

# Real-World Data Virtualization Stories

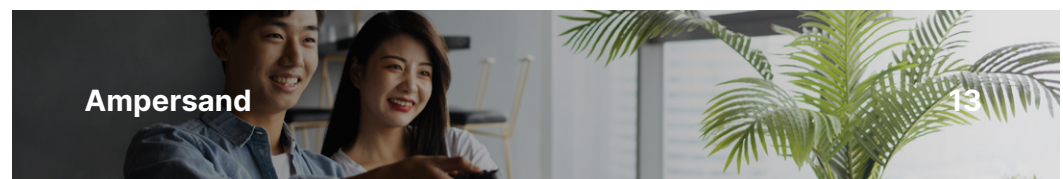
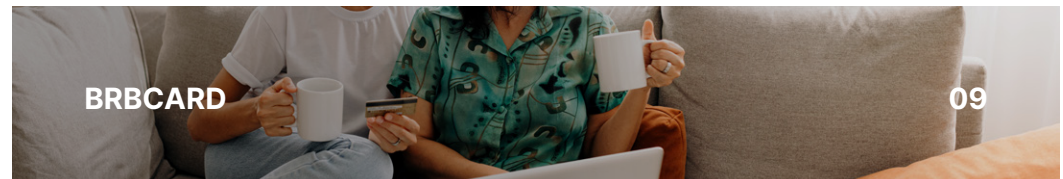
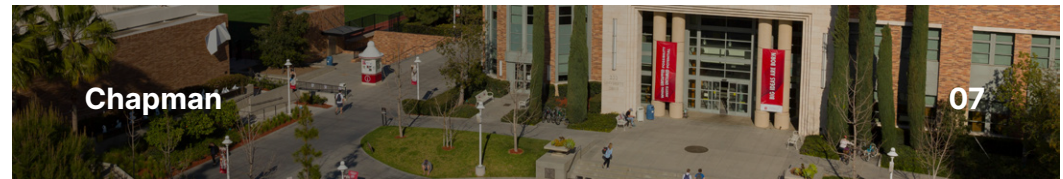


# The Introduction

In today's fast paced environment, decision makers are constantly seeking ways to cut costs, save time, mitigate risk, and reduce interruptions. This is particularly relevant in the world of data storage, where the sheer volume of data being generated and processed can quickly become overwhelming. All-flash drives have emerged as a powerful solution to these challenges, offering fast performance, reliability, and efficient use of resources. All-flash drives also offer organizations an attractive alternative to disk, [saving up to 91%](#) on storage system administration costs by offering tight integration with VMware and Microsoft database platforms. Thanks to Pure1®, admins spend significantly less time managing storage and storage-related tasks, resulting in more time for other critical tasks.

In this ebook, you'll see how our customers utilize strategies that enable decision makers to maximize the value for virtual infrastructure (VI) admins to reduce the time to results, for storage admins to mitigate risk, and database administrators (DBAs) to minimize interruptions.

Read on to discover how data champions have helped their organizations increase efficiency and productivity while reducing costs for mission-critical databases, VMware, and more.





# FixCloud Pioneers Cloud Services in Turkey

In Turkey's hotly contested cloud services space, FixCloud stands apart for its commitment to utilising market leading technologies and achieving the industry's highest certifications. The company has maintained its coveted leading position by continuously enhancing and expanding its solution portfolio.

When it came time to launch the company's new Modern Data Protection solution, CEO of FixCloud, Yılmaz Barçın upgraded to Pure Storage. This provided the necessary performance and stability for not just the new service, but also for its IaaS, BaaS, DRaaS, SECaaS, and DCaaS offerings.



"The feedback from clients has been overwhelmingly positive. They have been especially impressed by the performance of their applications and services since the storage upgrade."

**YILMAZ BARÇIN,**  
CEO, FIXCLOUD



## Not All Flash Is Equal

Despite investing in flash storage from another prominent vendor at its three cloud data centres, FixCloud wasn't experiencing the performance it expected. "Whenever query volumes spiked on our Oracle and SQL databases, performance degraded," says Barçın.

With so many leading enterprises in Turkey dependent on FixCloud services, this shortcoming was unacceptable. The company decided to overhaul its storage before the launch of its new Modern Data Protection service.

## Pure Storage Boosts Performance and Stability

Pure Storage FlashArray//C™ and FlashArray//X™, along with Veeam Backup & Replication, proved to be the ideal platform for the new service. "During the two-month proof of concept, Pure delivered incredible backup speed and a near instant restore ability," says Barçın. "Implementation was effortless. We installed and configured the arrays ourselves, and the migration of applications was both fast and non-disruptive."

Storage performance vastly improved post implementation. Previously, FixCloud averaged 20 milliseconds of latency. "We now see less than one millisecond of latency, which translates to faster, frustration-free customer experiences," says Barçın. "We also have a data reduction ratio of 3:1—much more than we expected."

## Raising Customer Confidence and Satisfaction

Pure Storage shrank the Veeam Instant VM Recovery time to near zero and even improved backup times by over 400%.

"We serve sectors such as finance, retail, hospitality, logistics, and education. The assurance of near-constant application and data availability is what gives our customers the confidence to invest in our cloud services," Barçın says. "The feedback from clients has been overwhelmingly positive. They have been especially impressed by the performance of their applications and services since the storage upgrade."

## A Safe Bet for the Future

Barçın and his IT team are already exploring ways to extend their partnership with Pure Storage. When fully implemented, Pure Storage SafeMode™ Snapshots will be used to enhance ransomware protection and improve the overall security of their customer's data.

"As FixCloud continues to introduce new and innovative cloud services in Turkey, we are confident that Pure Storage will stand firm as a partner that enables us to pioneer the market," says Barçın.

Read more about Pure Storage and FixCloud:  
<https://www.purestorage.com/customers/fixcloud.html>



**Region**  
EMEA



**Industry**  
Service Provider



**Company**  
FixCloud  
[www.fixcloud.com.tr](http://www.fixcloud.com.tr)



**Solution Area**  
Accelerate Core Applications  
Modernise Data Protection





# Expanding Boundaries of Medical Innovation

The University of Kansas Health System taps a unique blend of medical research and education to offer innovative treatments for patients with serious conditions. Its physicians—who are also researchers and educators—rely on IT to power these breakthroughs.

In 2015, the health system information technology team took a chance with a market disruptor, selecting Pure Storage for its Epic electronic health record (EHR) systems. The health system has since grown, and so has its Pure Storage footprint, delivering uptime, performance, and scalability across the health system while supporting a robust data protection strategy to protect against cyberthreats.



“Our goal was to never worry about storage again. Pure eliminates a lot of pain and gives us everything we want—maximum performance and flexibility, low costs, and peace of mind.”

**MIKE SCHLENK,**  
DIRECTOR OF IT INFRASTRUCTURE AND  
SERVICE MANAGEMENT, THE UNIVERSITY OF  
KANSAS HEALTH SYSTEM



## A Vital Operation

The information technology team is helping to power IT that saves lives—whether for patients in the hospital, or in the academic medical center where new treatments are discovered. They believe in investing in technology that helps improve outcomes and efficiency.

Recognizing that storage technology was changing rapidly and that demands on the IT infrastructure would increase sharply in the years ahead, they wanted a foundation to build on—to support growth, and to handle future threats and opportunities. Performance, cost, and ease of management were top considerations.

## Epic Performance Gains

Hospital IT leaders Mike Schlenk and Bill Young were initially skeptical about Pure Storage until proof-of-concept results were in. “With Pure, we were able to reduce costs and increase the number of Epic performance benchmarks,” says Schlenk, director of IT infrastructure and service management.

Today, Pure Storage underpins important elements of hospital operations. Pure Storage® FlashArray//X™ arrays support Epic Caché and SQL databases as well as 100 ancillary applications. Database recovery time went from days or hours to just minutes, and Epic reports run 93 percent faster. The University of Kansas Health System uses FlashArray//C for less-demanding, virtualized jobs and as a backup target.

Pure Storage is also central to the health system’s data protection strategy. “Ransomware attacks are rampant in healthcare, which is an all-day, every-day business,” says Young, health system server and storage assistant director. “SafeMode Snapshots give us fast access to immutable backups, providing valuable layers of data protection to ensure maximum data availability.”

The ability to minimize disruptions also worked in Pure’s favor. “The Evergreen//Forever subscription enabled us to do several software updates and upgrade controllers seamlessly,” says Young. “No one ever notices.”

## Leading in Caring and Discovery

With new health system initiatives always underway, application administrators and developers can spin up database copies quickly using Pure Storage snapshots, speeding innovation. And Schlenk and Young can keep a watchful eye on their growing environment using Pure1 while reducing the data center footprint from five racks to half a rack.

“Our goal was to never worry about storage again,” says Schlenk. “Pure eliminates a lot of pain and gives us everything we want—maximum performance and flexibility, low costs, and peace of mind.”

Read more about Pure Storage and The University of Kansas Health System: <https://www.purestorage.com/customers/universityofkansashealthsystem.html>



### Region

North America



### Industry

Healthcare



### Company

The University of Kansas Health System  
[www.kansashealthsystem.com](http://www.kansashealthsystem.com)



### Solution Area

Accelerate Core Applications  
Modernize Data Protection





# World-class Research Thrives at Chapman University

From climate change to the opioid crisis, Chapman University researchers tackle some of the world's most pressing issues. In parallel, the university prepares its graduates to address the challenges of tomorrow. Supporting researchers and students with fast and stable technology services is key to both missions.

Having already implemented Pure Storage to boost the performance of its enterprise storage and automate routine data management tasks, Chapman University expanded its Pure Storage footprint to support innovative research projects. Professors can analyze enormous data sets using advanced computer models and publish their findings in record time.



“Pure is the most advanced infrastructure solution we have. Its world class technology allows us to punch above our weight across the board, from our first-rate student services to the world-class research coming out of our labs.”

**JAMES KELLY,**  
SENIOR SYSTEMS



## Breathing New Life into Data Performance

Fast access to data is fundamental to Chapman University's operations, underpinning the school's student services, academic research, and ongoing modernization plans.

"The storage behind our student registration, tuition payment, and class scheduling is like air," says Senior Systems Administrator, James Kelly. "If there's latency, everything stops and the university president's phone rings off the hook."

The university moved its Oracle and SQL database storage to Pure Storage in 2015, achieving sub-millisecond latencies for its core PeopleSoft CRM applications. It also slashed hours from its data management, and consolidated its storage footprint, all while growing capacity. What's more, data replication tasks that once took 12 hours now take just 10 minutes.

## Powering Advanced Research

Kelly's top priority with Pure Storage today is to help Chapman's faculty publish more academic research at pace. Current projects at Chapman include undergraduate research into the impact of opiates on pain management, an analysis of climatic issues in North Africa by the Egyptian Space Agency, and the use of satellite imagery to better understand global poverty.

These projects require researchers to manage enormous data sets and use advanced machine learning models.

Pure Storage FlashArray//X delivers a stable storage environment with the performance and capacity they need, and data protection capabilities to safeguard against loss, corruption, and security threats.

"Our research is on par with some of the world's top ranked universities, but we don't have a huge team managing our data behind the scenes. With Pure Storage, I can directly support our faculty's most innovative projects, which is hugely rewarding," says Kelly.

## Leveling Up with Ease

Chapman University continues to modernize its storage environment. With the Pure Storage Evergreen//Forever™ subscription, storage upgrades are completed with zero disruption to academic research or student services, all while protecting storage investments and avoiding re-buys.

"I've never seen an upgrade model as easy as Pure Storage's Evergreen," says Kelly. "I can literally level up my performance overnight without the wasted time, money, labor, and equipment that comes with traditional upgrades.

"Pure is the most advanced infrastructure solution we have," he adds. "Its world class technology allows us to punch above our weight across the board, from our first-rate student services to the world-class research coming out of our labs."

Read more about Pure Storage and Chapman University: <https://www.purestorage.com/customers/chapman.html>



### Region

North America



### Industry

Higher Education



### Company

Chapman University

[www.chapman.edu](http://www.chapman.edu)



### Solution Area

Accelerate Core Applications

Activate Real-time Analytics

Modernize Data Protection







# BRBCARD Dramatically Improves Customer Satisfaction with Pure Storage

BRBCARD has 1.2 million active credit card users in Brazil and around the world. Customers expect fast and reliable access to their accounts at any time to make purchases or to pay bills.

By adopting Pure Storage FlashArray, BRBCARD accelerates application performance, boosts availability, and mitigates risk caused by possible ransomware attacks. These improvements enhance the customer experience and lead to greater customer satisfaction.



“With Pure, customers now access virtual card data in less than a second, down from 8 seconds previously. This transformed the customer experience, with the app’s store rating jumping from 2.5/5 to 3.7/5 in just 3 months.”

**MARCOS PAULO ILÍDIO,**  
CIO, BRBCARD



## Delivering Better Experiences With Real-Time Data

BRBCARD's mobile app is the primary way that customers interact with their accounts, so promoting agile and responsive self-service is a top priority. Pure Storage FlashArray//C dramatically improves storage performance for all credit card transactions, core SQL Server databases, and business intelligence, delivering much faster response times compared to the legacy storage environment.

"With Pure, customers now access virtual card data in less than a second, down from 8 seconds previously," says Marcos Paulo Ilídio, CIO at BRBCARD. "This transformed the customer experience, with the app's store rating jumping from 2.5/5 to 3.7/5 in just 3 months. We're empowering users to explore the app and access important services and financial transactions in real time."

## Faster Processes for Timely Customer Service

The new Pure Storage solution accelerated file load times, leading to databases updated in 40 minutes instead of eight hours. Faster speeds helped areas like billing and business intelligence by allowing them to work with the most up-to-date information throughout the day. Having more accurate data reduces risk and accelerates decision-making processes, allowing BRBCARD to handle issues such as customer contracts, payments, and other interactions in a more timely fashion.

The processing speed for customer transactions and purchase authorizations also increased 10x, allowing BRBCARD to support a growing volume of transactions without causing delays for customers.

## Eliminating Application Downtime

With FlashArray, BRBCARD can take advantage of ActiveCluster active-active replication for greater availability and resiliency, which reduces data recovery times from over an hour to instantaneous and keeps the mobile app available at all times for customers.

Pure1 VM Analytics supports increased availability and performance. "We cannot imagine our daily routine without Pure1," says Daniel Mendes, IT Infrastructure, Cybersecurity and Data Manager, BRBCARD. "It brings a level of visibility to our IT team that we didn't know was possible, allowing us to optimize our environment for the greatest performance."

FlashArray SafeMode Snapshots help mitigate ransomware attacks by preventing cyber criminals from destroying the immutable snapshots that BRBCard needs to restore data and get services back online quickly.

"For BRBCARD, high availability for products and services is a must. We chose Pure Storage for its ability to recover data quickly, practically eliminating recovery time and ensuring the continuity of our business," said Ilídio.

Read more about Pure Storage and BRBCARD:

<https://www.purestorage.com/customers/brb-card.html>



### Region

Latin America



### Industry

Financial Services



### Company

BRBCARD

[www.brbcard.com.br](http://www.brbcard.com.br)



### Solution Area

Accelerate Core Applications

Activate Real-Time Analytics

Modernize Data Protection





# Southwest Gas Puts Energy into IT Efficiency

Southwest Gas is a provider of essential energy for everyday life in the region, from heating water and warming homes to fueling indoor ranges and drying clothes. To support its commitment to reliable and safe service to customers, modern technology in the field and in the office is critical.

In the biggest IT project of its 90-year history, Southwest Gas replaced its legacy mainframes and underlying storage with FlashStack from Pure Storage and Cisco Systems. Key systems and infrastructure not only run sustainably, it also offers efficiency, reliability and data protection benefits which will serve generations to come.



**SOUTHWEST GAS**

“We are committed to serving our communities today and tomorrow, and that means investing in solutions that can scale with our business. With Pure, we can grow efficiently in every possible way.”

**ERIC VALENTINE,**  
MANAGER, PLATFORM SERVICES,  
SOUTHWEST GAS



Uncomplicate Data Storage, Forever

## Seizing an Opportunity to Drive Efficiency

Eric Valentine doesn't shy away from challenges. "I've always enjoyed troubleshooting issues and making processes more efficient," says the Manager of Platform Services for Southwest Gas. So, when it was time to replace the Customer Information System (CIS) in use for more than 25 years with SAP HANA, he immediately shifted into optimization mode.

"Everything we do is driven by our commitment to ensure our customers can rely on their natural gas service, safely and reliably," says Valentine. "This project allowed us to meet customer needs by modernizing our system and creating opportunities for scale. We also sought more ways to protect customer data and our systems from cyber threats. We always look to create efficiencies that will help us conserve energy and prevent unnecessary costs."

## Service and Support that Stacks Up

Valentine deployed SAP HANA on FlashStack. "A cutting-edge platform like FlashStack delivers the speed and performance we need to run a modern CIS like SAP HANA," says Valentine. "Coupled with Pure's customer service and support, we are set up for long-term success."

Today, production workloads including Oracle, SQL Server, and MongoDB databases, as well as VDI and SCADA, run on Pure Storage. To protect against cyberthreats, Southwest Gas enabled Pure Storage SafeMode Snapshots and uses encryption at rest for replication between its primary and backup data centers. Compared to the company's legacy storage, FlashStack reduces space and power costs. And with an Evergreen//Forever subscription, the team has consolidated more workloads and capacity using less space.

## Scaling to Serve the Community

Ease of visibility via Pure1 adds to IT team efficiency. They can now provision storage in minutes versus weeks and can complete patches 50% faster than before, freeing time to work on key virtualization initiatives. Southwest Gas is also achieving a data reduction rate of 4:1 in the SAP HANA environment.

"We are committed to serving our communities today and tomorrow, and that means investing in solutions that can scale with our business," said Valentine. "With Pure, we can grow efficiently in every possible way."

Read more about Pure Storage and Southwest Gas:

<https://www.purestorage.com/customers/southwest-gas.html>



### Region

North America



### Industry

Energy



### Company

Southwest Gas  
[www.swgas.com](http://www.swgas.com)



### Solution Area

Accelerate Core Applications





# Ampersand Adopts Hybrid Cloud to Speed TV Insights

Whether a local or national advertiser, Ampersand helps clients reach their unique target audience and deliver their messages anytime, anywhere on any device—with a commitment to privacy. This requires timely, data-driven insights to help clients capitalize on opportunities.

To speed decision-making, Ampersand adopted a cloud-first strategy that leverages Pure Storage for increased resilience and performance in a hybrid cloud environment. Ampersand benefits from the capabilities and economics that make the cloud ideal for both disaster recovery and on-demand analytics at massive scale—and advertisers can reach their goals more efficiently.



“Pure helps us deliver data insights that drive tangible results for advertisers. Our gain is their gain.”

**SETH WEINGARTEN,**  
VP OF NETWORK OPERATIONS, AMPERSAND



## Reaching Audiences with Precision and Scale

Every day, Ampersand collects and parses aggregated viewership data to help clients reach the right audiences in more than 200 media markets and 165 networks and apps.

Aggregate viewership data insights—and the associated machine learning (ML) workloads that extract aggregated insights for advertisers—resides in Amazon Web Services (AWS). Ampersand taps the batch processing capabilities in AWS to run thousands of ML workloads concurrently at any given time, absorbing an enormous amount of data insights from multichannel video programming distributors and rating sources.

To build on the scale and performance of the cloud, Ampersand wanted to move its SQL Server and MySQL transactional data to AWS and adopt the cloud for disaster recovery. That meant retiring the physical secondary data center used specifically for backups and instead replicating data from the primary data center to the cloud.

The problem with this was twofold. “Our legacy storage was costly to maintain and didn’t have the power to handle these workloads,” says Seth Weingarten, Vice President of Network Operations at Ampersand. “And even if it did, we couldn’t move this data seamlessly to and from the cloud.”

## The Best of Both Worlds

Ampersand solved both challenges with Pure Storage. Pure Storage FlashArray//X brings top performance on-premises, while Pure Cloud Block Store™ delivers data portability, flexibility, and consistency in the public cloud. For robust disaster recovery, Ampersand uses ActiveDR™ and asynchronous replication from FlashArray into AWS.

“Pure Cloud Block Store enables us to undertake our cloud initiatives with confidence,” says Weingarten. “With Cloud Block Store on AWS, we get the best of both private and public cloud and maintain complete control over our data.”

Cloud Block Store proved simple to deploy and manage. From the Pure1 interface, Ampersand can move volumes into the cloud or repatriate data to the physical data center without reformatting data or refactoring applications. Ampersand is consuming less storage capacity in AWS with Pure Storage Snapshots, achieving average data reduction rates of 5:1. The company gains better performance, at a lower cost, with complete data portability.

## Optimizing TV Campaigns

Having aggregated viewership and transactional data reside in the cloud accelerates time to insights for Ampersand’s clients. “Pure helps us deliver data insights that drive tangible results for advertisers,” says Weingarten. “Our gain is their gain.”

Read more about Pure Storage and Ampersand:  
<https://www.purestorage.com/customers/ampersand.html>



### Region

North America



### Industry

Media and Entertainment



### Company

Ampersand

[www.ampersand.tv](http://www.ampersand.tv)



### Solution Area

Enable Multi-cloud





# St George's Hospital Accelerates Critical Healthcare Applications

Like many healthcare institutions, St George's Hospital is going through a digital transformation, moving from traditional paper-based records to digital platforms. Facing end-of-life hardware and ongoing digital growth, the hospital needed to rethink its storage environment.

St Georges Hospital turned to Pure Storage FlashArray//X for greater capacity and performance with lower risk. The hospital can now ensure round-the-clock, high-speed access to critical patient information.



**ST GEORGE'S  
HOSPITAL**  
A TRADITION OF EXCELLENCE

“We worry less about security risk and cyber threats knowing we have a secure platform that is optimised and up to date.”

**FENTON KITCHEN,**  
CHIEF DIGITAL OFFICER,  
ST GEORGE'S HOSPITAL



## Investing in Digital Healthcare

St George's Hospital has invested significantly in digital systems over the past ten years. Many departments, including moving patients' paper clinical records to a new digital medical records for surgical patients and the Cancer Care Centre using high-resolution images in treatment plans, results in a much larger data footprint.

The IT staff reassessed the hospital's storage requirements and considered future needs. The hospital decided it needed to migrate to a faster and more efficient storage cluster in Pure Storage FlashArray//X.

## Implementing Pure Storage During Lockdown

St Georges' legacy systems were running out of capacity and needed to be retired as soon as possible. But a COVID-19 lockdown was looming.

"We wanted to get the new Pure Storage implemented quickly as our storage needed to be ready to take on extra workload during the height of the pandemic," says Fenton Kitchen, Chief Digital Officer from St George's Hospital.

The St George's IT team moved quickly with remote support from the Pure Storage team. "Once the hardware was delivered onsite at St George's, the Pure arrays were up in under six hours," says Fenton.

## Keeping Up With Growing Storage Demand

"We chose Pure for the speed of its storage, and for the real-time monitoring and updates

from Pure1," says Fenton. "We purchased 20 terabytes, but we're actually getting much more with a potential data reduction ratio of 3:1."

The hospital also chose the Pure Storage Evergreen® Storage model to enable IT staff to rapidly expand storage as needed. Since moving onto Pure Storage, the team has not only increased storage capacity, but also gained significant speed and smoother integration with the VMware environment.

"Our file access and Microsoft SQL Server instances are much faster, helping to improve the stability of SQL connections for applications," says Fenton. "Backups and snapshots are significantly faster too."

## Resiliency in the Face of Disaster

Christchurch is no stranger to natural disasters. The St George's team implemented ActiveCluster and advanced data protection measures that help maintain availability and deliver high resiliency should an unforeseen event occur. In addition, IT staff receive pre-emptive alerts with Pure1.

"We worry less about security risk and cyber threats knowing we have a secure platform that is optimised and up to date," says Fenton. "Working with the Pure team has been an incredibly positive experience. The team's knowledge and expertise provide us with peace of mind."

Read more about Pure Storage and St George's Hospital: <https://www.purestorage.com/customers/st-georges-hospital.html>



### Region

APJ



### Industry

Healthcare



### Company

St George's Hospital

[www.stgeorges.org.nz](http://www.stgeorges.org.nz)



### Solution Area

Accelerate Core Applications





# Conclusion

Thanks to deep integration with VMware and all database providers, Pure Storage helps you put an end to under-performing workloads with operationally efficient, intelligently automated data management solutions that are always on, always fast, and always easy to manage. Deliver innovation and superior outcomes and be a data hero for your business and end users.

Learn how Pure Storage can help you [accelerate your data](#) growth and uncomplicate data services for your [VMware hybrid cloud](#).

[purestorage.com](https://purestorage.com)

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