

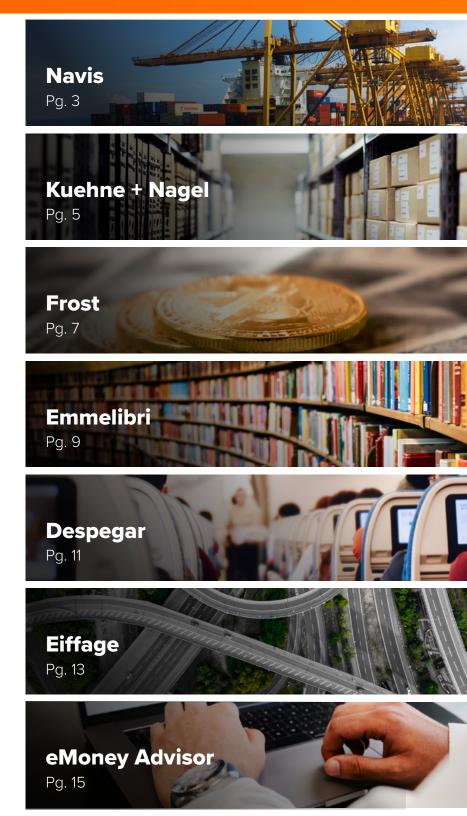
### Introduction

Heroes work among us. Look no further than your friendly neighborhood IT department. That's where legions of superheroes battle the harmful effects of villainous legacy storage on applications and their businesses. These heroes have learned that the key to unlocking the value in workloads is a new approach to data management.

Read on to see shining examples of everyday IT admin heroes who have helped their organizations simplify and transform operations for mission-critical databases, virtualized environments, and analytics.









### Navigating Software DevOps Transformation

The heavy demands of database operations and rapid software-development cycles can create challenges that overwhelm deficient data-management solutions and leave IT teams grasping for solutions to get back on track. Find out how IT heroes at Navis discovered how to make a dramatic impact on productivity.



"Pure Storage gives us the ability to write more software in less time and add features that will benefit our customers and help us capture new market opportunities."

JIM WILD, MANAGER OF R&D INFRASTRUCTURE





Navis provides software to the world's leading terminal operators and ocean carriers, including more than 60% of the world's major ports. Its flagship product is used to automate equipment operations at a port, track the movement of cargo, and manage multiple terminals through a single solution. Data management is a critical concern for Navis's 20-person IT department, which deals with nearly 3,000 databases, mostly Oracle® and Microsoft® SQL Server. "We have multiple databases for every customer, and they all have to be kept updated so that our emulations are accurate," says Jim Wild, manager of R&D Infrastructure.

Navis turned to Pure Storage™ FlashArray systems to address the heavy demands on its storage infrastructure. Navis has seen the primary benefits from the use of Pure Storage arrays in its software-development process and in the emulations the company runs to ensure that its software will work as desired.

"Our DevOps team has been able to double its processing with the Pure array," Wild notes. "They're running 400 jobs at a time, whereas they used to do 200. What Pure has done with DirectFlash™ technology and NVMe has made a dramatic impact on productivity."

With the software-development process putting heavy demands on storage, Navis is now prepared for whatever may come. "I wouldn't recommend doing what I do to a Pure array to any other storage device I've ever worked on," says Wild. "I guarantee it would belly up and die. But you just don't have to worry about Pure. It handles anything you give it."

#### **Discover more about Navis and Pure Storage:**

https://www.purestorage.com/customers/navis.html



#### Region

NAM



#### Industry

Transportation



#### Company

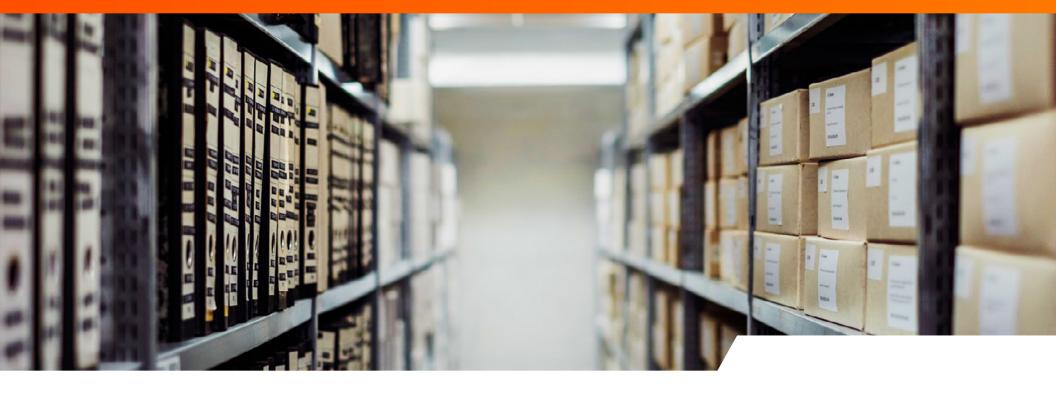
Navis

www.navis.com



- Oracle®, Microsoft SQL Server®
- Virtual Server
   Infrastructure –
   VMware vSphere®





# Keeping Pace with a Deluge of Data

Today's enterprises face the challenge of managing the exponential growth of data, which can mean struggles to keep daily operations at peak performance. A logistics company discovered how to scale capacity while freeing valuable IT administration time by implementing modern all-flash storage.



"We replicate systems in less than an hour instead of eight, process data warehouse reports significantly faster, and spin up services for testing in mere seconds—all while using less bandwidth."

**DARREN WISEMAN, IT MANAGER** 



### KUEHNE+NAGEL

Having evolved from a traditional international freight forwarder to become a leading global provider of innovative, fully integrated supplychain solutions, Kuehne + Nagel has more than 1,300 offices in over 100 countries. Facing challenges associated with rapidly expanding business data flows, it was critical for the company to have a storage system with high performance, reliability, and low latency to enable it to stay at the forefront of the industry.

"With ever-increasing system loads, we conducted a study to upgrade our storage system to drive seamless and effortless operations of the business." says Clarence Chan, senior vice president of IT Asia Pacific and Corporate Financial IT. "The legacy system was experiencing constant performance issues and fell well short of the requirements of our business applications."

As part of the evaluation process, Kuehne + Nagel conducted benchmark tests of Pure's offerings. In the in-depth review, <a href="Pure Storage">Pure Storage</a>
<a href="FlashArray">FlashArray</a> consistently came up as top for performance, I/O throughput, and latency.

Kuehne + Nagel was also in the process of developing a business application to streamline business workflows for sea freight. The <a href="mailto:snapshot">snapshot</a> and cloning technology on Pure arrays enabled the team to significantly reduce storage consumption on the development platform. Overall, the team improved its software development and testing productivity by more than 30%.

"The FlashArray has drastically streamlined our storage," reports Chan. "Pure Storage exceeded our expectations for availability. Furthermore, the data reduction through compression, deduplication, and thin provisioning reached 4-5:1, which is much higher than expected." The team estimates that Pure's self-driving storage capability has saved around 40% of the personhours required for infrastructure administration, performance tuning, troubleshooting, monitoring, and reporting. This allows IT team members to focus on more strategic and mission-critical tasks.

Find out more about Pure Storage and

**Kuehne + Nagel:** <a href="https://www.purestorage.com/customers/kuehne-nagel.html">https://www.purestorage.com/customers/kuehne-nagel.html</a>



#### Region

APJ



#### Industry

Business Logistics / Shipping



#### Company

Kuehne + Nagel www.kuehne-nagel.com



#### **Use Case**

Database: MSFT - SQL Server; Oracle - Oracle DB





# **Banking on Consolidating Every Workload**

Interesting things can happen when the worlds of fast-changing IT and stability-conscious banking intersect. The IT heroes at Frost Bank standardized every business-critical application on Pure arrays.



"We're very impressed by Pure's ability to handle all these diverse workloads with no hit on performance or any management overhead."

**DAVID COINDREAU**, MANAGER OF SERVER AND STORAGE SERVICES





Frost Bank is the banking, investment, and insurance subsidiary of Cullen/Frost Bankers. It operates more than 130 branches and 1,200 ATMs throughout Texas, serving both individuals and businesses. With many years of experience in banking IT, David Coindreau knew what he valued most in a storage infrastructure: rock-solid reliability.

Given the magnitude of the decision to replace virtually all the bank's storage, the team proceeded cautiously. "We brought in a Pure Storage array for a proof-of-concept trial and put all our virtualized test/dev operations on it," says Coindreau. After several months of the POC, Frost purchased its first FlashArray.

Now, virtually every business-critical application is running on Pure arrays. It's a wide range that includes an in-house developed e-commerce suite, proprietary applications for bank tellers and ATMs, back-end transaction processing, PostgreSQL, Oracle and SQL Server databases, and Microsoft Exchange. "We're very impressed by Pure's ability to handle all these diverse workloads with no hit on performance or any management overhead," Coindreau notes.

A fairly recent addition to Frost's workload has come from a sharp increase in the use of Splunk® log collection and analysis. In short order, the bank's security department became the dominant user of Splunk. "Splunk on Pure Storage is the primary tool for detecting any anomalies in our environment," explains Coindreau.

"We have sensors on virtually every piece of equipment to collect logs. And we throw every conceivable piece of data we have into Splunk."

Looking back on the decision to adopt Pure FlashArray, Coindreau says "It's always there and always works. As more things get added to our plate, IT needs more things that don't require a lot of care and feeding. Pure just works and demands very little of our time. It's really storage-as-a-service."

#### Learn more about Pure Storage and

**Frost Bank:** <a href="https://www.purestorage.com/customers/frostbank.html">https://www.purestorage.com/customers/frostbank.html</a>



#### Region

NAM



#### Industry

Financial



#### Company

Frost Bank

www.frostbank.com



- Log management and analysis – Splunk®
- Database PostgreSQL®, Oracle®, Microsoft®
   SQL Server
- Virtual server infrastructure
  - VMware® vSphere®
- E-commerce
- Transaction processing
- · ATM network





## Writing a New Chapter in Innovation

Running diverse sets of workloads results in a wide array of operational challenges for enterprises looking to stay modern and deliver the highest level of services to users. The IT heroes at Emmelibri virtualized their entire data center without sacrificing performance or service reliability.



"Euphoria! Everybody is happy. Migration was quick and painless, performance is very high, and management is easy."

LUCA PALEARI, CIO





Emmelibri is a holding company that directs a large book-distribution ecosystem, including wholesale distribution, mass-market retail, bookshop chains, and e-commerce websites. Delivering high levels of service came at a very high cost, so the company was looking for ways to reduce data-center expenditures without sacrificing performance or service reliability. Emmelibri also wanted to complete the full virtualization of its data center, a step considered for years but not yet taken because the company couldn't find a storage infrastructure reliable and powerful enough to ensure a painless execution.

"Innovation is part of our company's DNA," says Luca Paleari, CIO. "We strive to always be on the forefront in order to deliver optimal IT services, which translate into optimal book distribution. We strongly believe in flash technology and Pure Storage is the perfect partner for the journey. We are proud to work with Pure and embrace storage innovation."

The new storage infrastructure has provided Emmelibri and its subsidiaries with new levels of performance. Processing of key applications is now two to eight times, and data deduplication ratios have reached 6:1, giving the company much more storage for its money. End-users and IT personnel alike have been impressed by the dramatically improved performance.

In the early phases of the implementation, some applications were running so fast that employees assumed tasks were not being completed correctly. When they realized this was the "new normal," their help-desk complaints turned into congratulations.

The performance and reliability of the FlashArray, together with the simplicity of the provided management tools, convinced Emmelibri to take the final step toward the full virtualization of its data center. "Currently, 95% of our data center is virtualized," says Paleari. "This includes all sorts of workloads, from Oracle databases to PostgreSQL databases, MongoDB, SAP EP and SAP BW."

#### Read more about Pure Storage and

**Emmelibri:** <a href="https://www.purestorage.com/customers/emmelibri.html">https://www.purestorage.com/customers/emmelibri.html</a>



#### Region

**EMEA** 



#### Industry

Retail



#### Company

Emmelibri

www.emmelibri.it



#### **Use Case**

Database – Microsoft® SQL Server, Oracle® MySQL™, PostgreSQL®, MongoDB®, SAP®





# **Amplifying Developer Productivity**

The success of development teams is based solely on unbridled access to resources. An inability to release new updates regularly was bogging down this fast-growing online travel service due to long cycles to provision storage infrastructure. The IT heroes at despegar.com broke down old barriers and improved responsiveness of their customer-facing web presence.



"We needed an infrastructure that would help us provide the best environment for our developers and the best services for our customers, and we found that with Pure Storage."

**GERMAN ANDERS,** STORAGE ENGINEER LEADER





Despegar means "take off" in Spanish, making it an appropriate name not only for an online travel service but also for a company that has risen from an Argentinian start-up to claim 60% market share as Latin America's leading travel website. Despegar.com faces a constant battle to maintain its competitive differentiation and retain customer loyalty. To do so it must continually add new features to its website. In the last five years, the company's software development team has grown from 100 to 600 people. During that growth, the pressure to churn out new features overwhelmed the supporting IT infrastructure.

"For many years, our developers were limited by their access to resources," observes German Anders, Despegar.com's storage engineering leader. "They depended on operations personnel to provision the development infrastructure. We needed to remove these barriers to improve timeto-market and enhance our competitive position."

"We needed an infrastructure that would help us provide the best environment for our developers and the best services for our customers. We found that with Pure Storage," says Anders. "They had all the key features we wanted, including excellent deduplication and compression, security, snapshots, support for continuous development, and non-disruptive upgrades."

Developers now create, test and deploy more than 400 applications and updates daily. This is in stark contrast with the previous pace of three to five per week. This dramatic improvement in developer productivity is accelerating the company's time to market for new features and services. And it's providing Despegar.com with significant competitive advantages. "For our customers booking travel, the new applications mean a faster website and the ability to view images in different ways to enhance the user experience," Anders notes.

Download the full case study about Pure Storage and Despegar: <a href="https://www.">https://www.</a>

purestorage.com/customers/despegar.html



#### Region

LATAM



#### Industry

Travel



#### Company

Despegar

www.us.despegar.com



- Database Oracle®, MySQL, Cassandra
- VSI KVM OpenStack®





## **Building Better Business Results**

Rapid access to data for reporting and decision-making is critical to maintain competitive advantage and retain customer satisfaction. Any negative impact to the productivity of internal users can have a ripple effect. The IT heroes at Eiffage bridged gaps in data performance and availability by modernizing their <u>storage solution</u>.



"All our internal users have benefited from this in their use of our main back-office applications: accounting, finance, human resources, purchasing management....They have seen their access to applications jump. They congratulated us on the migration."

**JEAN-YVES CARO,** INFRASTRUCTURE MANAGER





The Eiffage Group—one of Europe's leading companies in the construction, infrastructure, energy systems, and concessions sectors—currently employs 65,000 people and carried out 100,000 projects in 2017. After four years of amortizing its storage systems, Eiffage entered an obsolescence cycle: The infrastructure's performance was no longer in line with requirements, impacting the Group's internal activity.

"Originally, our storage was organized on three levels of performance, creating a structure that was ultimately quite complex," explains Jean-Yves Caro, infrastructure manager. "Pure Storage made us an all-flash proposal for the entire solution that was financially more advantageous than the competing proposal, based on a traditional mix of disk and flash."

Since implementing, the new all-flash infrastructure, the Eiffage information systems team has considerably improved the experience for users. For example, they've reduced the night batch process for closing quarterly accounts from 14 hours to 7 hours. They've also reduced average response time by a factor of 11, from 6 ms to 8 ms to 0.63 ms.

"There has been a virtuous effect on the performance of the various workloads," Caro says. "The acceleration of reporting has contributed to the improvement of the transactional part."

The benefits are equally obvious for the technical teams: "In addition to the effective deduplication rate that exceeded our initial expectations, the simplicity of administration was a real surprise and allowed us to reorganize our operations differently," Caro reports. "According to our estimates, we have reduced our time dedicated to storage management by a factor of 12," said Caro. In addition, Eiffage has reduced its storage footprint by a factor of 13, from 4 racks to 1/3 of a rack.

#### Dive deeper on Pure Storage and Eiffage:

https://www.purestorage.com/customers/eiffage.html



#### Region

**EMEA** 



#### Industry

Construction



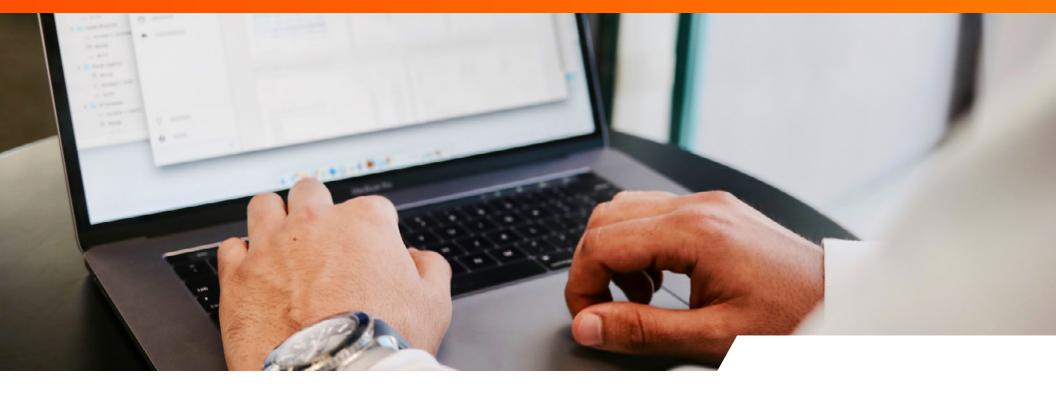
#### Company

Eiffage www.eiffage.com



- VMware for Linux and Microsoft Windows®
- Hyper-V for SQL servers on Windows





# Cashing in on Opportunity

Consumers of SaaS services demand always-on services and continuous delivery of innovative new features. Limitations in legacy storage can challenge operations and create complexity for overworked IT teams. The IT heroes at eMoney Advisor achieved operational advantages and eased administrative burdens for the entire staff.

### *e*Money

"With Pure's snapshotting capabilities and high rates of data reduction, we can deliver new environments in minutes, not hours or days. Our DBAs can refresh databases quickly and easily, with just a click."

MICHAEL FINNEGAN, VICE PRESIDENT OF PRODUCTION OPERATIONS



### *e*Money

eMoney Advisor is a cloud-based <u>software-as-a-service</u> (SaaS) <u>platform</u> that combines financial-planning software, data aggregation, business analytics, and other functions to help financial professionals build stronger client relationships, streamline business operations, and drive revenue growth. "The quality of the customer experience is paramount," says Michael Finnegan, VP of Production Operations. "We stress operational excellence in all we do so that our clients — and in turn, their clients — have the best possible experience."

The performance of eMoney's back-end databases is critical to delivering excellent customer experience. "The stability, reliability, and performance of Pure Storage arrays mean we can raise our standards and deliver on our promises — even to the point of delivering 100% availability," Finnegan explains.

Adding new features and functionality is essential for a SaaS provider to retain current customers and attract new ones. Finnegan credits Pure Storage with enabling a quantum improvement in how eMoney is able to add new services. "With Pure's snapshotting capabilities and high rates of data reduction, we can deliver new environments in minutes, not

hours or days. Our DBAs can refresh databases quickly and easily with just a click," he notes.

Finnegan is driving to automate IT processes at every opportunity and credits Pure Storage with helping in that effort. "We leverage Pure SDKs and plug-ins in many ways to improve automation and scripting and to deliver environments to developers who cannot afford to wait around," he says. "The integration with VMware is especially impressive."

With the storage requiring virtually no attention, eMoney's IT staff has been able to turn its attention to higher-value activities, making yet another contribution to enhancing customer experience and delivering new features faster." Pure Storage has been a game-changer for our organization and has delivered on everything we need it to do," Finnegan says. "Having a partner like Pure Storage—who's innovative and keeps a strategic focus—puts eMoney in a position to take advantage of the opportunities in front of us."

Get the full case study on Pure Storage and eMoney Advisor: <a href="https://www.purestorage.com/customers/emoneyadvisor.html">https://www.purestorage.com/customers/emoneyadvisor.html</a>



#### Region

NAM



#### Industry

Financial



#### Company

eMoney Advisor www.emoneyadvisor.com



#### Use Case

Database – Microsoft® SQL Server®



### **Conclusion**

Discover workloads without limits with Pure Storage and deliver a modern data experience for your business and users. Become an IT hero and put an end to slow, under-performing workloads with operationally efficient, intelligently automated data management solutions that are always on, always fast, and always easy to manage.

Find out more: <a href="www.purestorage.com/withoutlimits">www.purestorage.com/withoutlimits</a>

purestorage.com

800.379.PURE













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