



Faster Fashion



Myntra.com migrated most of its servers from AWS to Netmagic to cut latency by 20-25%. The result: a quicker loading site and better experience for shoppers

BY HEENA JHINGAN

In the highly competitive Indian online retail landscape, dotted with a million retailers in the fray (according to an IAMA survey), every second counts. And speed is what prompted online fashion store Myntra.com to move some of its web servers closer home—from Amazon Web Services' Singapore data centre to Netmagic's Mumbai facility.

Myntra Designs had started off in the business of personalisation of products mostly for corporate customers. Later, in 2010, the company shifted its strategy to becoming a B2C firm, expanding its catalogue to fashion and lifestyle products. Today, it offers products from over 500 Indian and international brands through its portal.

The company's B2C shift called for devising simple and effective ways to reach out to customers, including innovative payment models such as cash-on-delivery. Thus, they redesigned Myntra.com to meet the needs of online shoppers. They also expanded their warehousing capacity to deal with the surge in orders.

Initially, Myntra was hosted at the AWS data centre at Singapore. However, soon they realised they were experiencing network latency.

"Every user accessing the site from India had to be routed to Singapore; that would add quite a bit of latency and thus adversely affect user experience," explains Shamik Sharma, Chief Technology and Product Officer at Myntra Designs.

Besides, Myntra also needed more control over the infrastructure, which was difficult with AWS because the data centre was located at Singapore. The company needed to move its infrastructure closer home for better network speed and control.

"We wanted more control on what infrastructure we run our business on and the ability to choose specific server types. Also, we had limited control [with AWS]; though there were many configurations available to choose from, we could not customise it to the degree we wanted," he reasons.

In the previous setup, says Sharma, there had been a couple of incidents of downtime that made the network



Latency of services is now down by 20-25% overall.

Shamik Sharma,
Chief Technology and Product Officer,
Myntra Designs

unreliable and unpredictable. This made Myntra look for an India-based hosting provider.

Going hybrid

Not that Myntra wanted to move completely away from AWS; there were several good things—flexibility of billing and scale, for instance—that AWS had to offer. So currently, Myntra's is a hybrid setup, with about 80% of its servers hosted with Netmagic and the rest still on AWS.

"We have now about 80 servers at the Netmagic data centre—all managed on an opex model by them. Netmagic directly talks to our suppliers, such as Dell, and procures the desired infrastructure piece for us. We pay on a monthly basis, thus not having to incur capital expenditure," says Sharma, adding that Netmagic has software-based load balancers that help ease the pressure on various servers.

"We use a couple of servers for load balancing and on the network side we have firewalls to secure the website. Some servers are virtualised and used for development work—developers work on virtual instances for their jobs. And a server runs the caching service," he elaborates.

Netmagic also provides Myntra the bandwidth that powers the website, on a pay-per-use model. On redundancy of the website and the applications, Sharma says they are working with Netmagic to

include cross-datacentre BCP (business continuity planning) or high availability.

"What we do within Netmagic facility is that we have load balancers, firewalls and partitions across clusters. If one server goes down we can use another. We also take regular snapshots (every six hours) of our database and apps on to a parallel setup so that we can bring it back up there at short notice," he explains.

Shifting to the Netmagic data centre in Mumbai has resulted in some key benefits for Myntra. It has not just dramatically lowered the latency, but helped them improve customer experience as well.

"Latency of services is now down by 20-25% overall. Our website shows up on the user's page in a little over two seconds, whereas it used to take almost three seconds earlier," he says.

Faster load time a key advantage in the online retail space: if a site takes too long to load, impatient shoppers can switch to another e-tailing competitor.

Now that the company also avails of bandwidth from Netmagic, the network has become more reliable and robust than before.

An obvious choice

The migration to Netmagic wasn't smooth, if not cumbersome, points out Sharma. They had complex layers of applications and customer databases to manage. However, Netmagic stood besides the company as a strong partner to resolve all the issues that emerged, avers Sharma.

Citing an example, he says, "At one point of time we had a situation wherein one of the servers was not working due to a BIOS configuration issue. The Netmagic support team worked with us on an hourly basis: they set up a war-room and had three to four engineers working with us throughout the problem, and they resolved it."

"Netmagic pitched in with skill sets wherever we lacked," says Sharma. He feels they have forged a strong partnership with Netmagic and they are now also running a pilot of the solution provider's on-demand capability that helps manage traffic during peak times.

heena.jhingan@expressindia.com