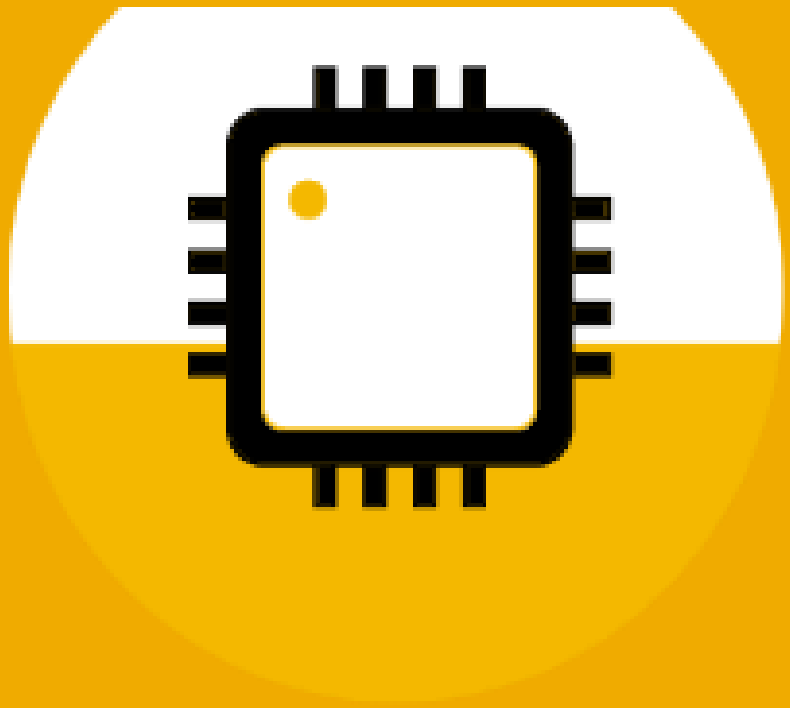
Virtual Sessions:
SAP In-Memory Computing I

24.February 2012

In-Memory



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SAP HANA Virtual Session H1 2012

Date	Theme
24. February 2012	SAP In-Memory Computing I
23. March 2012	SAP HANA Edge for Reseller
11. May 2012	SAP In-Memory Computing II
22. June 2012	SAP HANA Modeling

Session SAP In-Memory Computing I

- Date: 24.02.2012
- Target Audience: Channel Partner, Sales, Presales, Project Manager, Solution Consultant
- Objectives: The audience will get an overview about the SAP In-Memory Computing. They will get a first impression about how to explore and analyze vast quantities of data from virtually any data source — at the speed of thought.
- Agenda
  - What is SAP HANA?
  - Traditional versus SAP HANA
  - Speed of Business Change
  - Technical Background
  - Ideal Customer
  - beat me up
  - Summary
- Language: English
- Duration 40 min

SAP In-Memory Computing I
Agenda 24. February 2012

What is SAP HANA?

Traditional versus SAP HANA

Speed of Business Change

Technical Background

Ideal Customer

Beat me up

Summary

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What is SAP HANA

The SAP **H**igh-performance **An**alytic **A**ppliance (HANA) is a hardware and software combination that integrates a number of SAP components including an in-memory computing engine.

The SAP In-memory computing engine is the heart of SAP offerings that accelerate your business performance

In-Memory Computing

In-Memory Computing

Technology that allows the processing of massive quantities of real time data in the main memory of the server to provide immediate results from analyses and transactions

SAP In-Memory Computing I
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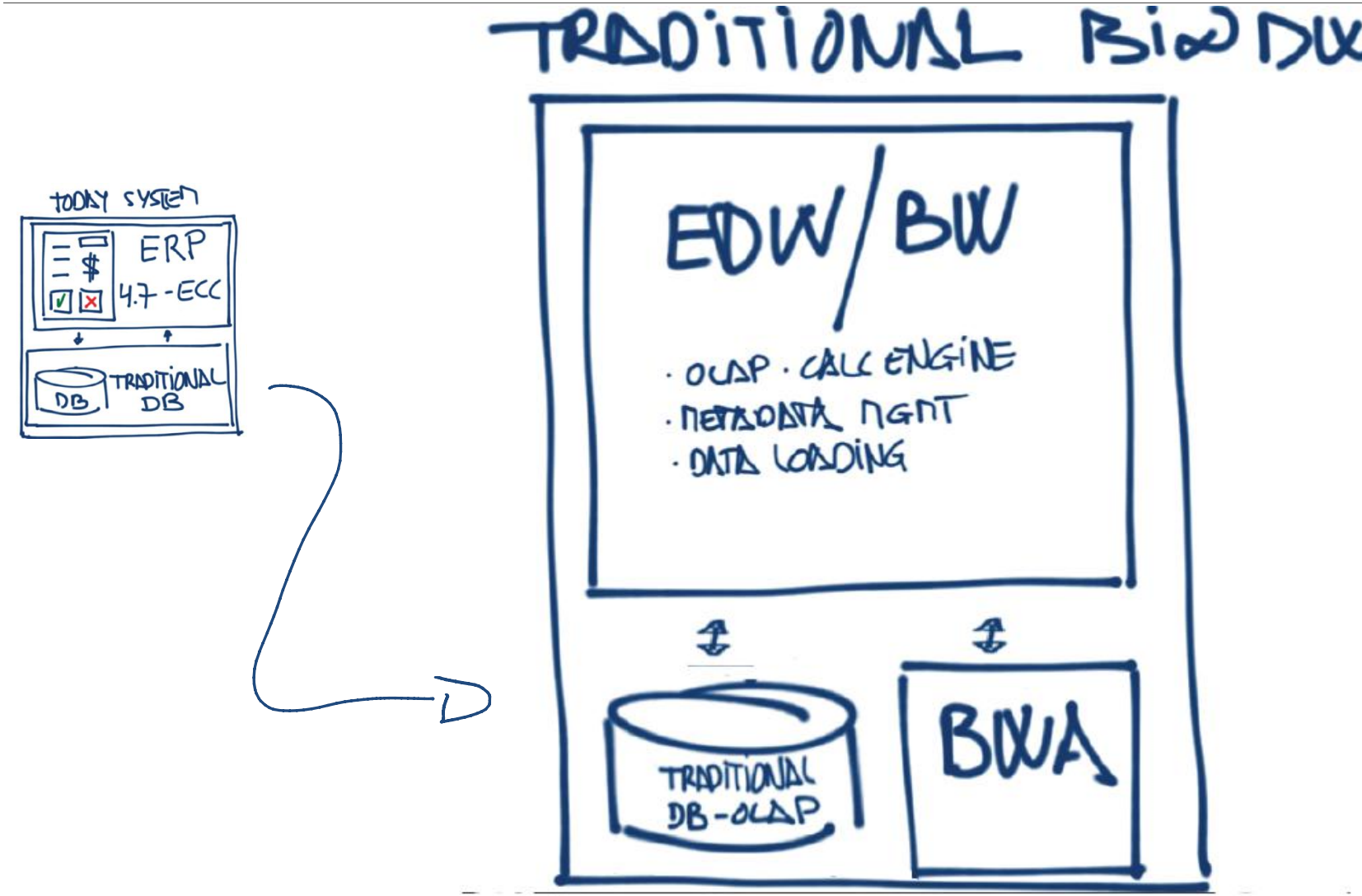
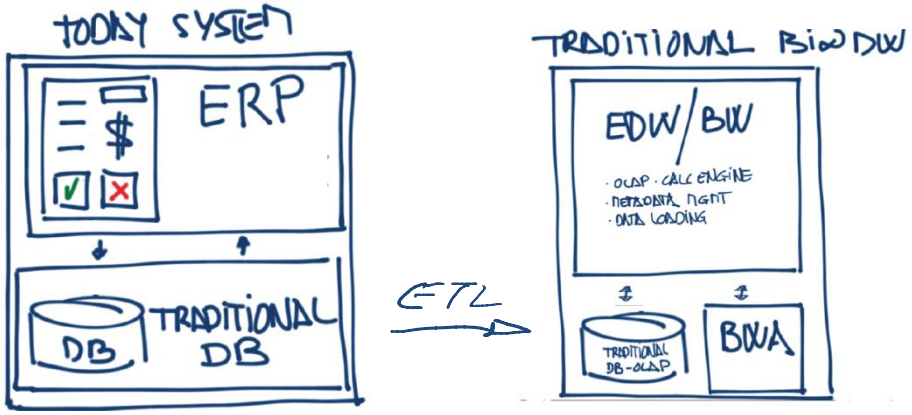
Traditional versus SAP HANA

Traditional versus SAP HANA



Traditional versus SAP HANA



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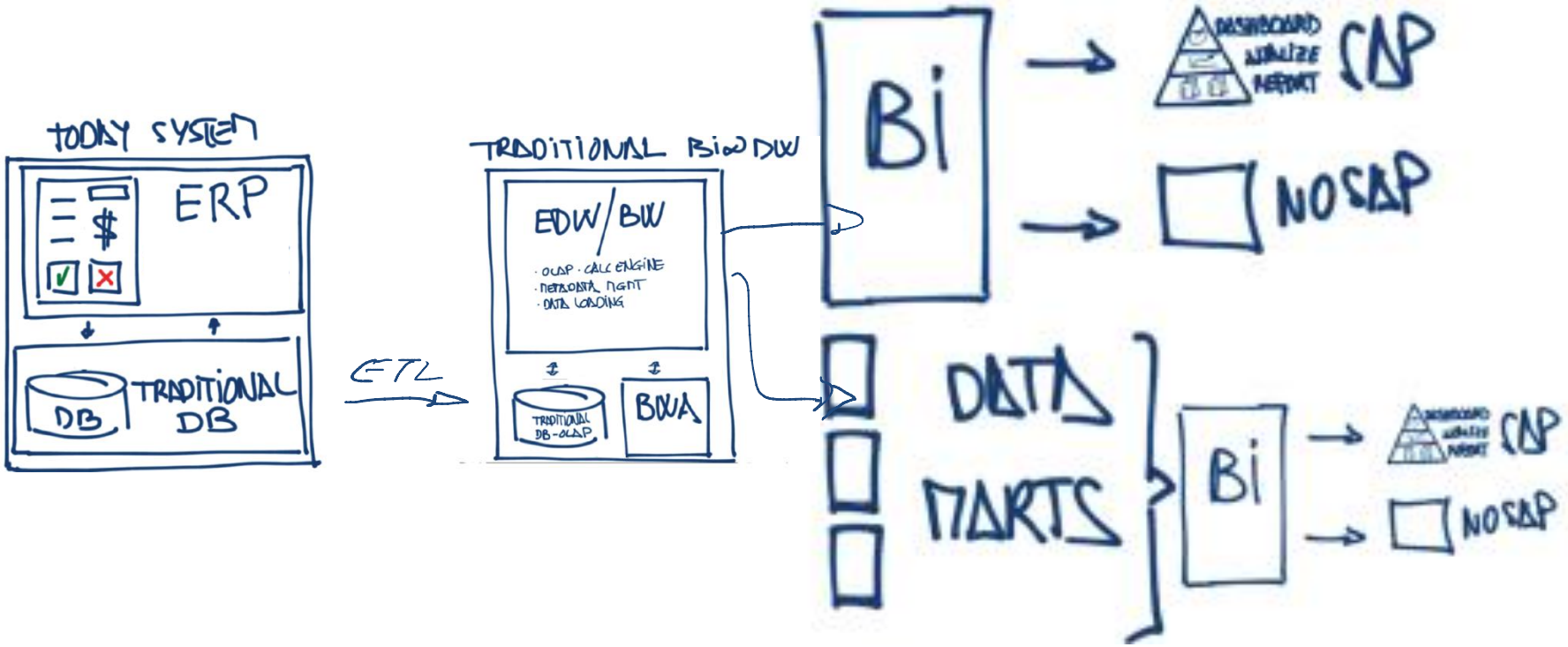

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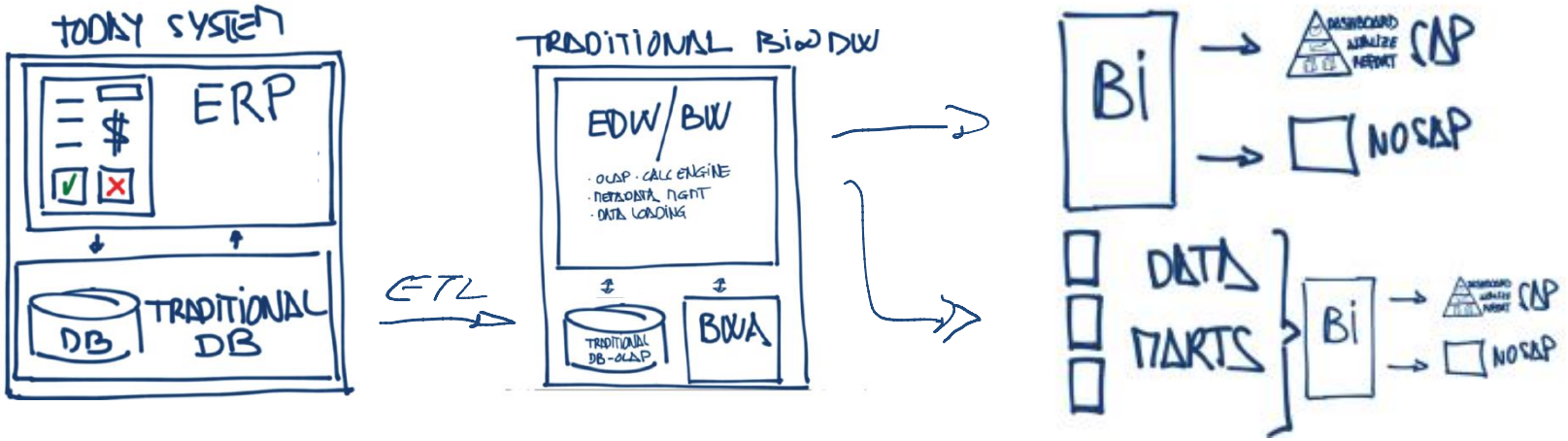

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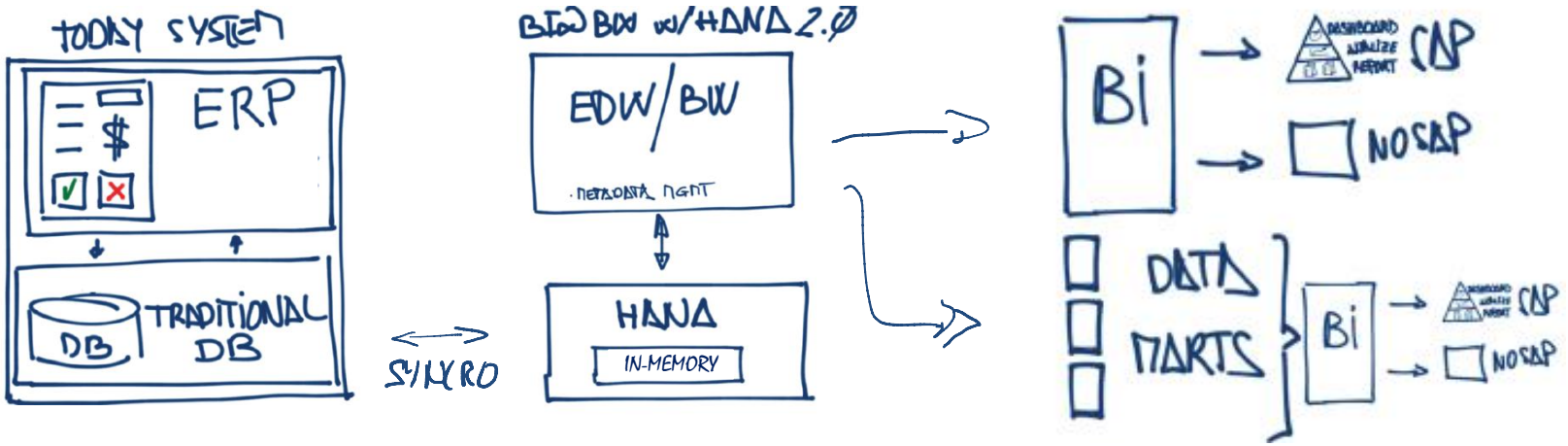

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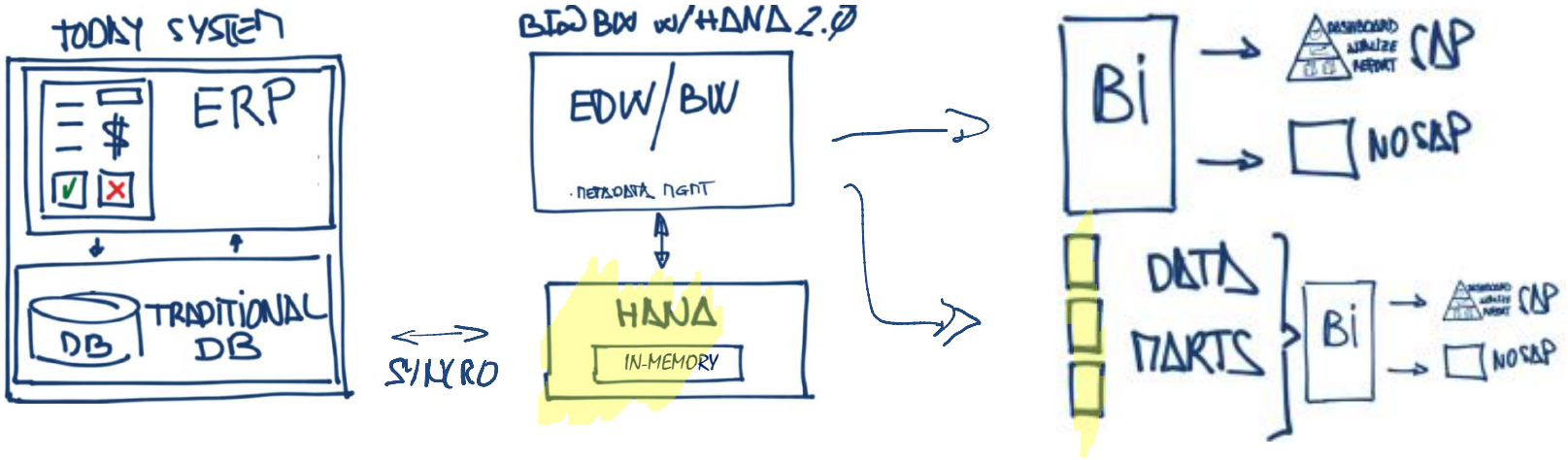

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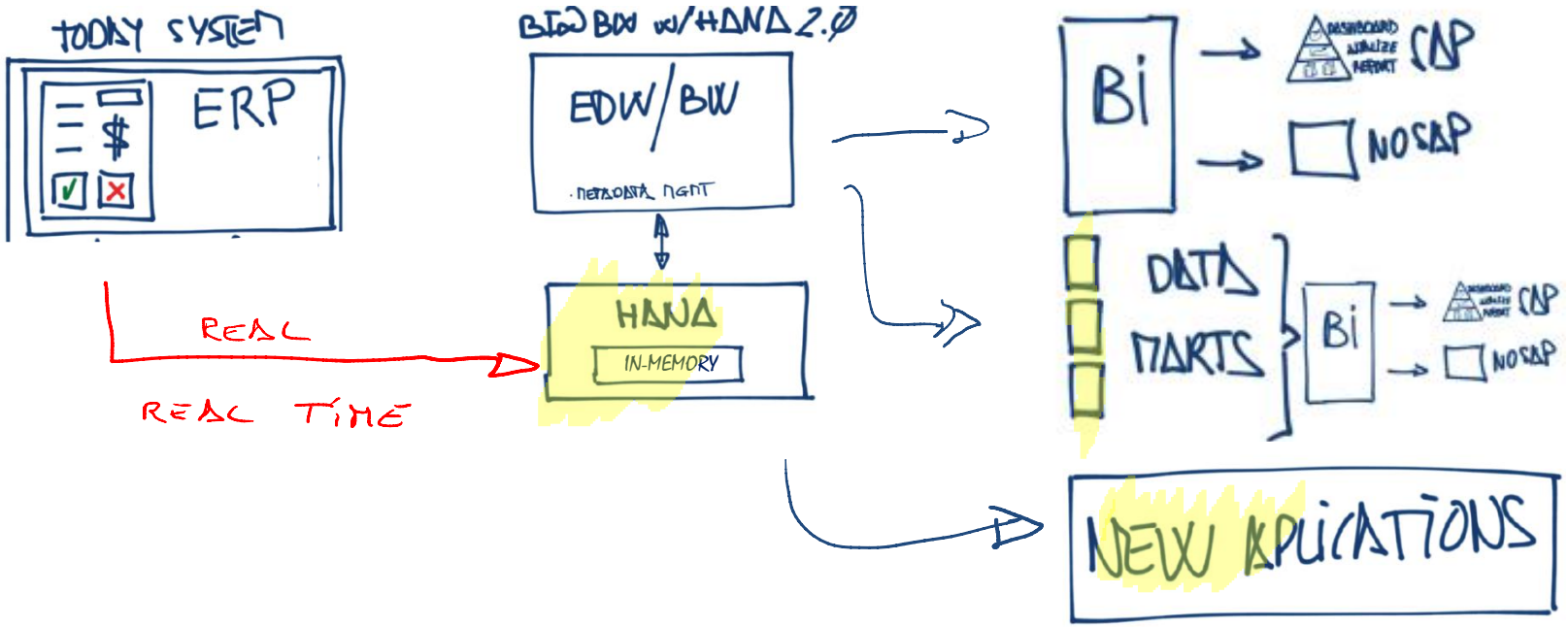

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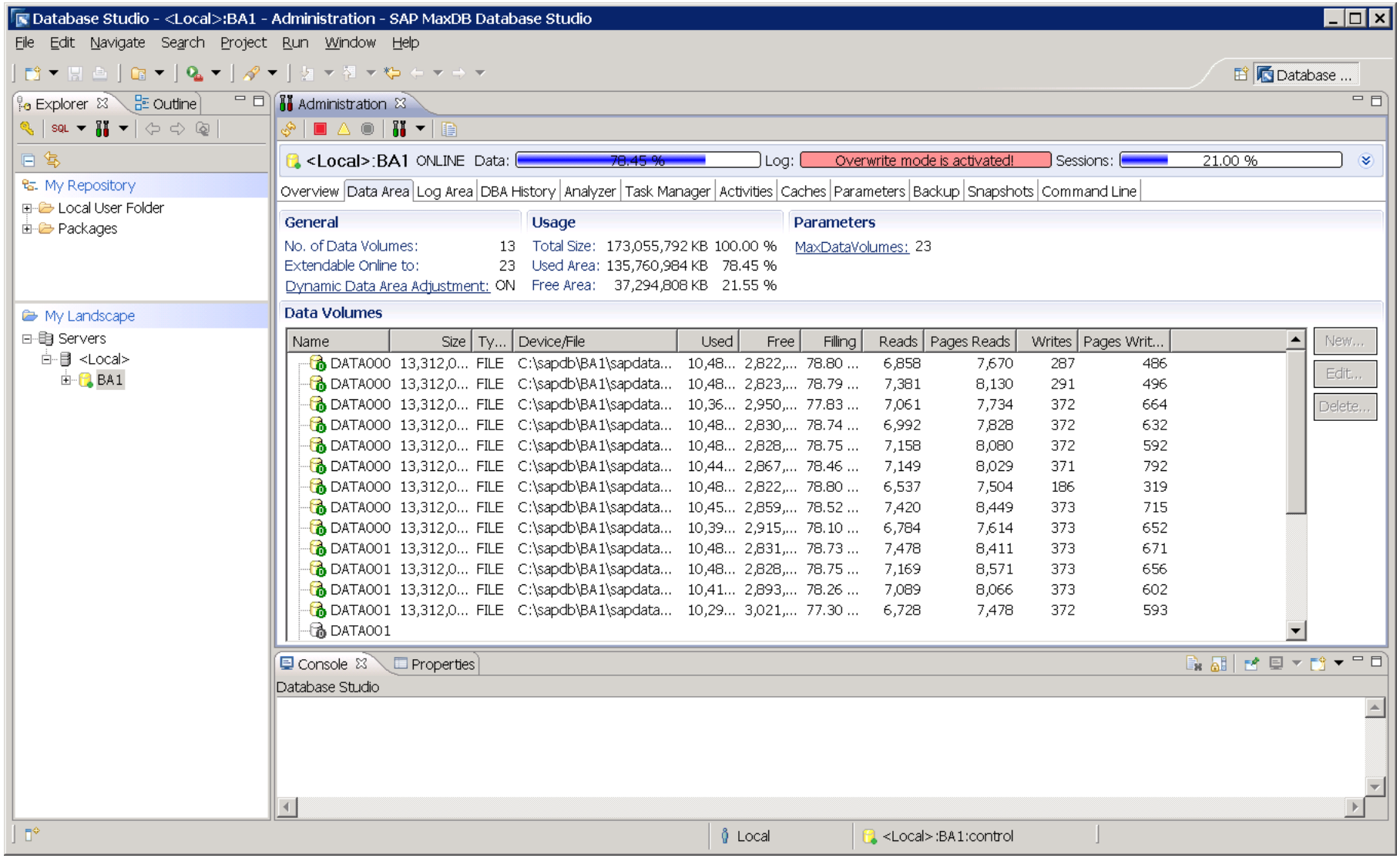

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Speed of Business Change

Years It Took to Reach a Market Audience of 50 Million

Radio

38 years

TV

13 years

Internet

4 years

iPod

3 years

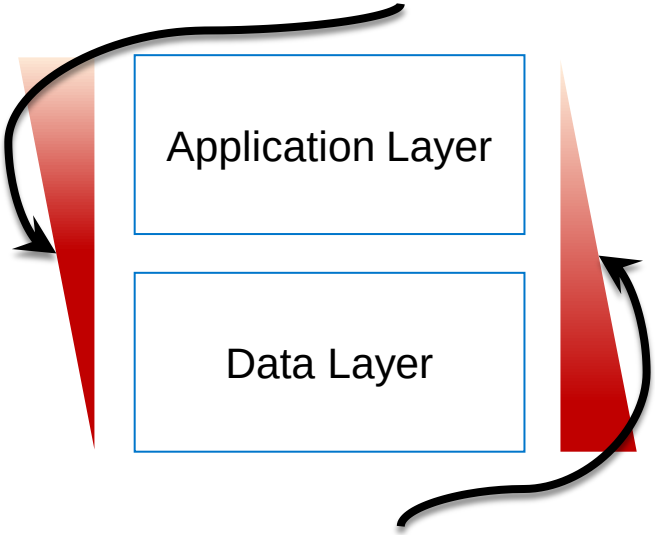
Facebook

2 years

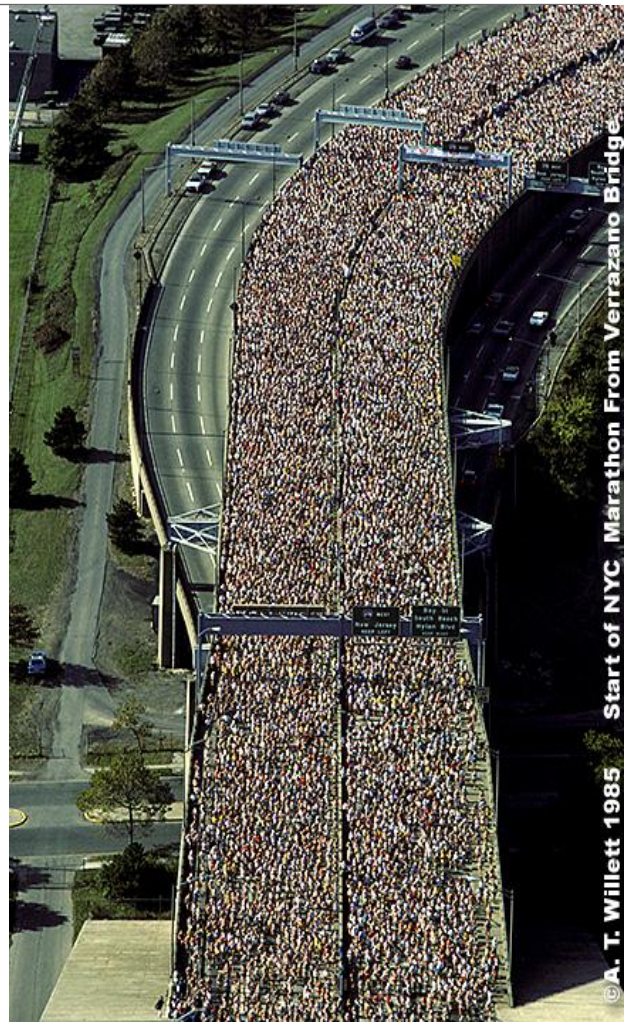
“The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday’s logic.” – Peter Drucker, 1980

SAP In-Memory computing

Today‘s applications execute many data intense operations in the application layer



High performant apps delegate data intense operations to the in-memory computing



In-Memory Computing Imperative

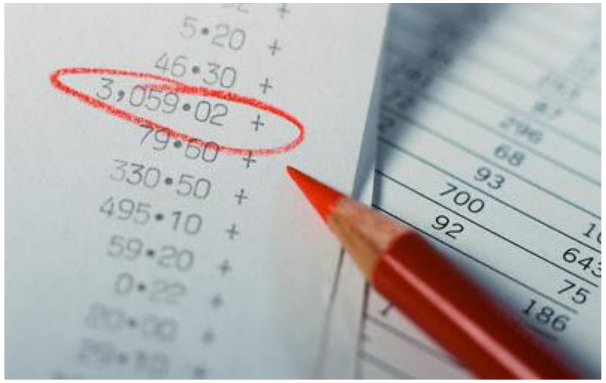
Avoid movement of detailed data calculate first, then move results

Why care about Real Time??

- **Real time Analytics**
- **Real time Decisionmaking**
- **Real time Execution**

Innovation Drives Success

Technology Innovations Enable Businesses to Become …

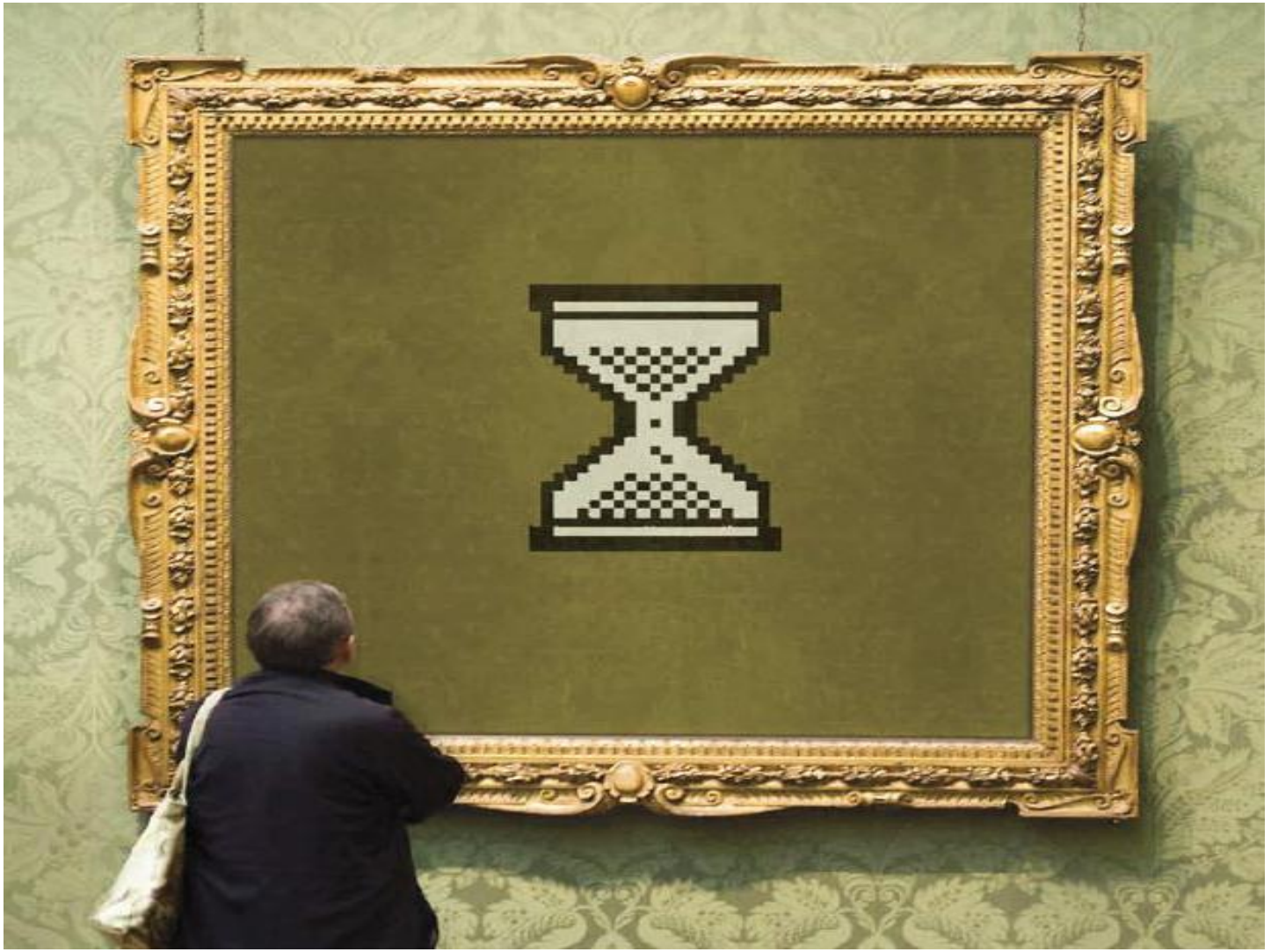


Fiscally and operationally efficient

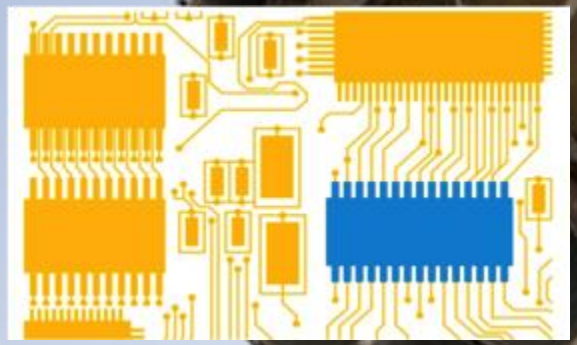
More flexible and quick to action with proper insight

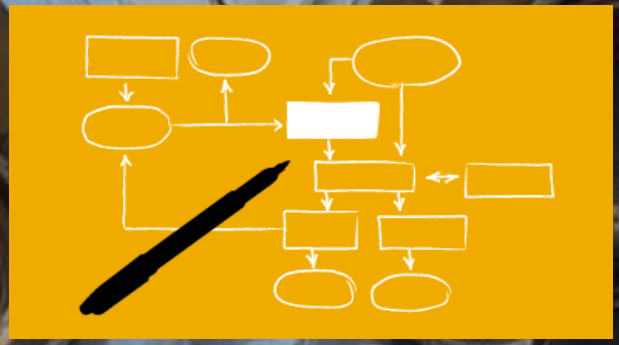
Empowered at the business user level to make smart decisions and act on these demand

The Art of Waiting…



Three strategies for running better using SAP HANA





Breakthrough analytics

Deliver real-time insight and manage ‘big data’ with the SAP HANA™ appliance with SAP BusinessObjects BI

Amazing new applications

Drive rapid innovation and meet strategic challenges with a new wave of in-memory business applications

Dramatic simplification

Reduce complexity to lower cost and accelerate value delivery from IT

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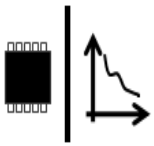
SAP InMemory Computing: Technical background

HW Technology Innovations

Multi-Core Architecture (8 x 8core CPU per blade)

Massive parallel scaling with many blades

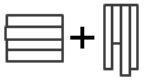


64bit address space – 2TB in current servers

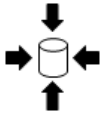
100GB/s data throughput

Dramatic decline in price/performance

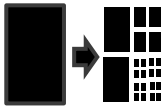
SAP SW Technology Innovations



Row and Column Store



Compression

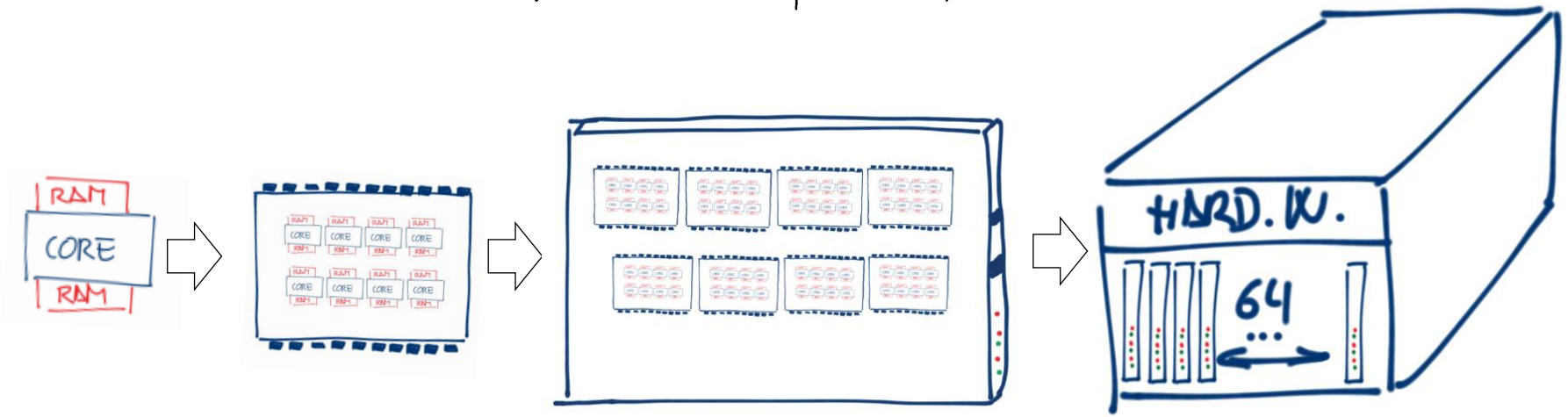


Partitioning

Without aggregates

Technical Background

Multi-Core Architecture (8 x 8core CPU per blade)



CORE + RAM

8 X CPU

8 X BLADE

64 X SERVER

Technical Background

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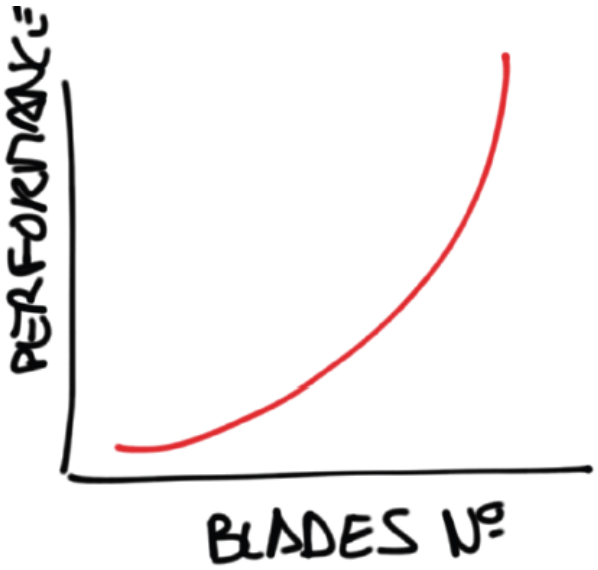
Massive parallel scaling with many blades



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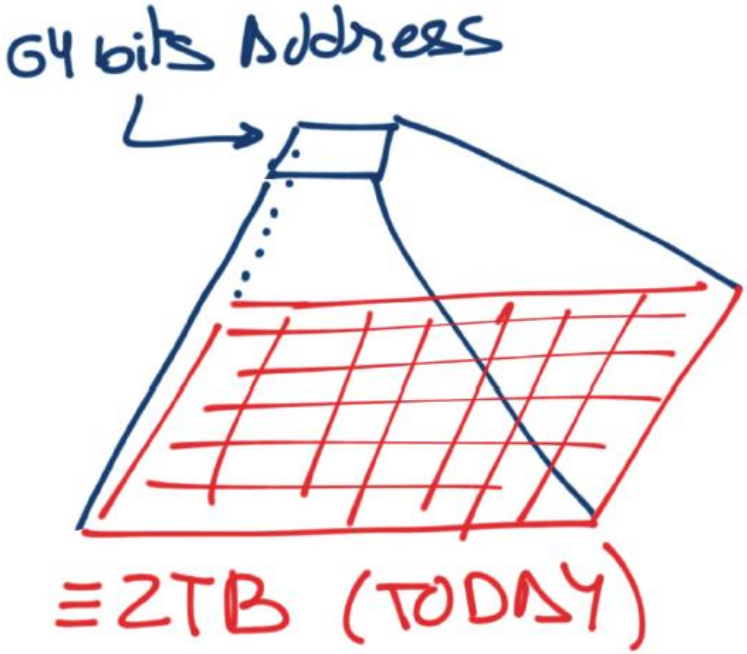
64bit ADDRESS SPACE → 2TB IN CURRENT SERVERS



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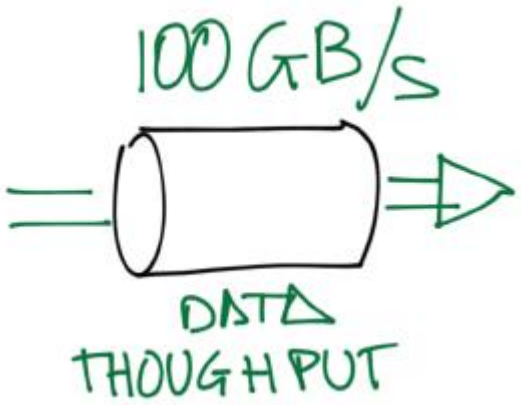
100 GB per second DATA THROUGHPUT



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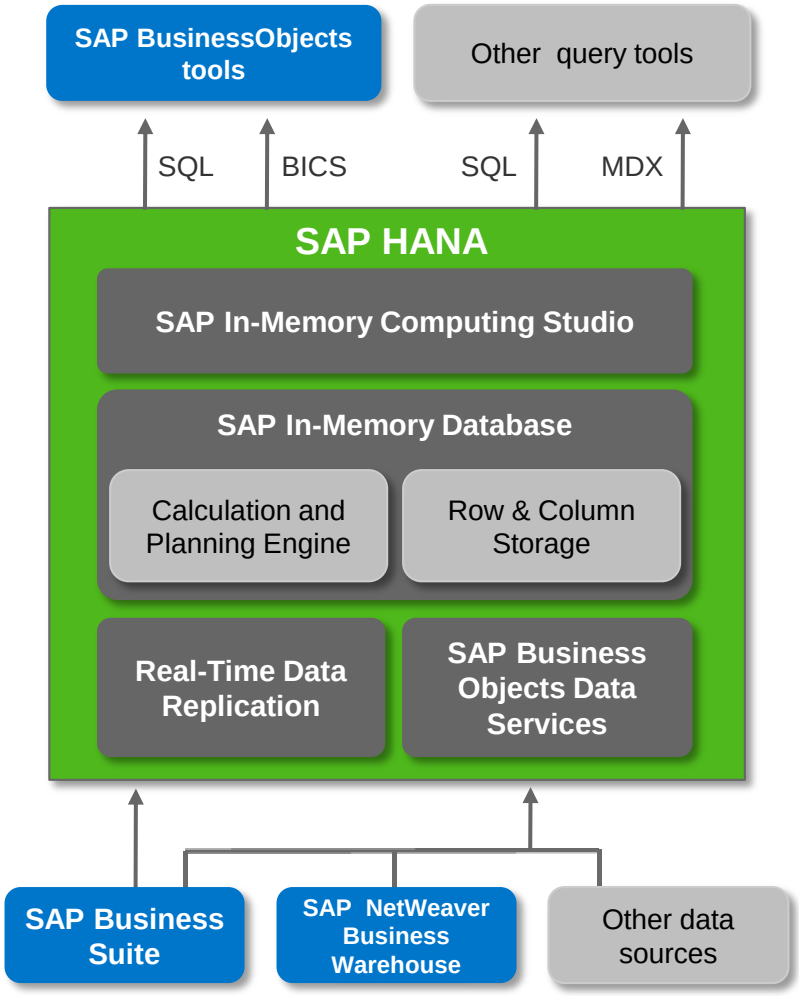
DRAMATIC DECLINE price/performance

SAP HANA Appliance Software



SAP HANA™

- In-Memory software + hardware (HP, IBM, Fujitsu, Cisco, Dell)
- Data Modeling and Data Management
- Real-time Data Replication
- SAP BusinessObjects Data Services for ETL capabilities from SAP Business Suite, SAP NetWeaver Business Warehouse (SAP NetWeaver BW), and 3rd Party Systems

Capabilities Enabled

- **Analyze information in real-time** at unprecedented speeds on large volumes of non-aggregated data
- **Create flexible analytic models** based on real-time and historic business data
- **Foundation for new category of applications** (e.g., planning, simulation) to significantly outperform current applications in category
- **Minimize data duplication**

SAP In-Memory Computing I
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Various SAP HANA Partner Opportunities

Co-Sell Opportunity

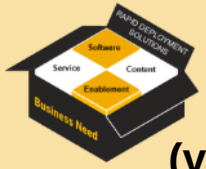
SAP HANA
Platform/Enterprise Editions

SAP HANA
Database Edition for SAP BW

Re-Sell Opportunity

SAP HANA
Edge Edition

+

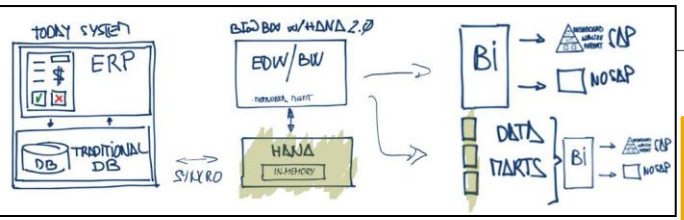


SAP HANA
Applications and Accelerators
(various high value RDS packages available and to come in 2012)


RDS packages available provide pre-defined, tested and documented content incl. service definition/fix price proposal

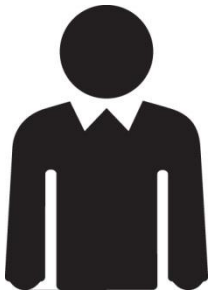
The Ideal Customer for SAP HANA Edge

ERP installed Base



Time-consuming financial analysis and reporting processes with high volumes of data

Financial decisions based on incomplete, inaccurate and often outdated information

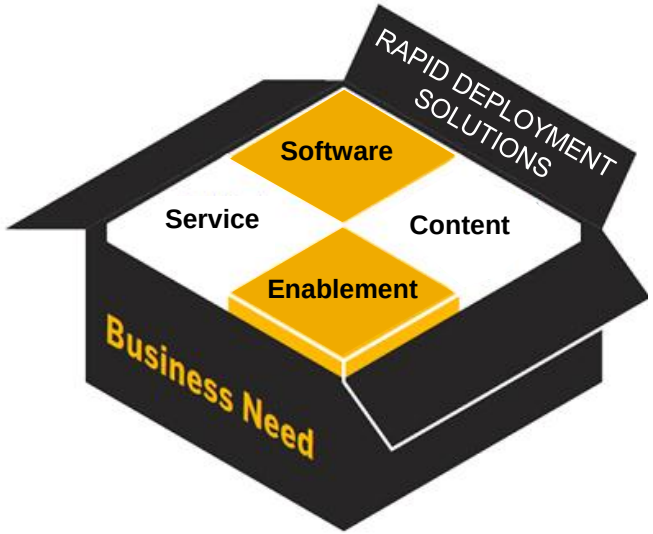


Inability to access detailed financial information across all business dimensions

Real-time insights into large volumes of profitability data in ERP	SAP CO-PA Accelerator
Accelerate period-end closing and reporting on vast amount of data in ERP	SAP Finance and Controlling Accelerator
Real-time financial analysis and reporting on large volumes of ERP data	SAP ERP RDS for operational reporting

SAP and a Global Partner Ecosystem offer Rapid Deployment solutions to meet specific business needs…

SAP RAPID DEPLOYMENT SOLUTIONS



Software

Quickly address the most urgent business processes

Content

SAP best practices, templates and tools make solution adoption easier

Enablement

Guides and educational material speed end user adoption

Service

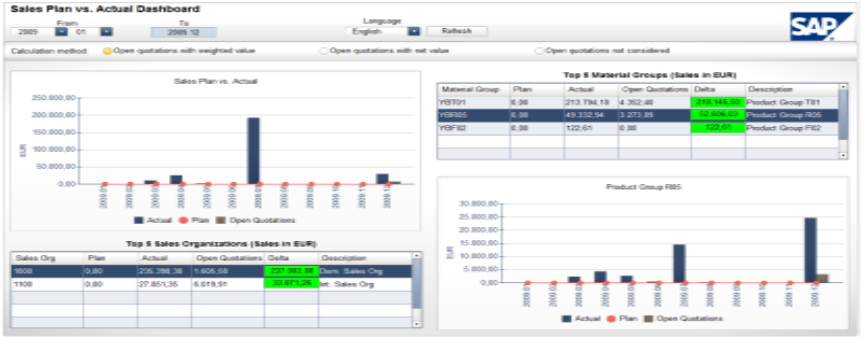
Fixed scope and price provides maximum predictability and lowers risk

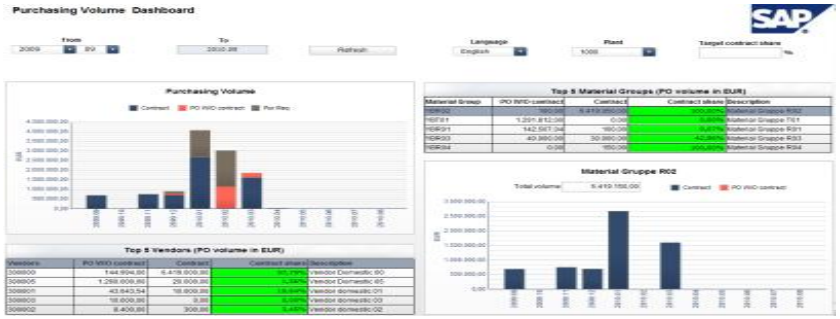
New! SAP ERP rapid-deployment solution for operational reporting with SAP HANA™

Solution to provide compelling SAP ERP operational analytics quickly and affordably

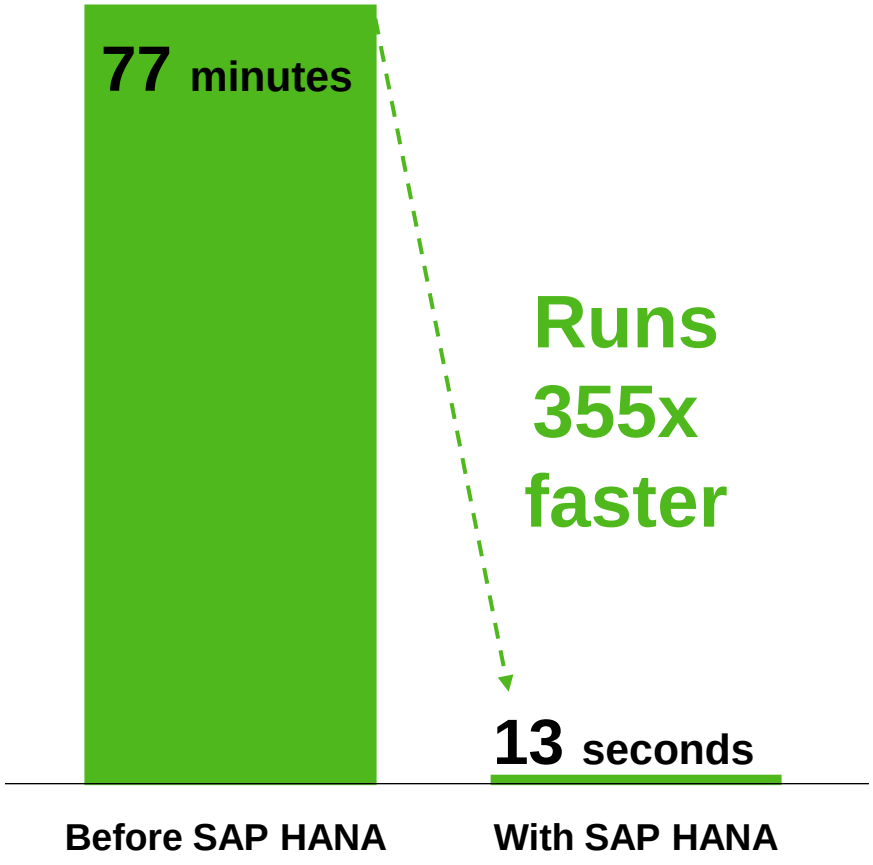
Pick from 3 Dashboards and 22 reports from the following business areas:

- Financial Reporting
- Sales Reporting
- Purchasing Reporting
- Shipping Reporting
- Master Data Reporting





SAP HANA: Real Numbers



70 retailers

460 billion records

50 terabytes of data

0.04 seconds
analysis response time

on any device anywhere, anytime

Please refer to the latest SAP HANA Hardware sizing for the latest certified hardware sizes for maximum storage size o SAP HANA 1.0.
Above tests were done in the SAP Lab with customer data-sets.

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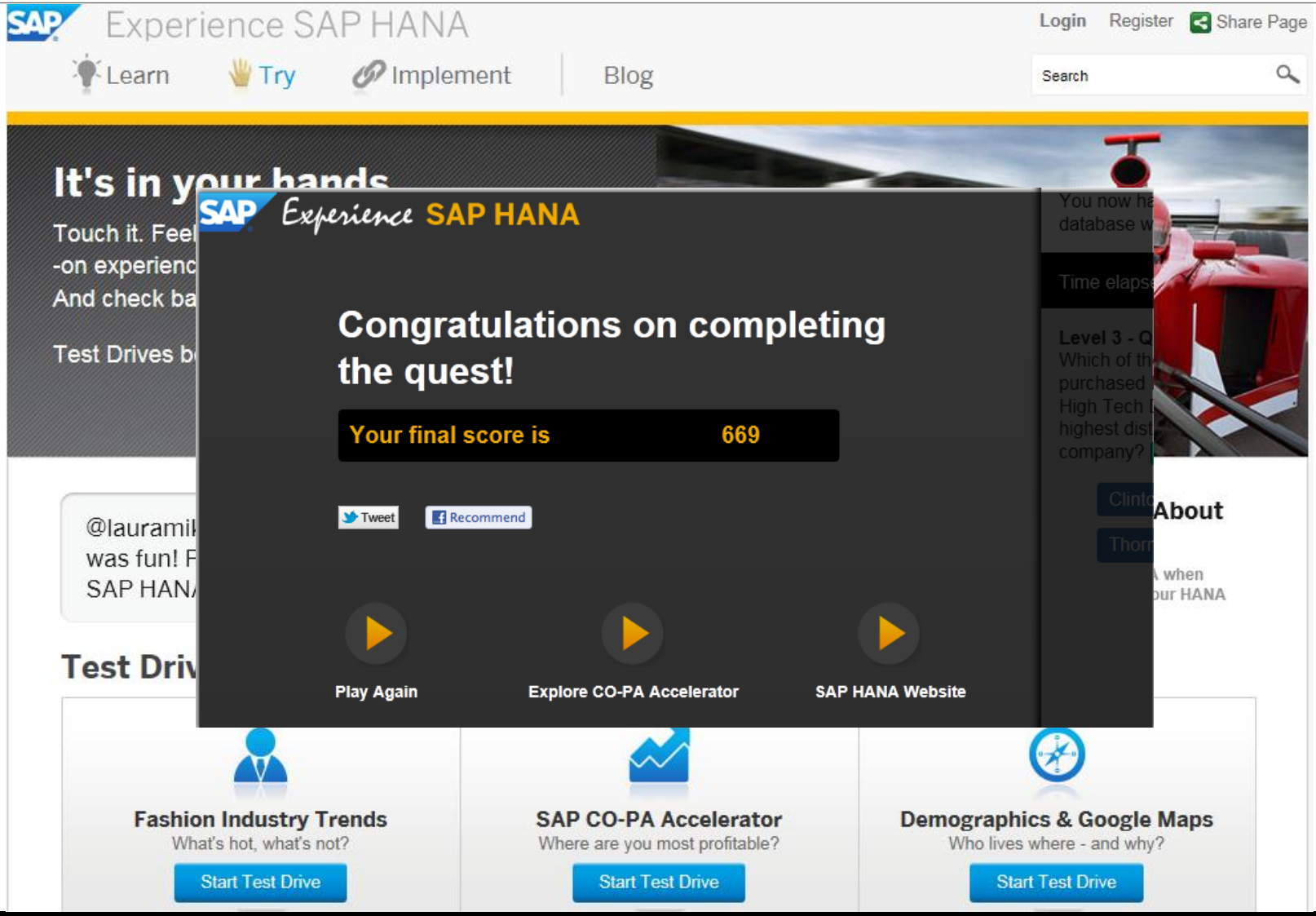
Who beat me ? ➔ Try ➔ SAP CO-PA Accelerator ➔ Start the Test Drive

http://www.experiencesaphana.com



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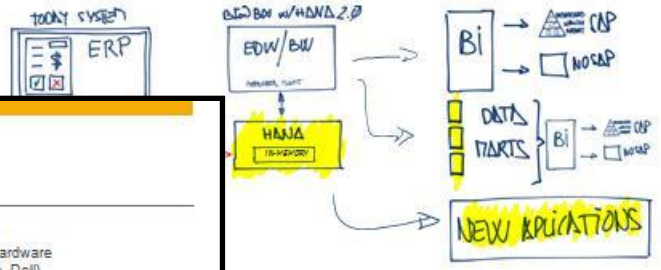
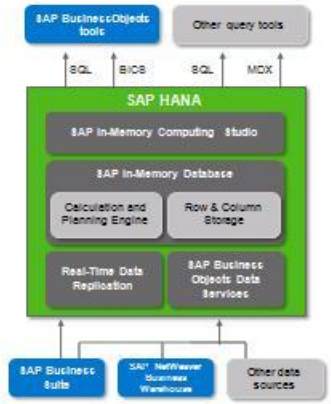


SAP HANA Appliance Software



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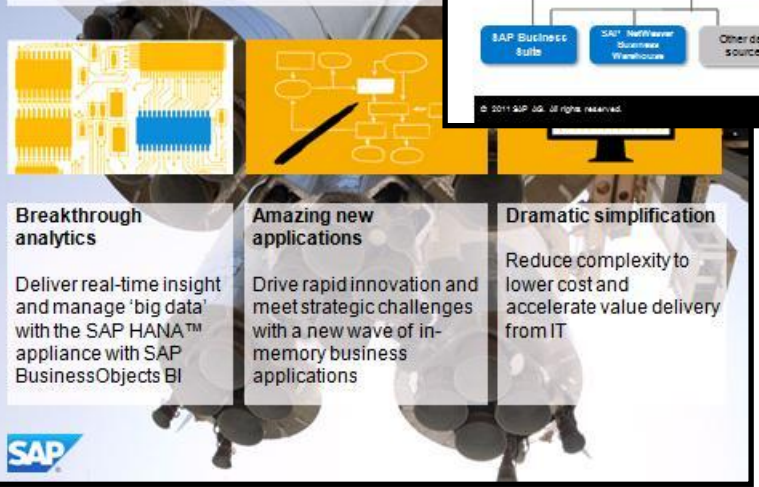
Three strategies for running better



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64bit address space – 2TB in current servers

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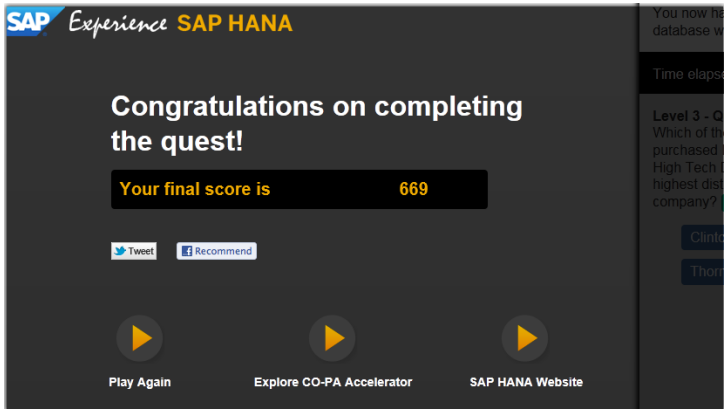
Dramatic decline in price/performance

SAP SW Technology Innovations

- Row and Column Store
- Compression
- Partitioning
- Without aggregates

Beat me up: my final score is 669

http://www.experiencesaphana.com
➔ Try ➔ SAP CO-PA Accelerator ➔ Start the Test Drive



Thank You!

In case of additional questions, please contact:

Martin Roth
Ecosystem & Channels Readiness
Solution Center Latin America
SAP America Inc., 5301 Blue Lagoon, Suite 790, Miami, FL 33126, USA
P +1 305 476 4436, **M** +1 786 837 1911, **F** +1 610 492 1682
E martin.roth@sap.com