Global enterprise builds an SAP S/4HANA environment on Dell EMC infrastructure

Business needs
Wihuri needed a reliable, cost-effective hardware platform to support a new SAP S/4HANA deployment.

Solutions at a glance
- SAP S/4HANA
- Dell EMC™ PowerEdge™ R920 and R930 rack servers
- Dell Compellent SC2000 storage system
- VMware virtualization

Business results
- Faster reporting
- Reduced costs for software licenses

Some reporting might run 100x Faster
The project came in early and Under Budget
110 years of leadership

Wihuri is a global Finnish industry and trade conglomerate engaged in packaging, daily goods wholesale, technical trade and aviation. Wihuri Group employs 5,000 people and operates in 30 countries. During its 110-year history, Wihuri has grown from a small family business into a diversified global enterprise. The Wihuri reputation and commitment have made each of its divisions into a leader in its own respective field.

Moving up to SAP S/4HANA

Each of Wihuri’s main business units has an SAP application system of its own. Wihuri also has SAP services and systems shared by all business units. All systems run on a shared platform hosted by Wihuri IT. Prior to its SAP S/4HANA migration, Wihuri was running all of its SAP systems on a Microsoft SQL Server database.

Wihuri made the decision to invest in new SAP S/4HANA technology in 2015, launching a program called W2H, for Wihuri to HANA. SAP S/4HANA is a real-time enterprise resource management suite for the digital business. It is built on SAP’s advanced in-memory platform, SAP HANA, and offers a personalized, consumer-grade user experience with SAP Fiori applications. SAP S/4HANA is deployable in the cloud or on premises.

The decision to move up to SAP S/4HANA was driven in part by the upcoming end of support for SAP R/3 and by SAP’s focus on S/4HANA, including investment in new technology, such as SAP Fiori, SAP Lumira Server and SAP Digital CRM, according to Wihuri Director of Corporate IT Juha-Matti Heino. In addition, Wihuri’s IT leaders saw advantage in migrating to an SAP HANA database due to SQL license costs and some issues with slow reports.

The IT infrastructure

Wihuri has two data centers, both of which are in Finland. One is on premises and one is hosted with Wihuri-owned gear in it. The entire infrastructure has more than 300 servers, most of which are virtualized with VMware software.

Wihuri’s SAP applications and database servers are mostly on their own VLAN, separate from the company’s other infrastructure. In addition, the company has a separate network VLAN for SAP HANA system replication. This network isolation enhances data security and helps ensure that traffic on the office network doesn’t impact the SAP HANA servers.

The company maintains two SAP S/4HANA installations, both based on Dell EMC™ PowerEdge™ R920 and R930 rack servers. Each of the installations has five servers with 2.5TB of RAM and 72 Intel® Xeon® processor cores in four sockets. The servers run the SUSE Linux Enterprise Server for SAP Applications operating system — an optimized OS platform that is validated and certified by SAP — for all SAP HANA, S/4HANA and SAP NetWeaver solutions.

Of the 10 servers, two are used for development systems, four are used for test and sandbox systems, and four are used for production systems. Data is stored in a Dell Compellent SC2000 storage system.

Realizing the benefits

The move to the SAP S/4HANA platform is yielding a wide range of cost and business benefits. On the cost front, Wihuri has reduced its database license costs and consolidated its hardware, putting more environments in the same platform. It has also realized savings on application support and maintenance costs. In another important benefit, the company is achieving faster database recovery, moving from four to eight hours to less than an hour, and faster adoption of IT innovations provided by SAP and its partners.

On the business front, the SAP S/4HANA platform delivers more real-time business information and analytics for decision making, while enabling business process execution through quick transactions.

“HANA is in-memory technology, which means the whole database is written to the server’s memory,” says Wihuri IT Project Manager Klaus Kivelä. “Those servers are much bigger than normal servers. They have a couple of terabytes of memory. With the database in server memory, it’s very fast, very available for users, because it doesn’t have to be read from disk. So that means systems should run faster. Some reporting might run 100 times faster than previously.”

The lightning-fast system speed allows Wihuri’s IT administrators to simplify not only how they run the applications but how they use them on a day-to-day basis.
Working with Dell EMC

Wihuri’s IT team initially did a proof of concept for a system based on IBM POWER8 processor technology. When that PoC fell short of the company’s expectations, Wihuri chose to work with Dell EMC, Heino says. “We choose to work with Dell EMC for three key reasons: delivery reliability, performance and price.”

“Dell promised that they had a solution that is working, that will provide the performance we need, and that they had the capability to provide all the servers on time,” he says. “And, actually, they did it much faster than on time. It was really fast; we had our servers in about a week. So Dell EMC showed the best delivery.”

Heino notes that the company’s IT leaders were also impressed with Dell EMC’s close relationship with Intel, which provides the processors for the PowerEdge R920 and R930 rack servers. “They work very cooperatively.”

“The environment has worked well,” Kivelä adds. “Beyond some memory issues in the servers that were fixed by Dell EMC maintenance professionals, it has been working very well. It has been very reliable for us in our first 16 months with the solution.”

In many cases in the IT world, managers are thrilled when they bring a major project to a conclusion on time and on budget. But in this case, the Wihuri IT leaders did even better.

“The project actually ended before the timeline, and it was cheaper than budgeted,” Kivelä notes. “The scope didn’t change during the project. In many ways it was a success story if you compare it to many other IT projects that quite often exceed the budget. We actually went low, below the budget.”