

Nubank makes digital finance modern, simple, and easy



Spot Ocean by NetApp helps Nubank break down banking barriers.

Enabling customers across Latin America to bank smarter, not harder.

Nubank makes banking accessible and affordable for tens of millions of customers in Brazil and across Latin America. In Brazil, Nubank already serves almost half of the adult population, with 85 million adult customers in total. In terms of customers, the company is the 4th largest financial institution in Brazil according to the Central Bank.¹ Among financial institutions in Latin America, Nubank stands out as one of the most efficient, with an operational efficiency ratio in the first quarter of 2023 at 39%.

¹ Per data from the Central Bank, at the end of the second quarter of 2023.

85 million customers in Latin America

“Nubank relies on data for every decision we make. Our partnership with NetApp and RealCloud helps us optimize our data usage to improve performance and efficiency.”

Daniel Capp
Product Operations Manager, Nubank

The largest fintech in the region, Nubank is on a mission to break down financial barriers for customers by providing simple, easy-to-use banking solutions.

From an individual building their credit up from nothing—starting with a \$50 limit—to the budding entrepreneur securing their first loan, Nubank is helping the underbanked build credit, avoid fees, and change their lives. The company depends on data and technology to serve customers and populations that other banks are unwilling or unable to serve. Partnering with RealCloud and NetApp, Nubank implemented a cloud data management solution in Amazon Web Services that uses Spot by NetApp® to scale, optimize costs, and boost efficiency.

Banking is for everyone

Across Latin America, 7 out of every 10 people are either unbanked or underbanked, and 58% of purchases are made with cash. With 70% of individuals unable to build credit and access basic financial services, income inequality in the region is on the rise.

In 2013, Nubank set out to change all that. Founded in Brazil, the mission of this innovative neobank was to become the affordable, easy alternative to well-established banking institutions for tens of millions of people in the region.

Nubank has no traditional branch offices and operates entirely through mobile and e-commerce solutions, so that customers don't have to visit locations that are often miles away from their home. It doesn't charge maintenance or overdraft fees. And it depends solely on social media and word-of-mouth advertising. Instead, data, technology, and agility are its competitive differentiators.

This unconventional approach to banking has been wildly successful. Over the last 10 years, Nubank

has become the largest fintech company in Latin America, with headquarters in São Paulo, as well as regional offices in Berlin, Columbia, Buenos Aires, and Mexico City. In 2022, TIME Magazine selected Nubank as one of the world's 100 most influential companies for the second consecutive year. As of April 2023, Nubank served over 80 million customers, more than 30% of the population of Brazil.

Small loans with a big impact

In Latin America, large portions of the population are not covered by credit bureaus, making them difficult to underwrite. For these customers, Nubank is building credit “on ramps” that reduce risk for underwriters. Also, Nubank gives customers a chance to build their credit by extending small loans (for example, \$50) and rapidly raising the limit as they gain trust in the customer's ability to repay.

“We think about Nubank as a technology company that works in banking, not the other way around,” says Daniel Capp, product operations manager for Nubank. “With access to alternative data and better fintech infrastructure, we can make better credit and underwriting decisions than the big banks can.”

A cloud data management solution you can bank on

The Nubank model depends heavily on data, technology, and proprietary machine learning algorithms. Nubank has been 100% in the cloud since its inception and boasts a long and successful relationship with AWS. But to scale the business to support its massive growth goals, the company needed to improve cost and operational efficiencies.

“Nubank relies on data for every decision made about the business,” says Capp. “While we mainly operate in the financial market, we're going into other niches such as marketplace and insurance. We need efficiency to scale.”

Partnering with RealCloud and NetApp, Nubank implemented a complete cloud data management



solution built on Spot by NetApp cloud cost-optimization tools for comprehensive visibility and maximum cost efficiency.

Using Spot Ocean, Nubank has improved cost efficiency for Kubernetes workloads in their cloud production environments, saving an average of 60% on AWS compute costs while also increasing scalability. Spot Ocean is an application-scaling service that automates infrastructure provisioning and pricing for spot, on-demand, and reserved instances for the optimal balance of performance and savings. Native autoscaling systematically selects and provisions the optimal capacity based on the needs of containers and pods.

Black Friday, the day in November that marks the start of the Christmas shopping season, can be a busy and stressful time for retailers, banks, and e-commerce platforms as their infrastructure is put to the ultimate test.

Spot Ocean enabled Nubank to automate the cloud infrastructure for containers while continuously analyzing and scaling the compute resources needed to maximize utilization and availability. The ability to blend different sizes and families of spot, reserved, and on-demand instances enabled Nubank to deliver resource availability at the lowest possible cost on Black Friday and throughout the holiday season.

According to Capp, “Black Friday is the moment in time when everyone in the world increases demand and decreases availability for cloud resources.

Using Spot Ocean and working with Spot throughout the Black Friday season made Black Friday like any other day for us.”

Nubank also uses Spot Elastigroup to further reduce compute costs in AWS for certain ETL and Spark workloads. Using Spot Eco to automatically negotiate and manage reserved instances helps the company optimize costs for fixed workloads while guaranteeing availability as infrastructure needs change. Instead of manually managing the buying and selling of reserved instances, everything is automated and optimized for maximum savings.

“Costs are a key variable for Nubank’s bottom line,” says Capp. “And NetApp is one of the most relevant partners that we have in terms of cost savings. It saves us 30% of our entire IT costs. That’s a lot of money.”

A Nu future with room to grow

As Nubank continues to improve efficiency and expand its service offering, its partnership with NetApp and RealCloud is paying dividends for customers across Latin America.

“NetApp and RealCloud have been vital in helping us deliver a better service to our customers,” says Capp. “These partnerships enable us to do more with less while increasing performance across our environment.”

NetApp products

Spot Ocean by NetApp

Spot Eco by NetApp



Learn more about Spot by NetApp



RealCloud



+1 877 263 8277

About NetApp

In a world full of generalists, NetApp is a specialist. We’re focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world’s biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. To learn more, visit www.netapp.com



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