Major retailer maximizes database performance to provide better customer experience

Needing a flexible, scalable infrastructure to ensure exceptional database performance, a global retail leader selected the Dell EMC PowerFlex platform.

Business needs

A leading global retailer had been grappling with multiple legacy platforms across its IT environment. As the retail chain grew, this operational complexity limited its ability to quickly respond to market opportunities. Ultimately, the retailer was finding it difficult to deliver on its goal of providing unmatched customer experiences.

Business results

- 20x better database performance for extraordinary customer experiences.
- 80% lower database input-output (I/O) latency for enhanced responsiveness.
- 100x improved transaction processing capability to speed up checkouts.

“Our databases run substantially faster on PowerFlex. The platform delivers the fastest database performance we have ever seen.”

Leading Global Retailer

Solutions at a glance

- Dell EMC PowerFlex
A major global retailer was experiencing tremendous success and rapid growth, significantly increasing demands on its IT infrastructure. The mix of disparate systems and solutions ranged from all-flash arrays to hyperconverged infrastructure, and the increasing complexity meant that the company simply couldn’t achieve the scale and agility it needed.

The retailer wanted to standardize on a consistent, flexible platform that could deliver exceptional database performance while running virtual and physical workloads. The solution was the Dell EMC PowerFlex platform, combining compute and high-performance NVMe-based storage in a managed, unified fabric.

Moving to the PowerFlex platform produced dramatic results compared to the retailer’s previous solution, including:

- 20x improvement in database performance.
- 80% decrease in database input-output (I/O) latency.
- 100-time increase in the ability to process transactions.

“Our databases run substantially faster on PowerFlex,” says the company’s database infrastructure administrator. “The platform delivers the fastest database performance we have ever seen.”

"PowerFlex consolidated our databases onto a single scale-out infrastructure platform.”

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Delivering a better customer experience

The retailer now relies on PowerFlex to support Oracle and Microsoft SQL Server as well as modern databases such as MongoDB and MariaDB Server. This allows it to efficiently process order flows, handle custom orders and increase transaction speed — for a better customer experience.

In the past, having multiple legacy platforms and systems limited the retail chain’s ability to scale and move quickly to take advantage of business opportunities. PowerFlex consolidated the retailer’s databases onto a single scale-out infrastructure platform, with the flexibility and software power to run high-performance virtual, physical and containerized workloads — all while providing integrated and automated lifecycle management.
By relying on PowerFlex, the retailer can deliver faster transaction processing and a better customer experience than ever before. In addition, enterprise-class resilience and mission-critical availability ensure that the retailer can consistently meet customer needs to maximize engagement and enhance customer satisfaction.

**An outstanding value**

PowerFlex is also proving to be a terrific investment for the retail leader. The cost of the new infrastructure has been roughly equal to its legacy platforms and systems. The solution facilitates a move to all-NVMe storage and drives massive consolidation that has resulted in large economies of scale and operational savings.

In addition, the PowerFlex platform's linear scalability has also allowed the retailer to support its rapid growth and keep pace with escalating workload requirements even as its demands continue to increase — all while essentially future-proofing its technology.

**Simple to implement and manage**

Another key benefit is the way in which PowerFlex has simplified operations and management of the retail chain’s IT infrastructure.

In the past, the retailer had to engage with different vendors across its various platforms and workloads. PowerFlex Manager provides tools for IT operations and lifecycle management that automate infrastructure workflows from BIOS and firmware to nodes, hypervisors and networking. Plus, the retail chain now only deals with Dell Technologies for needed support.

As for the future, the retailer will continue to look for opportunities to consolidate platforms and workloads and to simplify its IT through the use of PowerFlex and other Dell Technologies solutions.

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