

dailyVest Empowers 401(k) Plans for 7 Million Plan Participants with Fastboards and Real-Time Analytics

94.5% IMPROVEMENT

in Performance over
Azure SQL

35% DECREASE

in Total Cost of Ownership
(TCO)

“
SingleStore is consistently faster for us than Azure SQL. I was really blown away. I waited an hour for the cached financials with one plan for 12 months to run in Azure SQL. Then I ran it in SingleStore and it was done in 3 minutes.”

Gerry Morgan,
Lead Developer at dailyVest

Business Goals

dailyVest’s software empowers 401(k) plan sponsors, financial services firms, and plan participants with a white-label tool that integrates customized content and big data analytics within the sponsor or participant web portal. It surfaces key performance metrics for employer-sponsored retirement plans and calculates the personal rate of return for individual participants.

dailyVest expanded its platform’s capabilities by moving to the cloud but ran into performance and cost issues on Azure SQL as the transaction volume increased. It needed a new database solution that would:

- Speed up data ingestion and batch processing performance: Most of the data on dailyVest’s platform was processed at the beginning of the month. The Extract, Transform, Load (ETL) processes and batch data analysis took longer than the team wanted.
- Support a growing customer portfolio: The platform’s transactions were growing at a rate of 36 percent per year. The new database would need to scale with an ever-increasing data volume to allow dailyVest to grow its customer base.
- Reduce costs: The platform’s operating costs grew at a substantial rate as it scaled up. The long-term recovery backup expenses were particularly high.

Technology Requirements

dailyVest evaluated many types of cloud databases to find the best match for its FinTech platform. The most important requirement was remaining on the Microsoft Azure cloud. The financial services firm customers, such as Charles Schwab, already approved this platform’s security, and moving away from Azure would result in a massive disruption.

Along those same lines, dailyVest also wanted a database that supported SQL and C#. The company’s developers were already familiar with these languages, and support of SQL and C# would reduce the code that needed to be rewritten following a migration.

The database also needed to offer columnstore for better compression and read performance, along with supporting complex queries that generate large amounts of data. Getting all of these features in one database solution led dailyVest to SingleStore.

Why SingleStore? Fast Analytics and Easy Administration

SingleStore's unified database was designed for fast analytics and ultra-fast ingest. With support for billions of events per second, millions of real-time queries, and petabytes of data, dailyVest could easily scale to meet the demands of a growing customer base.

dailyVest selected SingleStore Managed Service to spend less time administering the database, and more time analyzing 401(k) data. This fully managed, on-demand, and elastic cloud database solution was simple to deploy and manage in Azure cloud. dailyVest didn't even need to leave its current data center. While dailyVest had the in-house talent to manage its own databases, it saved one full-time employee equivalent and was able to better allocate its technical resources.

Business Outcomes

Personalized Investment Content and Performance Delivered to 7 Million Plan Participants

Through dailyVest's customers, plan participants are better able to make decisions for their financial future. This customized experience helps employees choose age-appropriate investments, learn more about retirement planning, and understand their personal rate of return.

Switched Databases With Limited Disruption

By staying in the same cloud and data center, dailyVest customers faced little disruption from the underlying database change. Financial services firms are particularly security-minded due to the sensitive data they work with, so remaining in a trusted and approved environment was important.

Monthly Key Performance Metric Generation Improved 26.6 Percent

Every month, dailyVest analyzes 16,200 employer-sponsored retirement plans and generates key performance metrics. The platform outputs these metrics onto webpage tiles as a convenient big data visualization. After moving to SingleStore Managed Service, completing the batch process dropped from 4 hours and 12 minutes to 3 hours and 5 minutes for a 26.6 percent improvement.

Plan Sponsors Can Benchmark Performance Against Others

The health of an employer-sponsored retirement plan involves many factors, so it can be difficult for plan sponsors to know if they need to make changes for better performance and participation. DailyVest's platform leverages its data to allow plan sponsors, such as Boeing, to compare their plans against similar offerings.