

SAP HANA Is a Journey, Not a Destination

3 Use Cases Driving the Technology's Unprecedented Growth

Q&A with Dan Kearnan, SAP Americas



Dan Kearnan (dan.kearnan@sap.com) is Senior Director of Marketing for Data Warehousing and SAP HANA at SAP Americas. With more than 15 years of experience working with large and midsize companies to help define and plan their business intelligence (BI) strategies, Dan brings extensive knowledge of BI, enterprise resource planning, and data warehousing applications to his current role.

SAP HANA has come a long way very quickly. What started as a concept on the back of a napkin has become the fastest-growing SAP product of all time. *SAPinsider* recently spoke with Dan Kearnan, Senior Director of Marketing for Data Warehousing and SAP HANA, who shared his thoughts on how SAP HANA has evolved at an accelerated rate — and where it's going.

Q: Let's start with the release of SAP HANA into the market in 2010. What was the impetus behind its development?

A: Companies were struggling with staggering amounts of enterprise data and heightened user demands for faster access to real-time information. Lacking insight into data, users could not uncover new opportunities or gain visibility into certain areas of the business.

Enter in-memory technology, which gives companies the ability to store massive data in main memory. SAP HANA emerged as a high-performance in-memory appliance, enabling organizations to access and analyze data within their back-end applications in ways that aren't possible with a traditional disk-based data storage system.

This describes the first use case for SAP HANA — as a standalone appliance used to accelerate analytics and business intelligence and give companies deeper insights into their most valuable asset: their data. SAP customers rapidly adopted the solution — it boasts the fastest product growth in SAP history — and more than 300 companies are currently using SAP HANA as a tool for accelerating analytics.

For example, biotech company MKI relies on SAP HANA to accelerate genetic sequencing and analysis for cancer research and treatment. The

company can now access complex query results in a fraction of the time it used to take. It is also leveraging SAP HANA's speed to rapidly analyze data to develop and deliver drugs for trials.

Q: What's the next stage in the evolution of SAP HANA?

A: Moving beyond serving as a standalone appliance for accelerating analytics, SAP HANA is now available as an in-memory database. By placing applications on the SAP HANA database, SAP is breaking down the paradigm that applications need to run on a disk-based database.

The first application to run on SAP HANA as a database is SAP NetWeaver Business Warehouse (SAP NetWeaver BW).¹ This is exciting for SAP customers who have invested in SAP NetWeaver BW, but have often underutilized it.

Running SAP NetWeaver BW on SAP HANA speeds IT's ability to quickly deliver valuable information to the end users who need it. IT now has a supercharged environment that allows it to be more flexible, nimble, and adaptive to business needs. By powering SAP NetWeaver BW with SAP HANA, customers can dramatically improve performance, accelerate data loads, reduce efforts

¹ SAP Business Planning and Consolidation also now runs on SAP HANA.

SAP HANA will inevitably be the database platform for all of SAP's applications going forward.

to maintain SAP NetWeaver BW, and streamline the IT landscape.

For example, Nongfu Spring, a beverage producer and distributor, moved its instance of SAP NetWeaver BW onto SAP HANA to address the system performance issues it faced with its existing database as data volumes grew. By migrating to the SAP HANA database, this early adopter experienced benefits such as dramatically faster data loads and DSO activation, faster delivery of reports to end users, and reduced IT workloads and overall maintenance tasks for SAP NetWeaver BW. As a result of moving SAP NetWeaver BW onto SAP HANA and storing its data in memory, the company's entire data volume is one-third smaller than when it was stored on its previous database.

Q: You've outlined the first two use cases for SAP HANA: as an in-memory appliance and an in-memory database. Can you tell readers about a third use case?

A: Now, SAP HANA can also serve as an application platform on which partners, customers, and SAP can build out new applications that were "unthinkable" in the past.

In this case, I am referring to building out innovative applications that leverage the power of in-memory data. Previously, applications were constrained by the need to develop calculations to compute large volumes of data very quickly. SAP HANA has no such constraints.

Q: Can you offer an example of an application that can be built out using the SAP HANA platform?

A: SAP Smart Meter Analytics is an example of an innovative application that leverages SAP HANA to transform large volumes of smart meter data into powerful insights. By building this application out on SAP HANA, a company can collect data from thousands of smart meters, process the data as it comes in from customers' homes, perform calculations on the data at the SAP HANA level, and enable the application on top of the platform to display the information in a meaningful way. End users get more than a simple, static report — they get real-time, actionable data. The company can then better understand customer usage and, for example, develop an energy savings program broken down by peak and non-peak usage times.

Let's look at another example. Hilti, a manufacturer of small machines and hand tools, built an application on SAP HANA that allows it to perform detailed margin analysis on its thousands of products. Leveraging SAP HANA, the company can compile data on its various product lines and analyze the hundreds of variables that affect the margin associated with each product. Users can slice and dice the data and then look at what-if scenarios to understand how different variables might affect the product margins. As a result, the company can align its sales strategy with its marketing campaigns to take advantage of these new insights. In the past, this was unthinkable because the customer was hindered by the amount of data and the limitations of technology. However, SAP HANA is not slowed by data volume or data processing, making such rapid slicing and dicing possible.

With this third use case — SAP HANA as an application platform — we will see more applications built by SAP, our partners, and our customers that will empower companies to leverage their data more effectively and see into their business in different ways.

Q: Does the journey end there?

A: SAP HANA's journey has not reached its conclusion — far from it, in fact. More applications, such as SAP Advanced Planning & Optimization (SAP APO), will be enabled by the SAP HANA database in the near future. We also plan to move our cloud applications onto an SAP HANA cloud database.

Most significantly, SAP co-founder Hasso Plattner envisions SAP HANA as a single data platform for both analytical *and* transactional data that will run the entire SAP Business Suite, as well as provide an analytical foundation to understand the data by getting data in and getting it out.

At this point, we are adept at pulling data out of the in-memory database; we are now working on the ability to insert data into it. We're getting there, and the next big step in that direction is the pilot ramp-up release of running the full SAP Business Suite on SAP HANA, scheduled for the end of this year — a step that originally wasn't thought possible until 2014.

Visit www.experiencesaphana.com for more information about SAP HANA's journey. ■