Gap Inc. transforms in-store Wi-Fi experience with AI-driven networking

Doris and Don Fisher opened the first Gap store in 1969 with a simple idea—to make it easier to find a pair of jeans and a commitment to do more. Over the last 50+ years, the company has grown from a single store to a global fashion business.

While Gap, Inc. transformed their business, technology transformed the way shoppers interact with their favorite brands. A multichannel experience is the new normal, and e-commerce sales continue to grow rapidly in comparison to in-store sales. Consumers don’t simply want to shop for products; they want to seek out a more engaging experience. To give customers and retail associates the best experience with in-store Wi-Fi, Gap Inc. found AI-driven networking to be a perfect fit.

CHALLENGE

Al-driven WLAN is a perfect fit

Technology has reshaped everything—from how shoppers find a local store, to making purchases, to being in-the-know about fabulous promotions. Today’s retail experience requires great in-store wireless, and that’s what Gap Inc. set out to deliver.

"Wireless in retail is really tough," says Snehal Patel, global network architect for Gap Inc. "The more clients that we deployed in the network, the more problems we had in the network. But we knew that not every problem was related to the wireless."

"Wireless was a key infrastructure pillar that absolutely needed to be high performing and be able to host the next generation of technology in our stores," says Vishal Goradia, senior director of networking and technology at Gap Inc. "The length and breadth of technologies and platforms in our stores have grown by 4x in the past few years and it was evident that our current infrastructure was not going scale."

"We needed to redesign the wireless network in our stores," Patel says. "Stores need enough wireless capacity to support innovation, and the network operations team needs better visibility into issues when they arise." Gap Inc. wasn’t satisfied with the status quo.
The IT team wanted a WLAN that would leverage the scale and resiliency of public cloud and be based on modern engineering principles. It wanted a network platform that offered full access to rich APIs so IT could integrate the network with in-house-developed tools. "Full access to APIs would be instrumental to automating our provisioning process, which has helped us complete our wireless transformation in record time," Goradia says. The IT team wanted to lay the groundwork to deploy game-changing services to leapfrog the competition.

**SOLUTION**

Resilient WAN ensures smooth operations

Gap Inc. redesigned its in-store networks to enable new levels of retail innovation. The AI-driven Mist Platform provides stores with predictable, reliable, and measurable Wi-Fi.

A proof-of-concept test quickly turned into a deployment of the Mist WLAN in stores across North America. That’s because Mist has given the Gap Inc. IT team unprecedented visibility into a user’s Wi-Fi experience and consistently delivers the expected service levels. Marvis, a virtual network assistant, is at the heart of what makes Mist different. The IT operations team can interact intuitively with Marvis to gain proactive insights to deliver a better user experience and simplify network operations.

"Before Mist, we spent a lot more time troubleshooting," says Patel. "Now, we can slice and dice the data and see very clearly that we’re having a problem at a specific store. "Mist shows eight key metrics so we can see whether wireless is good in the stores," Patel continues. "Mist is always measuring the baseline, and if there’s a deviation, Mist helps our operation team identify the problem."

Juniper’s MX Series 5G Universal Routing Platforms provide SDN-enabled routing and industry-leading capacity, density, security, and longevity. "We use MX Series platforms in our global backbone that spans across multiple countries as well as to connect us to multiple cloud regions," says Patel. The corporate backbone delivers the highest levels of uptime and resiliency to ensure that Gap Inc. can scale and adapt technology operations as its business changes. Automation lays the foundation for a self-healing network, as the network is able to handle key management tasks on its own.

**OUTCOME**

Delivering innovative retail experiences

With a Mist WLAN, Gap Inc. has laid the foundation for game-changing retail innovation. Location-based marketing is simplified with Mist since the APs use virtual Bluetooth LE beacons rather than traditional battery-powered physical beacons. It will be easier for Gap Inc. to turn up location-based incentives to build shopper loyalty and increase engagement. "We are excited to partner with an enterprise that shares our vision of one day relying on AI to drive all support calls and functions," says Goradia.

"Our SD-WAN store networks have been successful in leveraging our self-healing backbone to ensure simplified routing and network services, ultimately resulting in application performance improvement across the spectrum."

Vishal Goradia
Senior director of networking and technology, Gap Inc.