Cutting-edge Fortune 500 OEM manufacturer relies on Zscaler to securely advance its cloud-first strategy

Founded in 1980, Sanmina is a Fortune 500 technology leader and manufacturer of sophisticated products for diverse market sectors, including computing and storage, communications networks, medical, defense and aerospace, industrial and semiconductor, multimedia, automotive, and clean technology. Headquartered in Silicon Valley, the enterprise offers end-to-end design, manufacturing, and logistics solutions for original equipment manufacturers (OEMs).

Challenge
Sanmina, a global Fortune 500 manufacturing and logistics company, is known for driving innovation on nearly every level—both internally and externally. The company embarked on its digital transformation early, adopting cloud applications and services, like Google G Suite, even before the concept of “the cloud” had become widespread. As Sanmina CIO Manesh Patel, points out, “We’ve always taken a strategic approach to our transformation. We believe that the cloud is a key differentiator and a competitive advantage, and we look at it opportunistically. As new services emerge, we consider very carefully whether these services make sense for us.”

As its first step toward its digital transformation, Sanmina embraced Google services in 2009, not only for the cost benefits but more importantly for its potential to improve productivity for their teams worldwide and to put the organization on a new trajectory with respect to collaboration and communication.

Google has since become an important partner for Sanmina. Patel observes that early on, he could see from the Google roadmap that they would be driving innovation.

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— Manesh Patel
CIO
Sanmina
The big push for innovation, inspired by the cloud and Google

Since Sanmina made the decision to use Google G Suite companywide, the company has been actively migrating applications to the cloud and leveraging its advantages.

In the manufacturing space, for example, Sanmina has been honing a proprietary application the company has used for 25 years to run its manufacturing plants. Four years ago, Sanmina decided to develop a cloud version. Millions of lines of code later, the application is now running in the cloud and is used by all Sanmina factories. In 2016, Sanmina launched a commercial version of the application. The first pure-play cloud manufacturing solution in the marketplace, the solution is now being offered through a Sanmina-owned startup called 42Q and has received accolades from Gartner and other industry thought leaders.

Another example of a highly successful digital transformation initiative is cloud-based supply chain portal that provides hundreds of Sanmina OEM customers the ability to communicate and execute on supply-chain information from tens of thousands of suppliers.

Cloud initiatives raise the bar for security

The company’s migration to the cloud has been a priority for Patel and his team, and so has the drive to deliver better security in the cloud.

“As we move our operations to the cloud, security becomes more and more critical. The cloud traffic we’re seeing is evolving—employees now have the ability to connect to the cloud themselves anywhere they work and sign up for services and access applications independent of what we’re doing on-premises. As a result, we’re seeing increasing security challenges. A lot of our security had been based on protecting the network perimeter and endpoints, but all that has changed. We knew we needed something that would align with our cloud strategy, and that’s why we turned to Zscaler,” says Patel.

Prior to the Zscaler deployment, endpoint security and local firewalls on employee laptops afforded a certain level of protection. However, when Sanmina’s more than 6,000 mobile employees were outside of the network and connected directly to cloud apps, they bypassed the security perimeter, increasing their exposure to internet threats.

Complete cloud security enhances usability

Because Zscaler is a completely cloud-based solution, Sanmina was able to address that risk, and improvement has been notable. With Zscaler Internet Access sitting between users and the Internet, every byte of traffic is inspected, even SSL-encrypted traffic, providing comprehensive protection from web threats. Zscaler provides Sanmina with a complete security stack in the cloud that encompasses access control, threat prevention, and data protection—without the need for costly, difficult-to-manage appliances. The Zscaler global multi-tenant architecture is ideal for a distributed company like Sanmina, with multiple global locations and its continual drive to innovation.

“When we discovered Zscaler, we had an opportunity to really step up and start with the basics of Internet access. Usability was a major issue, as users were asked to authenticate multiple times a day. It was pretty painful for them. Some of those basic things have made Zscaler a far more effective solution, and our users are happier. That’s a big step forward, but we see it as initial steps in a longer journey,” affirms Patel.

Where Patel saw an immediate improvement with Zscaler is in URL filtering, which was a major weakness with Sanmina’s previous open source solution. According to Patel, Zscaler blocks 10 times the number of malicious sites than then their legacy security tool. Zscaler blocks or limits website access based on a user or a group across destinations or URL categories. When users click on a suspicious site, Zscaler immediately issues a warning.

“Compared to our previous solution, we saw an order of magnitude of improvement with Zscaler. Zscaler is a little like electricity—it just works. People no longer have to authenticate three or four times a day, and performance issues having to do with configurations and routers are a thing of the past,” he relates.
Easier deployment and management.
Faster Google G Suite Performance.

For Sanmina, Google and Zscaler—two cloud-based solutions—were a natural fit: “Our Google G Suite experience with Zscaler has been pretty close to flawless,” comments Patel. Sanmina is planning to take full advantage of the Google G Suite portfolio by adding Google Hangouts and messaging to the mix.

Zscaler has also helped streamline Sanmina’s IT administration. With a gateway at each location worldwide, Sanmina’s IT team was burdened with ongoing infrastructure maintenance and management. With the previous solution, setting up rules and policies was a time-consuming, mostly manual process. Now that Zscaler has been deployed, Patel has seen a huge improvement in the configuration and policy-setting process.

“Now we can achieve this on a global basis and no longer have to do it in piecemeal fashion at each individual site,” says Patel.

“The power and the beauty of the Zscaler solution is that it’s very easy to work with. We’ve not only seen an improvement in performance, we have visibility that we’ve never experienced before,” observes Patel.

Pushing the transformation envelope with Zscaler

Continually driving innovation, Patel and his team are looking forward to exploring other ways in which Zscaler can streamline operations and strengthen security, always with the goal of furthering its cloud-first strategy. Currently, Sanmina has a traditional hub-and-spoke MPLS network architecture with multiple ISPs supporting local offices worldwide. With the expansion of the company’s cloud footprint, SD-WAN is an attractive, cost-effective way to implement more reliable branch internet breakouts and improve connectivity to cloud applications and the data center. Patel sees real value in Zscaler’s ability to secure SD-WAN breakouts without the need for costly appliances at each location, along with its centralized setup and policy enforcement, consistent protection across all users, and scalability. In his words, Patel “sees a real path to the future with Zscaler.”

Concerned about the risks associated with their existing VPN implementation, Sanmina also recently launched a proof-of-concept for Zscaler Private Access. While convenient, VPN gives users access to the entire network, which can invite exploitation that can potentially result in a breach. Zscaler Private Access, on the other hand, enables users to access the applications and services they need that run on the corporate network, the data center, or cloud platforms like Google - without accessing the network. Because Zscaler Private Access is based on Zscaler’s global cloud, there’s no need for additional hardware or hardware upgrades, which is another big plus for Sanmina.

“We see a lot of potential with Zscaler. The ability to see what’s going on and manage it is really important in our current network environment. We’re seeing more and more diversity in network traffic, in how employees are using the network, and in the devices they are using—both corporate-owned and personal. We’re seeing a lot of changes. With Zscaler, we’re confident that we can get our arms around those challenges,” concludes Patel.