



ORACLE®

Introduction to Hyperion Essbase – Session 41860

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9/11 Crisis in the Airline Industry

Southwest Airlines Adapts



- 83 million passengers a year
- 63 destinations
- 3300 flights a day

NEEDS

- Determine how long cash balances of \$1 billion would last – immediately
- Develop capital spending plans and 15 month rolling forecasts in 1 day
- Create business cockpits for executives and other functional areas to track key metrics

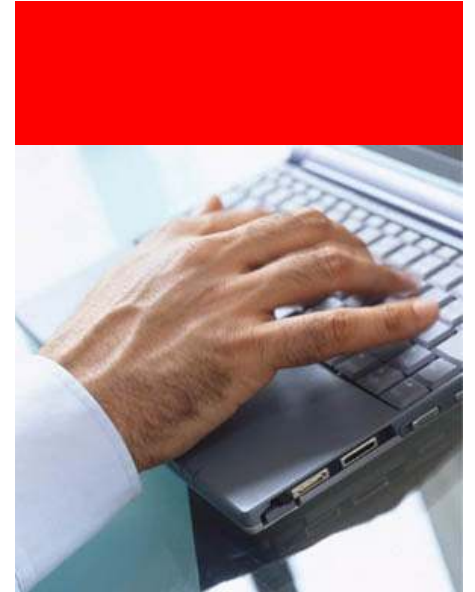


AFTER

- Ability to forecast within 2% of outcome, providing top-bottom and bottom-top analysis
- Analysis provided comfort level (no employees laid off; no need for government funding)
- Finance moved to spending 10% accumulating data and 90% analyzing (75%/25% before)

Agenda

- Analytic challenges
- Introduction to Hyperion Essbase
- Value of Essbase
- Oracle's enterprise performance management vision



Analytic Challenges



Today's Analytic Challenges

- Can't one report answer my questions?
- Analysts stretch Excel beyond it's abilities!
- Yet, Excel is the analysts' tool of choice
- No "single source" for information
- Acquisitions promote stress
- Flexibility with "Speed of Thought"
- What's certain about today's business climate is uncertainty



Can't One Report Answer My Questions?

It took me a week to pull these numbers together on a report and once I was done, they're asking me another question I hadn't thought of!



Analysts Stretch Excel

The Excel “system” broke again, the guy who built it has quit, and I’m not sure I can trust the numbers anymore.



Yet, Excel is the Analysts' Tool of Choice

I don't understand this interface, why can't
I work with the data in Excel?



No “Single Source” for Information

The gross margin number on my report doesn't match yours. I'm sure mine is right – how is yours calculated?



Acquisitions Promote Stress

With this latest acquisition I need to model our companies' combined financials including product synergies. Unfortunately, they are using SAP...



Flexibility with “Speed of Thought”

**I need a way to analyze 10 million customers,
and not have the query take 20 minutes and
impact production systems.**



Today's Business Climate is Uncertain

With this Avian flu crisis, I'm going to have to destroy my chickens and build my flock from scratch. How do I manage the cash I have in order to survive and then rebuild my business?



What Customers Need ...

To answer tough, unique business questions



With tools designed for business users



To bring together data – wherever it resides



Calculation power to transform their data



Ability to look into the future – enterprise wide



The Solution?

Hyperion Essbase

The **OLAP** (Online Analytical Processing) **server** that provides an **environment** for rapidly developing **custom** analytic and enterprise performance management applications



BI Tools are Designed for Reporting

Essbase is Tuned for Analysis

REPORTING

Which customers spend the most?

What did this customer buy?

What is the Q4 revenue forecast?

ANALYSIS

Which customers are most profitable?

What is the customer likely to buy next?

What if demand falls short of forecast?



Thomas H. Davenport
Harvard Business Review
Competing on Analytics
January 2006

Our study found three key attributes among analytics competitors:

- 1) Widespread use of modeling and optimization
- 2) An enterprise approach
- 3) Senior executive advocates



Introduction to Hyperion Essbase



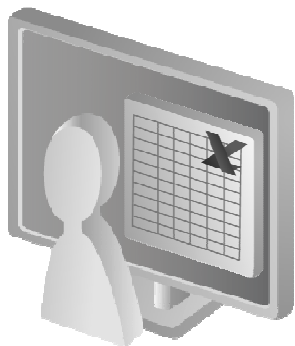
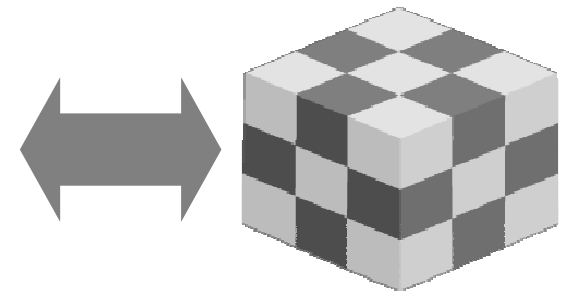
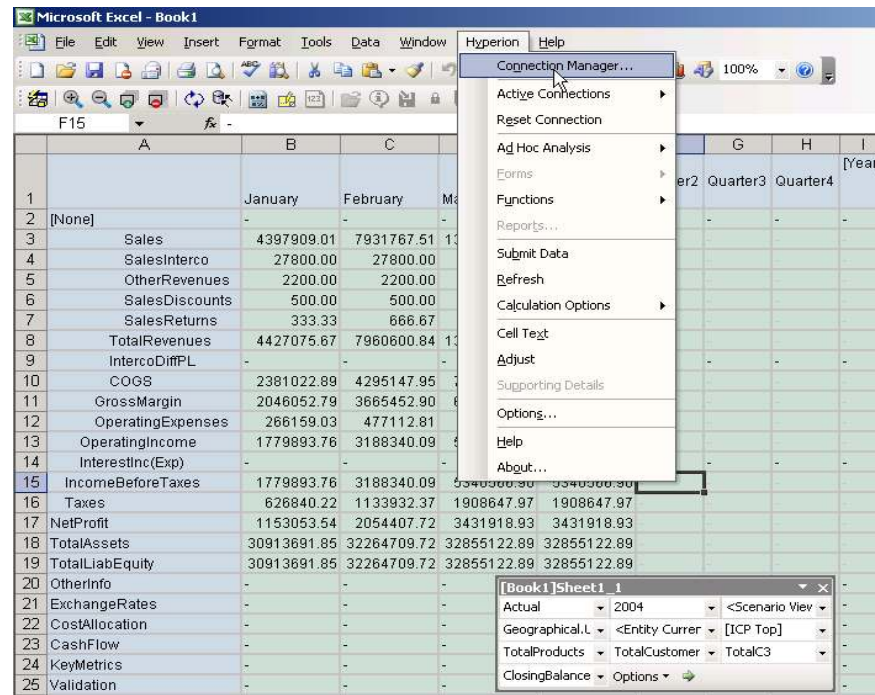


Why Essbase?

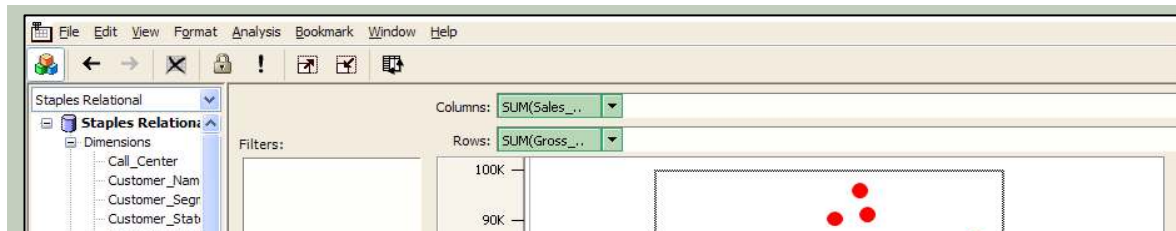
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Richest Business User Experience

SmartView: Microsoft Office Integration

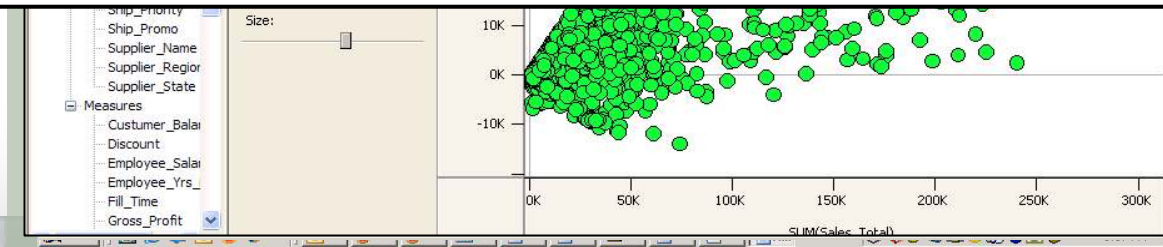


Plus a Range of Superior Reporting Tools...



“Visual Explorer is not just a slick way to visualize, it’s a slick way to visually analyze.”

– Wayne Eckerson, Industry Analyst, TDWI



Broadest Analytic Functionality

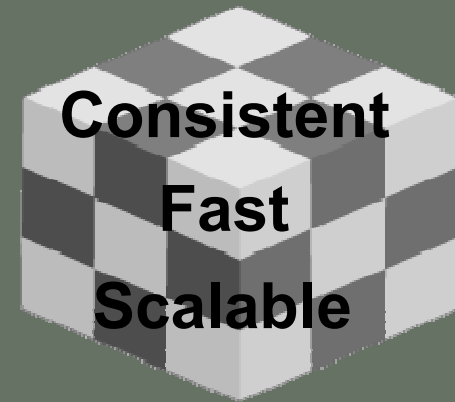
- Drill, pivot, select, compare, rank, sort, filter, group stack, calculate, annotate, write back...
- Reporting tools enabled by the “Outline”
- “Maps” to the business



Speed of Thought Response

“The interactive querying of data, following a thread of analysis through multiple passes”

Journal of Data Warehousing



“A conversation with the data”



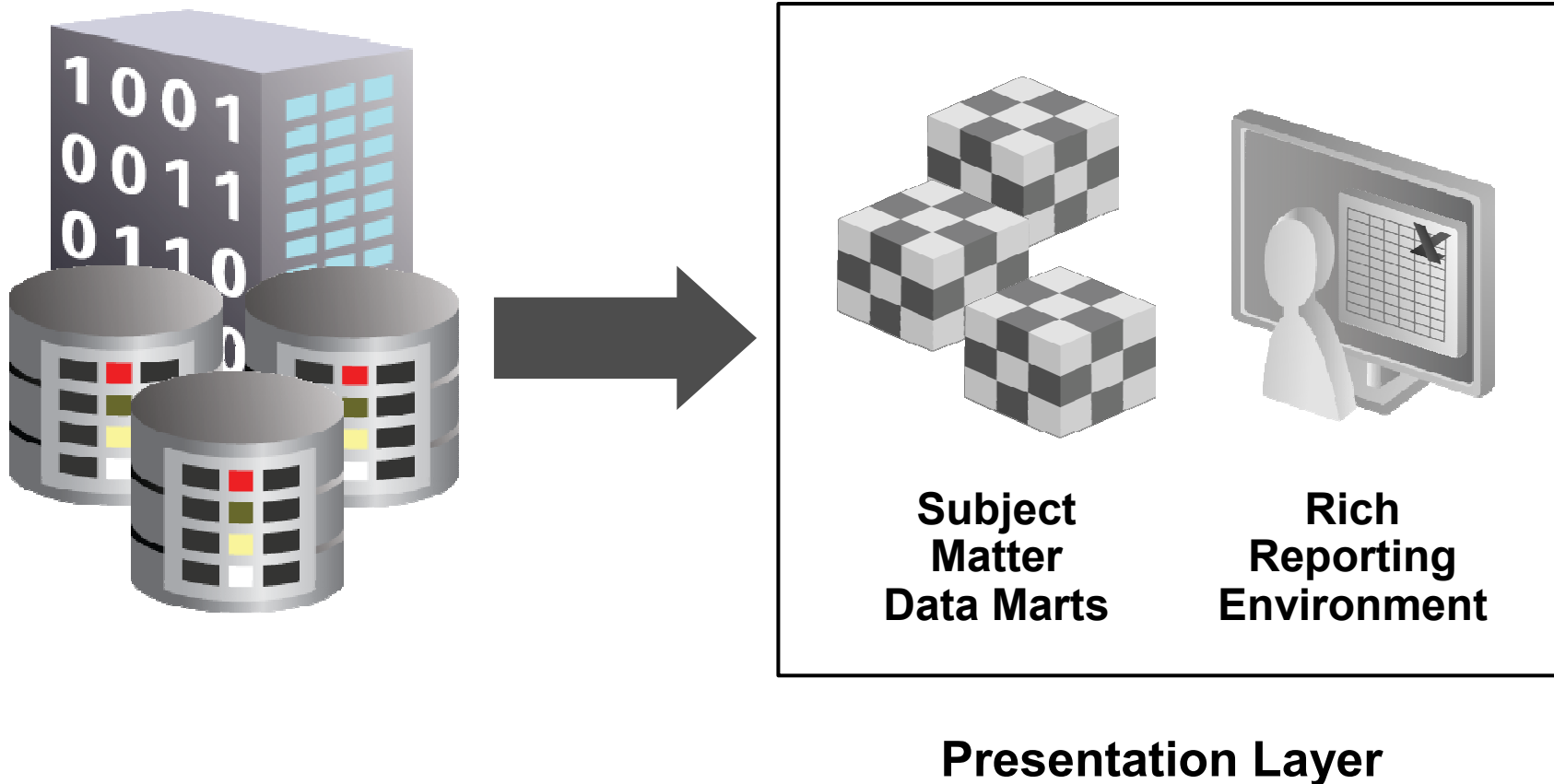
...for 30,000 Business Users



- 5,000 views & reports
 - Sales
 - HR
 - Purchasing
 - Finance
- 24 x 7 availability
- Maximum query time
 - Less than 4 seconds

“We realized we needed a powerful OLAP system—one that was highly dimensional and detailed—that could provide speed of thought response for tens of thousands of users. We selected Hyperion because it met our scalability and performance requirements...”

A Data Mart Strategy that Leverages the Warehouse





Why Essbase?

1

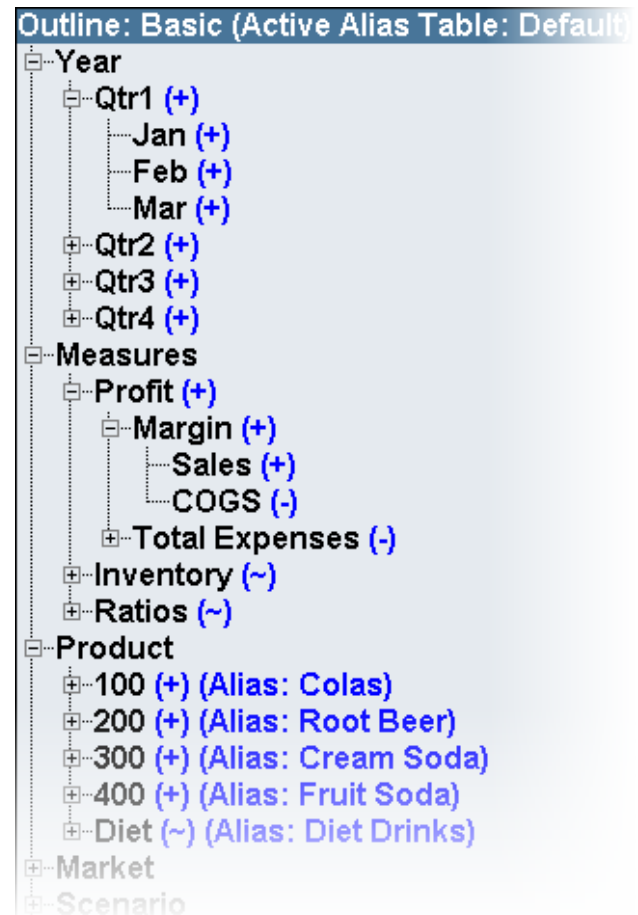
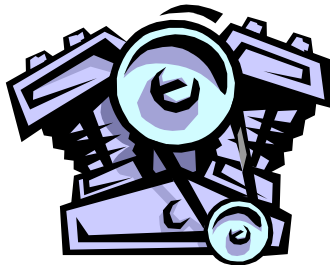
Richest Business User Experience

2

Highly Advanced Calculation Engine

Superior Calculation Power

- Widest range of functionality
 - Simple aggregations to complex cross dimensional allocations
 - Results stored or calculated upon retrieval
 - Relationship aware
 - Application wide or subset specific
 - Conditional and procedural logic



Customer Profitability in Health Care



- Leading distributor of name-brand medical and surgical supplies – 51 distribution centers in the US
- \$5.5 billion in revenue (2006)
- 200,00 SKUs/20,000 customer accounts

PREVIOUS ATTEMPT

- Three day calculation times
- Additional week to produce reports
- IT required to maintain rate changes and calculations
- Limited insight into customer profitability



AFTER

- Identified top 10 low profit customers in each geography
- Profile of each customer now shows operational characteristics as well as programs and services purchased
- Developed what-if scenarios providing a roadmap to increased profitability for targeted accounts

Comprehensive Library of Functions

- 350+ functions
- Simple syntax
- Extensible
- Single point of maintenance

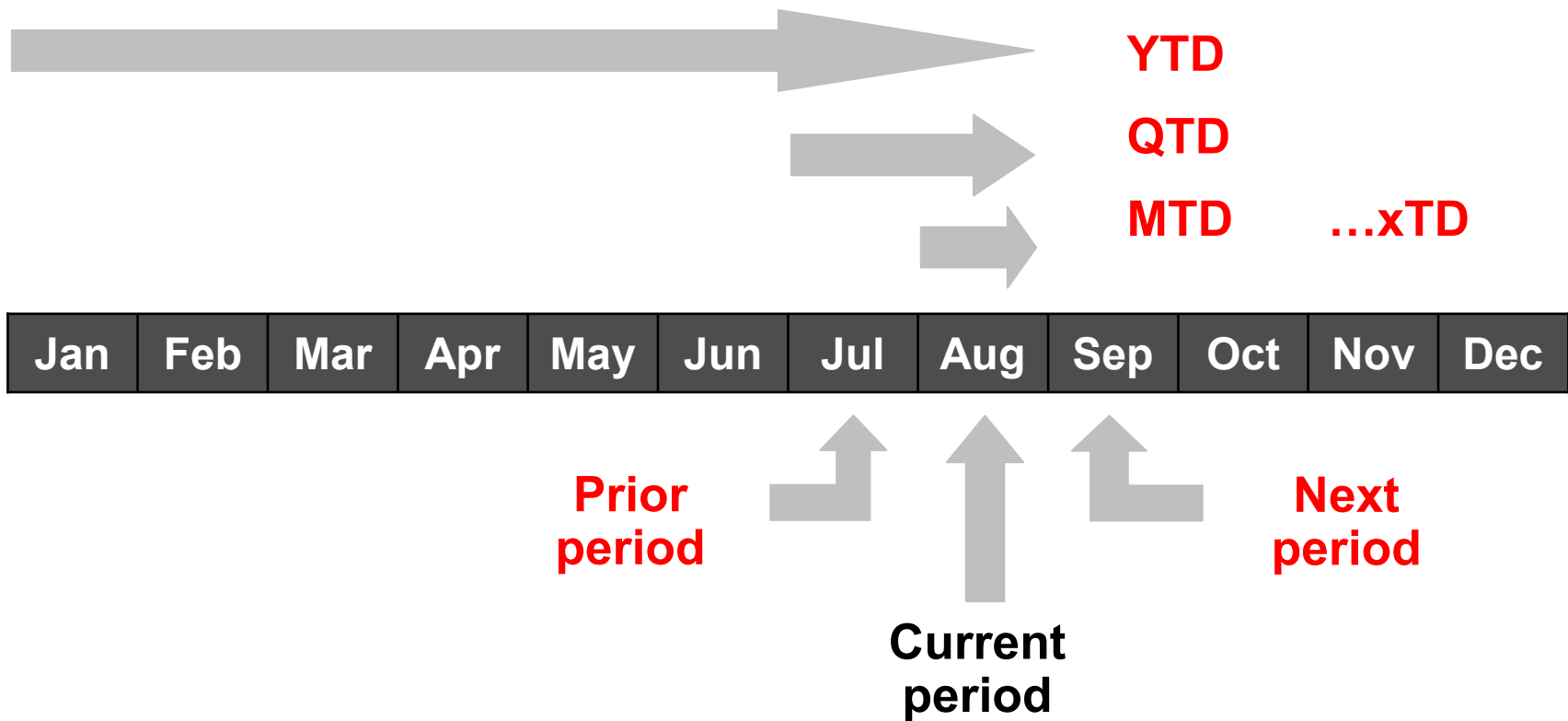
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| <u>@ALIAS</u> | <u>@INT</u> | <u>@MDALLOCATE</u> | <u>@ROUND</u> |
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| <u>@IANCESTORS</u> | <u>@MAX</u> | <u>@RDESCENDANTS</u> | |

Financial Intelligence: A Simple Example

| | | Actual | Budget | Variance | Variance % |
|---------|-------------|--------|--------|----------|------------|
| REVENUE | Gross Sales | 100 | 120 | -20 | (16.67) |
| EXPENSE | Advertising | 100 | 120 | 20 | 16.67 |

What's the variance?

Time Intelligence: A Simple Example





Why Essbase?

1

Richest Business User Experience

2

Highly Advanced Calculation Engine

3

Best Custom Analytic Environment

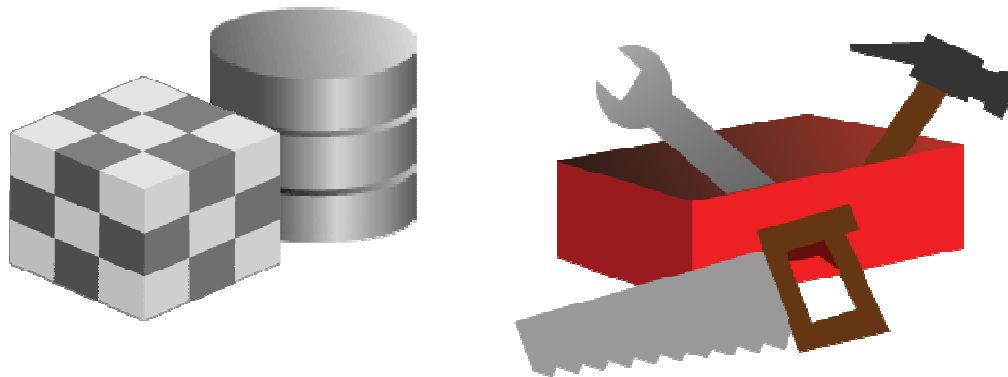
Optimized Storage

Block

Aggregate

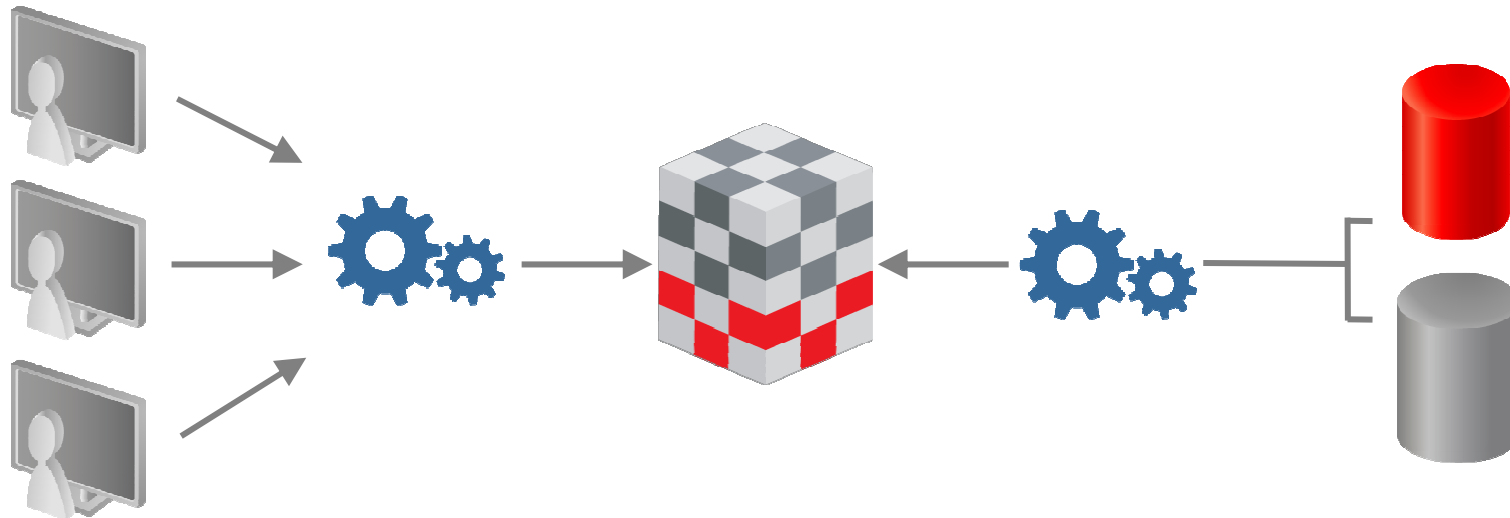
Hybrid

Advanced Relational Access



The Power of Aggregate Storage Streams

- Trickle-feed into a “persisted” Essbase cube
 - Disk-based
 - With any and all aggregations
- Essbase is online through the trickle-feed process
 - Read & Write co-exists with trickle-feed



Forward Looking Applications



- A spectrum of analyses
 - Trending
 - Forecasting
 - Scenario modeling
 - What if testing
 - Goal seeking
 - OLAP mining



“Predictive Analytics
...is where Business
Intelligence is going.”




An Analytic “Sandbox”



- Multi-user “writeback” inserts data into Essbase under security
- Calculations based on historical data
- An opportunity to input “user bias” and/or expertise to compensate for external conditions

...out of all the programs in this review we found Essbase the most important for your agency. It performs well, and the newly elevated reporting graphics make it even more versatile. Most important, it's easy to use.

Tools of the Master Forecaster
Government Computer News
March 2007



Scalability

USER SCALABILITY

NTT DoCoMo

- 30,000 users across 37 BUs & 172 offices
 - Mobile phone sales
 - Customer billings
 - Assets, contracts, purchasing & logistics
 - Human resources
 - Finance – P/L, C/F, B/S, Virtual close
- Real time visibility

ANALYTIC SCALABILITY

International Rectifier

- Collaborative demand planning
 - Sales trending & forecasting
 - Manufacturing capacity & mix
 - Marketing analysis
 - Customer & product profitability
 - Capital budgeting
 - Financial reporting & analysis
- Reduced inventory costs and increased revenue through improved forecasting

MAINTENANCE SCALABILITY

Chrysler

- Process automation using UNIX shell scripts, AutoSys jobs, and Tivoli TME 10 monitoring
 - 45 databases on 4 physical servers
 - Server and application log monitoring
 - Nightly updates and calculations
 - Back up and recovery
- Reduced administration costs and improved application availability

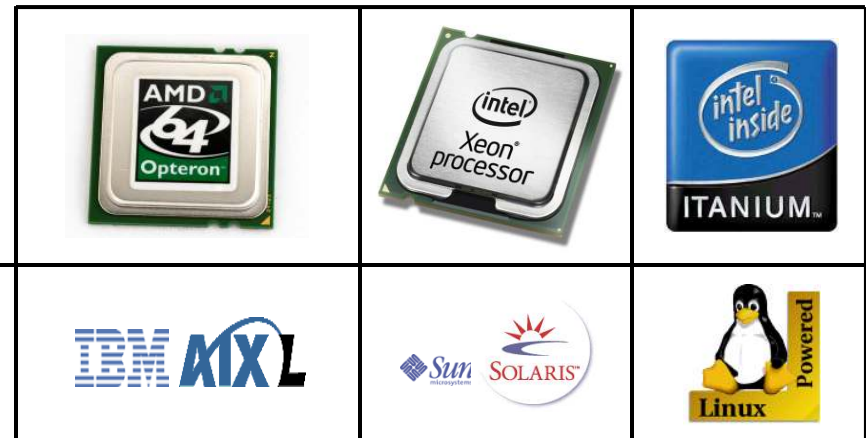
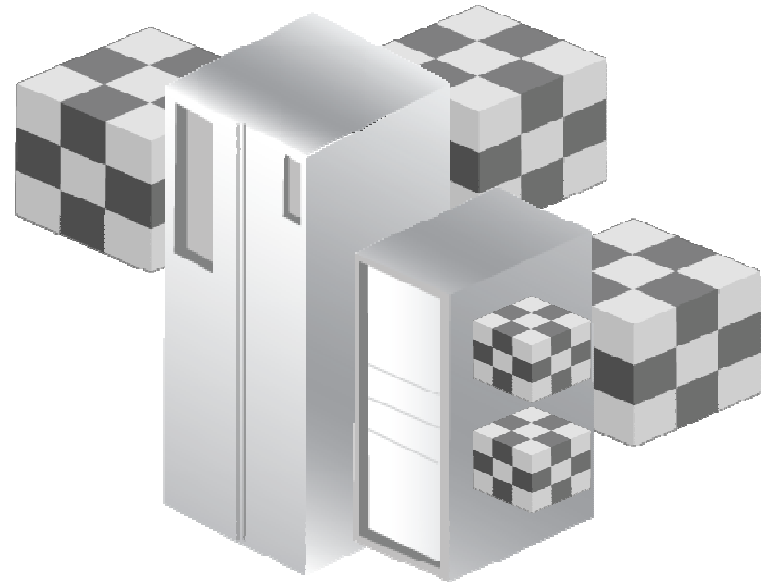
DATA SCALABILITY

Ontario Ministry of Transportation

- Over 100GB and 39 dimensions providing 14 years of history
 - 230,000 collisions
 - 250,000 sections of highway
 - 450,000 vehicles with 22 attributes
 - 185,000 persons injured with 18 attributes
- Lower fatality rates through improved insight of factors influencing accidents

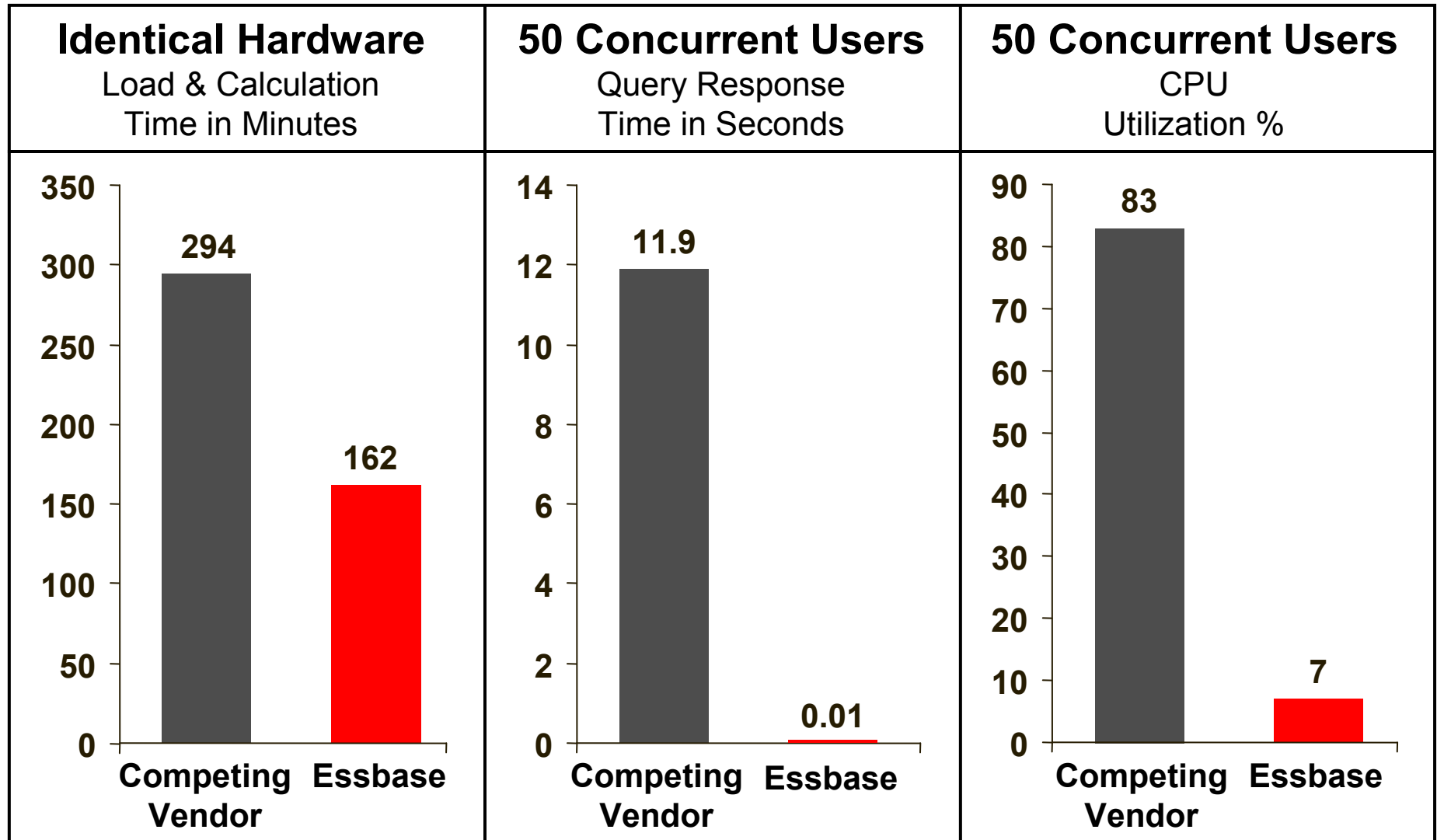
Premium Performance

- Multiple and cross platform deployment
 - Unix and/or Windows
 - 32/64 bit
- Optimization
 - Partitioning
 - Clustering
 - Tuning
 - Trickle feed



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Best In Analytic Performance Scalability



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The Value of Essbase



Analytic Challenges Met

| CUSTOMER CHALLENGES | | ORACLE VALUE | |
|----------------------------|---|---------------------------------------|--|
| Forecast accuracy | ➡ | 2% accuracy on \$1B cash balance | |
| Scalable query performance | ➡ | <4 second SLA, 30,000 users | |
| Massive data sets | ➡ | 100GB, 39 dimensions, 14 yrs. | |
| Brand valuation | ➡ | Relative contribution of 4,000 brands | |
| Customer profitability | ➡ | 14 million customers, .2 seconds | |
| Delayed reporting cycles | ➡ | 30% reduction | |



Why Essbase – Summary

| | |
|--|---|
| Richest Business User Experience | <ul style="list-style-type: none">• Superior tools for the business user• Broadest analytic functionality• “Speed of thought” response |
| Most Highly Advanced Calculation Engine | <ul style="list-style-type: none">• Superior calculation power• Comprehensive library of functions• Extensive financial and time intelligence |
| Best Custom Analytic Environment | <ul style="list-style-type: none">• Optimized storage• Enterprise scale forward looking applications• Premium performance |



Oracle's Enterprise Performance Management Vision



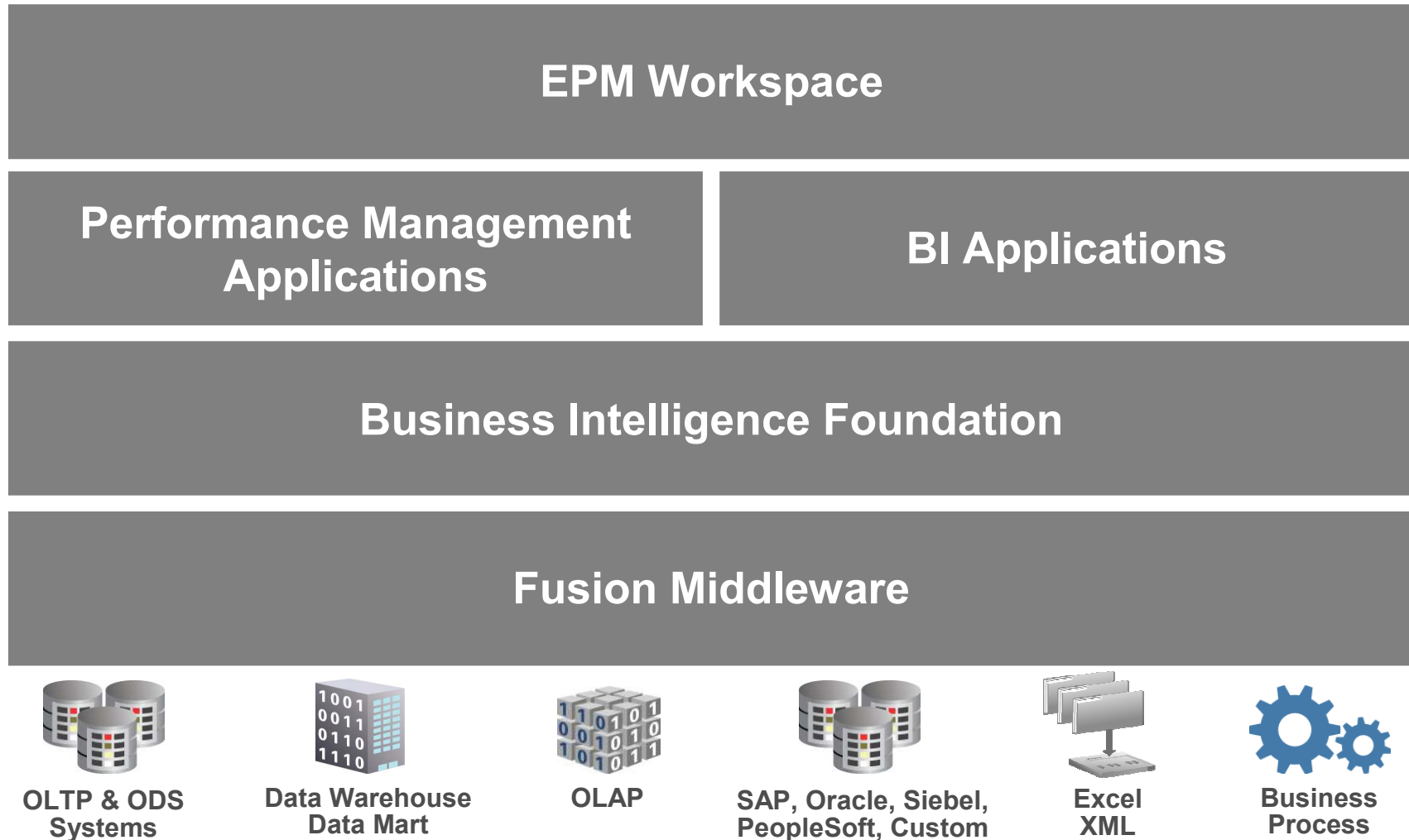
Oracle's EPM System Vision

Focus on Today and Plan for Tomorrow

- Link strategic goals to operational decisions
- Integrates all management processes
- Deliver consistent, reliable insights to drive action
- Lower costs and reduces system complexity
- Single version of the truth

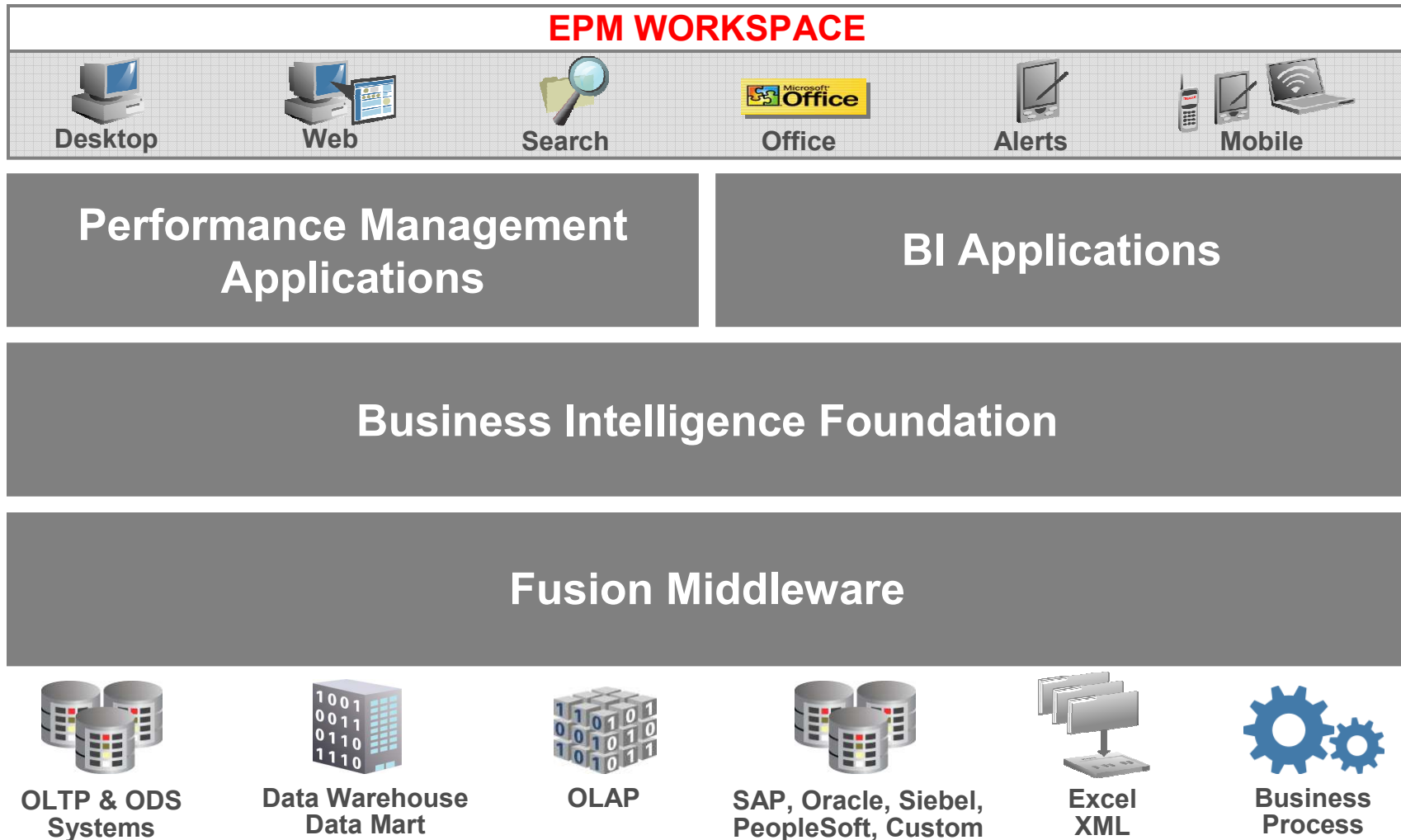


Oracle's Enterprise Performance Management System



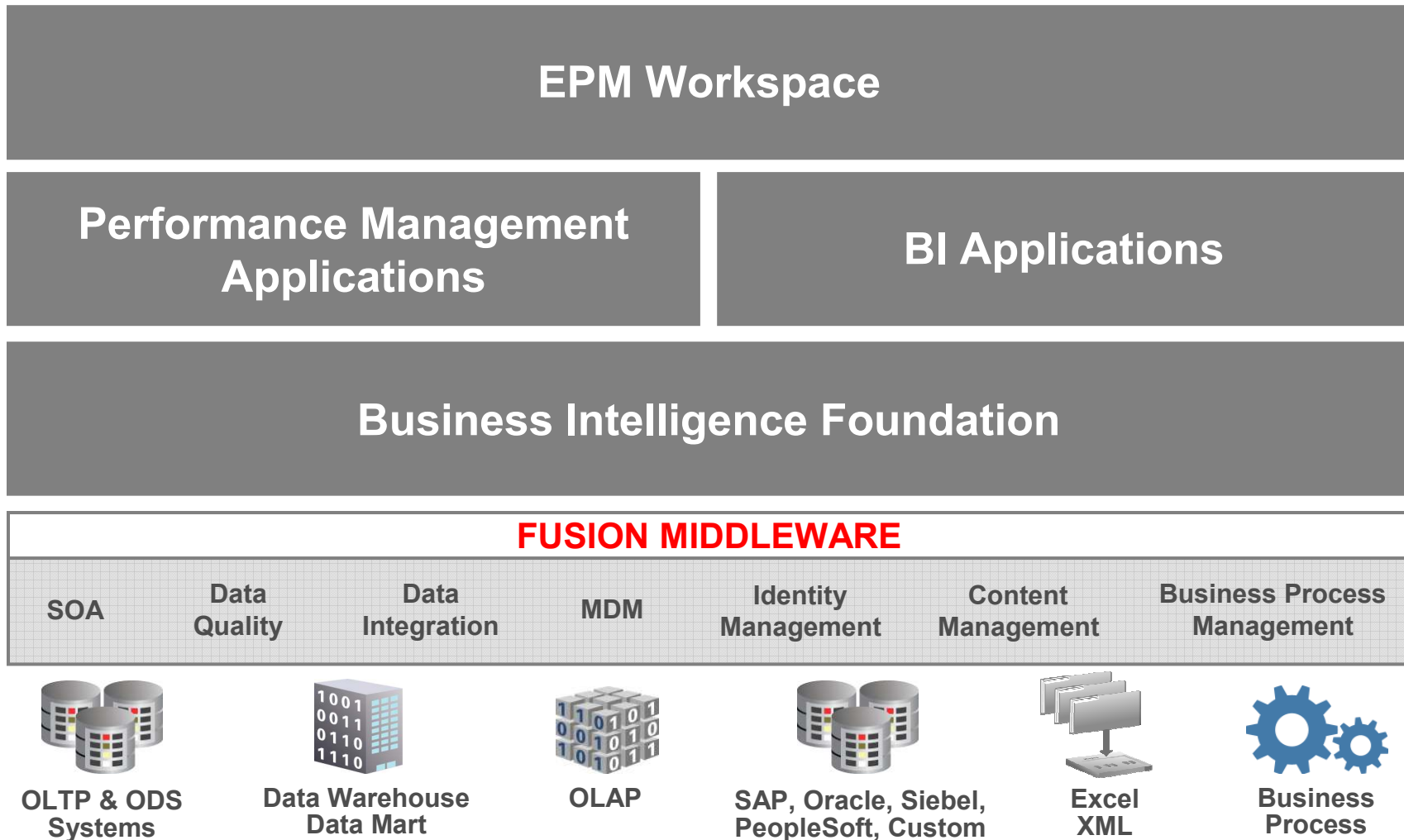
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Pervasive Information Access Through a Multi-Channel EPM Workspace



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Leverages Fusion Middleware



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Market Leading Performance Management Applications

EPM Workspace

PERFORMANCE MANAGEMENT APPLICATIONS

| | | | |
|---------------------|-------------------|--------------------------|----------------------------------|
| Strategy Management | Business Planning | Profitability Management | Financial Reporting & Compliance |
|---------------------|-------------------|--------------------------|----------------------------------|

BI Applications

Business Intelligence Foundation

Fusion Middleware



OLTP & ODS
Systems



Data Warehouse
Data Mart



OLAP



SAP, Oracle, Siebel,
PeopleSoft, Custom



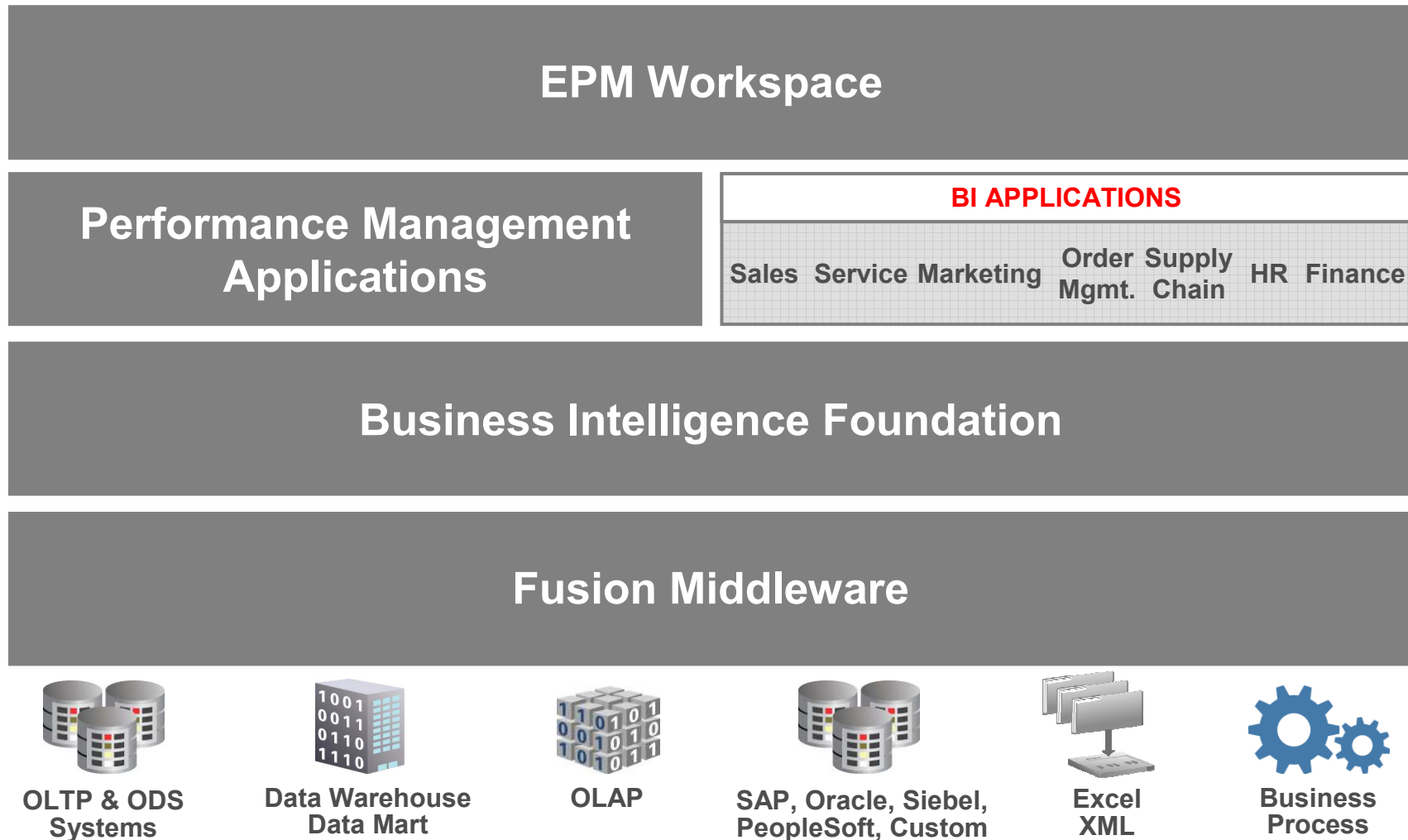
Excel
XML



Business
Process

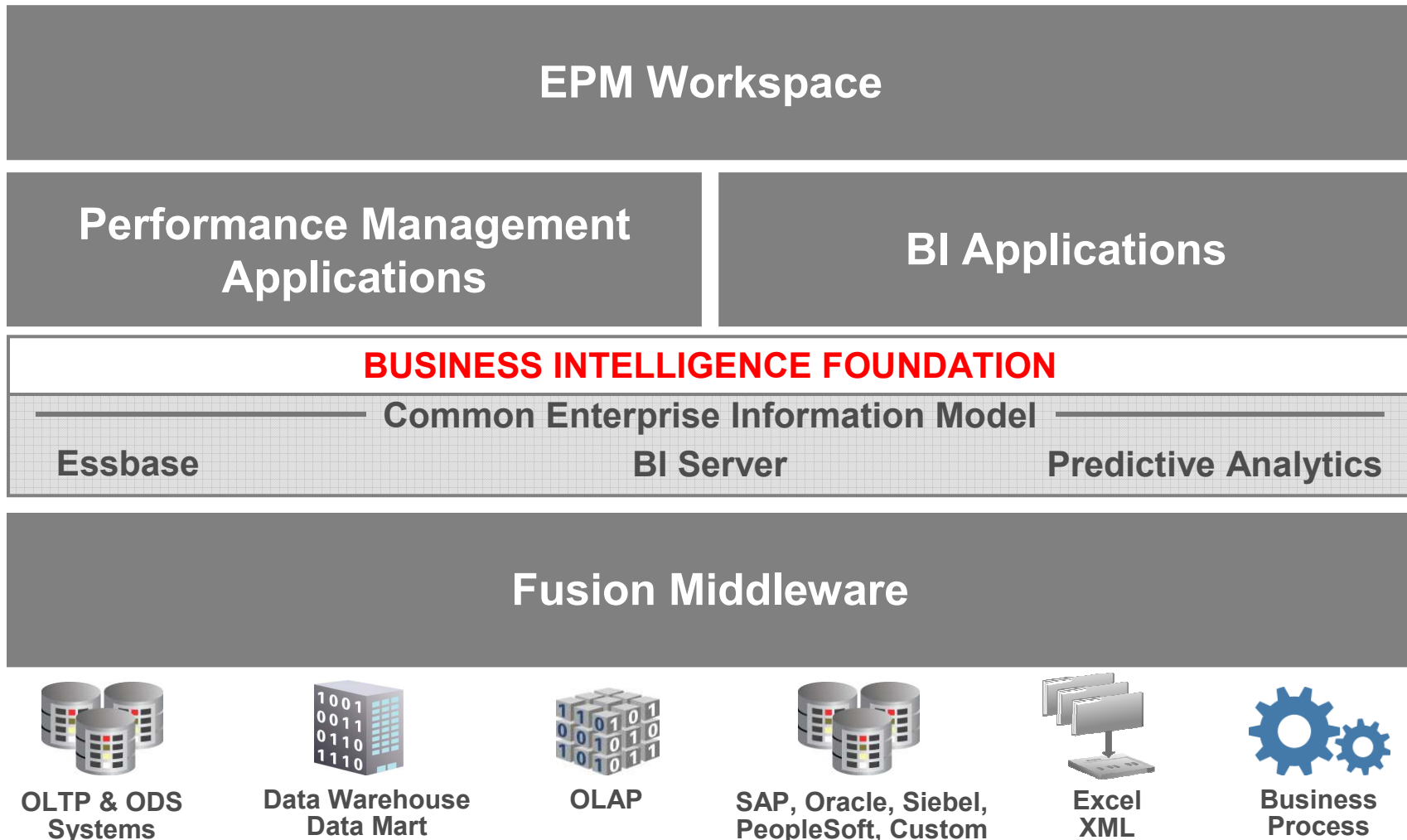
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Comprehensive BI Applications



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Highly Scalable BI Foundation



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