

SAP BusinessObjects 4

- Explorer
- Hana
- Mobile BI



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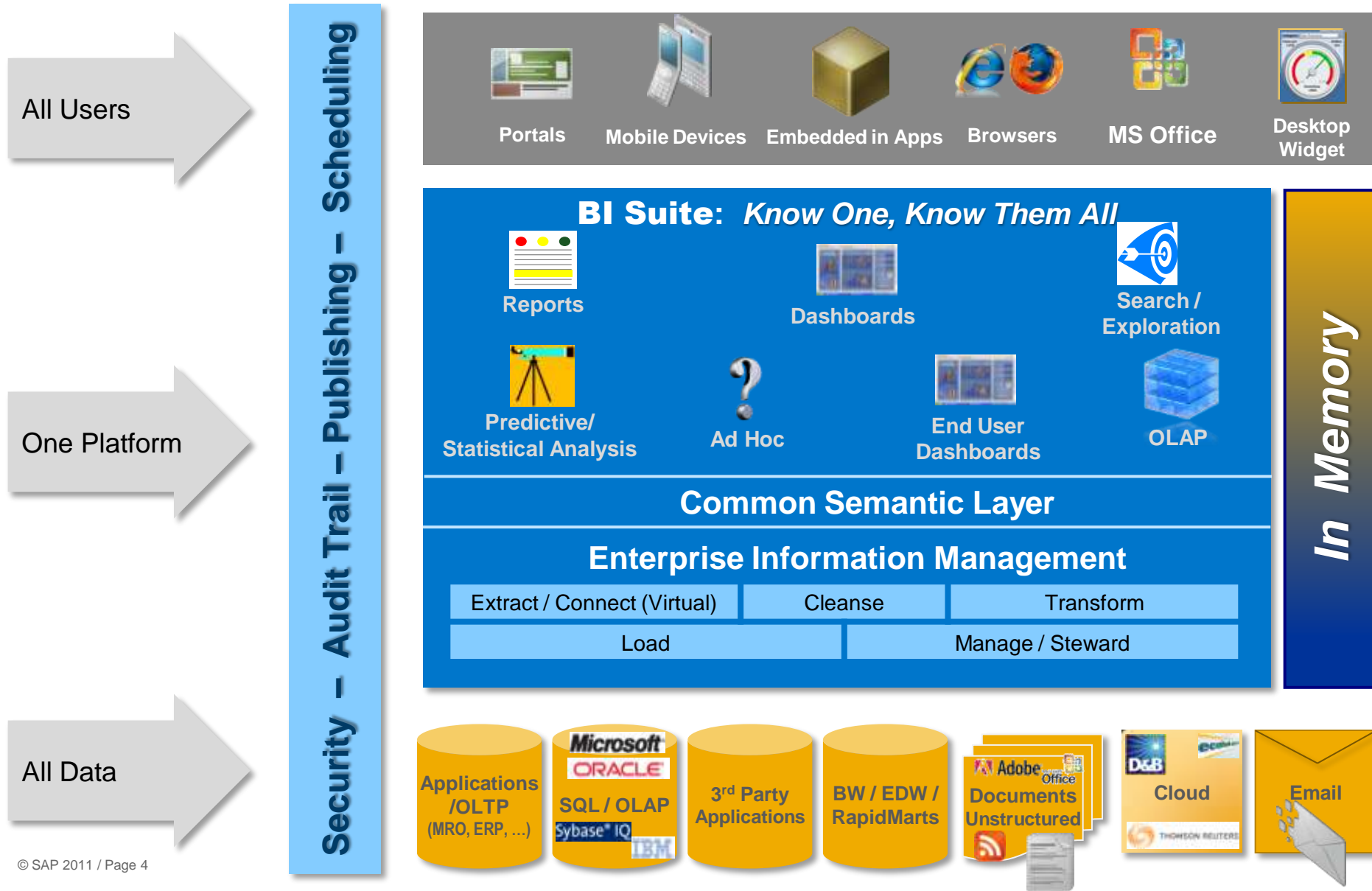
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Agenda

1. **SAP BusinessObjects Explorer**
2. **SAP BusinessObjects Hana –**
High Performance Analytical Appliance
3. **SAP BusinessObjects Mobile BI**

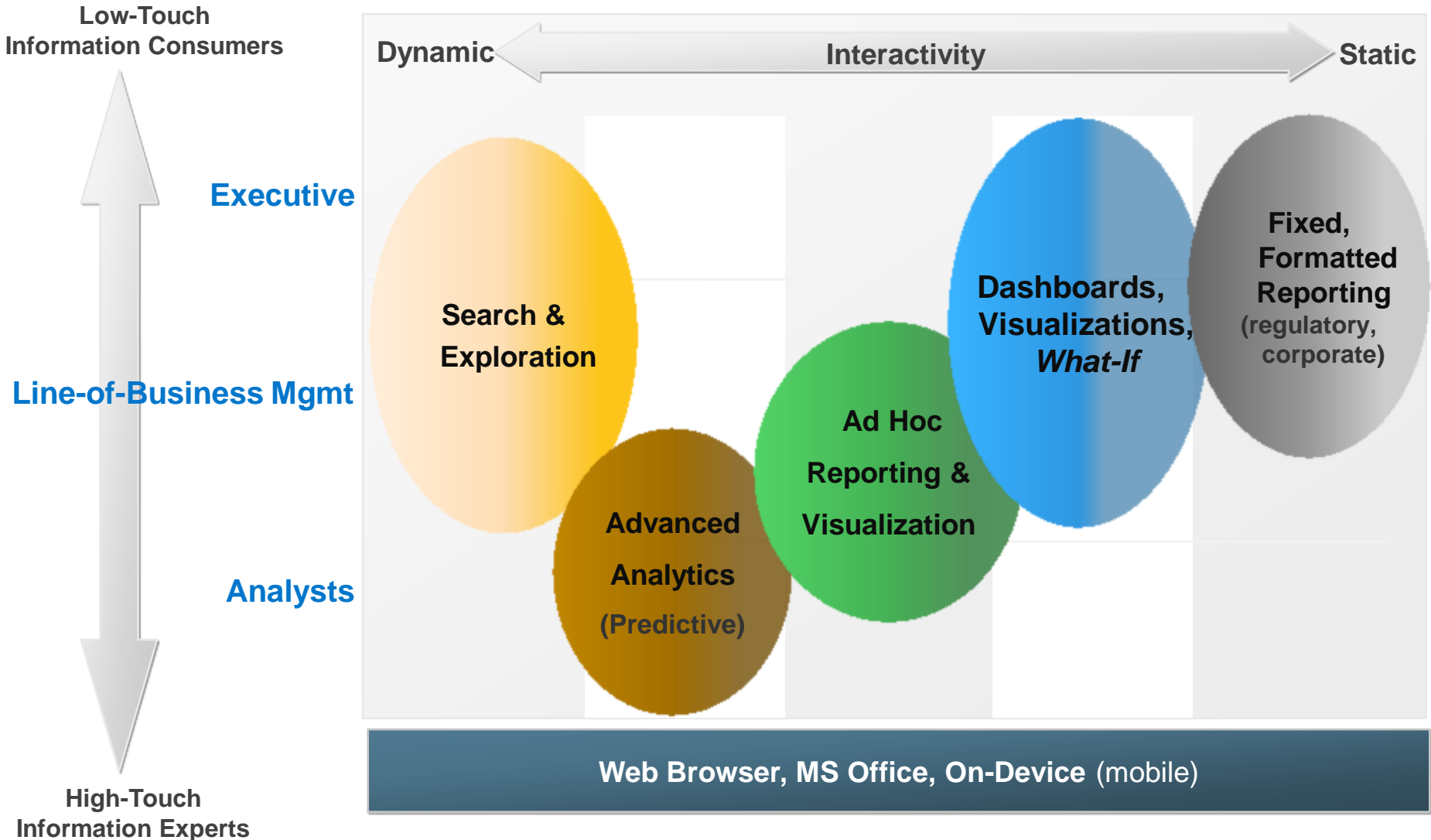
SAP BusinessObjects BI/EIM: Actionable Information

"On Premise, On Device, On Demand"



Single, Integrated Business Intelligence Solution

Meet Every Business Role



Search

Search results: Information Spaces:

Score	5 Result(s)
100%	<p>► Fashion Store and Product Information</p> <p>Contains information about the sales of products and store performance for eFashion retail.</p>
100%	<p>► Sales Information</p> <p>This is the sales information - contains key figures for sales and discounting, for all product</p>
100%	<p>► ETS Sales</p> <p>ETS Sales retail sales information space which contains key figures for sales and discounting for</p>
100%	<p>► Industry Breakdown</p> <p>Breakdown of companies by industry and segment</p>
100%	<p>► Department of Defense Parts Procurement</p> <p>Contains information about parts orders and contractors for the DoD.</p>

The screenshot displays the SAP BusinessObjects Explorer interface. At the top, the title bar reads 'SAP BusinessObjects Explorer - Microsoft Internet Explorer'. The menu bar includes 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. The main window is divided into several panes:

- Left Pane:** Contains a tree view with 'Home', 'Recent', 'Sales (COGS)', 'Quantity sold (Sales)', 'Margin (Sales)', and 'Discount (Sales)'.
- Top Center Pane:** Displays a data cube structure with dimensions: 'Region', 'Year', 'Sales', and 'Product'. The 'Sales' dimension is expanded, showing a list of products including 'Total', 'New York', 'California', 'Illinois', 'NY', 'North', 'Florida', 'Washington', 'Massachusetts', 'Colorado Springs', and 'Dallas'.
- Bottom Left Pane:** Shows a bar chart titled 'Sales' with the Y-axis labeled 'Sales' and the X-axis labeled 'Year'. The chart displays three bars for the years 2000, 2001, and 2002, with values approximately \$1,000,000, \$1,200,000, and \$1,400,000 respectively.
- Bottom Right Pane:** Displays a table titled 'Sales' with columns 'Year' and 'Sales'. The data is as follows:

Year	Sales
2000	\$1,000,000
2001	\$1,200,000
2002	\$1,400,000

A large blue semi-transparent box with the word 'Explore' in white text is overlaid on the top right of the image.

Item	Quantity	Price
T-Shirts	14,499	\$2,586,496
Soft fabric	5,328	\$675,264
Belts, bags, wallets	4,349	\$174,061
Turtleneck	5,457	\$749,507
2 Pocket shirts	3,642	\$735,960
Samples	4,899	\$649,298
Sweats	4,394	\$645,640
Short sleeve	3,959	\$618,540
Long sleeve	2,704	\$477,006
Evening wear	2,857	\$468,372
Lounge wear	2,732	\$468,939
Sweater dresses	1,654	\$247,052
Boothroom	1,559	\$235,031
Party pants	1,674	\$283,398
Casual dresses	966	\$182,771
Full length	1,216	\$174,085
High accessories	818	\$147,043
Hats	627	\$127,742
Gloves	528	\$89,665
Scarves	554	\$78,543
Total (34)	87,728	\$3,612,764

6

Explore Your Business At the Speed of Thought From Anywhere....

Delivers Accelerated Self-Service BI

- Intuitive data exploration and visualization
- Fast response across huge volumes of data anywhere in the organization
- Simplicity and speed of internet search – no training required



Easy to Deploy & Manage

- Fast ROI – Productive in days to weeks
- Low TCO – Simple & efficient to manage with appliance model
- Highly Scalable – Start small and scale to Terabytes



SAP BusinessObjects Exploration Views

Drag-and-Drop Dashboard Personalization



End User Dashboards, No IT Intervention

- Utilize Explorer Information spaces
- Fast response time
- Available natively on mobile devices
- End user creation and personalization
- Ready drill-thru to Explorer

Mobile Exploration Views – coming this quarter for SAP BusinessObjects Explorer

- Empowers business users to easily create, navigate & share key business views.
- Easily create, navigate & share key business views
- Highly personalized & dynamic experience
- Leverage investments including Explorer, in-memory (Hana) & semantic layer
- Smart visualization with auto adapting views on mobile devices
- Interact and analyze make informed business decisions



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High Performance Analytical Appliance
3. SAP BusinessObjects Mobile BI

Data Explosion

A Natural Result of Modern Societies, Businesses, and the Internet

Data created each year



Transactional data is growing 21.8% CAGR.
Unstructured data in data centers is growing 61.7% CAGR
Source: IDC "Enterprise Disk Storage Consumption Model" 2008

Legacy Business Intelligence Today

Business Intelligence



Slow
Painful
Expensive

Business Applications



Calculation Engine

Query Results

Query

Aggregates

Indexes

Data Warehouse/
Marts (xls? Access?)

ETL

Operational Data Store

Copy

Data



In-Memory Computing

Business Intelligence



Up to 1,000x faster

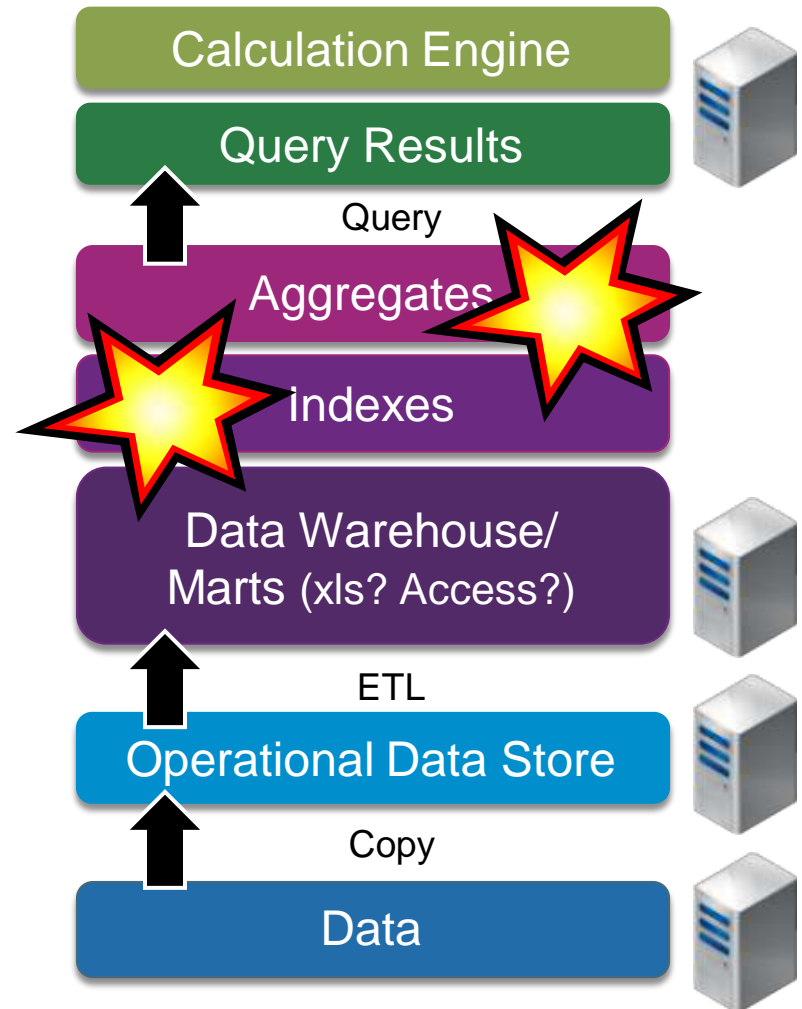
No optimizations required

More data in less space

Faster BI



Business Applications



Columnar Databases

Up to 1,000x faster

More efficient data storage

Better compression

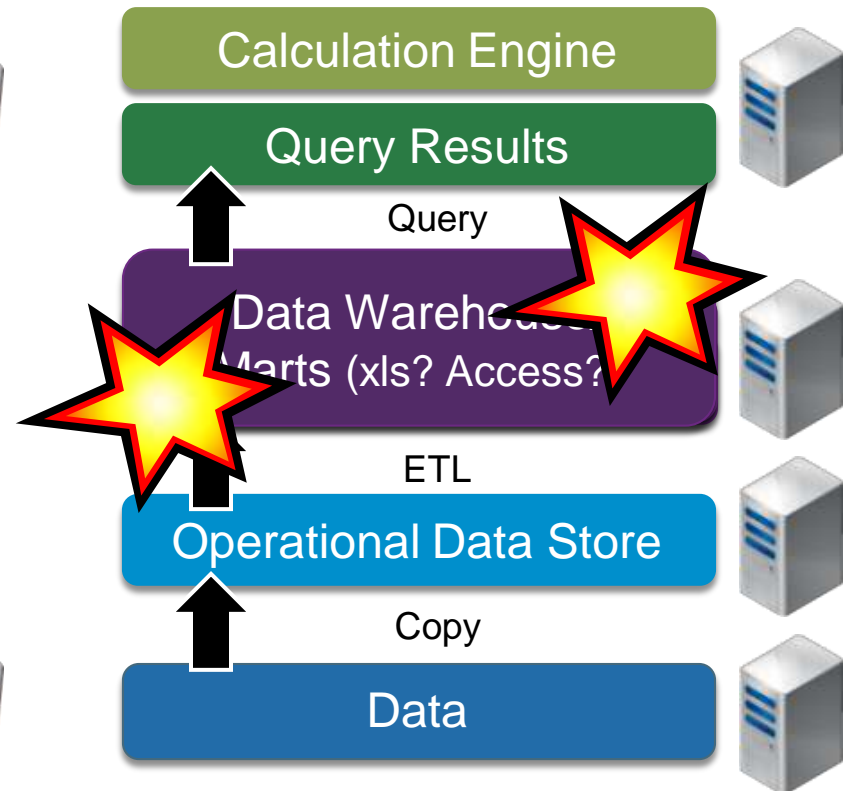
More data in less space

Faster BI

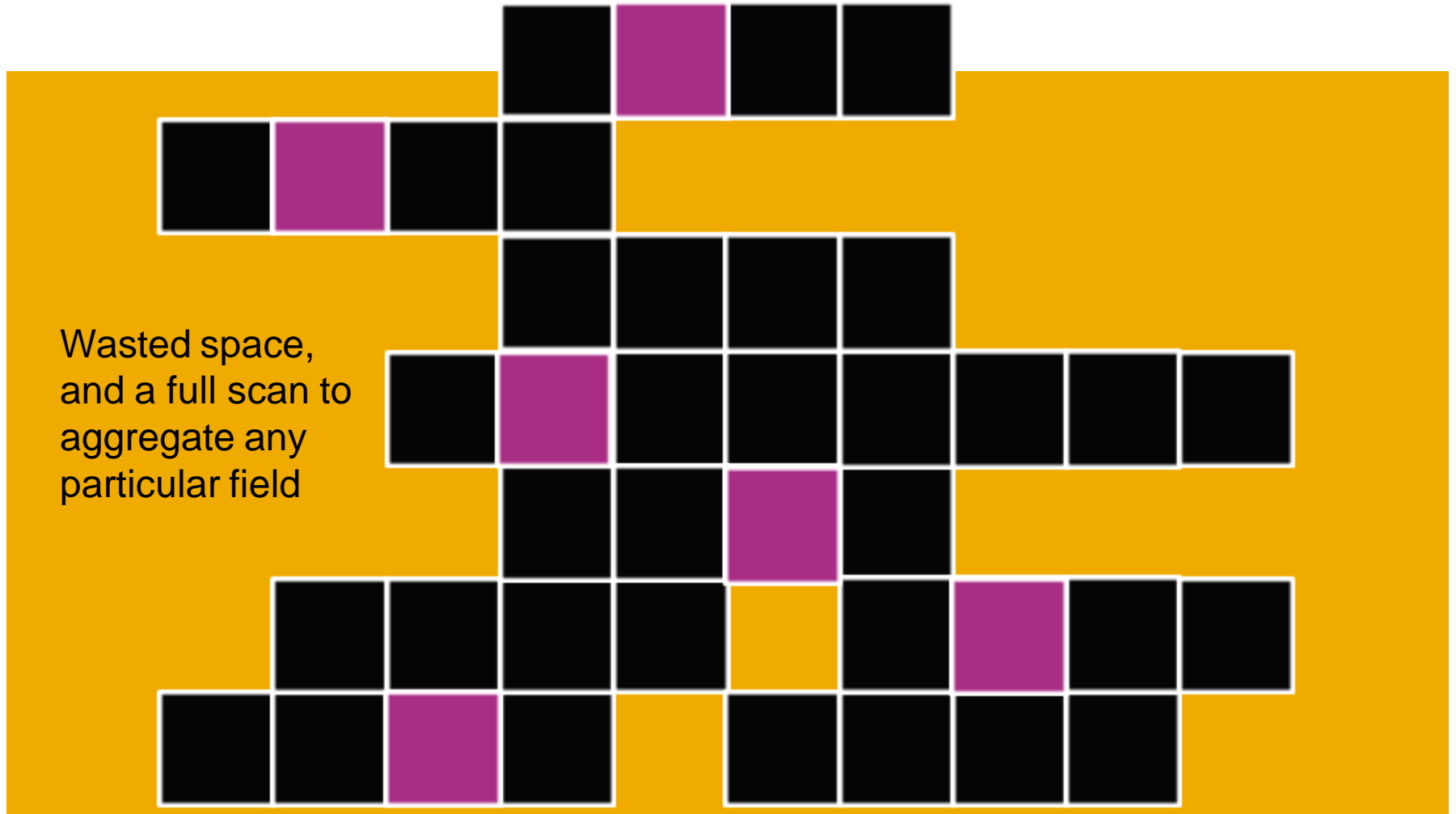
Business Intelligence



Business Applications



Row-Based Data



Column Data

More efficient data storage, better compression, faster queries



Analytic Appliance

Up to 1,000x faster

Massively parallel, optimized for hardware

Move calculation engine to the database: in-memory predictive analytics

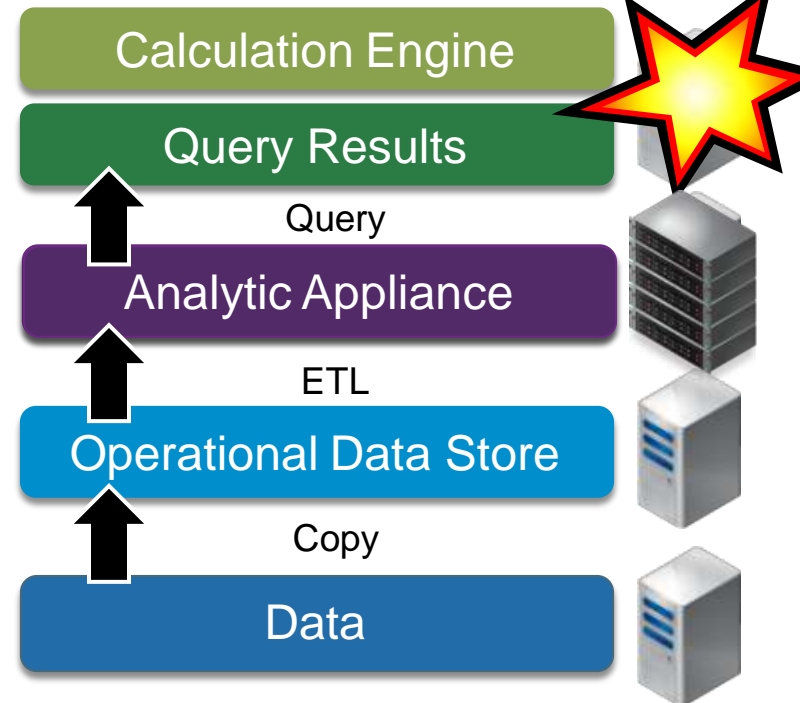
Include a BI server

Less data movement, faster BI

Business Intelligence



Business Applications



Operations and Analytics Together

If the Appliance is ACID compliant, why not just one machine?

Single source of data

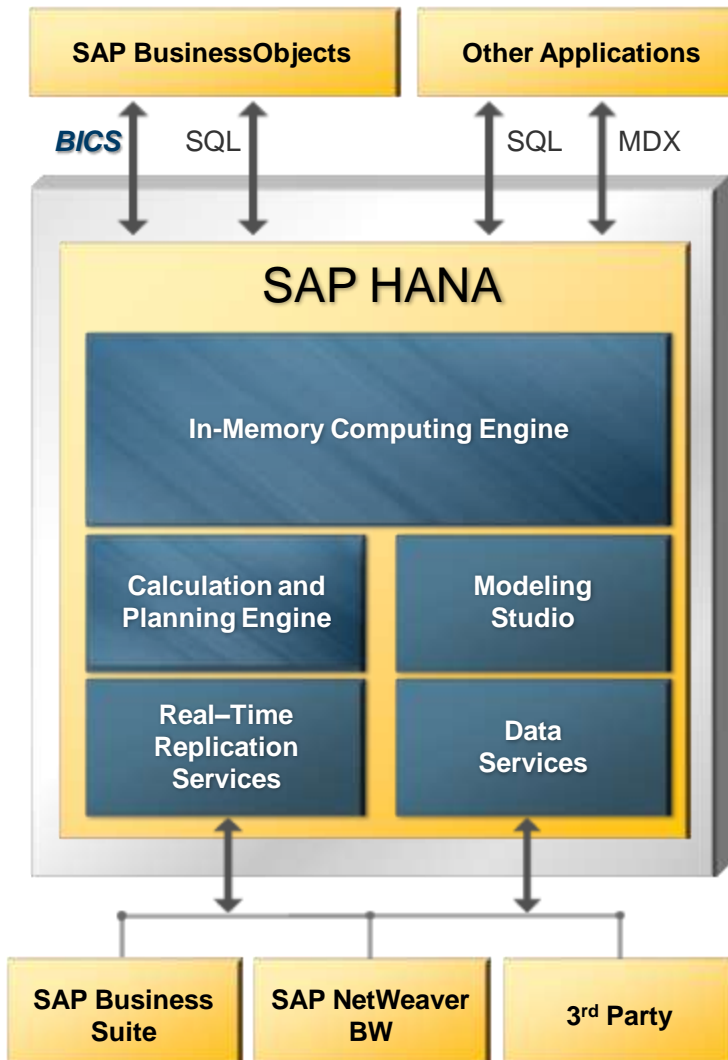
Faster, better BI and actionable intelligence

Faster, better applications

New application opportunities



SAP High-Performance Analytic Appliance (HANA) Architecture



Preconfigured Analytical Appliance

- In-Memory software + hardware (HP, IBM, Fujitsu, Cisco)

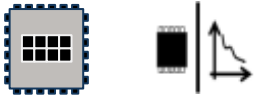
In-Memory Computing Engine Software

- Data Modeling and Data Management
- Real-time Data Replication Data Services for SAP Business Suite, SAP BW and 3rd Party Systems

Capabilities Enabled

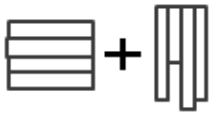
- **Analyze information in real-time** at unprecedented speeds on large volumes of non-aggregated data
- **Create flexible analytic models** based on real-time and historic business data
- **Foundation for new category of applications** (e.g., planning, simulation) to significantly outperform current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

HANA: Key Technical Differentiators



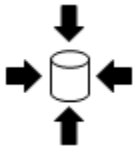
Multi-Core CPUs
Large Memory Footprint

Computational Power
1m Faster Access than Disk



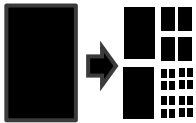
Row and Column Store

Column = Fast Queries



Compression

5x Compression
1 TB Data = 200GB Memory



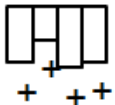
Partitioning
In-Database Computing

Analyze Large Data Sets
Complex Computations



No Aggregate Tables
Non-Materialized Views

Flexible Modeling
No Data Duplication



Real-Time Replication
Insert Only on Delta

Fast Data Loads

SAP HANA for Data Intensive Point of Sale Analysis

20x Faster with 200x Better Price Performance



Challenge

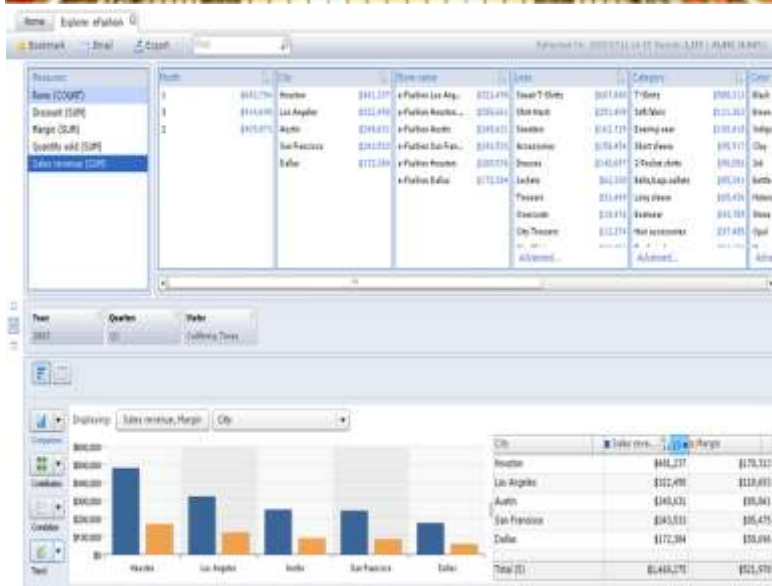
- Global CPG - POS analysis to predict demand
- 120TB Environment - 6 SAP BW Systems + Teradata
- Large Data Set - 460 Billion records (40TB)
- Unable to analyze data using current database platform
- Stock shelves with 48 hour turn-around

Solution

- 10 HANA blades with 500GB per blade
- SAP BusinessObjects Explorer

Results

- 120 TB Total System / 40TB Raw Compressed to 4TB
- 20x Faster & 200x Better Price Performance
- Moved from 5 days down to 2 days for shelf turnaround
- Eliminates out of stock scenarios during promotions



SAP In-Memory Strategy

Product Strategy and Plan



Capabilities

In-Memory Analytics

- **SAP HANA real-time operational analytics**
- Complete SAP BusinessObjects BI suite 4 runs on SAP HANA

Next-gen Applications

- **SAP NetWeaver BW fully running on SAP HANA**
- SAP HANA platform for in-memory apps
- **SAP Business Suite runs on SAP HANA**
- Further optimization of SAP BusinessObjects BI suite for SAP HANA
- Industry and LoB Analytic Apps

One Store for Data and Analytics

- SAP HANA only persistence layer for SAP Business Suite
- **SAP Business Suite optimized for in-memory computing**

Benefits

- Flexible real time analysis of operations at non-aggregated level

- Real-Time operational planning and simulation capabilities: link to execution
- Primary persistence and optimized for SAP NetWeaver BW

- Reduced landscape complexity
- Value chain transformation

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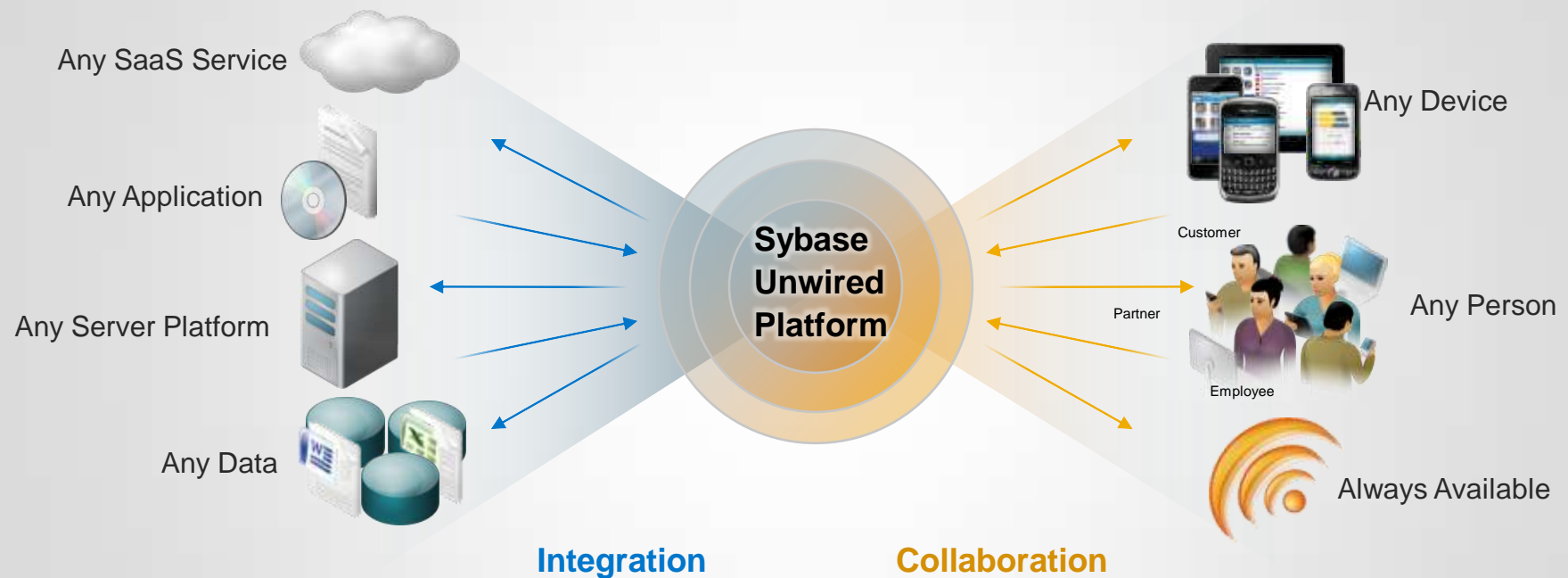
The SAP Mobile Platform

The Sybase Unwired Enterprise



Business Information

Information Mobility



Manage

Analyze

Mobilize

Mobilizing the SAP BusinessObjects BI Suite

The most complete Mobile BI Suite available



SAP BusinessObjects Dashboards on BlackBerry Playbook, Android and iPad*



- Xcelsius AIR dashboards , Crystal
- Native Flash, multi-tasking, HD viewing
- Connect through Wifi (VPN) or secure Bberry Bridge
- No elaborate middleware or recoding

* targeted for Q3 2011

SAP's Mobile BI 2011 Roadmap

1

Expand Multi-Device Strategy



Deliver current Mobile BI solutions in native format on majority of smart phones and tablets including iPhone, iPad, Playbook, and Android

2

Product Expansion



Fully supported Explorer and new Exploration Views

New solution based on location intelligence (Augmented Reality)

3

Unwired Platform Integration



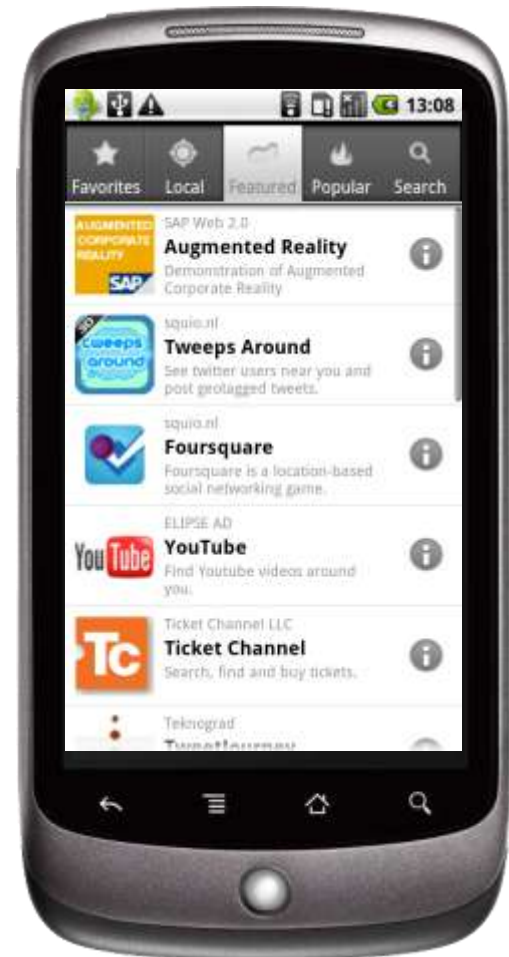
Integrated Mobile BI suite with Sybase Unwired Platform (SUP) for workflow analytics in SAP mobile apps and extending SUP advantages to Mobile BI customers through Mobile SDK

Deliver Critical Business Success

SAP BusinessObjects Augmented Reality – coming in H2 2011

SAP Augmented Corporate Reality

- Highly personalized & dynamic experience
- Leverages extensive Research & Innovation across:
 - Search
 - In-Memory Technology
 - Advanced Visualization
 - Contextual Navigation
 - Geo-Location Services





SFR 3G 09:57 97%

Filter by: Store Performance



Augmented Reality...

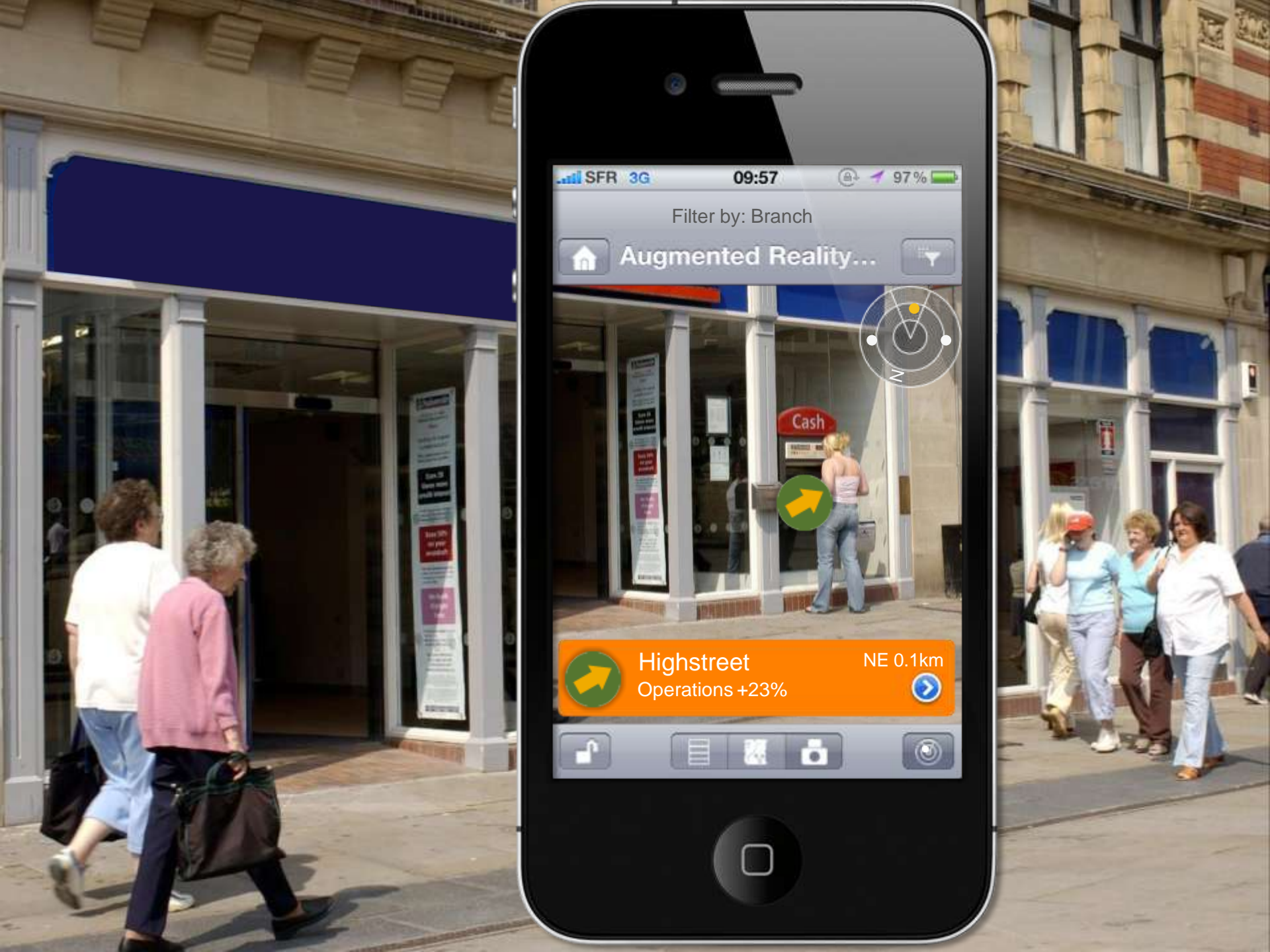


Store 23

SE 0.1km

Current sales: \$15k





SFR 3G

09:57

97%

Filter by: Branch



Augmented Reality...



Highstreet
Operations +23%

NE 0.1km





Photo by Thomas Hawk, [Flickr](#)



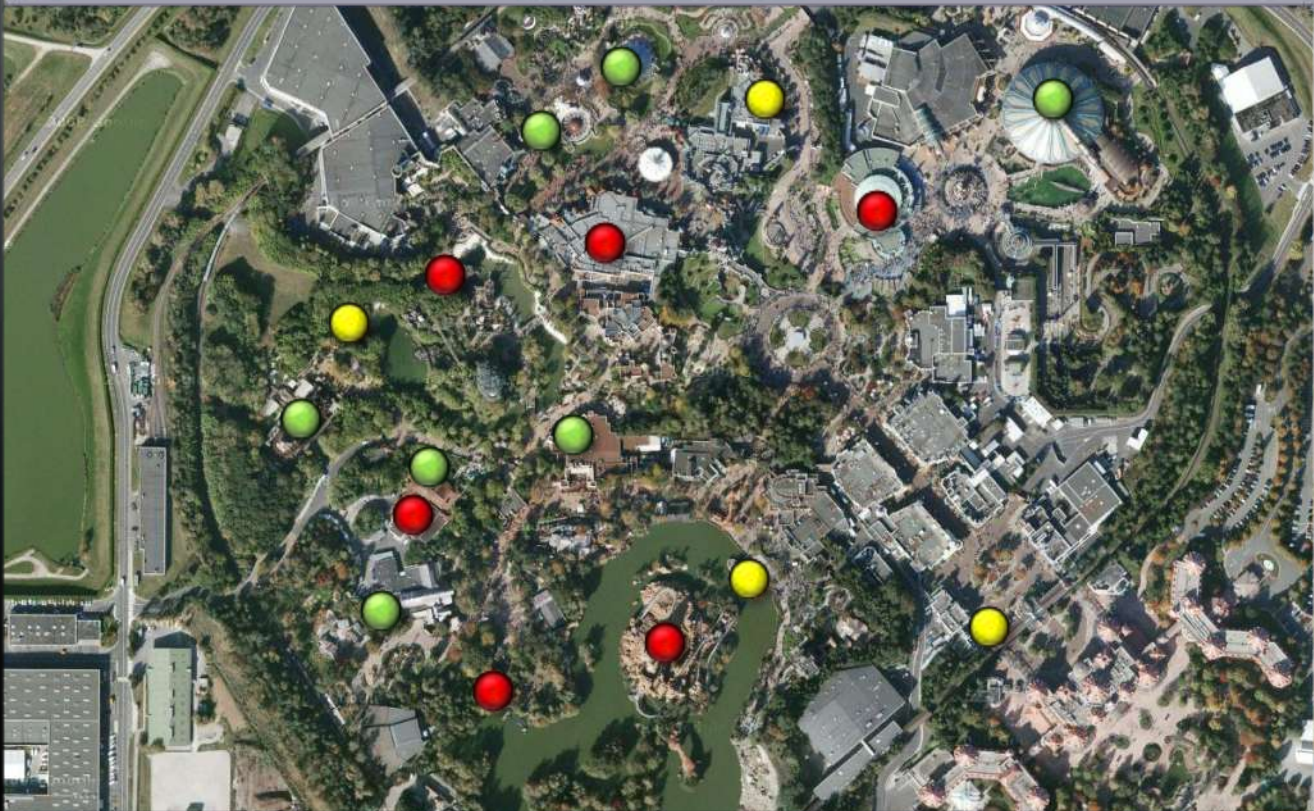
IPad

14:38

100%

Filtered by: Distance

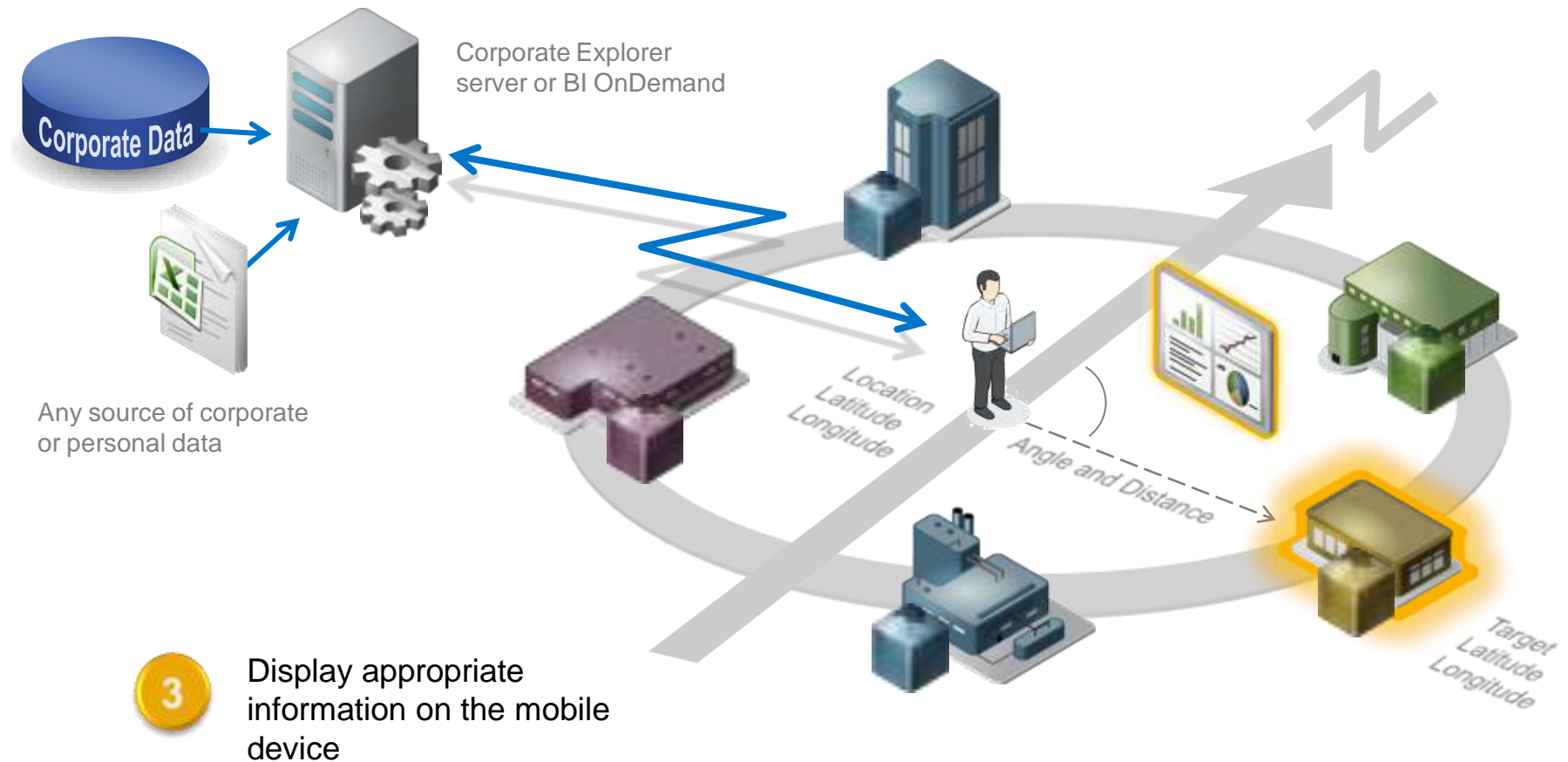
Augmented Reality Explorer



How Augmented-Reality Explorer Works

- 1 Define the points of interest and associated data and load them into SAP BusinessObjects Explorer

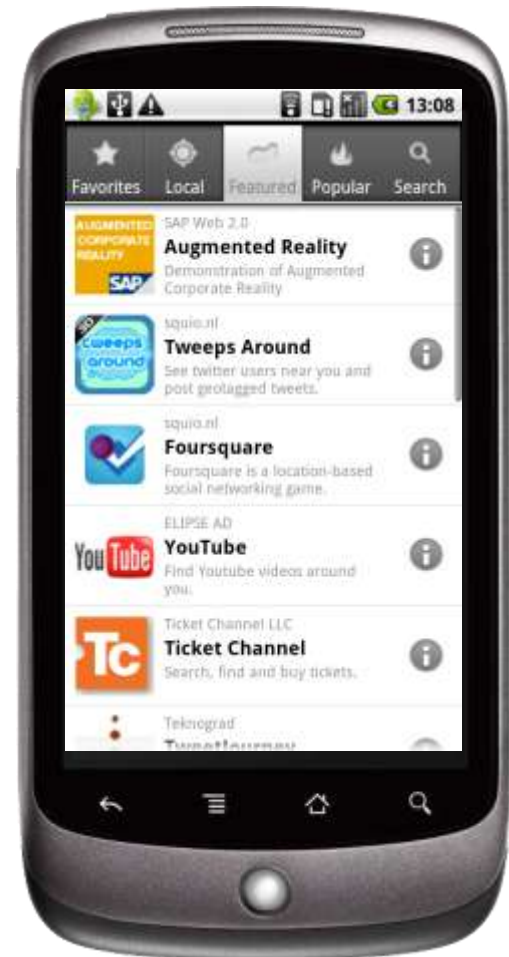
- 2 Calculate direction and distance to POIs, based on the users' GPS location and compass



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