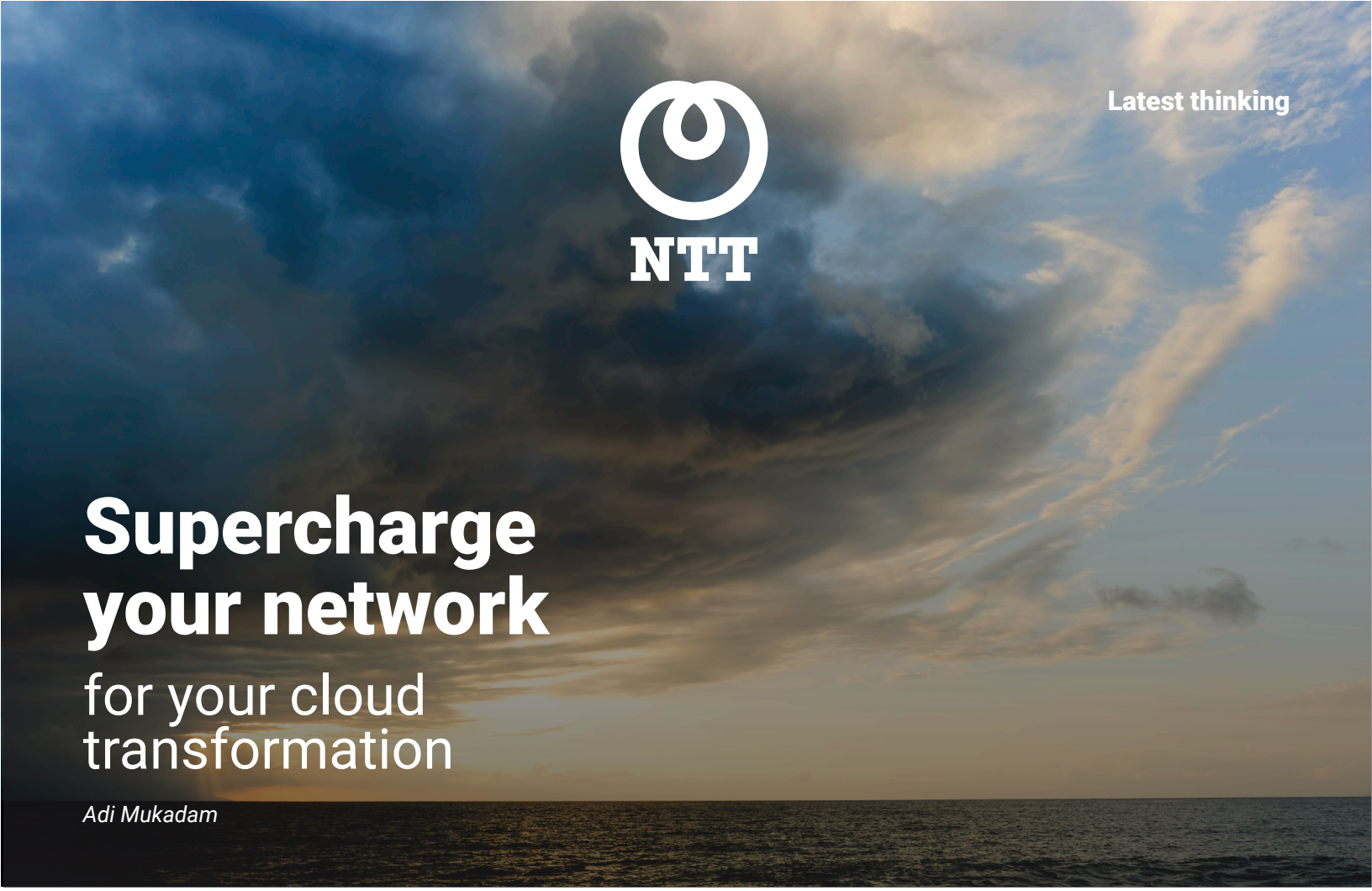

Latest thinking

Supercharge your network

for your cloud transformation

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The end-user experience of cloud-based applications relies on your network. To get the full return on your investment in digital transformation, you need a network that is scalable, secure, reliable, and optimized for cloud connectivity. Read on to learn how a Software Defined Wide Area Network (SD-WAN) can give your cloud migration the power it needs.

According to IDC[1], by 2024 over 50% of all IT spending will go toward digital transformation and innovation, driving over 90% of new applications to be cloud-native. Those applications are only as good as the networks that they run on. As the cloud speeds up your business, don't let a legacy network architecture hold it back.

You must be able to rely on your network at every step of your cloud transformation. Each new cloud-based development will affect and reshape your connectivity strategy. To ensure success, you'll need a robust, high-performance scalable, agile, secure network with optimal connectivity to any cloud resources that you use.

Here are some of the challenges you'll face during your cloud journey along with ways that SD-WAN can help.

Eliminate bandwidth constraints

New cloud-based applications drive demand for WAN bandwidth as customers use applications ranging from ERP and CRM to voice and video collaboration applications over the network.

Legacy networks are inflexible, forcing clients to negotiate more bandwidth with carriers to meet these new demands. In many cases, clients are left playing catch-up with their legacy networks, repeatedly waiting for bandwidth increases to rectify poor cloud performance.

It can take weeks to get more bandwidth from a legacy MPLS network provider. This leads to delays, lengthening cloud application deployment times.

SD-WAN gets you in front of the problem. It offers bandwidth when you need it, so that you can flex your network to cope with new challenges and ensure a network that is ready for your innovation.

Accelerate branch setup

Software-defined networking also solves another problem plaguing businesses with a cloud-first strategy: setting up branches and regional offices for high-speed cloud access.

SD-WAN has ability to augment additional bandwidth needs by aggregating WAN options that are readily available. This not only offers high-bandwidth connections with plenty of redundancy, but it also slashes wait times for bandwidth, giving remote branches fast access to take full advantage of your cloud applications.

The technology also provides full control over network traffic routing. It gives administrators unprecedented control over the network path. If there is a bottleneck in network traffic, the flow can be automatically redirected to a different switch without needing to manually change the routing rules. This keeps traffic moving quickly between branch offices and the cloud, improving the user experience.

With SD-WAN, branches also benefit from Cloud based network functions virtualization (NFV), which enables services to be delivered over the network and configured in minutes. They include intrusion prevention, which helps companies provide their own layer of cybersecurity when dealing with applications and data in the cloud. SD-WAN delivers these and other services such as application acceleration over the network with minimal equipment at the branch. It gives clients security and high-performance cloud connectivity while minimizing capital investment and technical support costs.

Improve reliability and performance

In traditional MPLS networks, branches accessing the cloud through the on-premises data center create a bottleneck and a single point of failure. These legacy networks often route traffic back from branches through the client's data center before sending it out to the cloud. That can overload switches.

SD-WAN lets you send traffic for cloud applications directly to service providers without traveling through your own enterprise network. Path optimization also routes traffic around congestion or failure. NTT offers access to over 8000 cloud-based applications via its global backbone, which features direct connections to all the major cloud service providers via optimal routes on our backbone.

Cloud-first strategies need adaptable networks

When you introduce a new service, how will the service impact the network and how will you react? Network packets might be predictable, but people aren't. When a business deploys cloud-based collaboration or unified communications (UC) functionality, real-world application usage could shape and strain the network in unexpected ways. This is a problem for traditional networks that are rigid and hard to reconfigure.

Network automation plays a big part in solving these problems. SD-WAN not only makes it possible to see what's happening across an entire network in real time but can also react at network speeds. At NTT, we have programmed these responses directly into our systems, which spots issues and reroutes trafficbetween network segments along the path automatically to avoid congestion.

Our AI-Ops driven automated systems have eliminated the traditional help desk. In cases that need human interaction, system-generated support tickets notify operations engineers who often troubleshoot and inform clients about emerging problems before they're even aware.

Our network is also tuned to identify malicious traffic patterns and neutralize emerging security issues before they become a problem for customers. We mitigate over two million cybersecurity threats every year.

Software configuration options in our SD-WAN network enable you to redefine network rules on the fly and configure quality of service parameters to cope with new cloud requirements. You can add virtualized network functions easily from a central management console.

SD-WAN is cloud-ready

SD-WAN goes far beyond a layer-three network fabric. It's a fully functional cloud-ready service stack, featuring a range of options ready for you to deploy, such as branch-level security that protects customers from cloud-borne pathogens.

The network must be a platform for cloud transformation. Without that, you will not see the benefits that you expect from the cloud. Instead, you'll suffer from issues such as poor user experience and traffic lag. SD-WAN can help ensure that your network is ready to support even the most ambitious cloud-first strategies.

Four reasons to choose SD-WAN for cloud

1. **Meet cloud bandwidth demand:** As you move more applications into the cloud, your bandwidth demands will increase. SD-WAN provides the ability to both predict future network requirements and scale up bandwidth to meet them.

2. **Setup branches quickly:** SD-WAN allows you to set up branches quickly to access cloud applications by aggregating available bandwidth and providing virtual network functionality from the cloud.

3. **Improve reliability and performance:** Avoid having to use the public internet for cloud services with direct interconnectivity to cloud providers.

4. **Adapt quickly to future needs:** Reconfigure your network easily to deal with changing traffic patterns caused by cloud services.

Contact NTT Ltd. to discover how we can help you to reshape your businesses WAN for the new world at sdwan@nttglobal.net.

1 https://www.idc.com/getdoc.jsp?containerId=prUS45613519

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