





The bank in Nepal gains flexibility, boosts IT performance, and lowers costs to accelerate the development of multi-channel digital financial services for its private cloud

BUSINESS BENEFIT

The legacy infrastructure at Laxmi Bank couldn't support the rapid development of services. Infrastructure management and ever-increasing compliance reporting was consuming too much IT resources. Increasing demands across the bank meant the hardware footprint of the data center was constantly increasing as was power consumption. Plus, the growing dependence on IT to drive growth created the need for more robust disaster recovery (DR).

Laxmi Bank migrated to Nutanix with the expert assistance of Nutanix Partner Digital Network Solution, a leading provider of IT security, network, infrastructure, and consulting services in Nepal. As a result, the bank can drive service development, reducing IT administration by 50 percent, cutting the time to deploy software from days to hours, and enabling one-click upgrades. Furthermore, the bank increased application performance by more than 87 percent, reduced hardware by 50 percent and power consumption by 30 percent. Not only did it gain a more effective DR capability, but also laid the foundation for a private-cloud strategy.



"Our Nutanix solution is enabling us to transform our business and delight our customers with mobile, internet, and microfinancing services that meet their ever-changing expectations and preferences. Nutanix ensures we stay competitive in a constantly evolving environment."

- Jiwan Limbu, Chief Technology Officer, Laxmi Bank

INDUSTRY

Financial Services

BENEFITS

- Reduces IT administration by 50%
- Cuts deployment times from days to hours
- Enables one-click upgrades
- Ensures system reboots take seconds instead of minutes
- Boosts processing performance by more than 87%
- Reduces hardware by 50% and power consumption by 30%
- Delivers reliable DR that maximizes resources

SOLUTIONS

- Nutanix Cloud Platform
- Nutanix AHV
- Nutanix Prism
- Nutanix Flow



APPLICATIONS

- F1 Software International mobile and internet banking applications
- Nelito Systems microfinance applications
- In-house office automation systems
- In-house customer relationship management software
- In-house enterprise resource planning software
- Microsoft SQL Server database
- MySQL database

CHALLENGE

Laxmi Bank is a leading provider of financial services for consumers, businesses, and investors in Nepal. It is widely recognized as one of the best-managed banks in the country, with high standards of governance and risk management. The bank is also at the forefront of digitizing processes that are still paper-based for many banks in Nepal. Indeed Laxmi Bank has invested significant funds in technology to drive ventures such as its microfinance subsidiary, Laxmi Laghubitta Bittiya Sansthan, and investment bank Laxmi Capital Market.

With almost 23 million of Nepal's 28 million citizens having internet access, digital banking services have become possible for large numbers of account holders. While this has created new opportunities for Laxmi Bank as well as other financial institutions, it has also brought new challenges. Legacy infrastructures are unable to support the rapid expansion of new services. Too much time is spent on basic infrastructure management when it could be better spent on enabling development. Plus, the sudden increase in systems—as well as growing compliance reporting—overwhelm the existing IT resources.

Laxmi Bank with its legacy three-tier infrastructure faced these challenges and more. Besides the management complexity of its IT in the face of increasing demands, there was also the growing hardware footprint and power usage. With the increasing reliance on IT as a driving force for growth, disaster recovery (DR) took on even more importance and needed to be more robust. Jiwan Limbu, Chief Technology Officer (CTO) of Laxmi Bank knew the bank's IT was ripe for transformation. "Our three-tier infrastructure was a dead end. We couldn't accommodate demands from our internal users. Our IT was more business-critical than ever and downtime was a constant worry. I had sleepless nights."

SOLUTION

Mr. Limbu saw many financial institutions moving workloads to hyperconverged infrastructure (HCI) to simplify management and gain the agility for more productive IT. The bank engaged with Nutanix Partner Digital Network Solution (DNS) to run a proof of concept (POC) of a Nutanix HCI. "We were really amazed by the simplicity of the solution and how we could host any type of environment through a single console," remembers Mr. Limbu.

Laxmi Bank worked with DNS to implement a solution based on a two datacenter active/standby design. DNS deployed three NX8035 nodes at each site to host around 100 workloads in failover mode. "DNS was totally professional in the way it supported the migration. Its expertise in Nutanix was clear as was its commitment to delivering our transformation goals," says Mr. Limbu. The bank



adopted Nutanix Prism, which allows the IT team to manage the entire stack through one console. The bank also chose Nutanix AHV as the hypervisor with Nutanix Flow for software-defined networking. "With Nutanix Flow, we have micro-segmentation to protect applications, increasing their security," says Mr. Limbu.

The bank is running its major workloads on the Nutanix private cloud. These include its F1 Software International mobile and internet banking applications, Nelito Systems microfinance applications, and in-house office automation, customer relationship management, and enterprise resource planning systems. Furthermore, Nutanix supports the bank's remittances, wallet system, API channels, and Microsoft SQL Server and open-source MySQL database engines.

CUSTOMER OUTCOME

Reduces IT administration by 50% and cuts deployment times from days to hours

By switching to Nutanix, Laxmi Bank can support the rapid development of its quickly expanding mobile, internet, and microfinance services. The IT team has taken out the complexity of managing networking, storage, and server resources—enabling it to respond quickly to requests. "Someone needs a development environment for a new mobile banking service, or we need to produce an additional compliance report," states Mr. Limbu. "We can line up everything in a couple of hours when it used to take days." In addition, as the pandemic highlighted, when everyone had to work from home, the IT team could just as easily manage the Nutanix stack remotely as at the data center.

The scalability and flexibility of Nutanix also means the bank can quickly attach third-party fintech services through application programming interfaces (APIs) to the stack for new capabilities off-the-shelf. "We're managing around 150 systems and services all through Nutanix Prism," Mr. Limbu comments, "This just wouldn't have been possible in the past without significantly adding to our management overheads." Indeed, the bank has been able to improve IT efficiency by 50 percent through Nutanix. "We're in a great place, where we can complete upgrades in a few clicks." Mr. Limbu adds. "I have no more sleepless nights."

Ensures system reboots take seconds while enhancing processing performance by more than 87%

Performance across the data center has noticeably improved since the migration. For example, when the IT team does maintenance work, system-restarts are much quicker. Says Mr. Limbu, "We used to wait 10-15 minutes for a system to come back up, but now with our SSD [solid-state disk] drives, it takes just a few seconds." Data is also stored in tiers, with the most critical data stored on the SSDs. "We've been able to allocate IOPS [input/output operations per second] to where they are most needed for better performance on the front-end," Mr. Limbu comments.

What's more, end-of-business day batch processing is significantly improved. Reconciliations that could take up to four hours in the past now take just 30 minutes—an improvement of more than 87 percent. "Being able to process data faster means we can get to insight quicker for better decision-making," states Mr. Limbu.



Reduces hardware by 50% and power consumption by 30%

Moving to a Nutanix HCI has enabled the bank to consolidate the IT in its data centers. It has reduced the amount of hardware by 50 percent and seen a corresponding fall in power consumption of 30 percent. Concerns about the data centers being large enough to support continued business growth are in the past. "The more hardware, the more possible points of failure," states Mr. Limbu. "We turned the situation around with Nutanix and can continue scaling our IT for years to come."

Gains reliable DR that maximizes resources

The bank has enhanced its DR capabilities with Nutanix and a 10-gigabit link between the production and DR sites. To maximize the solution's value, some systems, such as HR, are run from the DR site and data kept in synch with the production site. Data replication between the production and DR site is faster and data is easier to protect and recover from outages. "We can meet our targets with more confidence than ever, achieving our RTO [recovery time objective] and RPO [recovery point objective] effortlessly," says Mr. Limbu

NEXT STEPS

Laxmi Bank now has the migration of its core banking system to Nutanix in its sights. Once its data center operation is fully modernized, the bank will continue to push through their private cloud strategy. The organization is planning POCs of both Nutanix Calm and Nutanix Era for cloud capabilities that can support automation and self-service. "With new banking channels coming on stream and customer behaviors changing, it's an exciting time to be in financial services. I'm pleased we're transforming our IT to realize new opportunities with Nutanix," concludes Mr. Limbu.

