



## ESDS CLOUD POWERS DIGITAL SERVICES FOR 500 MILLION PEOPLE IN INDIA

### Summary

**Company:**

ESDS

**Industry:**

Web Services

**Business Challenges:**

Create cloud services that scale massively and in real time to meet the stringent needs of business and government.

**Technology Solution:**

- MX104 Universal Routing Platform
- QFX5100 Switch
- EX4550 Ethernet Switch

**Business Results:**

- Increased revenue by 40 percent in 2017
- Built a multicloud network to support banking, smart city, and other community clouds
- Enabled instant scalability and pay-what-you-consume pricing with SDN
- Simplified network operations and reduced network TCO by 20 percent

As a premier cloud service provider, ESDS is at the digital heart of banking, government services, and manufacturing across India. More than 500 million people use digital services running on the ESDS cloud each day. ESDS' patented architecture for automatically scalable cloud services is built around the Juniper Networks® MX Series 5G Universal Routing Platforms, Juniper Networks QFX Series Switches, and Juniper Networks EX Series Ethernet Switches. In 2017, the company grew 40 percent.

Digital services on the ESDS cloud serve more than 500 million today, with plans to serve a billion in the next few years. "We want to make a positive impact on the lives of the population of India," says Piyush Somani, managing director and CEO of ESDS. "Our services reach half the population of India, and in the next two to three years, our cloud services will have an impact on more than one billion people in India."

One hundred million people bank over the ESDS community cloud. Stand-Up India, which facilitates bank loans for women entrepreneurs and other underserved groups, runs on the ESDS cloud. In Pune, citizens can pay their tax bills, get building permits, participate in online tenders, and get marriage, birth, and death certificates through a convenient online portal. The ESDS cloud platform underpins Pune's smart city services; it's one of 100 cities being developed as part of the Digital India Initiative. More than 250 million smart meters are connected to the ESDS smart city cloud, with ambitious plans to connect more than one billion devices. Thousands of banks, manufacturers, and other businesses depend on ESDS cloud services.

*"Our cloud is very unique. We wanted virtual machines from our Mumbai data center to float to Nashik, and Nashik virtual machines to float to Mumbai, with hardly any latency. It was only possible with Juniper's multicloud and SDN capabilities."*

Piyush Somani, managing director and CEO, ESDS

### Instantly Scalable Cloud

The foundation of ESDS is technology innovation and exceptional customer service. "We invested in research and development and created an auto-scalable cloud platform," says Somani. "We offer a unique public cloud."

The ESDS cloud platform, called eNlight, takes a different approach, and the company was awarded patents in the U.S. and U.K. for its autoscalable technology. Cloud services can be scaled instantly, massively, and transparently to the applications. Uncompromising security and 100 percent uptime are a given. And ESDS delivers on the cloud industry promise of pay-for-what-you-consume—customers pay in five minute increments.

Auto-scalability is at the heart of the company's innovation. Most cloud services scale horizontally, as servers and virtual machines are added to cope with higher workloads. But vertical cloud architectures like eNlight scale by adding more compute and memory to the existing servers. Vertical architectures can be scaled without changing code, and ultimately are easier to manage because data is stored in one robust server rather than spread across a fleet of small-scale virtual machines. The result is unprecedented, instantaneous scalability.

Another differentiator is the ability to easily integrate legacy applications, which makes the ESDS auto-scalable cloud highly appealing to banks, manufacturers, oil companies, and other large enterprises that have been slow to adopt public cloud. ESDS operates multiple industry-specific clouds. Its banking community cloud is home to 280 banks across India. More than 60 manufacturers run on its SAP HANA cloud, and 80 government organizations run on their own community cloud.

*“With our engineering expertise and Juniper at the core, we can provide customers with cloud services as they scale and grow.”*

Piyush Somani, managing director and CEO, ESDS

### Massive Scale, Simplified

With Juniper Networks at the core, the company's Tier III data centers in Mumbai and Bangalore deliver the highest levels of availability, with state-of-the-art cybersecurity and simplified operations. The Juniper Networks MX104 Universal Routing Platform forms the core network. In the data center, the Juniper Networks QFX5100 Switch is used for the spine, and the EX4550 Ethernet Switch serves as leaf members.

“We created a completely software-defined cloud,” says Somani. With Juniper, ESDS can deliver cloud services to customers almost invisibly. Applications and services are ubiquitous, available wherever they are needed. Workloads move fluidly across all three data centers. Resources are fungible, and are not bound to specific resources. Security is a top-tier architectural consideration. Reliability is rock solid.

The performance of the ESDS cloud is exceptional. Customers who migrated to ESDS have noted a 3X performance improvement, according to Somani, and he offers a specific example: “WeChat evaluated 22 different data centers in India and chose us because our network speed was higher.”



“We wanted virtual machines from our Mumbai data center to float to our Nashik data center, and our Nashik virtual machines to float to Mumbai with hardly any latency,” says Somani. “It was only possible with Juniper’s multicloud and SDN capabilities.”

With Juniper, ESDS has a flexible, software-defined network that is high performance, elastic, secure, and adapts easily to changing business requirements. By simplifying operational complexity and leveraging automation, ESDS reduced its network TCO by 20 percent.

### Ready to Serve Billions More

The company's investment in state-of-the-art data centers is paying dividends. In 2017, ESDS saw an impressive 40 percent revenue growth and acquired hundreds of customers. With a massively scalable, multicloud network from Juniper, ESDS has the foundation to expand its cloud services, including multicloud, disaster recovery, and customer service chatbots driven by artificial intelligence. “With our engineering expertise and Juniper at the core, we can provide customers with cloud services as they scale and grow,” says Somani.

### For More Information

To find out more about Juniper Networks products and solutions, please visit [www.juniper.net](http://www.juniper.net).

## About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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