


8:1 DATA
CONSOLIDATION
50% SQL
SERVER
RESPONSE TIME
IMPROVEMENT
SCALABLE
HIGH-PERFORMANCE
STORAGE
INFRASTRUCTURE**COMPANY:**

SurveyMonkey
www.surveymonkey.com

CHALLENGE:

- Keeping pace with growing volumes of survey responses worldwide
- Delivery of new, reliable enterprise-scale products
- Avoid slow response times for customers

SOLUTION HIGHLIGHTS:

- Up to 50% improvement in database access response times
- Sub-1ms performance for over 98% of IOPS
- Ability to run multiple simultaneous database images with no additional CAPEX

BUSINESS VALUE ACHIEVED:

- Successful rollout of new enterprise-scale products
- Greater analytic functions offered to customers, faster
- Considerable drop in storage-related expenses

SURVEYMONKEY PINPOINTS PREFERENCE FOR FLASH STORAGE FROM PURE

SurveyMonkey is not a company that can afford to wait on storage. As the world's leading online survey platform, the company handles almost a half-million surveys every month, and nearly 3 million survey responses every day. The company operates 24/7, 365 days a year, in more than 190 countries.

This level of activity generates huge volumes of information that must be managed effectively by SurveyMonkey so customers can create, perform and analyze their surveys efficiently. "We never stop growing," says Argenis Fernandez, lead of database operations at SurveyMonkey. The company's data storage needs already exceed 50TB and are expected to increase at least 15% annually, so the IT staff is building an infrastructure that can handle the growth.

FLASH STORAGE ENABLES NEW BUSINESS INITIATIVES

SurveyMonkey has undertaken a major expansion of its business into high-end enterprise accounts, adding features and services targeted at large-scale customers and their increasingly sophisticated survey needs. SurveyMonkey's expanded product line requires its database infrastructure to not only scale up and accommodate an increased volume of user responses, but also to provide the kind of accelerated response times expected by corporate users who rely on fast survey results for greater market insight and competitive advantage.

Fernandez, who oversees SurveyMonkey's Microsoft SQL Server infrastructure and operations, knew that the company's legacy disk storage systems weren't up to the new demands. "Our old SAN wasn't giving us the performance we needed," Fernandez says. "We spent lots resources trying to get it to work with our data load, but it just wasn't happening."

SurveyMonkey went looking for alternatives, both traditional spinning disk systems and new flash-based approaches, and Pure Storage was selected as the most attractive option, both from a technical standpoint and for its ability to support the company's business objectives.

USE CASE

Database – MSFT SQL Server

GEO

North America

INDUSTRY

Technology

After performing a proof of concept, SurveyMonkey installed two FlashArray-420 systems in its California data center, and one FlashArray-420 in its Oregon data center, and quickly moved all of its Microsoft SQL Server applications onto the Pure FlashArrays.

The impact was immediate – and striking. “We saw a 20 to 25% increase in performance right off the bat,” both for performance of the website and in the access times for the SQL database, Fernandez says. “It was amazing.”

“ Thanks to Pure Storage we now offer more functionality to our users, and that gives us greater advantages over our competition.”

Argenis Fernandez, Lead Database Operations Engineer

Shortly after installing Pure Storage, SurveyMonkey experienced a compatibility issue and had to revert to its old disk-based storage system for a brief period. The company quickly learned two lessons about the performance benefits of the FlashArrays, and the quality of Pure’s support.

“The support from Pure was nothing short of stellar,” Fernandez says, noting that the FlashArrays were up and running quickly after a rapid upgrade. For the brief time the Pure equipment was undergoing its upgrade, the legacy storage system’s performance degraded so much that it made a big difference in the response times of SurveyMonkey’s Web pages. After resolving its upgrade issues, the company purchased additional Pure systems, “and we now have migrated most of our SQL Server applications to Pure flash.”

ENABLING NEW PRODUCTS AND SERVICES

Latency is the number-one performance criterion for evaluating SurveyMonkey’s database infrastructure. “We operate 24/7 on a worldwide basis, processing 350 survey responses a second,” Fernandez notes. “So, if our users experience slow response times, we’re going to hear about it right away.”

Prior to transitioning to Pure, SurveyMonkey’s average response times were several milliseconds. With Pure, over 98% of IOPS now perform in under a millisecond. This reduction in latency provides customers with a significant productivity gain, especially when it comes to complex surveys that use more granular queries about everything from studying buying habits to measuring brand awareness, testing a new ad campaign, and more.

Another positive impact from switching to flash storage has been a savings on space and power consumption. Storage capacity that used to require several racks is now accomplished in just two racks, Fernandez says.

And the deduplication features of Pure systems has greatly simplified key IT processes such as backup, application development and QA testing. “We have a main database of about 12TB,” Fernandez says, “and we need two or three copies of it running at any given time. With the Pure system, we are able to accommodate all three copies simultaneously without any additional CAPEX.”

In addition, batch processes that used to take as many as seven days are now completed in less than 24 hours, and data reduction rates are as high as 8:1.

GREAT SUPPORT KEEPS THE BUSINESS THRIVING

The superior support from Pure Storage has contributed to a strong working relationship. The customer service team assigned to SurveyMonkey proactively delivers system health checks that provide Fernandez and his team with greater insight into how their systems are performing and how to take preemptive steps to maintain optimal performance.

In perhaps the most telling testament to the advantage of moving to Pure Storage, Fernandez points out that “we just don’t worry about storage anymore. The Pure system is so easy to use and maintain that we don’t even need a storage administrator. We’re able to put our resources to better use and focus on other, more strategic things.”



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