

SAP HANA: In-Memory Technology as Business Enabler featuring Product Cost Prediction and Simulation

Rolf P. B. Sieberg

SAP AG
Dietmar Hopp Allee 16
69190 Walldorf
Germany
rolf.sieberg@sap.com

Abstract: SAP HANA is an in-memory platform for real-time analytics and applications. High data compression in columnar storage, massive parallel processing and in-memory computing enable extremely fast response times even for big data volumes. Thus the door is open for a wide range of new business processes and analytics.

One example for an interesting area of application is Product Cost Prediction and Simulation. Starting out from past and current product costs - as stored typically in an ERP system - one can predict cost changes, margin impacts and procurement requirements for potential future market conditions. Because of HANA's calculation speed, on-the-fly simulations and what-if analyses can be carried out.

Such investigations are particularly interesting for the consumer products industry: Here costs of goods sold are usually highly dependent on prices for commodities and raw materials. Calculating the impact of a commodity such as oil on the total cost and margin of an entire company is most often quite complex - also because of the high amount of data to be typically taken into account. With SAP HANA such computations can be carried out within seconds, allowing the simulation and exploration of many different future scenarios.