

## Accelerate Business, Cuts Costs, and Improve Performance with an All-flash Data Platform

Massive storage savings unlocked by customers, on premises and in the cloud.

## Introduction

How do you do more with less, expanding business services in an increasingly cost-conscious environment? Exponential data growth can appear to be at odds with cost-constraints many organizations are facing.

But savvy leaders now look beyond obvious savings in acquisition and maintenance costs to uncover hidden IT costs—including lower total cost of ownership and improved performance from a unified all-flash storage platform.

**Pure Storage® users often see savings in three major areas:** 

- Operational Savings

  Saving costs on-premises
  and in the cloud by reducing
  complexity, eliminating downtime,
  and improving data access.
- Dramatically slashing data center energy bills while cutting physical space and reducing e-waste.
- Subscription Savings

  Lowering upfront costs with an as-a-service storage platform that is ever-improving and self-updating.

The customers profiled in this e-book have discovered that the Pure Storage all-flash platform, with designed-in sustainability and mature Evergreen® subscriptions, helps **overcome the challenges of outdated legacy storage while reducing the total cost of ownership** and delivering unexpected savings to their organizations. We invite you to learn more about their stories.

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## City of Bloomington, IL

#### **Government**

Pure Storage helps this telecom achieve net zero emissions objectives with a platform that can meet their future data growth.

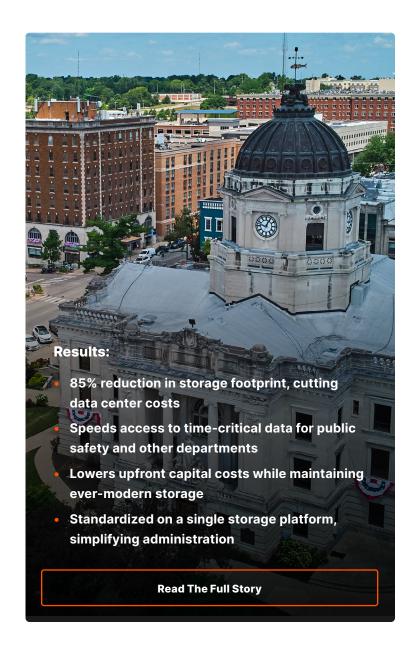
Pure Storage, consumed via an Evergreen//Flex<sup>™</sup> subscription, provides the financial flexibility, simplicity, and performance to help the city deliver citizen services in the digital age.

Fiscal challenges of the past compelled the City of Bloomington to make strategic cutbacks, impacting essential infrastructure investments. Among these difficult choices was the necessity to reduce funds for capital expenditures such as storage and related maintenance and refresh plans.

At the same time, public safety—namely the increasing use of police body cameras—was driving exponential data growth. For example, a homicide investigation that produced 50 gigabytes of information 10 years ago now generates terabytes of data. Other departments were also adding to the data load as part of the city's overall digital transformation. This combination of factors, paved the way for major IT modernization.

An Evergreen//Flex subscription gives the city the flexibility to pay only for the amount of storage being used, combined with the advantages of on-premises storage ownership. Equally enticing is the fact that, as part of their subscription, the city will always have the latest hardware, which is monitored and managed 24/7 by Pure Storage engineers.

The modern storage platform from Pure Storage resolved all latency and performance issues with the city's video management systems, enabling investigators to recall and replay any video quickly and easily. It can also handle data growth as the city continues to transform its operations to serve citizens in the digital age—but without the added footprint. With Pure Storage, the city's storage went from 48U to 7U in the data center, representing an 85% reduction. All of this translates to greater efficiencies that enable the team to focus on other initiatives.





### **Toss Bank**

#### **Financial Services**

Toss Bank introduced Pure Storage FlashArray<sup>™</sup> to significantly improve storage performance, scalability, and availability in the data center.

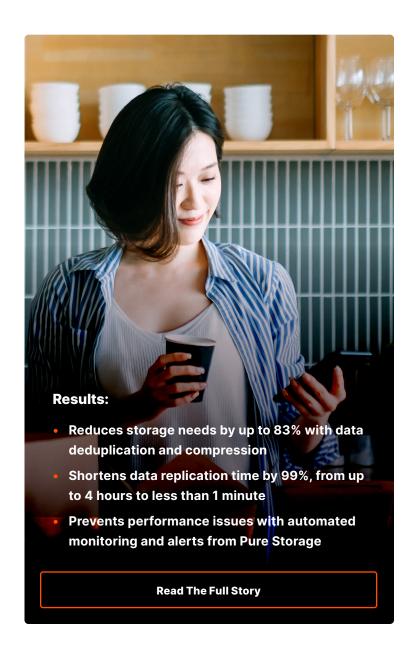
As the fastest-growing internet-only bank, ranked #1 in South Korea for Forbes' The World's Best Banks 2023, Toss Bank provides financial services with the latest IT infrastructure. To rapidly retrieve and analyze data on its customers' financial transactions, the bank needed to expand its storage capacity.

Adopting all-flash storage enables Toss Bank to scale storage volumes independent of servers. Pure Storage also improves the overall storage environment with increased write performance and reliability, lower costs, and support for non-disruptive upgrades. By consolidating more workloads onto Pure Storage, Toss Bank can alleviate bottlenecks and increase the availability of its storage by using a network independent of the servers to transfer data.

With Pure Storage FlashArray, Toss Bank achieved a 6:1 data reduction through always-on inline deduplication, compression, and pattern removal. This reduced storage needs by up to 83%, maximizing cost efficiency and storage usage.

"Seeing a 6:1 data reduction ratio without compromising performance was a real testament to the technology behind FlashArray," said Donghyun Park, Systems Engineer, Infrastructure Team at Toss Bank. "The powerful data reduction makes it 2.5 times more cost-effective than competing products in terms of effective capacity."

Migrating to FlashArray//X<sup>™</sup> has replaced 400 solid state drives, saving significant disk purchasing costs estimated at more than \$485,000, as well as significant savings in data center footprint and power costs estimated at \$122,000 over a five-year period. The network load used for replication has dramatically improved with the built-in SafeMode<sup>™</sup> Snapshots reducing replication time from four hours to less than a minute—a 99% savings.





## Virgin Media O2

#### **Media and Entertainment**

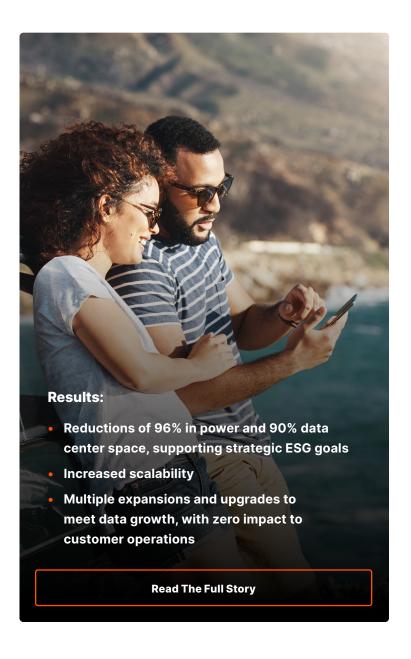
Pure Storage helps this telecom achieve net zero emissions objectives with a platform that can meet their future data growth.

As one of the largest UK telecom companies, Virgin Media O2 provides customers with full TV, broadband, phone, and mobile coverage. Their goal was to upgrade their aging storage infrastructure to meet data growth as well as achieve a lofty goal of net zero emissions by 2040.

After deploying the Pure Storage platform, Virgin Media O2 immediately began to see benefits from a sustainability perspective, reducing power consumption by 96%. Data center floor space was reduced by 90%, avoiding the need for additional data center space. Pure Storage is now a pivotal part of Virgin Media O2's strategic corporate sustainability objective.

Additionally, the IT team has run three hardware upgrades with Pure Storage to meet data growth, each one completed with zero disruption to customers thanks to the platform's Evergreen architecture.

"We know that deploying Pure Storage is quick and simple. So, as our data volumes grow, we'll be able to easily scale our capabilities without worrying about the storage that our business relies on." says Ajit Sharma, Business Optimization Manager, Virgin Media O2.



## **Anonymous Justice** and Law Enforcement **Agencies**

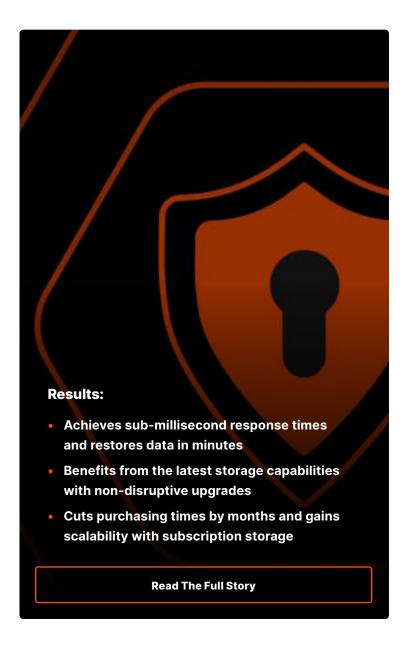
#### Government

When legacy spinning disk storage slowed investigations and put efficient data analysis at risk, this department switched to the Pure Storage data platform.

In an environment of heightened terrorist threats and incidents, this department's investigative arm relies on a deluge of video surveillance evidence. But legacy, spinning disk storage risked preventing investigators from being able to collect and analyze data efficiently, slowing their progress.

To offset this risk, the department invested in the Pure Storage data platform. It uses a combination of traditional ownership via the Pure Storage Evergreen//Forever subscription, and as-a-service via an Evergreen//One subscription, to provide a highly scalable and performant infrastructure for investigations and crime-fighting activities.

In addition to realizing major efficiency gains in performance and overall storage management, the department also reduced its data center footprint significantly. Its massive collection of fingerprints once resided in a purpose-built data center consisting of several floors. Now, this biometric data takes up just a single rack in one data center.



## **Berríos**

#### Retail

Pure Storage has helped Berríos position itself for scalability, growth, and service innovation with an Evergreen//Flex subscription.

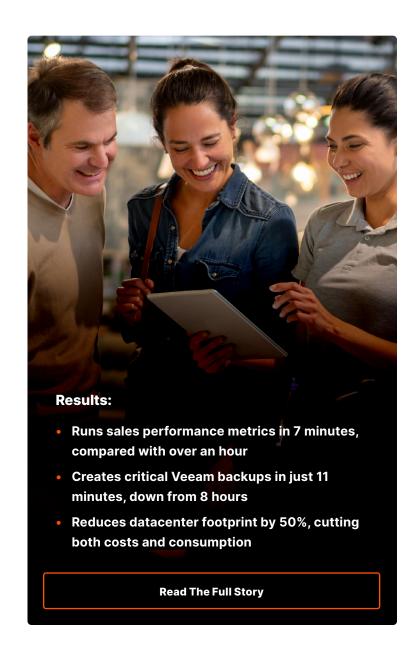
Berríos strives to be Puerto Rico's leader in furniture and household goods with its quality of service, product variety, price, and ease of financing. But located on an island known for natural disasters and facing a rising ransomware threat, it needed the ultimate business continuity and data protection plan. Pure Storage has delivered that resiliency since 2017, helping Berríos withstand catastrophic events like Hurricane Maria with no service interruptions, despite a year-long power outage on the island.

Berríos adopted Pure Storage FlashArray//C<sup>™</sup> to fuel its modernization, gaining an all-flash solution that is value-optimized for its specific workloads. By consuming via the Pure Storage Evergreen//Flex subscription model, Berríos maintains ownership of its storage while benefiting from pay-as-you-go, cloudlike consumption economics.

Together, the solutions deliver a perfect blend of performance and affordable capacity, giving Berríos unparalleled scalability to innovate and expand without worrying about service reliability or cost.

The value of Pure Storage, which was implemented in partnership with Multicomputos, became clear a few months later when Puerto Rico was devastated by Hurricane Maria. Even with the island's energy grid out, the arrays kept running—enabling Berrios to continue serving customers as they rebuilt their homes. "Frequent power failures had us switching over to generators 10 to 15 times per week, but Pure rebooted each time without a hitch. We had no corrupted data and were operating again within minutes," says Morales.

In parallel, Berríos has reduced its datacenter footprint by 50%, saving time and money while running a more efficient IT operation. With energy costs in Puerto Rico skyrocketing, these savings have positioned the business for steady, sustainable growth.





## HealthEdge

#### **Healthcare**

To scale quickly and cost effectively, the HealthRules Payer division adopted Pure Storage via the Evergreen//One subscription model.

HealthEdge and its portfolio of mission-critical technology solutions for payers are driving digital transformation in healthcare.

Managing annual data growth of 30% for its 50 HealthRules Payer customers— whose data is kept forever—was taxing the growing business unit's hyperconverged infrastructure. "We needed to scale storage quickly," says Kendra McCormick, Senior Manager of Data Center and Network Operations for the HealthRules Payer division of HealthEdge. "But in a hyperconverged environment we couldn't just add more storage. We had to buy a whole new node, which included more compute and networking." At \$150,000 per node, it was an expensive and unsustainable growth strategy.

HealthEdge began replacing some of the hyperconverged infrastructure in its HealthRules Payer division with Pure Storage FlashArray//X via the Evergreen//One subscription model. "Evergreen//One gives us the financial flexibility and operational agility to sustain our growth as a data-driven healthcare business," says McCormick. "By cutting our own costs, we can help providers keep costs in check for their members."

As a result of this early success, McCormick and her team decided to replace the entire legacy footprint with Evergreen//One for all of the division's customer workloads. This will cut the division's data center space requirements by 70%, helping to reduce its carbon emissions and boost energy efficiency. "Our goal is to run our data centers as efficiently as possible, and our Pure architecture helps us do this," says McCormick. "An average data reduction rate of 3:1 on our arrays enabled us to cut power and cooling costs and reduce our emissions, even as we grow."





## **Motion Pictures Industry Pension and Health Plans**

#### **Financial Services**

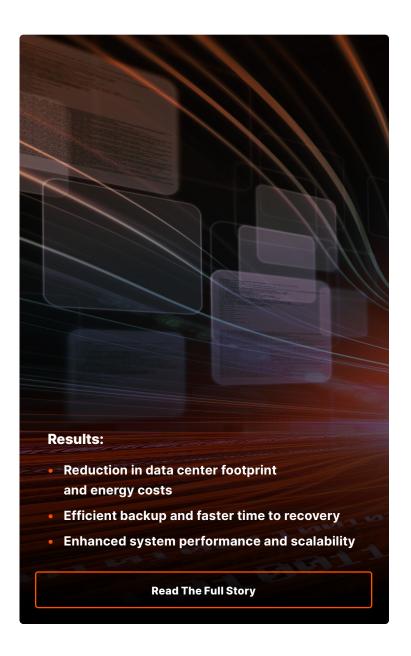
MPI replaced its legacy systems with Pure Storage to achieve their goals, while also enhancing overall performance, efficiency, and recovery time.

Over 60,000 set designers, animators, and numerous other motion picture production workers across 30 film industry unions and guilds rely on MPI for their health and retirement benefits. Faced with aging legacy systems and an escalating ransomware threat, MPI underwent a comprehensive overhaul of its IT operations to prioritize speed, scalability, and data protection.

Always-on deduplication and compression make the most of MPI's storage capacity despite continuous replication and multiple copies of MPI's environment. A 13:1 compression rate and a resulting 95% reduction in storage racks—from 44 rack units to two—significantly reduced power and cooling costs and MPI's overall data center footprint.

MPI replaced all its tape archives with FlashBlade//S<sup>®</sup> for rapid backups and near-instant data recovery. MPI calculated time-to-restore from a complete ransomware loss to be less than two days with FlashBlade<sup>®</sup>, compared to more than 18 days trying to recover from tape. Ultimately, FlashBlade has proven to be 10 times faster than MPI's previous system.

"Embracing Pure Storage's all-flash portfolio over legacy tape was a strategic slam dunk for our organization. It goes beyond a mere transaction; it's a genuine partnership that has not only elevated our performance but also ensured the longevity of our critical IT systems. Pure Storage has become an integral part of our success story, providing a robust foundation that aligns with our goals for the long haul" says Andy Marosi, Sr. Manager, Infrastructure & Operations, MPI.





# **Anonymous Government Agency**

#### **Government**

Since moving to Pure Storage, the agency has reduced its total cost of ownership and data center footprint, and simplified the way it manages petabytes of data.

As part of a multi-year project to modernize its citizen services, this agency joined forces with Pure to transform its data storage. It has since achieved new levels of performance and availability while cutting its data center costs and footprint. Powerful storage also underpins advanced data analyses powered by artificial intelligence (AI) and machine learning

Having built up multiple IT systems over the years, the agency found itself with a tangle of disparate legacy technologies that had become unsustainable and expensive to manage. After its website crashed for three days due to these inefficiencies, leaving citizens unable to access its services, the agency knew it was time for a change.

The agency is now modernizing its citizen services with Pure, part of an ambitious, end-to-end digital transformation initiative. Its goals are threefold: to enhance its services, reduce its storage management costs and data center footprint, and position itself to release new innovations to the American public year after year.

Pure Storage Evergreen//Forever and Evergreen//One subscriptions have allowed the agency to benefit from the latest storage technology and best of both worlds for CAPEX and OPEX budgets. Agile software and hardware upgrades ensure the agency's storage always runs at peak performance with no disruption to its service, which in turn drives a culture of continuous innovation and on-demand scalability.





## **Adistec**

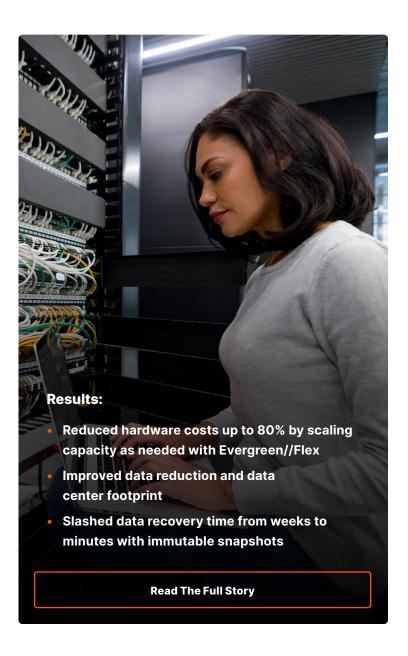
### **Information Technology**

With Pure Storage, Adistec gained competitive data storage consumption economics, improved data center efficiency and costs, and future-proofed data resiliency against outside threats.

Adistec's managed services support Latin American businesses across industries on their cloud journeys with subscription-based IT bundles tailored to each customer's needs. However, its existing data storage solution was causing outages, failing to properly support cloud services, and proved to be too slow and unreliable to efficiently manage client workloads. Adistec adopted Pure Storage to help support customers on their cloud journey.

Adistec can subscribe to the capacity it requires to match its customers' evolving needs, minimizing its overall upfront investment. With less time spent managing hardware, Adistec's front-line engineers can dedicate more energy to developing and refining its IT services.

The performance and simplicity of Pure Storage have enhanced every Adistec service from VMware to backups. With Pure Storage, Adistec has achieved a data reduction rate of 3:1 and shrunk its total storage footprint by nearly 90% (from 24U to 3U), making it more cost-efficient and sustainable in a region with notoriously high energy prices. With Pure1 to simplify its storage management, Adistec can predict and scale capacity to match its customers' variable workloads.



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## **Australian Genome Research Facility (AGRF)**

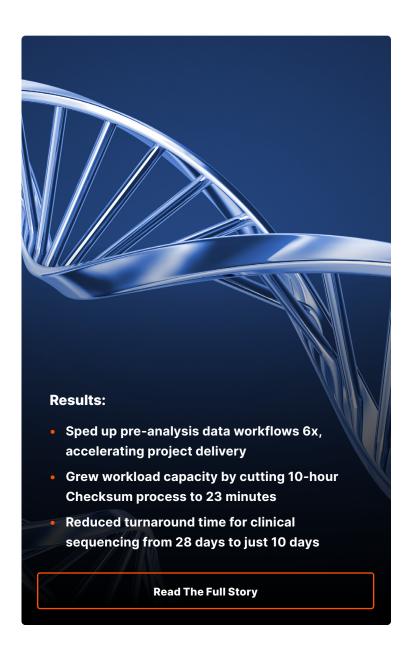
#### **Life Sciences**

AGRF replaced its legacy disk storage with Pure Storage FlashBlade, accelerating the end-to-end genomics pipeline by up to 86 percent.

AGRF provides critical genomics data to global researchers and clinicians in the biomedical, clinical, agricultural, and environmental fields, whose work is focused on improving people's lives. AGRF's genomic analyses underpin more time-sensitive research projects each day. Fast and accurate data is paramount to the success of these projects, especially for research teams fighting diseases like COVID-19 or children's cancer.

By replacing its legacy disk storage with FlashBlade, AGRF cut its pre-analysis times from 18 hours to just three hours. Checksum processes, which ensure the quality of data during genomics analytics, now take 23 minutes instead of 10 hours. Together, these enhancements have helped AGRF to cut clinical genome sequencing times by as much as 86 percent—going from 28 days to just 10 days, and as little as four days in urgent cases.

The move to Pure Storage has also reduced latency and increased AGRF's input/output capacities, allowing it to take on more ground-breaking genomics projects in Australia and globally. "We never would have achieved these turnaround times with our old disk storage," says Douglas Morrison, ICT manager at AGRF. "Pure FlashBlade gives us the bandwidth, performance, and speed we need, all with lower latency."





## Nashville Electric Service (NES)

#### **Government**

With Pure Storage, NES has a simpler yet more powerful storage infrastructure that cost-effectively and energy-efficiently boosts disaster recovery and data protection capabilities—all while scaling to support future growth.

"The promise of storage simplicity was hard to believe, but with Pure Storage, everything from the data migration and deployment to daily management and upgrades really is uncomplicated," says Chris Beegle, director of infrastructure. "This has been especially important for the IT team to regain the trust of internal stakeholders who were impacted by IT disruptions in the past.

Upgrades on the previous storage caused weeks of downtime. The Pure Storage Evergreen//Forever subscription simplifies everything from integration to storage management to upgrades—without disruption or the need to re-buy storage. "Instead of holding our collective breaths and hoping for the best, Evergreen//Forever lets us upgrade, expand, and innovate continuously and with confidence," says Beegle.

Sustainable innovation is also top of mind for NES—from introducing Nashville's first community solar array, to enabling customers to purchase renewable energy, to mitigating its greenhouse gas emissions to become carbon neutral by 2050. In fact, one of its key goals is to educate customers on how to save energy and lower their bills. "Our IT transformation is aligned with—not at the expense of—our environmental responsibilities," says Mill. "With Pure Storage, we are leading our community down a greener path to a sustainable future." NES has replaced multiple storage racks with just one from Pure Storage, significantly reducing its data center footprint, power and cooling requirements, and associated emissions.





## Golden Cloud Technology (GTC)

### **Information Technology**

GCT replaced its legacy infrastructure with Pure Storage, reducing its data center footprint and strengthening its data protection and recovery services.

Organizations across Brazil rely on Golden Cloud Technology (GCT) for business intelligence, managed services, data recovery, and more. With its customers managing larger data workloads and adopting new cloud services, GCT needed to scale storage capacity across its two data centers while keeping its costs in check.

"Pure Storage gives us the performance our customers expect today and the scalability to grow with them as they handle more data and embrace cloud services." says Chief Technology Officer Edmar Ferraz. GCT's data has since doubled in size—growing 300TB per year—and GCT has non-disruptively upgraded its FlashArray//C via the Evergreen architecture. In addition, GCT recently purchased Pure Storage FlashBlade//E" with an Evergreen//Flex subscription to support the evolving needs of its customers. "Evergreen//Flex gives us the freedom to own the Pure Storage arrays and the ability to expand our capacity as needed by offering consumption-based pricing to our customers," says Ferraz. "It's a win-win all around."

Energy efficiency is also a priority for GCT, especially when bidding for government contracts that include strict sustainability benchmarks. "With Pure Storage, we are on track to realize energy savings of 85% per year. Reducing our environmental footprint on top of gaining unparalleled performance was a welcome surprise," says Ferraz, referring to overall storage efficiency and sub millisecond latency for the largest customer workloads.





## New Mexico State University (NMSU)

#### **Education**

By replacing its outdated spinning disk storage with the Pure Storage cutting-edge, all-flash portfolio, NMSU can now shift its focus to ushering in a new era of efficiency and performance for its community.

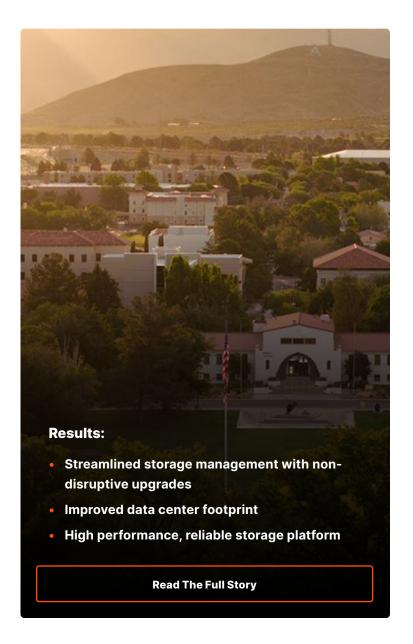
To further its commitment to delivering seamless student services, NMSU recognized the need to modernize its IT environment due to lagging performance, siloed operations, and excessive administrative hours consumed by its complex legacy storage.

Adopting the comprehensive Pure Storage portfolio, NMSU gained a powerful, cost-effective, and secure enterprise storage platform that underpins exceptional services for every student, faculty, and staff member.

With a Pure Storage Evergreen//Forever subscription, NMSU can perform non-disruptive upgrades without buying new hardware each year, reducing annual costs by 66%. Tasks like virtual machine migration, once taking eight hours, now only require 15 minutes. Anticipating over 100 hours saved per storage upgrade, disruptive forklift processes are completely eliminated.

NMSU reduced its data center footprint 14-fold (from 42U to 3U) in one data center site and 12-fold (from 38U to 3U) in the other. In addition to reducing its costs and power consumption, these efficiency gains enable NMSU to easily relocate a secondary data center that is scheduled to be demolished.

The Pure Storage platform powers NMSU's virtual desktop infrastructure, ensuring reliable and efficient operations for learning labs and counseling services. Additionally, Pure Storage supports NMSU's mission-critical ERP system, significantly reducing latency by 98% to three milliseconds with over 55,000 daily writes.



# Ministry of Economic Affairs, Republic of Taiwan

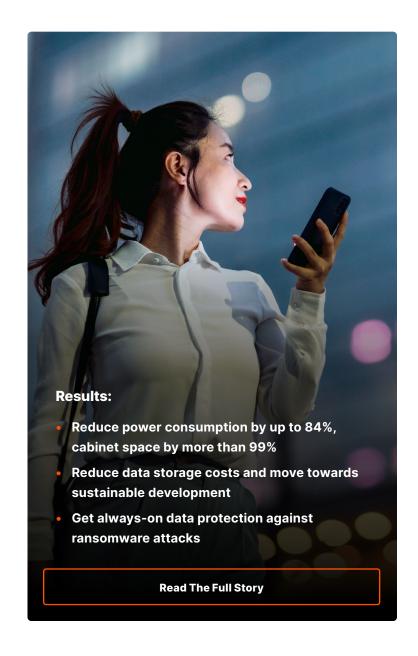
#### Government

With Pure Storage FlashArray, Information Management Center optimizes its IT infrastructure with storage that improves performance, agility, and security.

As digitalization continues to expand at the Ministry of Economic Affairs (MoEA) in Taiwan, the Information Management Center is faced with the question of how to support the growing demand for data in limited rack space while minimizing the cost of power and data center space.

With Pure Storage FlashArray//X, the Information Management Center improves speed, space cost-performance, and information security. Read/write speed accelerates from 1.5 ms to just 0.4 ms, improving application performance for government agencies.

Pure Storage delivers an excellent data reduction ratio of 3.9:1, contributing to significant space savings and energy efficiency. Storage utilization increased from 33% to 63% in the Taipei Datacenter, and from 65% to 72% in the Taichung Datacenter. Both data centers now require just 3U of rack space for data storage, consuming only 868 watts of power. This is a major saving from before, with 162U of rack space consuming 5,364 watts of power in Taipei and 52U of rack space consuming 2,564 watts of power in Taichung, resulting in a reduction of up to 99% in storage devices rack space and 84% in power requirements.





## Health 2030 Genome Center

#### **Healthcare and Scientific Research**

Pure Storage meets changing data needs, accelerates the availability of DNA sequencing and analysis, and helps streamline IT operations.

Health 2030 is a Swiss genome sequencing and analysis center that aims to advance research and improve human health. Its bio analysts conduct DNA sequencing analysis and generate significant volumes of data, and their legacy storage just wasn't able to keep up.

The IT team at Genome Center turned to Pure Storage for more efficient and agile storage so their unstructured data was more quickly accessible to researchers and clinicians. "Thanks to Pure, analysis data are available 10 times faster on the platform used by researchers and clinicians, and the transfer speed to the customer site has been multiplied by two," says Arnaud Hungler, responsible for the Genome Center's IT infrastructure.

The Pure Storage Evergreen//One as-a-service subscription allows the Genome Center to scale storage to meet constantly changing needs, without wasting resources. "This means we don't have to pay for 500TB of data on a permanent basis, which we only use occasionally," adds Arnaud.

Pure Storage also delivers other advantages including proactive and predictive customer support. The easy-to-use Pure1® interface for storage management helps save the IT team a significant amount of time on daily operational tasks.







## **Summary**

## Helping our customers achieve business and IT objectives is a core principle at Pure Storage.

**Simplifying** system installation, operation, and upgrades can reduce the need for expensive specialized talent, freeing up staff for more valuable projects.

Doing so through a **storage as-a-service subscription model** further reduces costs by automating these processes and provisioning the capacity you need on-demand without paying for more than you use.

With rising electric bills and the emergence of power-hungry workloads like

Al, organizations are adopting more energy-efficient systems that consume less power and space, significantly cutting data center costs.

Pure Storage addresses these issues with a **unified all-flash storage platform and acquisition prices comparable to disk**—but with lower TCO and faster access to your data.

No other storage vendor comes close to delivering the kind of simplicity and peace of mind that organizations get from Pure Storage.



#### Learn more about the ways we can help you save on your storage infrastructure:

- Top 5 Ways to Save with a Consistent Data Storage Platform
- The End of HDD in the Enterprise



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