

SAP Business One analytics powered by SAP HANA

An Overview

Richard Duffy
SAP Business One Product Evangelist

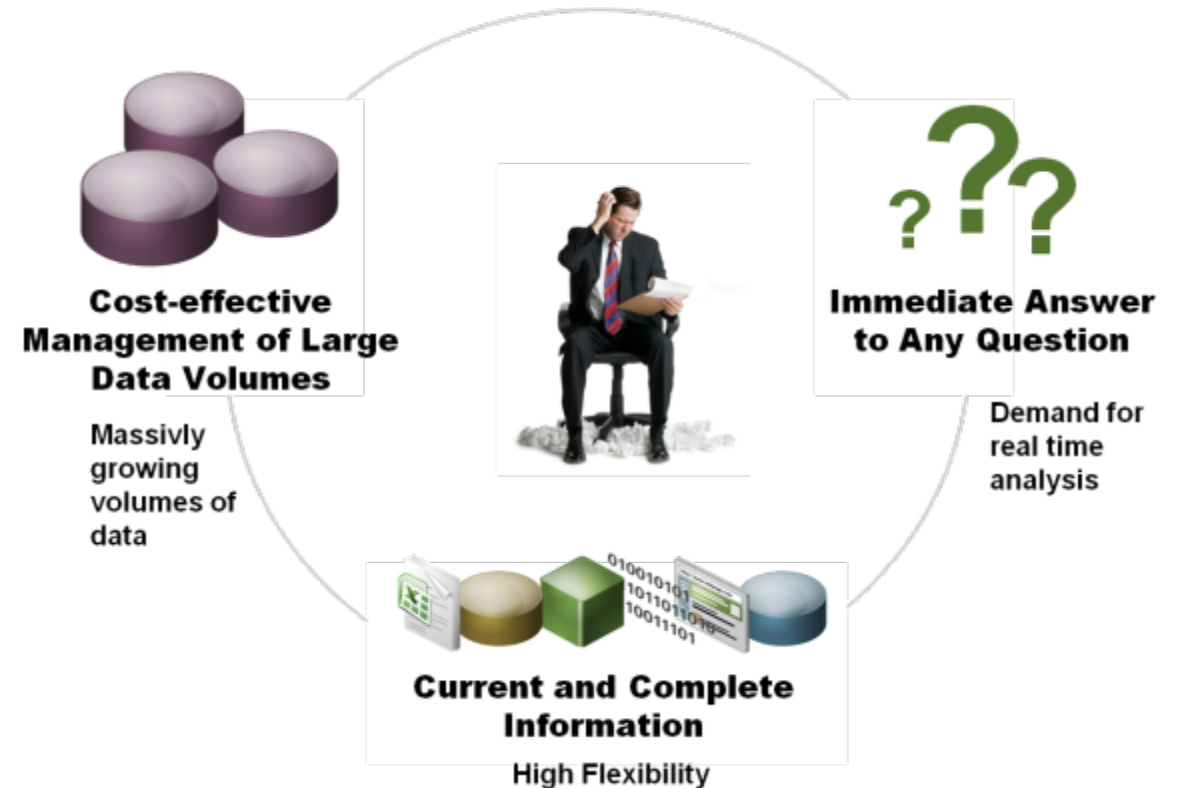
The SAP logo is located in the bottom left corner of the slide. It consists of the letters 'SAP' in a bold, white, sans-serif font, set against a blue rectangular background with a white diagonal line.

SAP Business One Analytics Platform

What do Small Businesses expect?

Small Business Owners need an analytics platform that is not a full-scale BI offering, but with :

- Ready to use content
- Ad-hoc analysis and Interactive analytics
- Superior performance - “real time” access
- A seamless user experience
- Ease of use and rapid implementation
- Affordability



SAP Business One Analytics Portfolio:

Major Investment Areas



Seamless user experience

SEMANTIC LAYER			
Store Code	Store Name	Sales Revenue	Date
store_db			
str_cod	str_nam	rv_net	dt
001101	Steve's	2,350	12102010
001132	Acme Gen. Store	43,905	12132010
000210	Super Store	90,201	12182010
003133	Kevin Centre	13,199	12182010
000543	Philstore	110,005	12212010
000766	Jackstore	130,949	12222010
000780	Mogamall	500,909	12272010

Semantic Layer



Analytical Content



Interactive Analysis



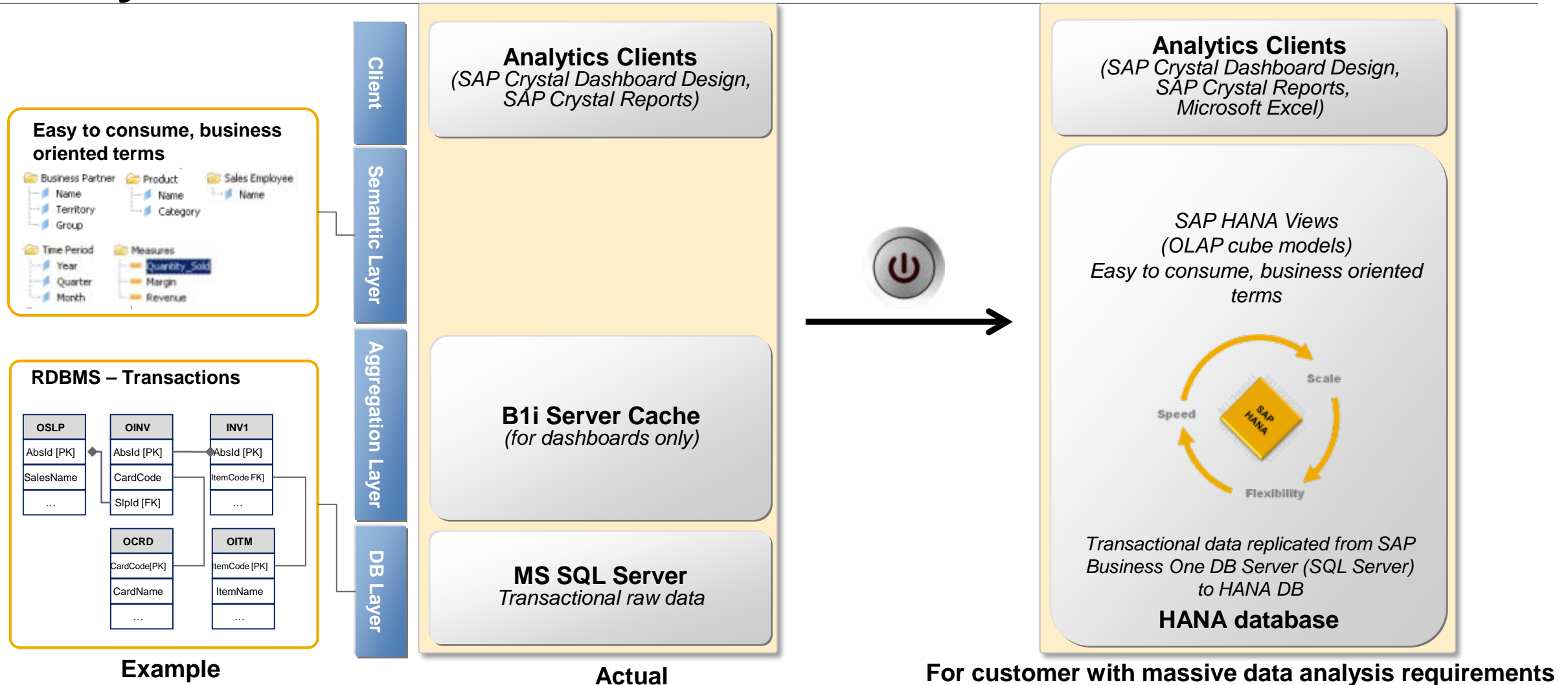
Groundbreaking In-Memory Technology

Row-based DBMS vs
Column-based DBMS

From application cache
to In-Memory DBMS

Real-Time Access to
Transactional Data

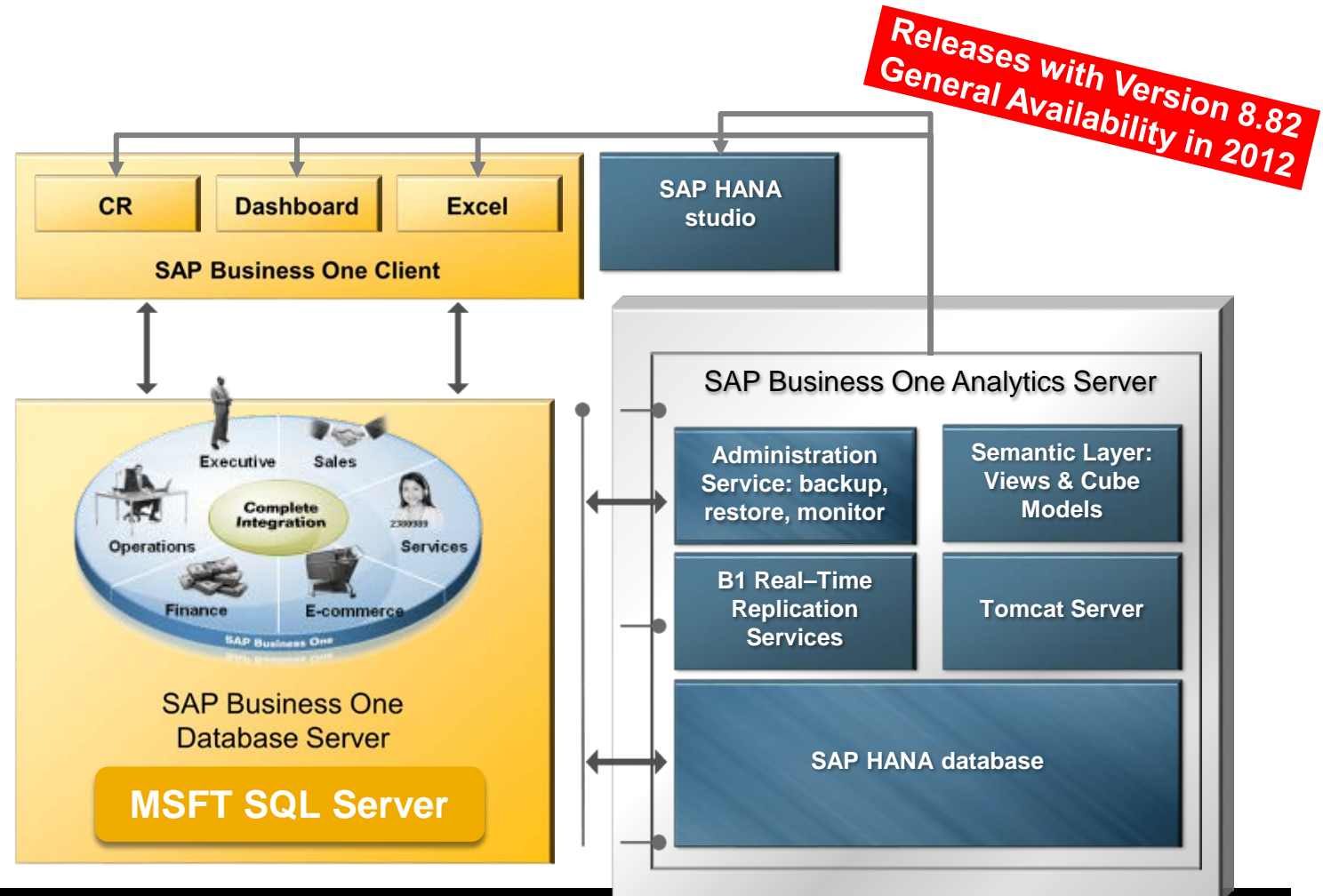
The Technology Evolution for SAP Business One Analytics



SAP Business One analytics powered by SAP HANA

Delivers in-memory technology and analytics innovations without disruption to the customer's business

- Benefits for both installed base and new customers
- Seamless user experience
- Semantic Layer
- Interactive Analysis
- Superior performance
- New analytics content



Easy to Use

A Seamless User Experience - Overview Demonstration





- My Cockpit
- Administration
- Financials
- Sales Opportunities
- Sales - A/R
- Purchasing - A/P
- Business Partners
- Banking
- Inventory
- Production
- MRP
- Service**
- Human Resources
- Reports
- Interactive Analysis

Welcome, Jayson Butler. You are in the Sales cockpit of OEC Computers.

Look up master data and documents Search

Service Call - HANA



Open Documents

- Sales Quotations
- Sales Orders
- Deliveries
- Returns
- A/R Down Paym...
- A/R Down Paym...
- A/R Invoices
- A/R Credit Memos
- A/R Reserve Inv...
- A/R Reserve Inv...

Common Functions

- Sales Opportunity
- Sales Quotation
- Sales Order
- Delivery
- A/R Invoice
- Dunning Wizard
- Item Master Data
- Price Lists
- Business Partner ...

Messages and Alerts

- Activities Scheduled for Today 10/20/2011
- Activities Scheduled for Today 10/21/2011
- Activities Scheduled for Today 10/22/2011
- Activities Scheduled for Today 12/01/2011

System Message Log (50)

Errors Warnings Information 50 Last Messages to Display

#	Message	Help	Context	Date / Time	Message ID
1	No recurring postings require posting today [Message 680-15]			07/12/2011 17:00:20	-1
2	Operation completed successfully [Message 200-48]			07/12/2011 15:54:14	-1
3	Warning! No valid contracts exist for the customer			07/12/2011 15:53:51	-1
4	Operation completed successfully [Message 200-48]			07/12/2011 15:53:41	-1

SAP Business One Enterprise Search

SAP Business One App Powered by SAP HANA

Functional Highlights

- Seamless SAP Business One client experience
- Hierarchical search in all SAP Business One modules (repositories)
- Full text search for all business object types
- Narrow down options per business object type
- Link to SAP Business One form
- Compliant with SAP Business One data ownership concept
- Ease navigation with business object map
- Report & printing

The screenshot displays the SAP Business One Enterprise Search application. The interface includes a top menu bar (File, Edit, View, Data, Goto, Modules, Tools, Window, Help) and a search bar at the top right. The main content area shows search results for "AP Credit Memo" with a list of results and a detailed view of a selected record. The detailed view includes fields for BP Name, Posting Date, Total Credit, Buyer, and Open Balance. A table is also visible, showing line items with columns for Line, Item, Quantity, Unit Price, Discount %, and Line Total.

Line	Item	Quantity	Unit Price	Discount %	Line Total
0	C00007	40	375	0	15000
1	C00008	40	150	0	6000
2	C00009	40	15	0	600
3	C00010	40	15	0	600
4	C00011	40	30	0	1200

A Demonstration of Enterprise Search

Jayson is an account representative of OEC Computers.

He just got a call from a customer (customer reference No. 256789) and the customer asks him when the orders for this month will be delivered.

Jayson uses enterprise search to search customer reference No. 256789 and find all related business objects.

He filters the search results by AR invoice type and further narrow down by open invoice and recent month.

Jayson selects the 1st invoice, links to the related data, he finds the related delivery is scheduled for 15th Dec. So he answers the customer that the goods will arrive in 2 days.

- My Cockpit
- Administration
- Financials
- Sales Opportunities
- Sales - A/R
- Purchasing - A/P
- Business Partners
- Banking
- Inventory
- Production
- MRP
- Service
- Human Resources
- Reports

Welcome, Jayson Butler. You are in the Home cockpit of OEC Computers.

Look up master data and documents Search

Service Call - HANA

Overview

Incoming Calls Today 0

Calls to Close 34

Backlog of Last 6 Months

Month	Misc. Issues	Mouse	PC Issues	Printer Issues
07-2011	4	0	0	0
08-2011	4	0	0	0
09-2011	14	0	0	0
10-2011	14	0	0	0
11-2011	14	0	0	0
12-2011	14	0	0	0

Details of Misc. Issues

Employee Workload 13

Employee	Others	Due by Today	Overdue
Fred Buyer	0	0	1
Jim Boswick	0	0	1
Juan Peron	0	0	1
Jayson Butler	4	0	0
Not Assigned	0	0	1

Service Call Turnover of Last 6 Months

Month	Closed	New
07-2011	4	0
08-2011	4	0
09-2011	14	0
10-2011	14	0
11-2011	14	0
12-2011	14	0

- ### Open Documents
- Sales Orders (35)
 - Deliveries (53)
 - Returns (8)
 - A/R Down Paym... (3)
 - A/R Down Paym... (2)
 - A/R Invoices (259)
 - Purchase Quota... (39)
 - Purchase Orders (37)
 - Goods Receipt POs (44)
 - Goods Return (13)
 - A/P Down Paym... (0)
 - A/P Credit Memos (17)

Common Functions

Sales Order	Delivery	Return	A/R Down Payment ...
A/R Invoice	A/R Credit Memo	Purchase Order	Goods Receipt PO
A/P Invoice	Goods Return	A/P Reserve Invoice	

Messages and Alerts

- Remind Notice for Phone Call: 09/15/2011
- Remind Notice for Meeting: 09/15/2011
- Remind Notice for Phone Call: 09/15/2011

System Message Log (2)

Errors Warnings Information 50 Last Messages to Display

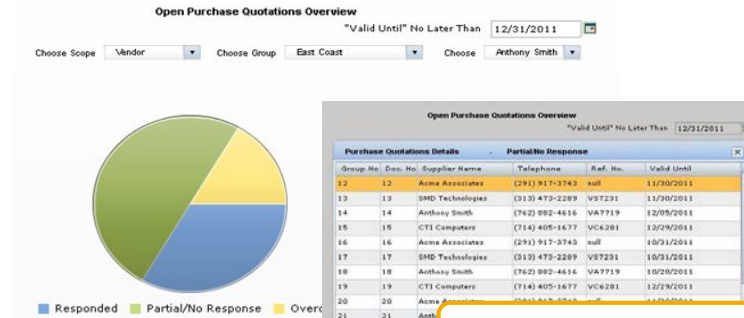
#	Message	Help	Context	Date / Time	Message ID
1	No recurring postings require posting today [Message 680-15]			07/12/2011 16:45:32	-1
2	This use of the software is subject to the End User License Agreement (EULA)			07/12/2011 16:45:15	47000003

SAP Business One Analytics

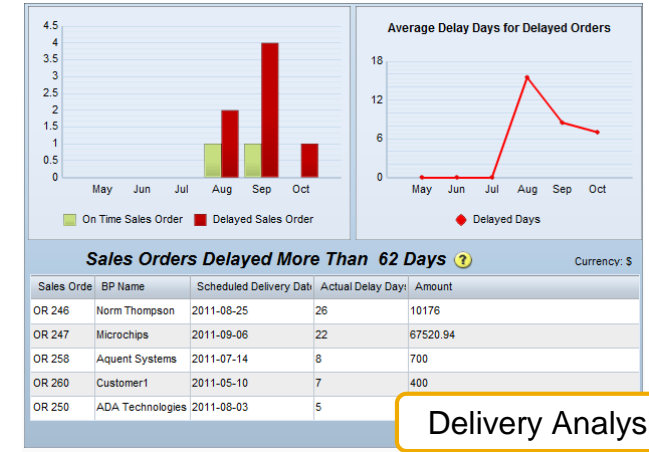
Content Powered By SAP HANA

The solution that provides compelling SAP Business One based operational analytics - quickly and affordably

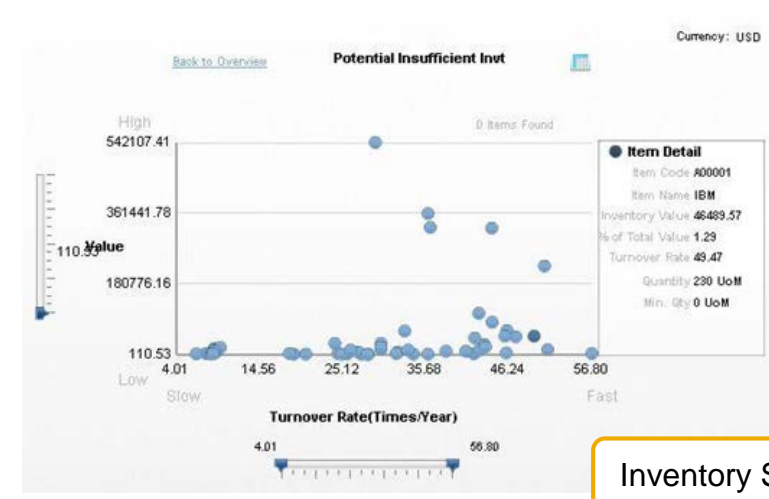
- **Migrate calculation intensive CR Reports (4)**
- **Migrate current dashboards (3)**
- **New dashboards (4)**
- **Semantic Layer (8)**
 - i. Financial module
 - ii. Sales module
 - iii. Inventory module



Purchase Quotations



Delivery Analysis



Inventory Status

SAP Business One Analytics

Content Powered By SAP HANA

In addition to Crystal Reports and dashboards we deliver pre-defined Semantic Layers to enable ad-hoc (interactive) analysis via Microsoft Excel and rapid content development based on dimensions & measures

Financials

Dashboard

Customer Receivables Aging

Cash Flow Forecast

Semantic Layer

Aging

Cost Center Analysis

Profit & Loss Analysis

Liquidity Analysis

Sales & Marketing

Dashboard

Sales Analysis

Delivery Analysis

Crystal Report

Periodic Sales Analysis by Customer

Customer Open Item List

Semantic Layer

Sales Opportunity Analysis

Purchasing

Dashboard

Purchase Quotations

Inventory

Dashboard

Inventory Status

Crystal Report

Inventory Turnover Analysis

Semantic Layer

Inventory Turnover Analysis

Service

Dashboard

Service Call

Cross Module

Crystal Report

Monthly Customer Report (order, invoice, payment, return)

Easy to Use

Interactive Analysis – Empowering Business Users

The screenshot displays the SAP Interactive Analysis interface within Microsoft Excel. The main window shows a PivotTable with the following data:

Row Labels	EXPENSE_LC	REVENUE_LC
Monitor *	17,688	137,488
2009	0	5,208
2010	17,688	56,864
2011	0	75,416
New York Sales Office *	0	32,175
2010	0	13,045
2011	0	19,130
PC *	1,518	61,184
2009	0	2,888
2010	1,518	24,873
2011	0	33,424
Philadelphia Sales Office *	6,600	88,129
2009	0	11,550
2010	6,600	42,014
2011	0	34,565
Printer *	2,244	100,964
2009	0	4,505
2010	2,244	38,958
2011	0	57,501
San Francisco Sales Office *	14,850	92,917
2009	0	1,050
2010	14,850	52,000
2011	0	39,866
Grand Total *	42,900	512,855

The interface includes a navigation pane on the left with categories like Administration, Financials, Sales Opportunities, and Interactive Analysis. The PivotTable Field List on the right shows the current configuration: Report Filter (Due Year), Column Labels (Values), Row Labels (Cost Center), and Values (EXPENSE_LC, REVENUE_LC). The SAP logo is visible in the bottom right corner.

A Demonstration of Interactive Analysis for sales professionals

Richard is the sales manager of OEC Computers.

He wants to do an ad-hoc analysis of his sales prior to the monthly sales meeting

He selects the Sales Analysis option from Interactive Analysis inside SAP Business One

He then selects the relevant customer, profit and sales dimensions in to his Excel Pivot Table.

Then he wants to know the details by business partner category by Month and Year

Now he's got the information he wants to drill down to see the individual business partners



- My Cockpit
- Administration
- Financials
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- Purchasing - A/P
- Business Partners
- Banking
- Inventory
- Production
- MRP
- Service
- Human Resources
- Reports
- Interactive Analysis
 - Cost Center Analysis
 - Budget Analysis
 - Inventory Turnover Analysis
 - Sales Opportunity Analysis
 - Sales Revenue Analysis

Welcome, manager. You are in the Home cockpit of OEC Computers.

Look up master data and documents Search

Service Call - HANA

Incoming Calls Today 1

Calls to Close 6

Overview

Backlog of Last 7 Days

Details of Misc. Issues

Employee Workload 1

Service Call Turnover of Last 7 Days

- ### Open Documents
- Sales Quotations
 - Sales Orders
 - Deliveries
 - Returns
 - A/R Down Payment...
 - Purchase Quotat...
 - Purchase Orders
 - Goods Receipt POs
 - Goods Return
 - A/P Down Payment...
 - A/P Down Payme...
 - A/P Invoices
 - A/P Credit Memos

Common Functions

Sales Quotation	Sales Order	Delivery	Return
A/R Down Payment ...	A/R Invoice	A/R Credit Memo	A/R Reserve Invoice
Purchase Order	Goods Return	Goods Receipt PO	A/P Invoice
A/P Reserve Invoice			

Messages and Alerts

System Message Log (50)

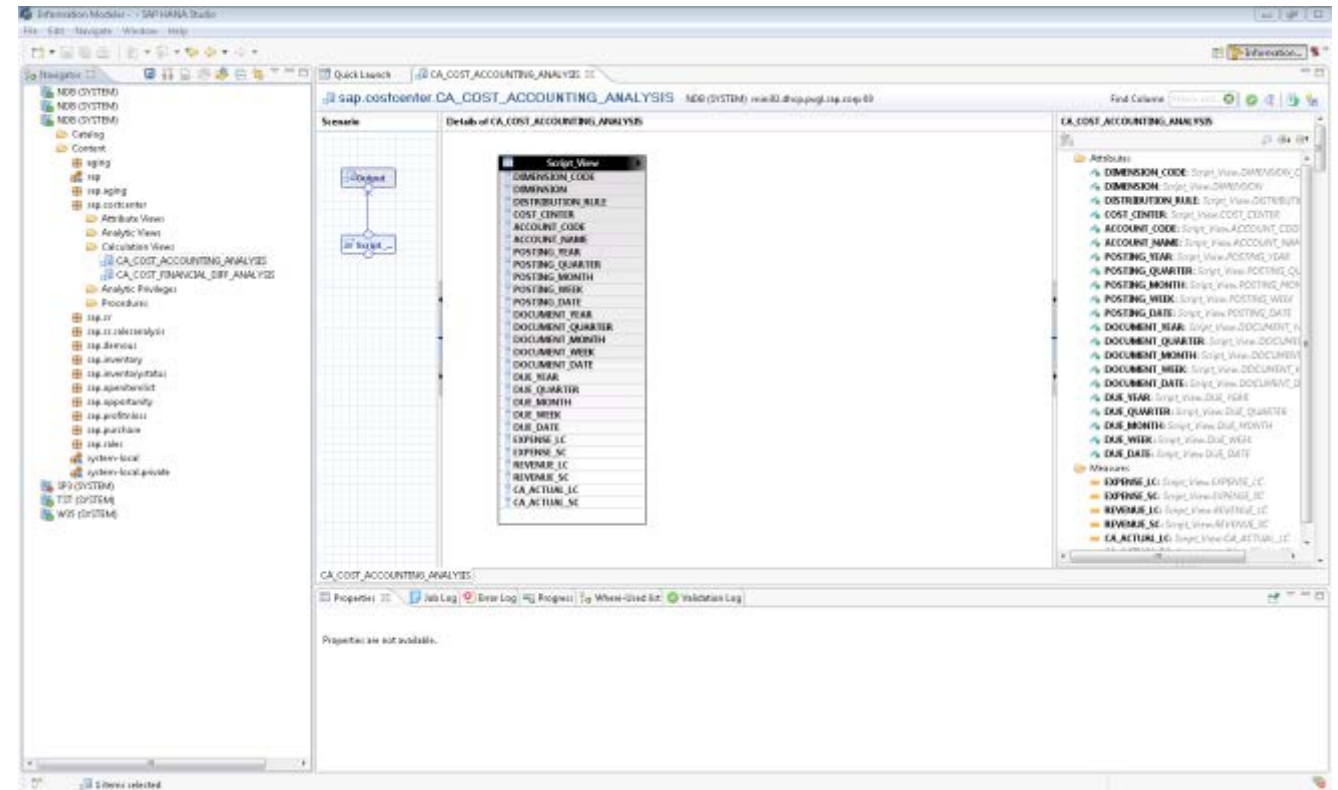
Errors Warnings Information 50 Last Messages to Display

#	Message	Help	Feedback	Context	Date / Time	Message ID
1	⚠ Your settings will be lost once you close the widget. Do you want to continue?				07/12/2011 18:53:27	480000071
2	✅ Operation completed successfully [Message 200-48]				05/12/2011 18:52:48	-1
3	⚠ Warning! No valid contracts exist for the customer				05/12/2011 18:52:35	-1

Quick Time to Implement Semantic Layer, Easy to Extend

Predefined Models

- Cost center analysis
- Cost account vs. financial accounting
- Budget analysis
- Aging analysis
- Inventory turnover analysis
- Dynamic cash prediction
- Sales opportunity analysis
- Sales revenue analysis



A Demonstration of Ad-Hoc Analysis for finance professionals

Lisa is the finance manager of OEC Computers.

She wants to quickly find out the current status of budget usage.

First she selects the relevant dimensions and measures.

Then she wants to know budget situation per year and per quarter.

But she also wants to change the layout of the report based on her need, e.g., change the quarter dimension to a column instead of a row.

Now she wants to narrow it down to see only data for the 4th quarter and 2011.

So she changes the Excel pivot table to filter accordingly.

Sheet1 - Microsoft Excel

PivotTable Tools

Home Insert Page Layout Formulas Data Review View Add-Ins Options Design

PivotTable Name: PivotTable1 Active Field: Expand Entire Field Collapse Entire Field Field Settings

Group Selection Ungroup Group Field Group Sort Refresh Change Data Source Clear Select Move PivotTable PivotChart Formulas OLAP tools Field List Buttons Field Headers Show/Hide

C7

PivotTable1

To build a report, choose fields from the PivotTable Field List

PivotTable Field List

Choose fields to add to report:

- Σ Values
 - Actual Amount LC
 - Actual Amount SC
 - Budget Amount LC
 - Budget Amount SC
 - Difference Amount LC
 - Difference Amount SC
 - Future Amount LC
 - Future Amount SC
 - Total Amount LC
 - Total Amount SC
- BUDGET_SCENARIO
 - Budget Scenario Name
 - BUDGET_SCENARIO
- BUDGET_DATE
 - BUDGET_DATE
 - Month

Drag fields between areas below:

Report Filter Column Labels

Row Labels Σ Values

Defer Layout Update Update

Ready

100%

Rapid Design based on existing tools and content

Develop Crystal Reports and Dashboards based on HANA DB

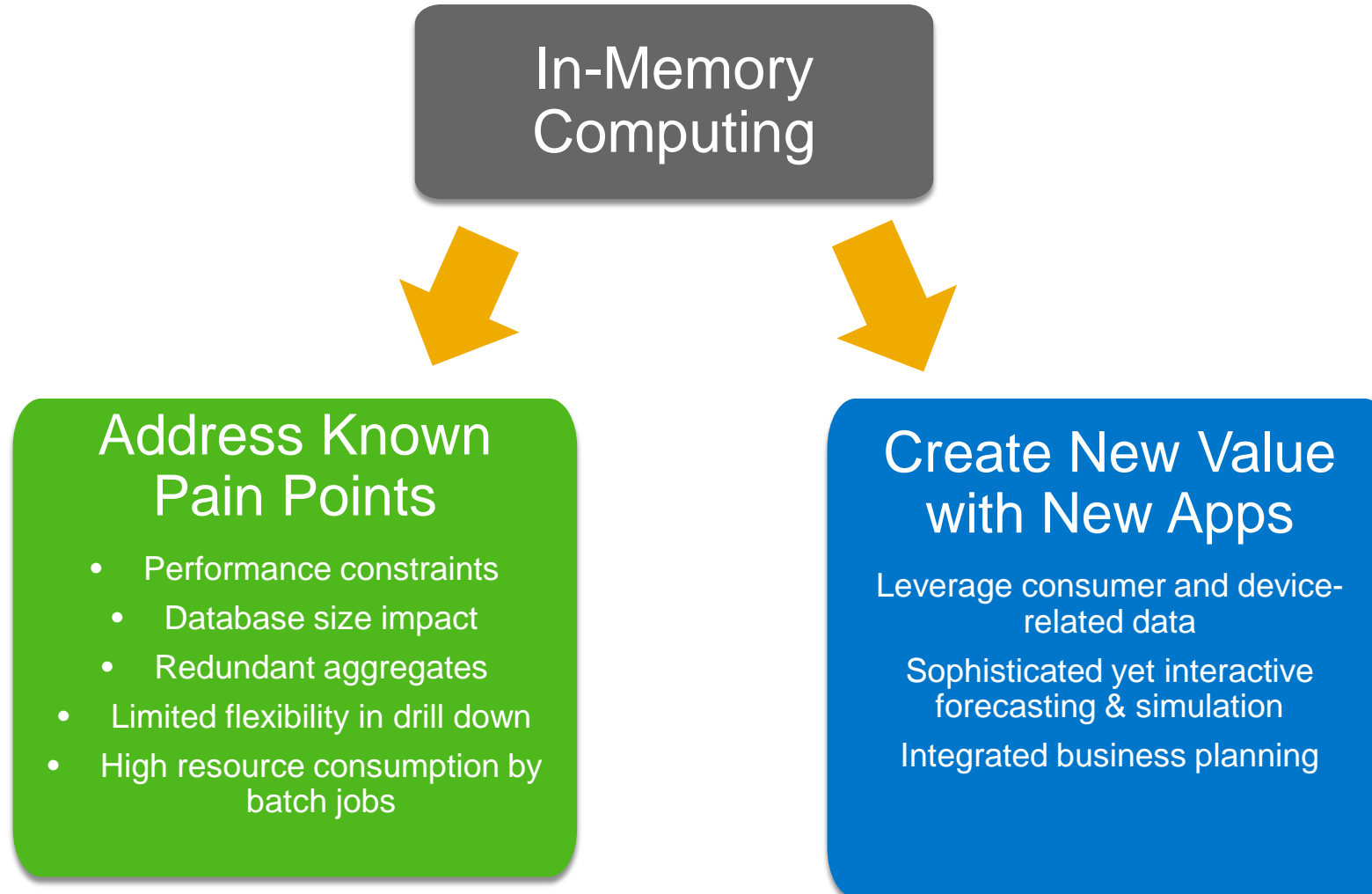
Crystal Reports

- Crystal Reports 2008 SP5 (end of Nov. 2011)
- Runtime: same user experience
- Content Management: same user experience
- Design: user can have HANA views or procedures or direct query as data source (user is not able to query over B1 tables in HANA-DB)

Dashboards

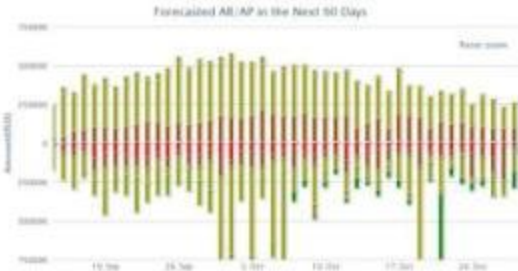
- Runtime: same user experience
- Design: same user experience except only one difference - **Info.xml of dashboard package:**
<IsIMDB>Y</IsIMDB>
- Content Management: same user experience, but no B1i

In-Memory Technology drives Business Opportunities



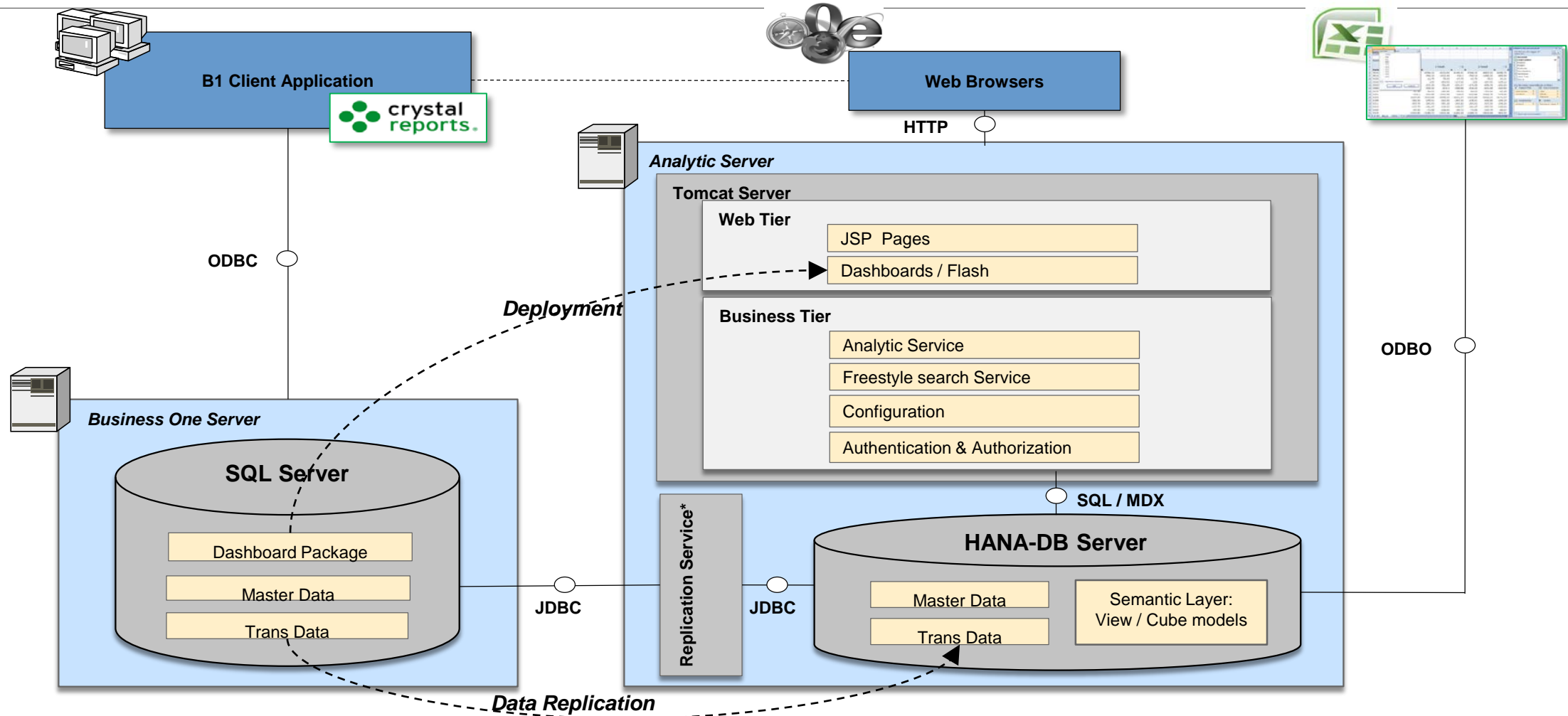
In-Memory Technology Drives Business Opportunities

New SAP Business One App: Payment optimization and liquidity forecast



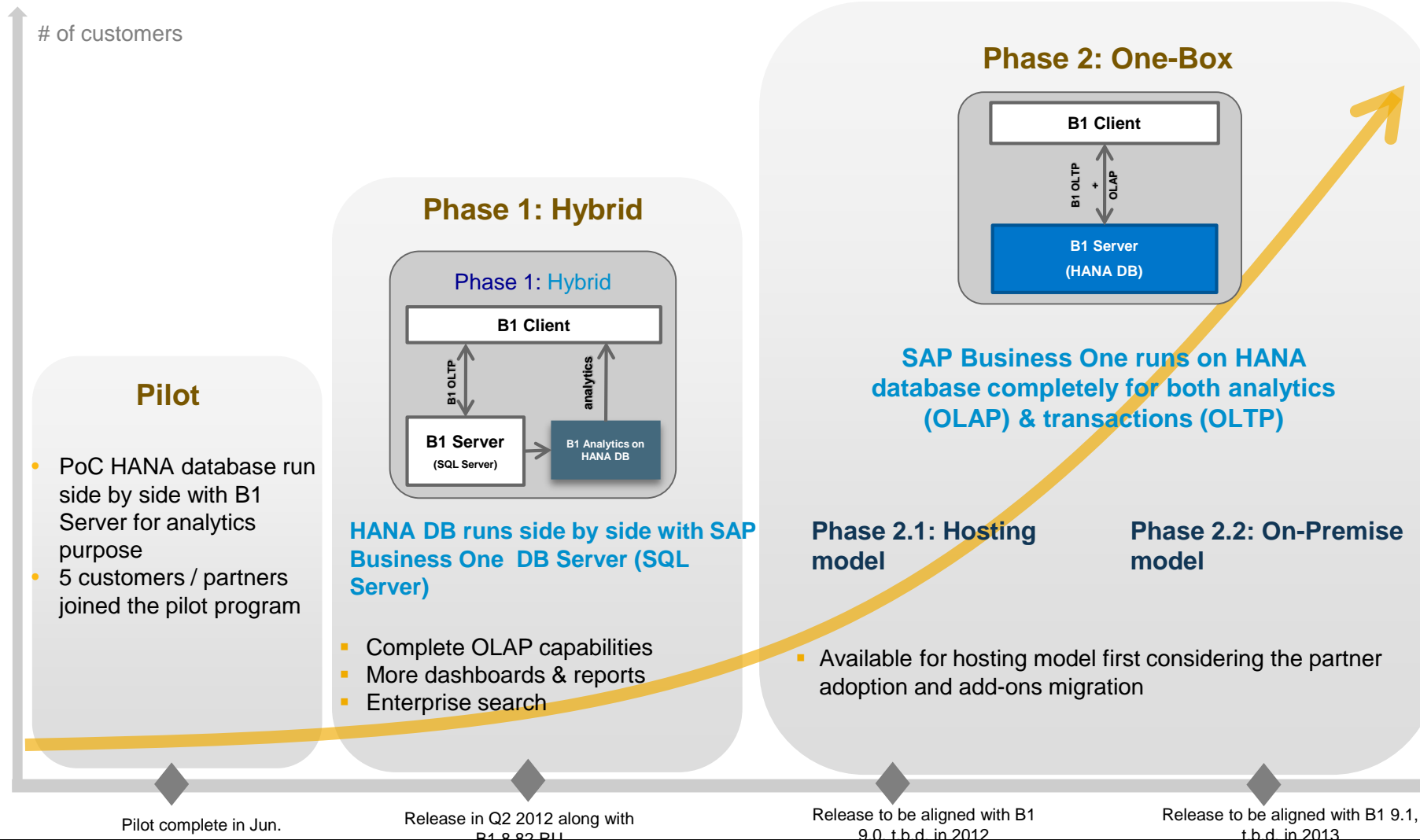
- Forecast Accounts Receivable based on historical data
- Liquidity forecast to ensure healthy operations
- Best payment strategy to maximize discounts
- Propose the right financing services at the right time

SAP Business One on HANA-DB: Hybrid Solution Architecture



Note: ■ Semantic layer (OLAP cubes) consists of analytic views and calculation views, which can be consumed by both SAP and Partner apps

SAP Business One and New Opportunities: HANA Adoption Overall Roadmap



What Pilot Customers and Partners Say

“ *Real-time OLAP for the Small Enterprise market is a niche market with disruptive potential*

Hu Pengchen, CEO of Beijing AVA Technology, B1 Gold partner

“ *With real time analysis capabilities of SAP In-Memory Computing, I can get all my sales and operation figures **faster than before**. For example: sales forecast & operation planning, employee performance evaluation, etc... With one time investment to build the multi-dimensional data model in SAP HANA studio, my IT efforts for ad-hoc report development are reduced from weeks to 1 day !*

Beijing Boan, SAP Business One customer in China

[Watch the customer video](#)

“ *Leveraging B1 enterprise search on top of SAP In-Memory Computing Technology, we are able to obtain all **relevant business information in seconds with one click freestyle search**; without the pain from the past of navigation among hundreds of forms searching for data.*

*With SAP In-Memory Computing, now my management team can directly **perform multi-dimension analysis by themselves in real time**, and make business decisions within hours based on trusted data, without wasting days waiting for IT to prepare and consolidate data.*

Taiko, SAP Business One customer in China



Thank You!

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SAP Global SME

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