Retailer Deploys Scalable Network to Meet Global Demand



Leading retail chain implements cost-effective WAN architecture to accelerate service delivery in new markets worldwide.

EXECUTIVE SUMMARY

Industry: Retail Location: United States

Challenge:

- Simplify network infrastructure after series of mergers and acquisitions
- Help ensure business service availability and disaster recovery for expanding global audience
- Regionalize IT services to achieve more streamlined, stable, scalable WAN architecture

Solution:

- Cisco Services acted as strategic advisor in creating global WAN architecture
- Cisco Services designed borderless network with detailed plan for worldwide redundancy
- TeleGeography informed Cisco recommendations with in-depth data on service providers

Results:

- Achieved networkwide efficiencies with significant reductions in total cost of ownership
- Gained tools and templates necessary to independently gauge and adjust IT architecture
- Accelerated time to market by supporting fast deployment of new services

Challenge

A global economy calls for a global IT strategy. For one major retailer, staying competitive meant acquiring new properties around the world, then incorporating those properties into an increasingly complex WAN architecture. The result was an inefficient and poorly designed network, unable to scale as bandwidth requirements continued to accelerate.

With more mergers and acquisitions pending in the future, the retailer needed to redesign its current WAN architecture to allow more nimble implementation of new services. The company also wanted to take more aggressive steps toward providing business service availability and disaster recovery for its global customer base. With multiple tenants at each retail location, the organization hoped to offer full-featured network services for its tenants. In addition, it aimed to create a truly cohesive shopping experience for customers, whether they were visiting a store location, browsing on a home computer, or accessing online services on a mobile device.

To meet these requirements while maintaining growth well into the next decade, the retailer wanted to build data centers in strategic locations around the world, then regionalize all IT services to achieve a more streamlined, stable, and scalable architecture. Only then would the organization be able to realize its five-year plan to become a true innovator in the rapidly evolving retail industry.

Solution

A longtime Cisco customer, the retailer was already acquainted with the full range of Cisco hardware solutions. Until recently, however, it regarded Cisco primarily as a technology vendor, *not* a strategic advisor. All of that changed with the retailer's bold plan to implement a global WAN architecture.



At first, the retailer considered choosing a service provider to plan and implement its new architecture, then realized that a typical service provider would tend to make architectural recommendations geared toward its own service offerings. Cisco, on the other hand, could build and run an independent network unbiased toward any particular service offering, then give the retailer the option to engage with other vendors to help enable actual service delivery.

Cisco[®] Services for Borderless Networks, working in conjunction with Cisco Advisory Services, began an in-depth strategic engagement with the retailer to determine optimal WAN design, bandwidth requirements, and hub locations for a borderless network on a global scale. The Cisco team spoke with stakeholders across the retailer's organization, creating a document that articulated a plan for the next generation of IT services. Applying best practices from across the retail industry, Cisco recommended the types of technologies that should be deployed, the bandwidth necessary for each service, and the providers of those services around the world.

Cisco partner TeleGeography played a crucial role in these conversations. TeleGeography specializes in gathering information on global service providers, which gave the Cisco team the information it needed to draw maps of different world regions and identify the high-speed network locations that would best support the retailer's requirements for a scalable WAN architecture. Cisco then created a matrix of cities where high-speed network interconnects were feasible, mapping out a network beltway with plans for redundancy and failover at every hub. Using a detailed scoring mechanism, the Cisco team compared service providers in more than 40 countries based on price, quality of service, reliability, and other factors. Then Cisco Services ran its data against the retailer's very specific future-state business objectives, crafting a list of recommendations for a full-scale global network redesign.

Results

The scope of this implementation is so large, cost-effective, and scalable that the retailer will be able to position itself as one of the world's most prominent service providers once it begins executing on the next-generation IT services plan laid out by Cisco Services. Even more importantly, with the new WAN architecture in place, the organization will be able to sharpen its competitive edge with network-wide efficiencies that translate into significant reductions in total cost of ownership (TCO). These include faster deployment of new IT services, enabling the company to derive revenue sooner, and the identification of additional revenue sources and new ways to engage with customers.



TCO Comparison

Figure 1. Using the tools and templates provided by Cisco Services, the retailer calculated the total cost of ownership (TCO) for the new global WAN infrastructure, showing that over time it would be substantially lower than for the current network.

To help the retailer understand the TCO savings it could expect from the redesigned WAN and network roadmap, Cisco Services provided it with a custom-designed methodology and model for gauging the operating expense benefits of the new design. Cisco Services also delivered a detailed template for reinventing a global IT infrastructure, giving the company valuable tools for gauging and adjusting its own WAN architecture going forward. With these templates and tools in hand, the retailer is now uniquely empowered to apply this new IT model as it expands into more global markets, engages with new service providers, and responds to ever-changing bandwidth requirements.

The company is now able to deliver digital-media and other services anywhere in the world quickly and affordably, paving the way for new service offerings to further differentiate itself. Meanwhile, an expanded data center footprint, built on a solid network, meets the retailer's requirements for a disaster-recovery strategy, mitigating the risk of downtime even as the company relies more heavily on network-based service delivery. And with a more flexible network infrastructure in place, the retailer is in a far better position to offer the complete mobility employees and customers increasingly demand.



Lease Expense Projection

Figure 2. By following a detailed template for reinventing its global IT infrastructure provided by Cisco Services, the retailer expects to pay significantly less for physical data center space in the coming years than it would have with its previous network.

Next Steps

Redesigning the network infrastructure was only the first step in helping reduce the retailer's TCO. Now that the company realizes Cisco can provide independent IT strategy as well as solutions, it will look to Cisco to turn its global IT vision into reality. With a huge amount of customer data being constantly collected at retail locations and on e-commerce sites, the retailer hopes to make the most of its optimized WAN architecture by distributing data across its new compute facilities for internal consumption on demand. And with the almanac of information on global service providers and locations compiled by Cisco Services, the company now knows just where to go when it comes to expanding its data center footprint internationally. Meanwhile, as it continues to refine and expand its network, this industry-leading retailer hopes to continue creating and deploying a whole new generation of analytical tools, innovative services, and fresh consumer experiences to a growing global audience.

For More Information

To learn more about Cisco Services for Borderless Networks, visit: <u>www.cisco.com/go/borderlessnetworks</u>.

Services List

- Cisco Services for Borderless Networks
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