Optimize IT performance with a simple, standardized strategy

Northwestern Mutual partnered with Dell Technologies to implement a new infrastructure solution with smaller form factors, resulting in high performance, sustainability and cost reduction.

Business needs
As it grew over the years, Northwestern Mutual had experienced infrastructure sprawl across its data centers. Aging hardware and software from different vendors created inefficiencies and increased expenses. The firm needed to modernize its infrastructure for improved performance, enhanced integration, sustainability and lower costs.

Business results
- Increased storage performance 40% over previous systems.
- Supports around 80% of the firm’s main infrastructure, including middleware, web applications and databases.
- Decreased server footprint by approximately 35% — reducing data center space and power costs.
- Enabled the firm to trim the time required to meet customer requests from weeks to days or hours.
- Slashed the time and resources required to migrate data by about 50%, delivering further cost savings.

Solutions at a glance
- Dell PowerEdge
- Dell PowerMax
- Dell VxRail
- Integrated Dell Remote Access Controller (iDRAC)
- Dell CloudIQ

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Sr. Director, Infrastructure & Cloud Services
Northwestern Mutual
Northwestern Mutual is a 167-year-old, Fortune 500 company, with $35 billion in revenue and $350 billion of total company assets. The firm offers a range of products, including life insurance, long-term care insurance, annuities, mutual funds and other investments.

With some of the highest ratings in the industry, Northwestern Mutual is among the most admired and trusted providers, relied on by more than five million policy owners and clients to navigate financial challenges in their lives.

Over the years, however, the firm had experienced significant IT infrastructure sprawl across its data centers. It amassed racks of hardware and software from a cross-section of vendors — and this was creating inefficiencies and unacceptable expenses.

“To overcome this, we partnered with Dell Technologies,” says Adel Bekhiet, senior director of infrastructure and cloud services at Northwestern Mutual. “Our goals were to simplify and standardize our IT infrastructure. Dell Technologies helps in all phases of the process — from assessment and scoping to implementation.”

Higher performance and greater efficiencies

Northwestern Mutual is on an innovation journey and the firm expects modernization to accelerate going forward, thanks to its multicloud strategy. The firm has deployed pods of infrastructure on-premises consisting of Dell PowerEdge servers and Dell PowerMax storage.

“Dell PowerEdge and Dell PowerMax together deliver exceptional performance and efficiency,” Bekhiet remarks. “PowerMax alone improved our performance by up to 40%. In addition, PowerEdge provides us with significant cost savings on power and cooling. For us, this translates into sustainability and a higher return on our investment.”

PowerEdge servers power the primary infrastructure for Northwestern Mutual’s virtualized environment, running as much as 80% of the firm’s middleware, web applications and middle tier databases such as Microsoft SQL Server, Sybase and Informatica. Dell OpenManage and the Integrated Dell Remote Access Controller (iDRAC) — which is embedded in every PowerEdge server — streamline management, enabling the firm’s IT team to deploy, update and monitor IT operations more efficiently.

Plus, with PowerEdge’s high density and smaller form factor, Northwestern Mutual has consolidated its overall footprint by approximately 35%, decreasing to around 300 servers from 460.

“PowerEdge enables us to consume much less rack space,” notes Bekhiet. “The eight-node pod clusters are repeatable and highly cost-efficient.”

Responsiveness for critical applications

PowerMax is the perfect fit for the firm because of the systems’ various storage tiers and range of performance offering response times as low as 60 to 100 milliseconds.

“Many of our critical core applications run on PowerMax,” Bekhiet explains. “With our previous provider, responses could take multiple seconds. PowerMax ensures that our bread-and-butter applications provide the highest IOPS and six nines of availability our users require.”

Built-in capabilities right out of the box with PowerMax have streamlined integration and provided immediate efficiency advantages. For example, the firm uses PowerMax SRDF to replicate data among arrays, whether within the same data center or miles away. Powerful compression technology has produced up to 4:1 data reduction rates for PowerMax.

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“The proactive insights available from Dell CloudIQ have also proven valuable — including health score checks and predictive analytics — so we can stay on top of any issues,” adds Bekhiet.

Further, as Northwestern Mutual grows and moves to the PowerMax 8500, it will speed up the firm’s implementation of a Zero Trust security model through the systems’ built-in encryption and highest levels of cybersecurity including hardware root-of-trust, multifactor authentication and ransomware anomaly detection and alerting.

Tight integration saves time

Northwestern Mutual relies on a virtualized environment supported by VMware vSphere. VMware Cloud Foundation (VCF) on VxRail enables the firm’s IT staff to efficiently manage virtual customer desktop needs for various workloads, delivering cloud benefits for solutions such as its VMware Horizon-based virtual desktop infrastructure (VDI) for the firm’s remote users.

“We had an aging desktop environment,” Bekhiet relates. “VMware’s tight integration with both PowerEdge and PowerMax let us hit the ground running — reducing our time and resource usage by about 50% in migrating our data and workloads from older and aging systems.”

He continues, “It used to take weeks to meet customer requests. With the integration of PowerEdge and PowerMax, we’re able to reduce that to days or even hours in many cases.”

A beneficial partnership

Bekhiet’s team continues to work closely with their Dell Technologies counterparts to address requirements for the financial services firm.

Concludes Bekhiet, “There’s a level of synergy in how we engage with the Dell Technologies team. We have a true strategic partnership. Dell plays a key role in every phase of our innovation and modernization journey.”

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