

The Telstra logo is positioned in the top right corner of the image. It features the word "Telstra" in a white, sans-serif font, with a blue circular graphic element to its left. The background of the entire image is a photograph of a laptop with a miniature shopping cart on its keyboard. The cart contains several cardboard boxes, one of which has a shopping cart icon on it. The laptop screen shows a blurred e-commerce website. The bottom of the image has a blue-to-teal gradient overlay.

Telstra

Use Case:

Supporting global
e-commerce expansion with
software-defined networking



The company is one of the world's most successful e-commerce players, connecting millions of buyers and sellers around the world. Headquartered in the United States, the company's growth strategy is focused on international expansion to take advantage of new customers in some of the world's fastest-growing markets.

The challenge

The global e-commerce market is a highly competitive, fast-moving industry where even the smallest change can impact customer experience. In fact, every millisecond of downtime can be quantified in terms of lost revenue.

Meanwhile, retailers have to deal with enormous variations in demand over the course of a year. Their networks face significant pressure to keep up during periods around Christmas, Black Friday, Singles Day, or Valentine's Day, though the requirements during the rest of the year are much lower. The issue for the business is how to manage those demand spikes to



ensure availability and performance, while remaining cost-efficient by not paying for bandwidth they only use a few times a year.

At a time when your customers' experience is the difference between a successful business and the rest, the importance of flexible, available, and efficient connectivity cannot be overstated.

Yet, as the company began to create new regional hubs to enable its expansion, it began to notice issues affecting customers. Despite significant investment, its connectivity wasn't performing to the level required and it was concerned about the level of investment required to ensure always-on availability.

Its shoppers were also feeling the effects of missing out on time-sensitive deals. And sellers were getting lower prices since bids weren't going through fast enough.





The company's IT department realised it had to close this gap between its network performance and its customers' needs. To do so, the company decided to create a new Point of Presence (PoP) in Australia to better connect to Australian consumers, as well as new customers in Asia. However, this presented another challenge – connectivity in the region was often relatively costly or took longer to deploy, with a wait of up to eight weeks due to regulatory requirements.

The traditional way of doing things wasn't going to get results. That would have required the company to forecast capacity requirements ahead of time, which would be a challenge because of variations across the globe.

Ultimately it meant a worse customer experience for users – and a direct impact on the bottom line. What the company needed was for an agile solution to quickly and reliably connect its business between Asia and the US.

The solution

After understanding the company's challenges and needs, Telstra implemented a solution comprising an Ethernet Private Line service and the Telstra Programmable Network (TPN), a software-defined network.

Using TPN, the company had the flexibility to quickly scale capacity according to its needs, which let it bring new PoPs online and begin serving customers as soon as possible. This also meant it could scale its bandwidth up and down seasonally, meeting high capacity demands during peak shopping days and reducing its investment when not required.

By ordering TPN ports, the company could utilise the Telstra backbone and spin up

connectivity between Australia and Asia on-demand, as well as order circuits to connect to the United States within a short period.

The Benefits

The company was able to shorten the usual timeline of up to eight weeks to get connectivity to mere minutes, by using TPN. This highly compressed timeframe, coupled with the ability to create new endpoints and flexibly determine bandwidth flow and diversity, created a dynamic network and generated significant cost savings.

During the PoP expansion, this arrangement proved as resilient as it was flexible, standing up well to a severe typhoon in Asia which resulted in damage to several subsea cables. While the company lost connectivity to Asia on its traditional network and was unable to reroute traffic or order new routes quickly, through TPN it was able to spin up a new port to reconnect to its Asian hub. This ensured its customers could keep buying and selling without interruption, unlike those of its competitors which could not get back online as quickly after the typhoon.

More importantly, the flexibility and agility the company gained from TPN enables it to right-size its network at any point, and quickly hedge against unforeseen changes. In the highly competitive global e-commerce market, this safeguards the company's lifeblood – the ability for buyers and sellers to be quickly connected, and able to make a sale whenever they choose.





Contact your Telstra account representative for more details.

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