

NOVa, Iceland's leading telecommunications provider, has used Pure Storage as a partner in its journey from industry disruptor to market leader. With Pure Storage, Nova has increased the agility of its operations, helping to bring new services to market while simplifying IT operations.



## **BUSINESS TRANSFORMATION**

Nova can accelerate time-to-market for important new products, improve customer service, and virtually eliminate the need for staff to manage storage.

### GEO

Iceland

# **INDUSTRY**

Telecommunications

"With Pure Storage, we can introduce new solutions with greater speed and reliability. It gives us confidence to innovate."

Dagbjartur Vilhjálmsson, IT System Administrator

# PURE STORAGE ANSWERS THE CALL FROM NOVA FOR A HIGH-PERFORMANCE STORAGE SOLUTION

In the decade since its founding in 2007, Nova has gone from a small start-up to the largest market share of mobile telecommunications providers in Iceland. Its 153,000 subscribers account for some 34% of the nation's population.

Nova credits its rapid growth to a fresh brand identity, a fervent focus on providing superior customer service, and constant innovation. The company was the first independent 3G mobile operator in Iceland, and in 2014 launched the first 4G/LTE Internet service. It is currently rolling out fibre-to-the-home broadband connectivity across the country.

"We entered the market at a time of great change, both in terms of technology and customer behaviours," said Dagbjartur Vilhjálmsson, Nova's IT System Administrator, who is responsible for the design and implementation of IT infrastructure across the business. "The new generation of younger, mobile-savvy customers were looking for a better level of service and new services that fit their way of life. The existing operators didn't cater to this demographic, so it created a real opportunity for our growth."

As a fast-growing company in a quickly evolving market, Nova requires an IT infrastructure that is flexible, cost-effective and reliable. Creating and maintaining such an infrastructure is the responsibility of a very small team, just Vilhjálmsson and one other person team. On a day-to-day basis, Vilhjálmsson oversees Nova's virtual server infrastructure and storage systems.

Since late 2013, Pure Storage has been Nova's strategic partner for storage solutions. Pure was still a small and relatively unknown company when Vilhjálmsson visited the company's booth a VMworld show in Barcelona. "I instantly fell in love with the company and the simplicity of its technology. When I got back to Iceland I immediately started working on how we could add it to our datacentre."

Vilhjálmsson said he saw a perfect fit between the two companies. "Pure Storage was the right company for us at that time. We both are innovative companies that want to change their industries."

Using Pure Storage, Vilhjálmsson has helped to create a fast, reliable storage environment that gives the business confidence to grow and innovate.

#### **COMPANY:**

Nova www.nova.is

## **USE CASE:**

- Database Microsoft® SQL Server®
- Virtual server infrastructure (VSI) VMware® vSphere®

#### **CHALLENGES:**

- Legacy storage infrastructure failed to keep pace with continued growth.
- Frequent downtime for storage maintenance interfered with business operations and the number of images that could be presented to clients.

## IT TRANSFORMATION:

- Customers can now access call records through the Web almost in real-time.
- High data-reduction rates provide adequate capacity headroom to support future growth.
- The Pure Evergreen™ Storage program delivers non-disruptive upgrades and long-term stability of costs.

"There's just no comparison with our previous storage infrastructure. Pure Storage is so far ahead."

Dagbjartur Vilhjálmsson, IT System Administrator

"Rapid growth can challenge many aspects of business operations, not least data storage and management. Using Pure Storage has given us the level of agility and robustness to grow quickly. Without Pure, we wouldn't be able to get to market with new services and serve our existing customer base so quickly and responsively," he added.

#### **PURE STORAGE GROWS ALONG WITH THE BUSINESS**

Nova's first Pure Storage device was a FlashArray 420 with 2.75TB of raw capacity. Since then, it has been expanded and upgraded until it now is a FlashArray//M50 with 33TB capacity. That growth has been accomplished gradually over time, and without a single minute of downtime.

"With our previous system, we had to go off-line to upgrade or add to our storage. It was a very tedious process. But with Pure Storage, it's perfect. There is no impact on operations at all," he noted. "This has given us the ability to scale smoothly at whatever pace we needed. What's more, I was able to manage much of the process myself. It was so simple."

The seamless upgrade process is one reason Vilhjálmsson praises the Pure Evergreen™ Storage program, a unique program that guarantees customers access to the latest technology through non-disruptive upgrades that preserve investment for up to 10 years. "Storage tends to get old, and Evergreen helps us avoid obsolescence. Plus, it is a big help knowing exactly what we will be paying for storage over a period of several years."

Because he is responsible for storage management by himself, "I really needed a solution that could offer easy management and a high level of support from the supplier. I get both from Pure Storage."

At the time he became aware of Pure Storage, "we had a multi-tier storage environment based on SANs. The speeds we were getting were not enough for our current applications, let alone those we were looking to introduce in the future. We were working on new services so we wanted a solution that would keep pace with our growth, and offer speed and performance from the outset."

Today, some 400 virtual machines are supported by the Pure Storage array, and all of the company's customer-facing applications and data are on it as well. Nova has about 15TB of customer-related data on SQL Server databases, and it puts a high priority on giving customers quick and easy access to detailed information about their call records.

After installing Pure Storage, the time between completion of a call and information about that call being available on-line was reduced to an average of just 3½ minutes. "That level of performance is amazing," Vilhjálmsson said. "It has meant we can do more for customers with fewer resources and in much less time."

# **DIALING UP THE RESULTS**

Nova is currently using about 60% of the 33TB of raw capacity on its Pure Storage array. That accommodates all of the 25-30TB that was moved off its legacy SAN, as well as all data related to customer records, sales operations and the Website. Nova is seeing data-reduction rates of around 3.7:1 across all workloads, with its SQL Server databases achieving 6:1. "So, we have a lot of headroom to meet our storage needs."

"Pure Storage has exceeded our expectations in every respect," Vilhjálmsson said. "The reliability and resiliency as excellent. The data reduction is impressive, the speed has been phenomenal, and we've had 100% uptime since January 2014. There's just no comparison with our previous storage infrastructure. Pure is so far ahead." "Without Pure Storage, we wouldn't be able to get to market with new services and serve our existing customer base so quickly and responsively."

Dagbjartur Vilhjálmsson, IT System Administrator

The impact on the business has been significant, he added, not only in daily operations, but also in the critical DevOps area, where the priority is on accelerating time-to-market for new services. "With Pure Storage, we can introduce new solutions with greater speed and reliability. It gives us confidence to innovate."

Vilhjálmsson lauded the support he has received from its long-time system integration partner, Cloudio Denmark, as well as from Pure Storage.

"I have called Pure Storage maybe two times in four years, and maybe emailed them with questions six or seven times. So, that's not a lot of need for support, but every time the response has been perfect — within minutes, 24/7."

As Nova continues to grow and expand into new areas, Vilhjálmsson sees Pure Storage as a partner for the long term. "We'll keep moving into new markets and exploring new opportunities, so it's great to have the confidence and support we get from using Pure to help us on this journey," he concluded.



www.purestorage.com/customers