CASE STUDY

Compañía Financiera de Argentina S.A.

Compañía Financiera de Argentina (CFA), a financial entity focused on providing services to the unbanked population, started a process of technological renewal. CFA acquired a Pure Storage® FlashArray to support its mission-critical applications. The FlashArray provided significant reductions in space and power consumption within the data center, which helped reduce its fixed operating expenses.

Business Transformation

After a thorough analysis, CFA verified that the space and energy savings of FlashArray would deliver a return on investment within three years. The latency characteristics and IOPS rate allowed CFA to accelerate the daily report preparation for decision making by nine times, allowing users to access them at the beginning of daily operations.

Challenges

- Renew technological infrastructure after hosting data center externally
- Optimize energy and space expenses

Solution Benefits

- Reduced data-center space requirements from a complete rack to only three rack units.
- Replaced a high power-consuming array, equipped with three or four sources, with a low-consuming one, with two 10amp sources.
- Accelerated system processes by up to 9x.
- Provided a highly available platform to meet the demands of mission-critical applications.

Geo
Argentina

Industry
Financial services

Company
Compañía Financiera de Argentina S.A.
www.efectivosi.com.ar/

Use Case

- Database: Microsoft SQL Server, UniVerse
- Virtualization platform: VMware ELA, Citrix VDI
- ERP: SAP
“In the past, the cost of electricity in Argentina was very cheap. We honestly did not pay much attention to IT systems’ consumption. Technology providers made their presentations talking about ROI, which were not of much interest. The reality is that nobody in Argentina could see that a storage array would generate a return on investment or pay itself over time.”

**DIEGO NAKAMURA, CTO, COMPAÑÍA FINANCIERA DE ARGENTINA**

**Compañía Financiera de Argentina Reduces its Data Center Costs**

Compañía Financiera de Argentina (CFA) focuses on providing services to the unbanked population. Founded in 1982, CFA currently serves more than 400,000 customers through 94 branches and more than 700 contact points, under its name brand Efectivo Sí.

CFA is a leader in its category and has a wide product and service offering, ranging from payment instruments for government social assistance to loans and credit cards. Despite its commercial success, Argentina’s economic situation—characterized by a generalized increase in prices, a weak currency, and rising energy rates—has forced CFA to look for ways to optimize operational costs, including those related to its technological infrastructure.

**H1: Analyzing Alternatives for Infrastructure Renovation**

In 2017, CFA began restructuring its data centers after moving to host them with an external provider, locating them 40 kilometers apart from each other. The hosting service is responsible for providing energy, cooling, protection, cleaning, and square footage. This decision allowed CFA to drop fixed costs. However, the technology team concluded that, when setting its second data center, it should also renew its technological infrastructure, including the storage platform, to optimize energy and space costs.

“In the past, the cost of electricity in Argentina was very cheap. We honestly did not pay much attention to IT systems’ consumption,” said Diego Nakamura, CTO. “Technology providers made their presentations talking about ROI, which were not of much interest. The reality is that nobody in Argentina could see that a storage array would generate a return on investment or pay itself over time.”

The technology team was asked to evaluate different technology options and present a business case to CFA’s expenses committee to explain how its recommended solution provided business benefits. The team looked beyond the common claims of performance and deduplication, instead focusing on finding a storage array with low electricity consumption that required less space. The team resolved to find all-flash solutions, which were not yet common in the Argentine market.

The team began by analyzing the options offered by traditional vendors, several of which they already worked with and had a presence in the country for many years. Nevertheless, the options they offered did not convince the CFA team so they decided to look for other technologies. ITCG—a technology integration company in Argentina—contacted CFA to present Pure Storage, a company they described as different and that promised to transform the storage industry.
“When we concluded the PoC, we did not want to return the array. Much to our regret, we returned it. Users immediately asked what happened because the response times reverted to what they had before. This contributed to us presenting our case to the expenses committee.”

DIEGO NAKAMURA, CTO, COMPAÑÍA FINANCIERA DE ARGENTINA

Nakamura and his team were initially skeptical of the performance and deduplication values that Pure Storage promised, but they decided to give it a try and do a proof of concept (PoC) with the Pure technology.

When the demonstration array arrived at their facilities, the first thing they noticed was the orange indicators on the FlashArray. Nakamura found it rare seeing orange lights after getting used to the blue color most manufacturers use. “The first thing I thought was that something might not be working properly,” he said. “I didn’t like it at first, but now I love orange.” Soon it was clear that everything was operating correctly and that Pure wasn’t a conventional vendor.

During the PoC, the CFA team put Pure’s array into production. First, it carried out a series of tests manipulating the disks. Although there were no service interruptions, Pure’s support team reached out proactively, informing CFA that it had detected anomalies and was seeking to confirm that everything was in order.

The CFA team was also able to corroborate the characteristics that Pure had presented. The FlashArray met the need for space savings, due to its compact 3U size, as well as energy savings, by using only two sources of 10 amps each. Next, the CFA team checked compression and deduplication capabilities. When installing the data-warehouse for almost 2TB, the team saw that the Pure array barely took up megabytes, representing less than 1% of its capacity. Finally, once the array was in production, users immediately noticed improvements in response.

“When we concluded the PoC, we did not want to return the array. Much to our regret, we returned it,” concludes Nakamura. “Users immediately asked what happened because the response times reverted to what they had before. This contributed to us presenting our case to the expenses committee.”

CFA Chooses Pure to Renovate its Infrastructure

Although the other all-flash options presented good performance, they did not match the Pure Storage array. CFA opted for the FlashArray solution based on the ROI. The array paid for itself with the savings in operating expenses it generated from space and energy reductions, plus offering better availability.

When signing the contract, CFA verified other benefits that Pure Storage had promised. The Evergreen Storage Subscription Program allows CFA to keep its current storage up-to-date by continuously delivering software and hardware updates.

“With other manufacturers, when extending the array’s warranty or expanding its capacity, it frequently ends up being more expensive than buying a new array,” said Nakamura. “But the reality is that renewing storage every three
“As a customer, I’m happy because the benefits that Pure Storage has offered me are tangible. It has been a long time since I’ve felt taken care of by a brand. My perception is that what Pure is doing is taking care of our investment, its clients and giving us benefits through deduplication and compression.”

DIEGO NAKAMURA, CTO, COMPANÍA FINANCIERA DE ARGENTINA

years is very expensive and migration consumes too much time. Honestly, at first, I distrusted the Evergreen Program, it wasn’t until I saw it in the contract and read the fine print that I was convinced.”

Once it completed the purchase process, CFA installed the array in the new data center and performed the migration overnight transparently, through replication tools. It was already in production the next day with mission-critical applications.

CFA has observed improvements, mainly in the overnight backup processes. For example, it has reduced processing times of the most demanding applications from eight hours to one hour. The main benefit that users have observed is the high availability of the systems, after shortening the backup window, a process that previously interrupted operations during the first hours of the morning.

It also significantly reduced the data-warehousing processing—that feeds reports for decision making—going from six hours to only 40 minutes. Now users can check key business information at 5:00 am. The information was previously not available until two hours after starting daily operations.

CFA’s technology team is made up of 18 people, three of whom are SAN admins. Previously, the admins spent two to three hours a day reviewing storage, especially to ensure that backups were done correctly. Since implementing FlashArray, the process is simplified and the admins can now monitor storage through a dashboard that they can check any time.

Even after implementation, the company continues to discover benefits. For example, in 2018 it was asked to update the array’s firmware version. It coordinated the migration process through a phone call, without registering service interruptions. This last update optimized the space by 36%.

“As a customer, I’m happy because the benefits that Pure Storage has offered me are tangible. It has been a long time since I’ve felt taken care of by a brand,” Nakamura added. “My perception is that Pure is taking care of our investment, its clients, and giving us benefits through deduplication and compression.”

In the future, CFA plans to acquire a second Pure array for the second data center, keeping both data centers active-active using Pure’s replication tool.