Callaway Golf accelerates production planning with SAP HANA on Lenovo

Callaway Golf Company is an American global sporting goods company that designs, manufactures, markets and sells golf equipment, golf accessories and golf lifestyle-related products worldwide. Based in Carlsbad, California, the company is one of the largest makers of golf clubs in the world, with revenues approaching USD 900 million annually.

Teeing off

Driven by growing consumer expectations and agile new market entrants, today's retail market moves faster than ever before. Customers increasingly expect to be able to order customized products and have them delivered within short timescales, and for Callaway this was putting unprecedented pressure on planning and logistics processes.

Michael Nevlida, Senior Director of Global IT Infrastructure & Support Services, comments: "Callaway needed to better understand the changing position of key metrics in planning, manufacturing and logistics, so that we could keep pace with customer demands. We now compete against very fast moving, born-on-the web businesses, and we have to be able to ship the right products exactly when our customers need them. However, some key reports were taking more than 32 hours to run, which meant that by the time decision-makers had the information they wanted, it was already out of date."

Hal West, Senior Global IT Infrastructure Manager, adds: "There was no specific bottleneck in our existing hardware or software. The long run-time was simply down to the quantity of data and the number of steps involved in sourcing, exporting, transforming and transferring that data. We needed to bring those 32-hour report times right down and put aggressive targets in place."

To enable faster operational planning, Callaway needed to accelerate its SAP® Advanced Planning and Optimization (APO) system, which was at that time running on the IBM Power Systems platform with Oracle databases. Horace Jones, Principal UNIX and Storage Administrator, says: "We were happy with AIX, Power and Oracle, but no amount of extra investment in that architecture could give us the performance boost we needed. We recognized that migrating to SAP HANA® in-memory technology was the only way to achieve our business objectives."

Challenge

In an age of high-speed retail and customized orders, Callaway Golf needed to accelerate key production planning reports to stay ahead of competitors.

Choosing the global leader

Knowing that SAP was planning to move all installed customers to SAP HANA within five years, Callaway decided to take the plunge and migrate not only its APO systems, but also its SAP ERP Central Component (ECC) and SAP Business Warehouse (BW) systems. The company ran a detailed RFP process based on a complex scoring matrix, ultimately choosing Lenovo to supply the platform for its new SAP landscape on SAP HANA.

"The Lenovo solution offered the performance and scalability we needed, backed by the highest levels of SAP HANA expertise and support that we saw in the market," recalls Michael Nevlida. "Lenovo's large share of the global SAP HANA install base gave us a great deal of confidence, as did seeing large numbers of their servers when we toured the SAP HANA Enterprise Cloud data center. Finally, we were already working with Lenovo as a supplier for desktops and laptops, and it always makes sense to us to minimize the total number of suppliers by extending our footprint with those that we like and trust."

Solution

Migrating its SAP APO, BW and ERP systems to an SAP HANA in-memory database on Lenovo servers enabled the company to dramatically cut report run-times from hours to minutes.

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For the SAP HANA database servers, Callaway deployed four Lenovo System x3950 X6 servers, each with eight 18-core Intel® Xeon® E7-8880 v3 processors, and one System x3850 X6 server with four Intel Xeon E7-8880 v3 processors. The servers each have 4TB of memory, which can be upgraded to 6TB within the existing physical footprint. For the SAP application servers, which run virtualized on VMware to minimize the number of physical machines required, Callaway deployed eight Lenovo System x3850 X6 servers, each with two Intel Xeon E5-2600 v4 processors. Red Hat Enterprise Linux is the operating system for both parts of the solution. To increase flexibility and resilience in a disaster scenario, Callaway configured its production and quality assurance (QA) servers to be physically identical, so that the QA servers can be moved seamlessly into production if required.

"The deployment ran very smoothly," says Hal West. "A key objective was to minimize the disruption to the business, and we certainly achieved that. On Day 1 of the go-live, we were able to process the highest level of daily transactions that month without any hitches."

Horace Jones adds, "When we completed the migration, the only impact on users was that some people thought the system was broken, because things that previously took 10 minutes were running instantly! In fact, things went so well that it was easy to forget what a revolutionary project this was: we were one of the first companies globally to migrate SAP APO to SAP HANA."

Accelerating business

The migration to SAP HANA on Lenovo servers, combined with extensive work to optimize data and queries, enabled Callaway to cut generation time for its largest APO reports from 32 hours to just seven within the first month of operation. The company has planned further optimization phases that would reduce report generation time even further.

By dramatically reducing the time taken to produce planning reports, the Lenovo solution empowers Callaway decision-makers to analyze production plans throughout the week, making the business much more agile and responsive.

Key solution components

Industry

Retail

Applications

SAP® HANA® platform, SAP Advanced Planning and Optimization, SAP Business Warehouse, SAP ERP Central Component

Hardware

Lenovo Solution for SAP HANA, Lenovo System x3950 X6 with Intel® Xeon® processor E7 family, Lenovo System x3850 X6 with Intel Xeon processor E7 family, Lenovo System x3650 M5 with Intel Xeon processor E5 family

Software

Red Hat Enterprise Linux for SAP HANA, VMware

Services

Lenovo configuration and software installation services, Lenovo extended warranty 24x7, hour response time

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Hal West
Senior Global IT Infrastructure Manager
Callaway Golf

Benefits

- **Reduces the time taken to produce planning reports**
- **Empowers Callaway decision-makers to analyze production plans throughout the week**
- **Enables more agile, real-time business decision-making**

"We've been live only for a very short time, and already the solution is changing the way we think and work at Callaway," says Michael Nevlida. "Our employees were accustomed to requesting a report and then doing something else for a few hours while it ran. In many cases, the results now come back in a matter of minutes, so people are adjusting their whole outlook on how they organize their working week. Running on the fly and making real-time decisions is now a possibility. And we're talking about serving big wholesalers placing million-dollar orders: the ability to serve these customers faster is extremely valuable."

One benefit of the SAP HANA migration project was that the main SAP database size was reduced by approximately 50 percent. This not only enabled Callaway to reduce its initial investment in memory for the SAP HANA platform, but also makes backing up, storing and recovering the database much faster and easier. Horace Jones adds, "With a columnar database held entirely in memory, transaction processing is faster and users enjoy snappier response times from all our SAP applications."

Migrating from mid-range Unix servers and Oracle databases to Lenovo servers running Linux and SAP HANA has also produced significant cost reductions for Callaway.

Says Hal West: “The cost savings are extremely impressive, but ultimately this project was about enabling the Callaway business to work better and smarter. We already have one of the fastest turnaround times in the industry, and we’re always looking to build on that through faster forecasting and analysis.”

Michael Nevlida adds: “Having faster insight from SAP APO means that we can run leaner in terms of buying raw materials and holding stock, as well as how we physically lay out the distribution center. So when customers ask us, ‘Can you build this for me and deliver by the end of the week?’, we can now make that happen.”

He concludes: “Choosing Lenovo as our infrastructure partner for SAP HANA was the right decision for Callaway: we would make the same choice again today, because we’ve achieved everything we wanted in terms of flexibility, scalability, reliability and performance. As we look to grow our market share and build brand momentum, having more timely and accurate operational insight from SAP HANA enables Callaway to analyze and plan more efficiently. Ultimately, that means we do a better job of getting the right orders to the right customers at the right time.”

For more information

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To learn more about Lenovo Solution for SAP HANA, visit: lenovo.com/sap/hana

For more information about Callaway Golf, visit: www.callawaygolf.com or connect with @CallawayGolf

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