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RELEVANT ANALYSIS. RELEVANT SOLUTIONS.

Integrating Essbase & OBIEE+ with Your Data Warehouse Strategy

interRel Consulting

OAUG Connection Point 2010

OAUG Connection Point - Enterprise Performance Management Conference

"Providing Excellence in Education & Training to the Oracle Hyperion and Business Intelligence Communities"

February 23 – 24, 2010

Hyatt Regency, Jersey City, New Jersey

Five Tracks

Budget, Forecasting & Planning	**Financial Consolidations & Reporting**	**Business Intelligence & Analytics**	**The Office of the CFO**	**EPM Product Roadmap**

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ODTUG KALEIDOSCOPE 2010

Marriott Wardman Park Hotel Washington, D.C. June 27-July 1

ANNOUNCING ODTUG KALEIDOSCOPE 2010 IN WASHINGTON, D.C.

TOPICS

- Application Express
- Database Development
- Essbase
- Hyperion Applications
- Hardcore Hyperion
- Middle Tier and Client-Side Development
- Oracle Business Intelligence and Hyperion Reporting
- SOA and BPM
- Other

- **MARK YOUR CALENDARS NOW - JUNE 27-JULY 1**
- **BE A PRESENTER - SUBMIT AN ABSTRACT**
- **GO TO WWW.ODTUGKALEIDOSCOPE.COM FOR MORE DETAILS**

About interRel

- **2008 & 2009 Oracle Titan Award winner - EPM Solution of the year**
- 2008 Oracle EPM Excellence Award
- 2009 Oracle EPM/BI Innovation Award
- One of the fastest growing companies in the world (Inc. Magazine, ’08 & ‘09)
- Two of the three Hyperion Oracle ACE Directors in the world
- Founding Hyperion Platinum Partner; now Oracle Certified Partner
- Focused exclusively on Oracle Hyperion EPM software
  - Consulting
  - Training
  - Infrastructure and Installation
  - Support
  - Software sales

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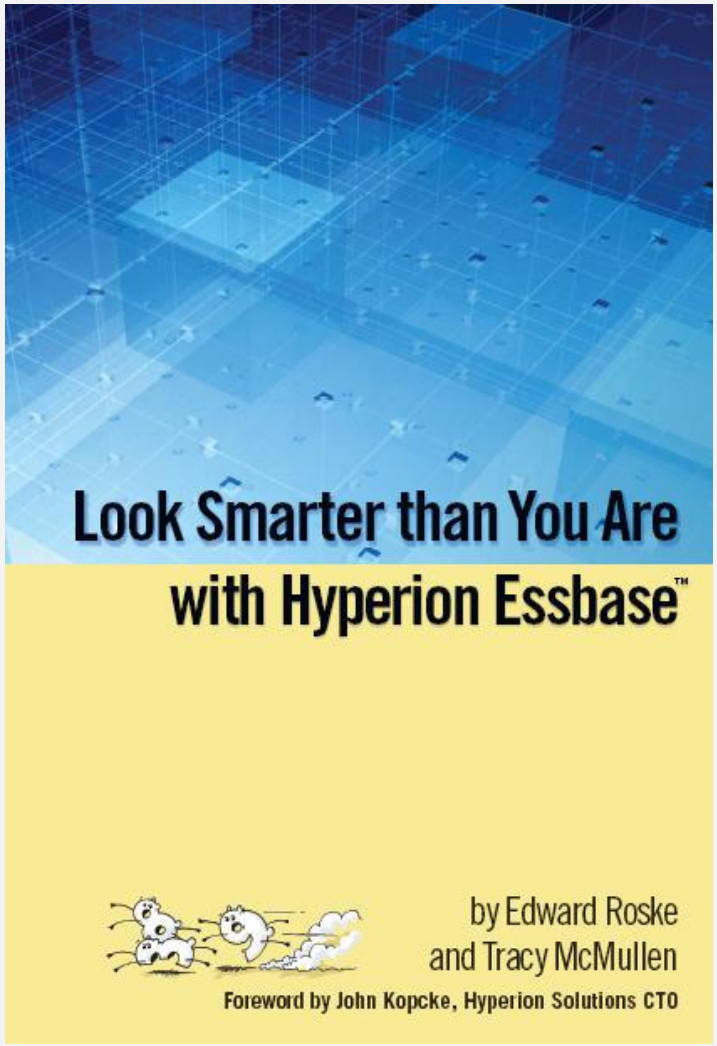

- 5 Hyperion Books Available:
  - *Essbase (7): Complete Guide*
  - *Essbase System 9: Complete Guide*
  - *Essbase System 9: End User Guide*
  - ***Smart View 11: End User Guide***
  - ***Essbase 11: Admin Guide***
  - ***eBooks available on Amazon Kindle***
- Just out!
  - Hyperion Planning for End Users
- Coming Soon
  - Hyperion Planning for Admins (days now…)
  - Hyperion Financial Management (Q1 2010)
- To order, check out www.lulu.com

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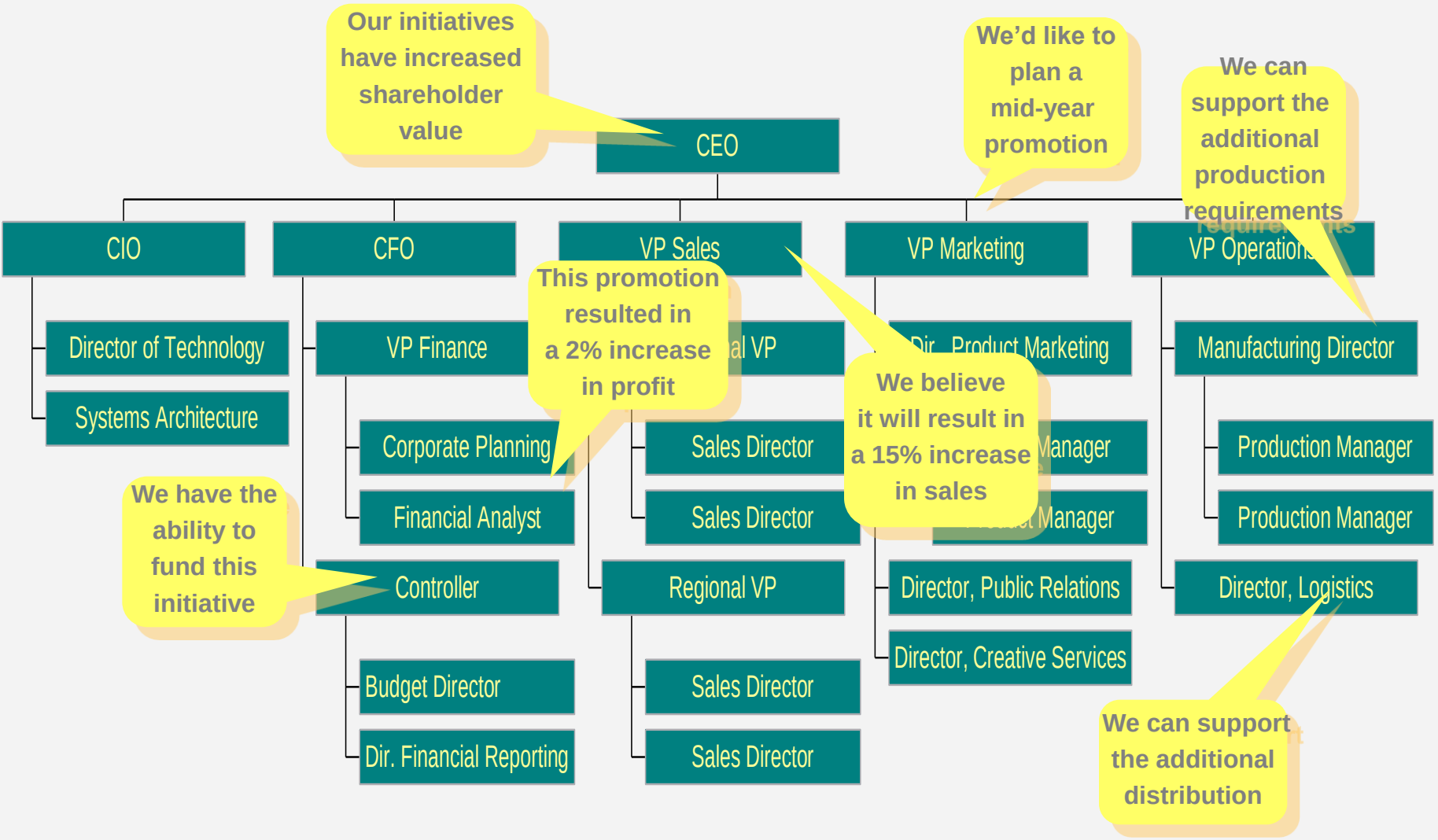
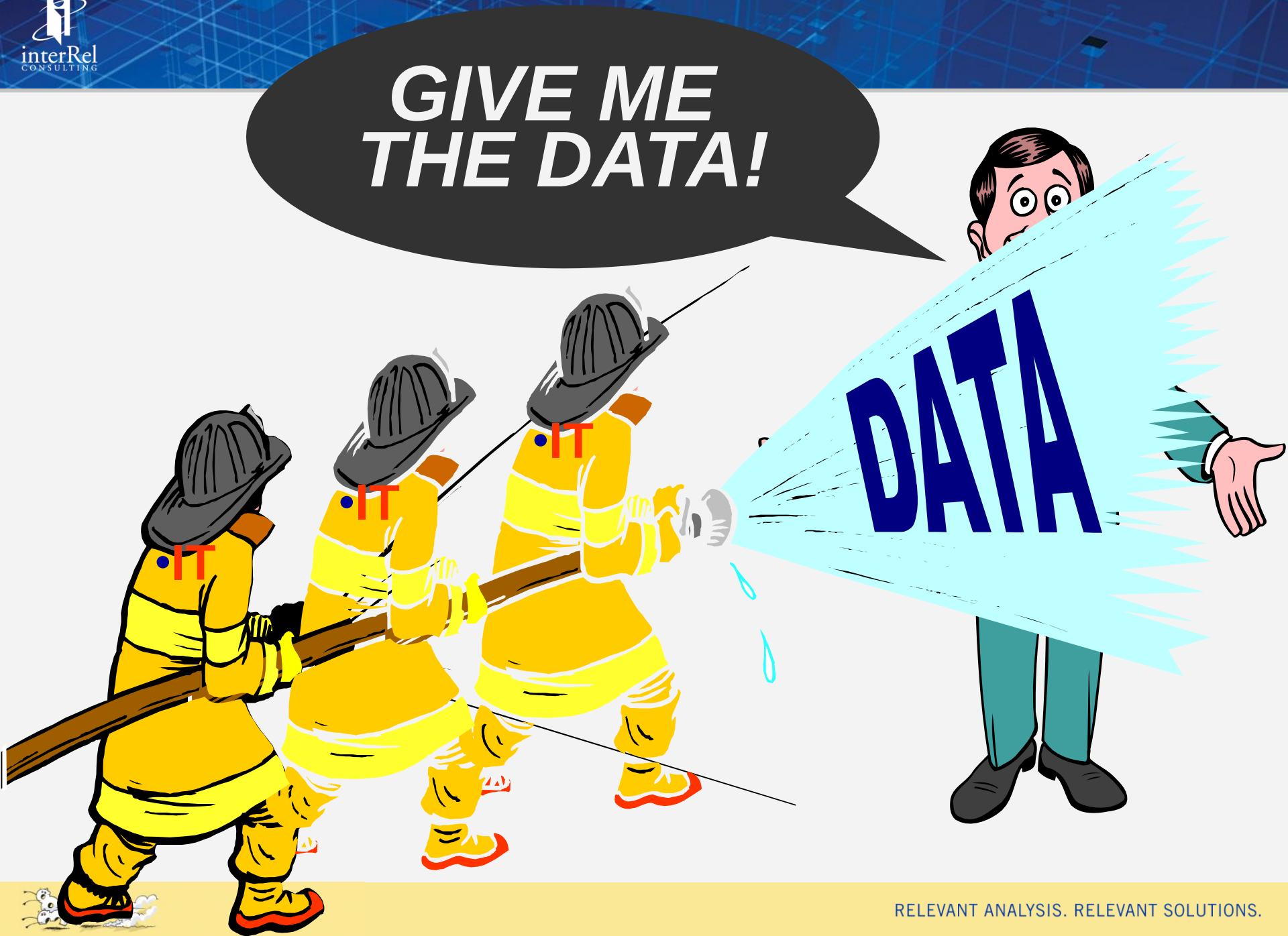
Agenda

- The Problem – Common Data Warehouse Issues
- The Solution
  - OBIEE+ and Oracle Business Intelligence Server
  - Essbase
  - One Presentation Layer - Reporting and Analysis Tools
- Steps to Integrate Essbase and OBIEE+ with your Data Warehouse
- Solving Problems / Summary
- QA

What Are the Questions?



Data is Everywhere


GIVE ME THE DATA!
DATA
IT
IT
IT

Where is the data?

- Ideally enterprise data warehouse
- Business unit data warehouses (does your company have more than one?)
- Other relational databases
- Source systems
- Spreadsheets, Access databases

- If you own Hyperion,
  - Essbase
  - Planning
  - Financial Management

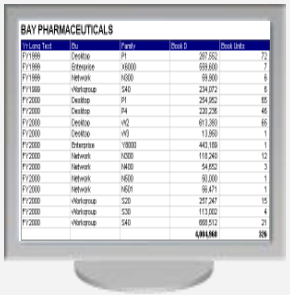
- In real life, probably many different places across your organization

Common Data Access Issues

- No single strategy for information delivery
- Data is stored in a data warehouse but no real easy way for users to get to it
  - IT queries vs. End user queries
  - No analytic capabilities
  - Limited write back and what if scenarios
- Silos of information with a multitude of tools and technologies for accessing that information
- Limited visibility to metrics for operations management and budget evaluation
- Limited correlations and integrations of data across systems
- Meaningless data results
  - Not what the user was looking for
  - Doesn't help improve enterprise performance
- IT on one side of the house | End users on the other side
- Different user communities have different interface & delivery needs

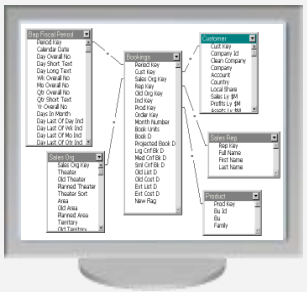
Different User Communities Have Different Interface & Delivery Needs

Enterprise Reporting



IT Staff

Power Analysis



Data Experts

Web Reporting & Analysis

Analysts

Performance Dashboards

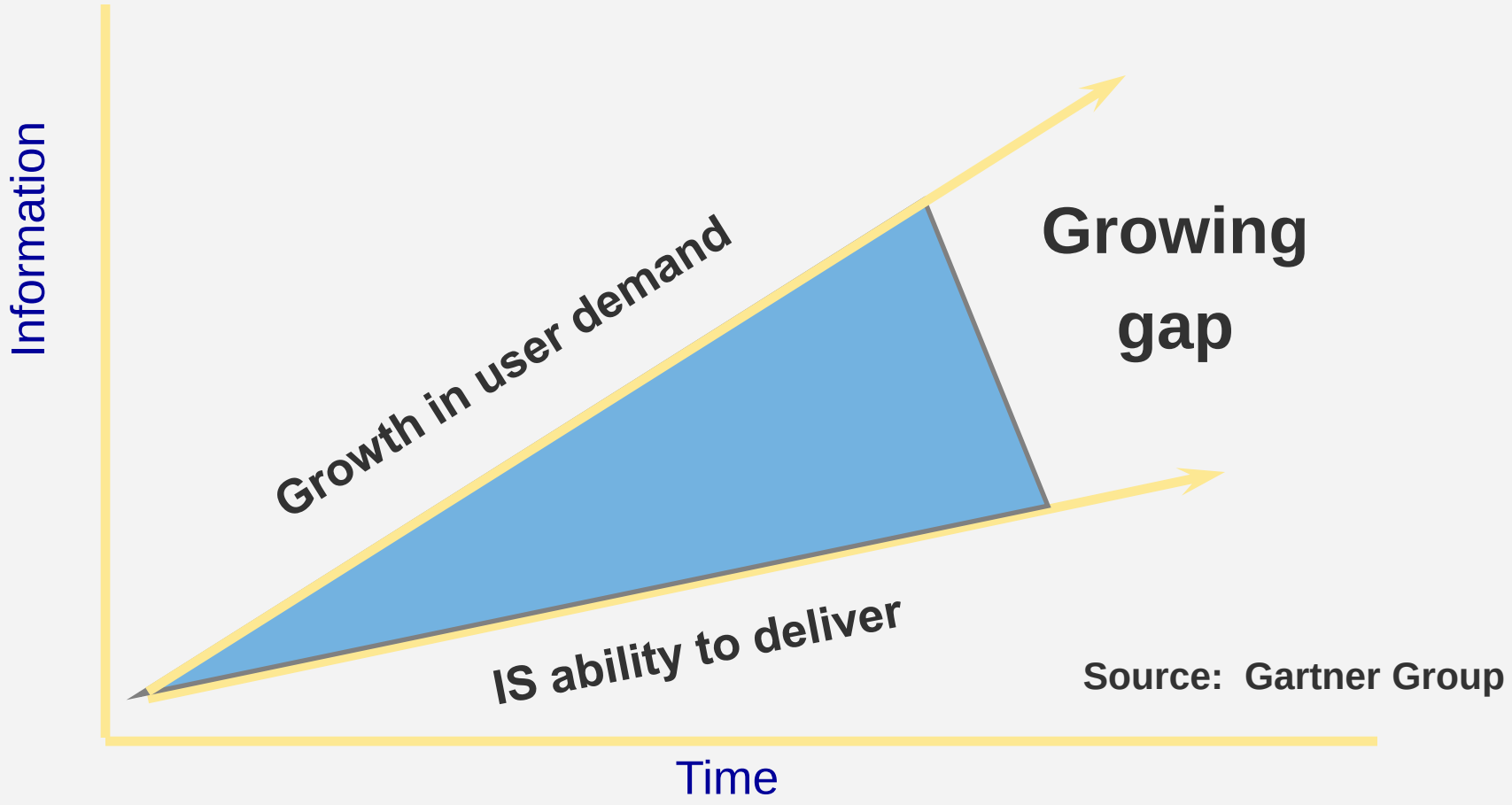
Executives & Managers

Production Reports ← → **Query & Analysis**

Common Data Warehouse Issues

- Changes to data warehouse can be time consuming
- Politics of what should be stored
- New sources require
  - Modeling
  - ETL
  - Integration to overall data warehouse design
  - Mart design
  - Reporting and analysis
  - Hardware / underlying architecture
- Update frequency (not fast enough for the end users)
- Building aggregate structures for reporting and analysis
  - Helpful for end users but …
  - Maintenance nightmare
- More expensive to maintain a data warehouse than to build one?

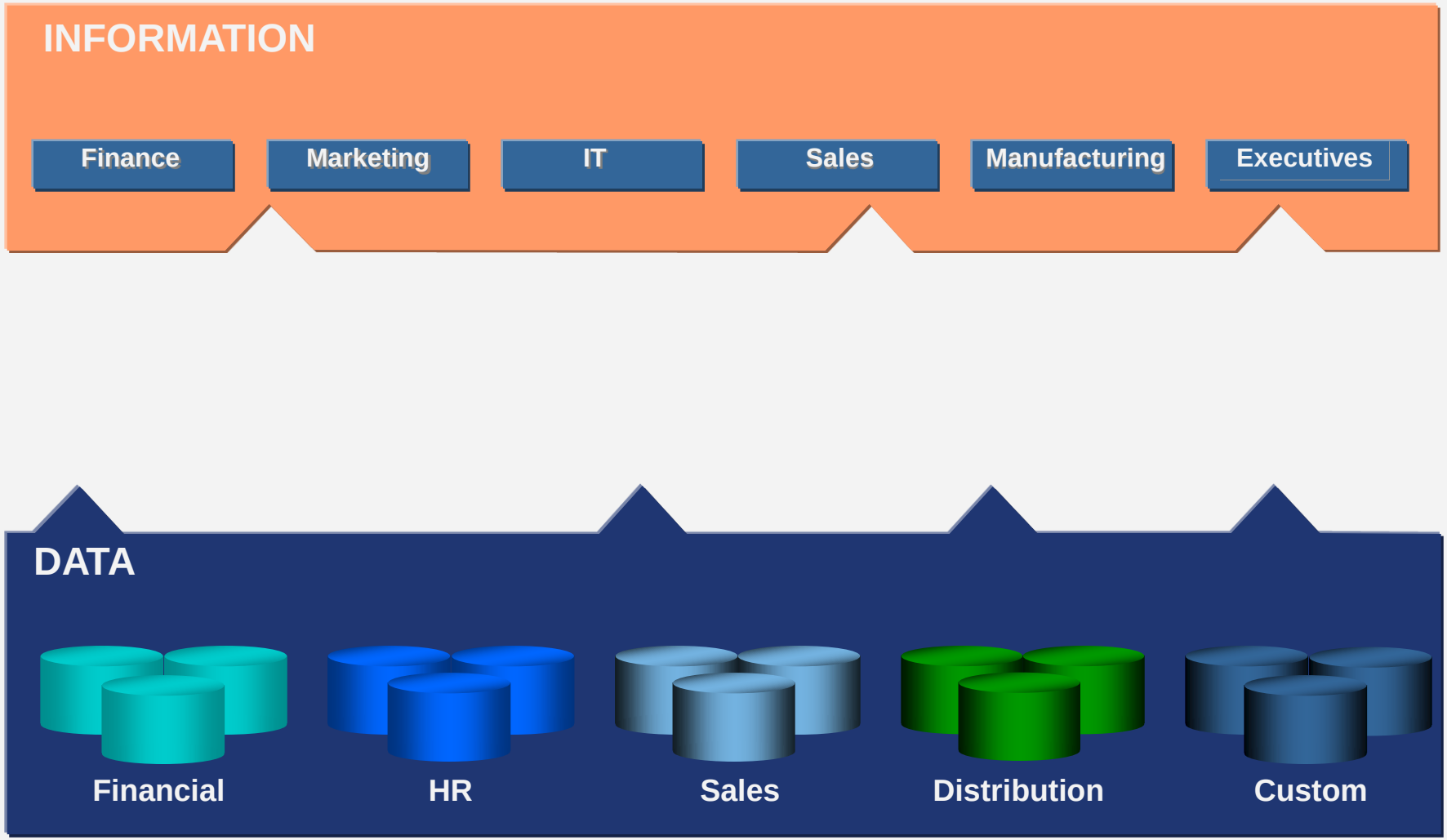
Knowledge Gap



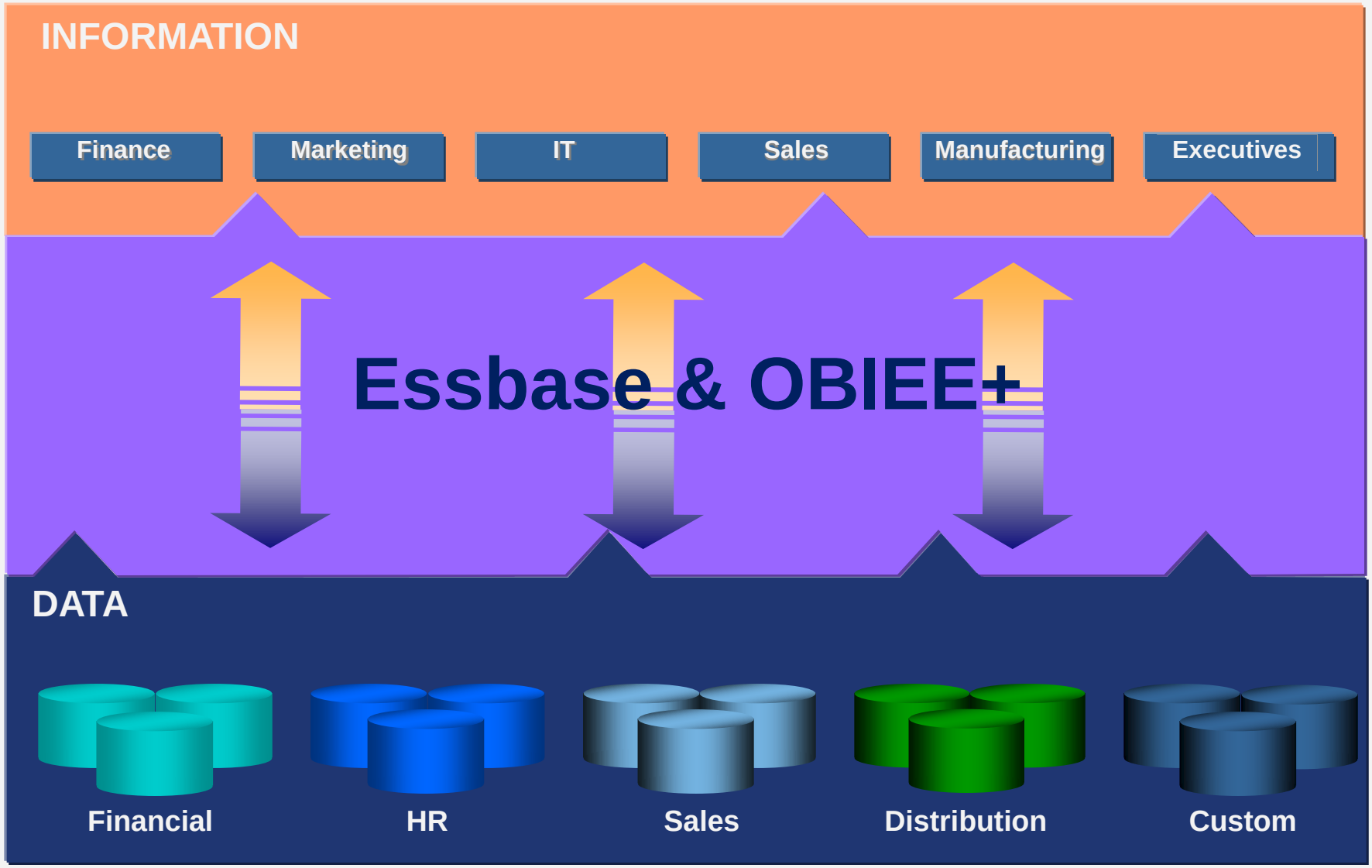
Common Data Warehouse Issues

- Ever changing definition of attributes
- Limited data marts; limited user views
- Common dimensions, common definitions standards

Maybe we should build more databases in our data warehouse?



Closing the Knowledge Gap



Integrate Essbase and OBIEE+ with your Data Warehouse

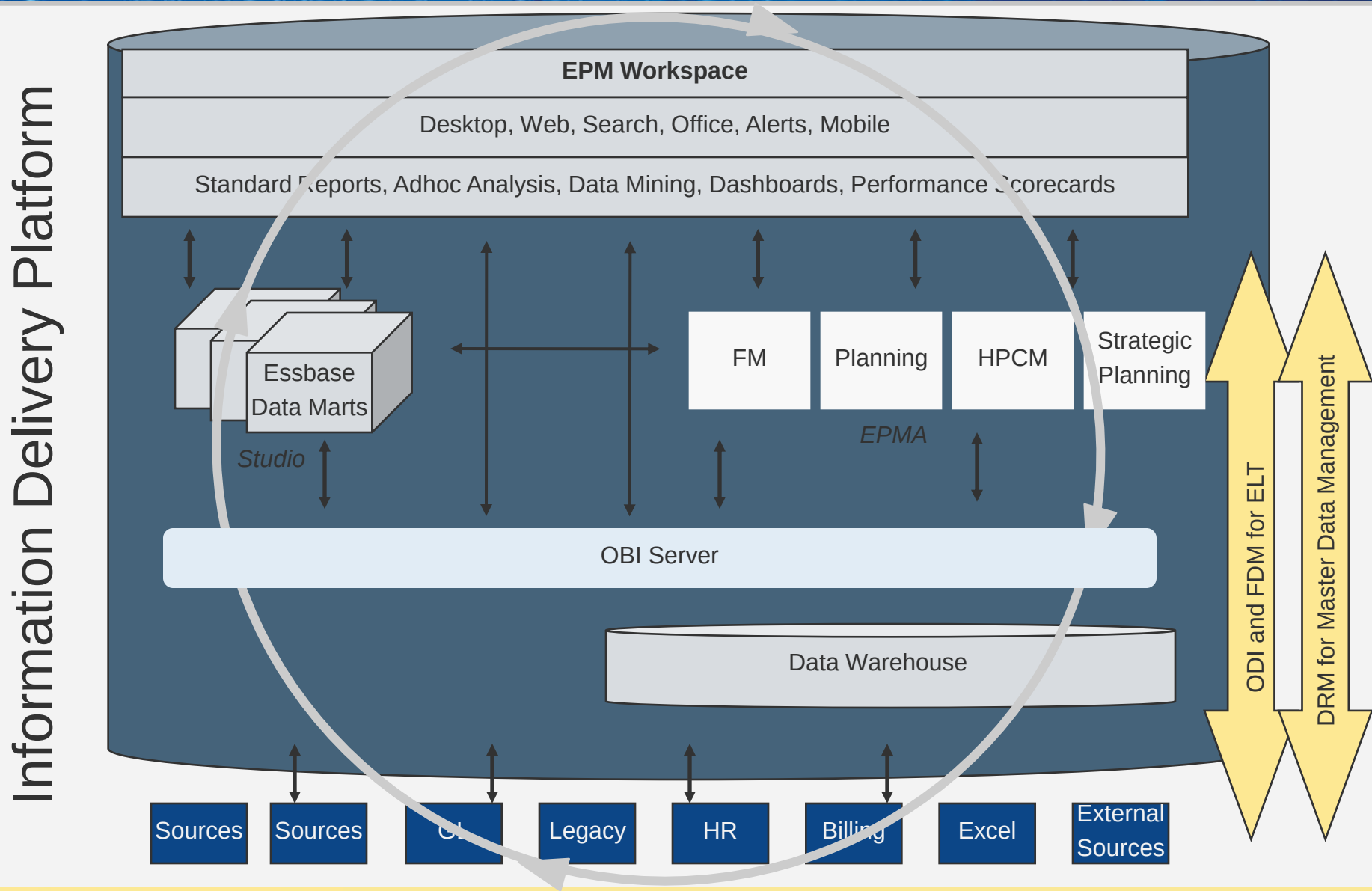
- Essbase and OBIEE+ are the enabling technologies to:
  - Help close the knowledge gap
  - Address and resolve a number of the common data warehouse issues
  - Event driven business intelligence
  - Pervasive use
  - Real time, predictive data

Integrate Essbase and OBIEE+ with your Data Warehouse

- Create an Information Warehouse (vs. Data Warehouse)
  - Information is meaningful sets of data, grouped together for the purposes of reporting and analysis
  - Includes your relational data warehouse, Essbase and OBIEE+ to achieve successful information delivery

- One presentation layer
  - Includes reporting, analytics, dashboarding, and data mining
  - Behind the scenes may access a number of different databases and servers but is one point for end user community

Integrate Essbase and OBIEE+ with your Data Warehouse



What is Enterprise Performance Management?

- By developing this Information Delivery Platform, you can better supports the enterprise performance management cycle

"A set of processes that help organizations optimize their business performance. It is a framework for organizing, automating and analyzing business methodologies, metrics, processes and systems that drive business performance." – Wikipedia

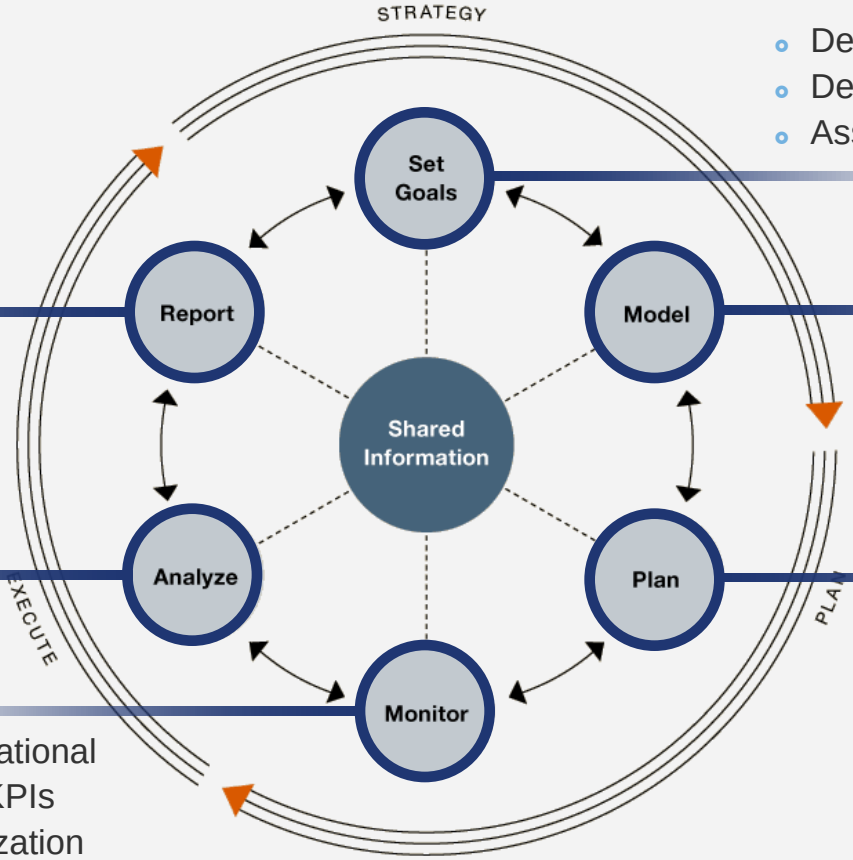
- EPM systems are used to proactively manage the business
  - Tie operational reporting and analysis to financial plans and reports
  - Provide insight into results
  - Provide relevant, timely and actionable information for better business decision making

Oracle's Enterprise Performance Management System

This new Information Delivery Platform supports the enterprise performance management cycle.

- Develop strategies and goals
- Define key initiatives and KPIs
- Assign Accountability

- Financial & Statutory
- Management Reporting
- Compliance
- SDR – GRI Metrics



- Long term planning scenario's
- Full P&L, B/S, Cashflow
- Set strategic targets
- Capital structure/financing

- Variances to budget
- Key trends across LOBs
- Profitability
- Effectiveness

- Allocate strategic targets
- Financial budgeting
- Operational planning
- Rolling forecasts

- Financial and operational
- Revenue, profits, KPIs
- Efficiency and Utilization
- Benchmarking and metrics

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The Enabling Technologies

What the heck is Essbase and OBIEE+?

Highly Scalable BI Foundation

EPM Workspace

Performance Management Applications

BI Applications

BUSINESS INTELLIGENCE FOUNDATION

Common Enterprise Information Model

Essbase

BI Server

Real Time Decisions

Fusion Middleware

OLTP & ODS Systems

Data Warehouse Data Mart

OLAP

SAP, Oracle, Siebel, PeopleSoft, Custom

Excel XML

Business Process

From Oracle

Key Component for Successful Information Delivery

- Common Enterprise Model
  - Model once, deploy everywhere
- Remove silos of information
- Bring information together and present to users in terms they understand
- Information is available on demand

Enabling Technologies – OBIEE+ and Essbase

OBIEE +

OBIEE

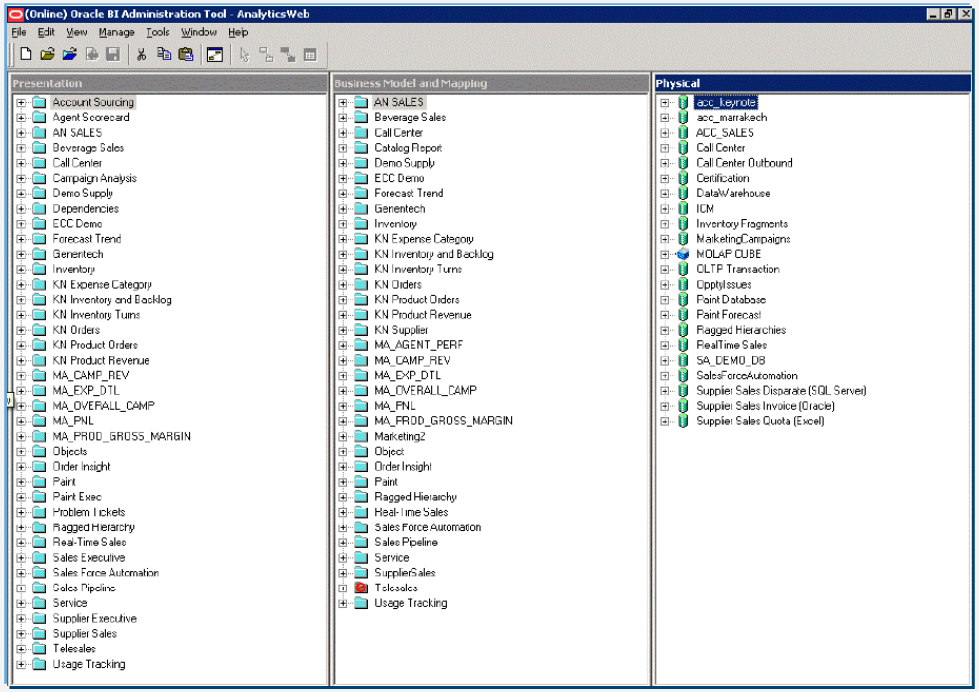
Product	Overview
BI Server	Create a virtual data warehouse of many sources Data resides in the transaction systems (could be a burden on transaction systems)
Answers	Analysis over the web for OBI sources
Dashboards	Easy-to-create and use dashboards for OBI Sources
Delivers	Delivery to emails, dashboards, web services Alerting capabilities
Mobile Analytics	Content access via mobile devices
BI Publisher	Formatted reports, pixel perfect reports Not a tool for analysis

Financial Reporting	Printed, formatted reports for Oracle EPM System (Essbase, FM, Planning)
Interactive Reporting	Analysis, reporting and dashboards for relational and Essbase sources
Web Analysis	Analysis and dashboards for Oracle EPM System (Essbase, FM, Planning, HPCM)
SQR Production Reporting	Pixel perfect, large volume reporting

Essbase	*The* multidimensional database engine

Oracle BI Server

- Scalable, efficient query and analysis server
- Provides integration of many sources
- Intelligent caching services
- Calculation and integration engine
- Intelligent request generation and optimized data access services
- Three layers
  - Physical
  - Business Model /Mapping
  - Presentation



Oracle BI Server – 50,000 ft view

- Federates the data with a virtual schema
- Virtual schema is created
- Moving the data “virtually”
- Do everything you do in your data warehouse without building the data warehouse physically
- Combine tables across sources (columns + columns)
- Combine data in tables sources (rows + rows)
- Perform transformations
- Aggregate tables for performance improvements
-

Real Time Data Access

- *BI Server doesn't store data but logically and efficiently organizes it for query and reporting*
- Because BI Server is pulling data dynamically, real time information access is possible for end users
- Think of the value placed into the users' hands; real time data access side-by-side with historical information for reporting and analysis

Combining Systems and Data Sources

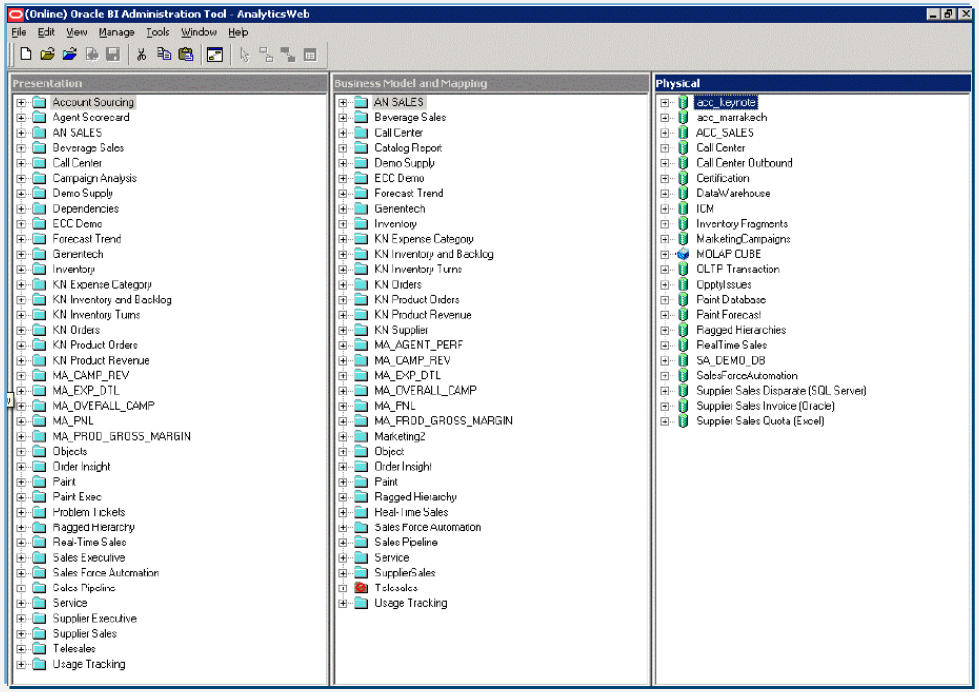
- Imagine you need to combine sales data from the GL and customer data from the CRM system and you don't have the resources or budget for a full scale data warehouse implementation
- BI Server can easily connect to and unify this information into one virtual schema for reporting and analysis
- Do we recommend sourcing directly against transaction systems?
- Behind the scenes, efficient logical SQL is executed against the sources and presented in a user friendly format

Abstraction

- Take complicated technical structures and terms and putting them into a logical, business view of the information with business terminology
- CUSTDSC is Customer Name?
- Within the BI Server physical layer, the CUSTDSC is queried but in the presentation layer, the designer has abstracted the field and renamed it Customer Name
- BI Server can combine tables across sources, adding the customer contact column from CRM to the main customer table in the GL into one logical table
- BI server can combine data in tables across sources, for example, joining sales data from multiple systems in a distributed environment into one main fact table

Oracle BI Server

- Three layers
  - Physical
  - Business Model /Mapping
  - Presentation



Physical Layer

- Define the data sources
  - Manual
  - Importing the metadata into the BI Server
- Join relationships are defined as necessary

- Sources
  - Flat files
  - XML files
  - Excel
  - Relational sources
  - Essbase
  - Almost any source

Business Model and Mapping Layer

- Define the logical or business view of the data in the Business Model and Mapping layer
- After you have created your sources in Physical layer
- First step in taking more complex IT structures and multiple sources and grouping them into models or content focused areas using business terminology
- Define fact tables (tables that contain the measures or “numbers”) and dimension tables (Time, Product, Customer)
- Create logical tables, columns, dimension hierarchies and joins to create the business view of the data

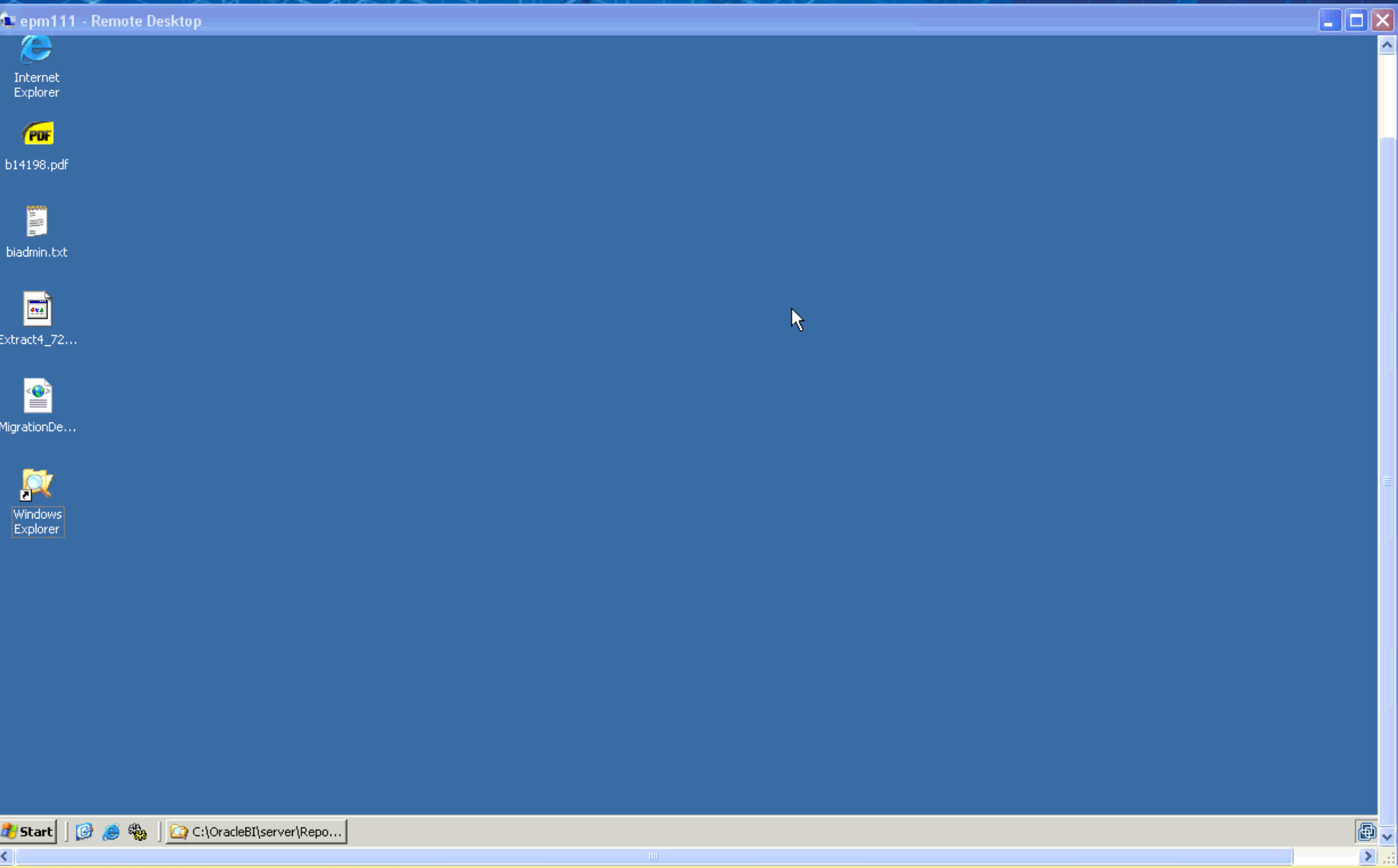
Business Model and Mapping Layer

- Create calculated columns and measures
- Define the business logic once for use across any query or report.
- Watch out - calculations can be expensive from an end user performance standpoint

Presentation Layer

- Final layer that further adds abstraction over the Business Model and Mapping layer
- What the end user sees
- Organize the columns into logical catalogs and folders, customizing naming for specific user groups as needed
- Make the information as easily and logically accessible as possible
- Catalogs show different views of a business model to different users via presentation tables which look like folders to the end user perspective
- Folders contain the grouping of columns that make sense to the end user
- Users can easily navigate through the catalogs and folders, picking and choosing the desired data elements and pull them into a detailed report, pivot report, chart or graph, apply filters or add in report side calculations

Demo


epm111 - Remote Desktop
Internet Explorer
b14198.pdf
biadmin.txt
Extract4_72...
MigrationDe...
Windows Explorer
Start
C:\OracleBI\server\Repo...

Oracle BI Server

- Key Strength
  - Easy to do
  - Real time data
  - Flexible
- Key Cost / Disadvantage
  - On the fly queries so possible performance issues (because everything is virtual)
  - Some tools to minimize performance issues (caching)

OBI Server vs. Data Warehouses

- Data warehouse or BI Server? Both!

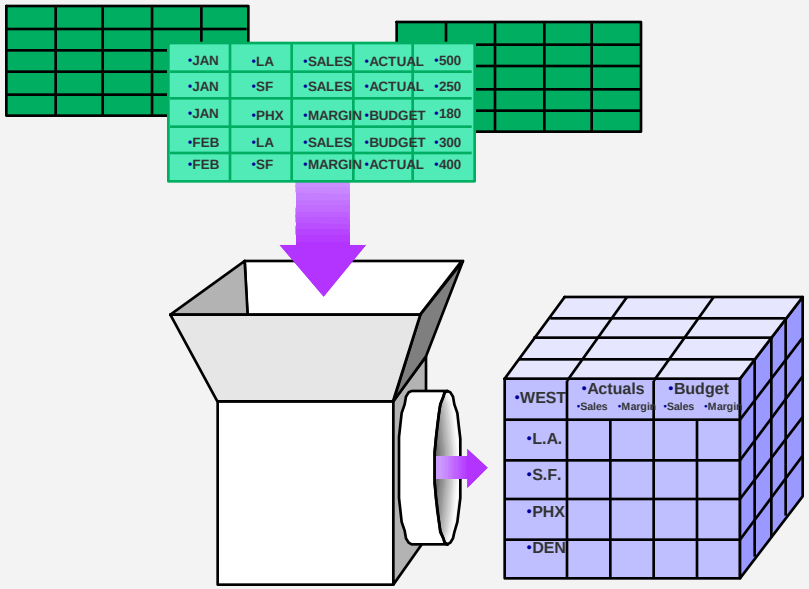
- Leverage BI Server to create a common enterprise model
- Pull in data warehouse and other sources into one model
- Quickly add new sources (without all of the infrastructure required to add to the physical data warehouse)
- Present historical data from data warehouse and real time “daily” data from the transaction server
  - Minimal impact to transactional system (small query just pulling today’s data)
- Create end user presentations with their terminology and business definitions
- Remember – BI Server is not an ETL tool

Essbase

- Essbase is THE online analytical processing solution
- Broadest Analytic functionality
  - Drill, pivot, select, compare, rank, sort, filter, group, stack, calculate, annotate and write back
- High-speed reporting of information
  - Speed of thought
  - Reporting tools are enabled by the outline
  - Follow the business thought / organization view of the data
- Highly advanced calculation engine
  - Aggregations, allocations, conditional, procedural, subsets
- Enterprise-wide data analysis
- Optimized storage

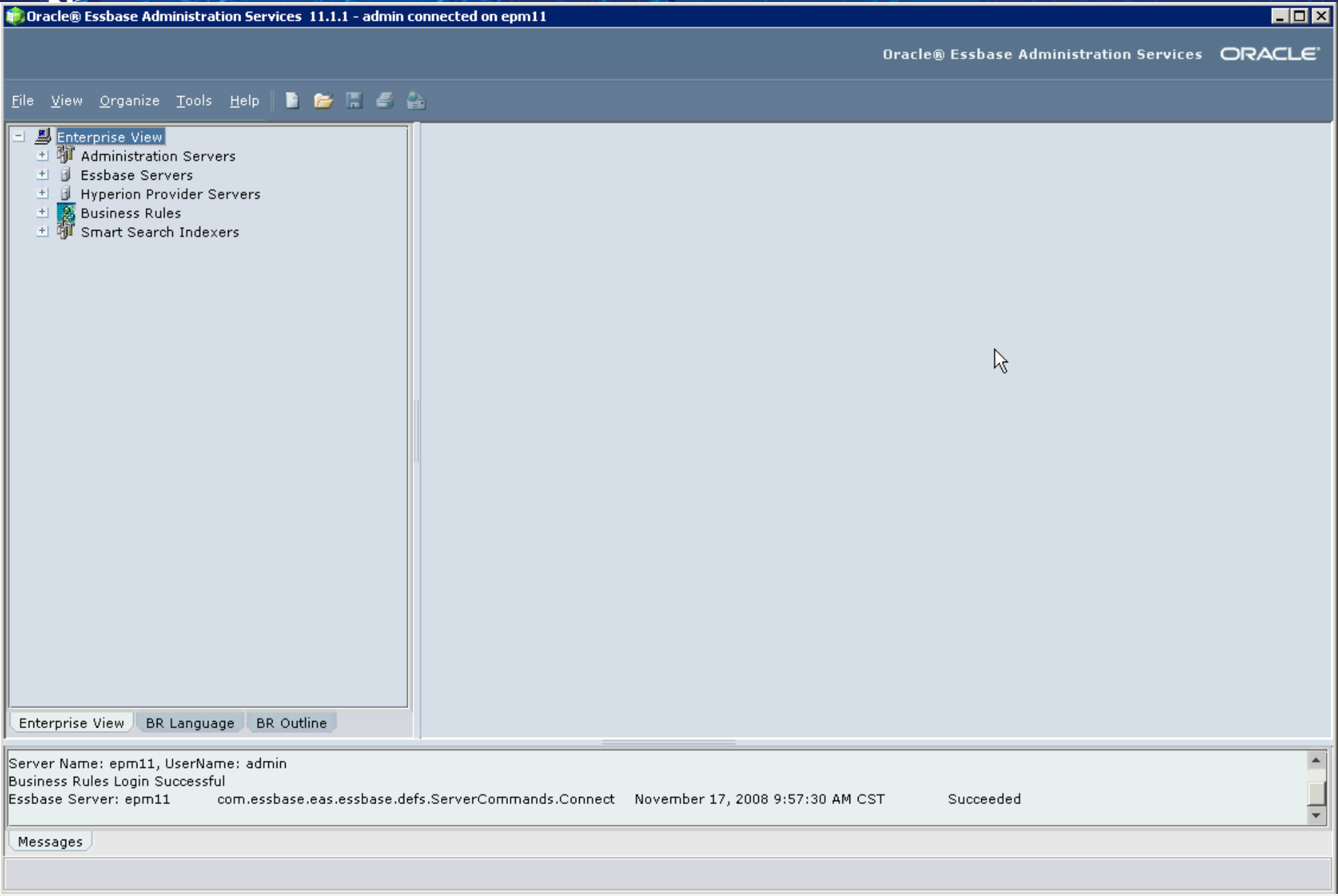
How Essbase Thinks

- Multidimensional cubes
- No tables and columns
- Database definition is defined in the outline
- Dimensions
  - Common grouping or hierarchy of master data
  - Organization
  - Product
  - Accounts



Advantages of Hyperion Essbase

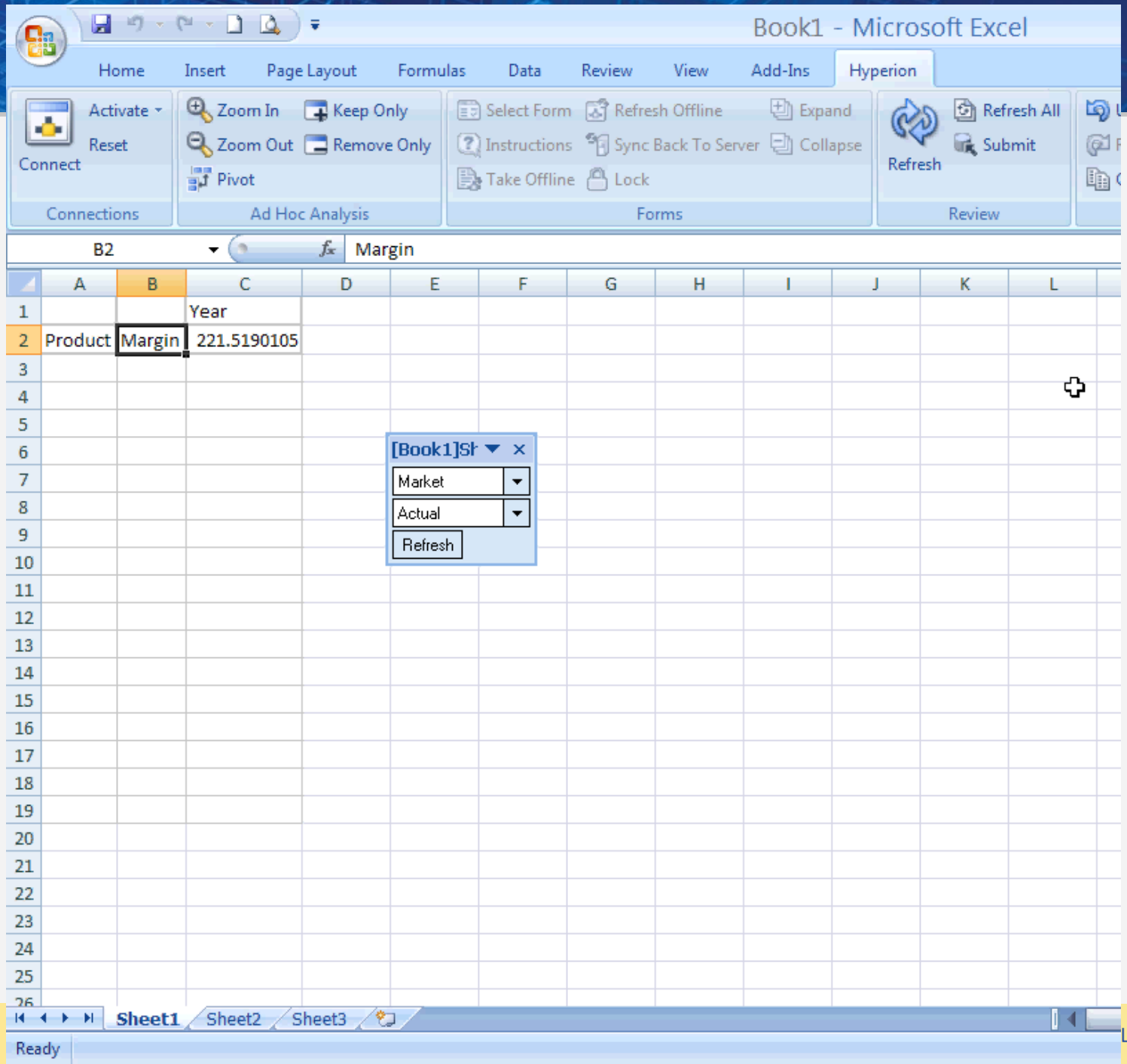
- Optimized data storage
- Fast reporting and analysis performance
- Top down analysis
- Limitless dimensions and members with ASO
- Flexible
- Dimensional view
- Advanced Calc Engine
- Shared
- Secure
- Fast – both administrators and users
- Advanced Analytics
- Scalable


Oracle® Essbase Administration Services 11.1.1 - admin connected on epm11
Oracle® Essbase Administration Services
ORACLE
File View Organize Tools Help
Enterprise View
Administration Servers
Essbase Servers
Hyperion Provider Servers
Business Rules
Smart Search Indexers
Enterprise View
BR Language
BR Outline
Server Name: epm11, UserName: admin
Business Rules Login Successful
Essbase Server: epm11 com.essbase.eas.essbase.defs.ServerCommands.Connect November 17, 2008 9:57:30 AM CST Succeeded
Messages

Fast Reporting and Analysis

- Web enabled reporting and analysis tools via a common Workspace
- Microsoft Office (Excel, Word and PowerPoint) integration with Essbase information

- End User Capabilities (the short list):
  - Drill down and up, pivot, and more
  - Advanced analytics – sorting, traffic lighting, filtering, and more
  - Data submission by end users
  - Business rule launch capabilities by end users
  - Highly formatted reusable reports
  - Filtered views for a personalized analysis and reporting experience (Smart Slices)


Book1 - Microsoft Excel
Home
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Select Form
Instructions
Take Offline
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Sheet2
Sheet3
Ready

Essbase vs. Data Warehouse

- Data warehouse or BI Server? Both!

- Essbase is part of your data warehouse solution
- Essbase provides the set of multi-dimensional marts for fast reporting and analysis
- Built for top down analysis allowing you to remove the complicated aggregation structures in your data warehouse
- Provides what if'ing and scenario writebacks from end users
- Line is blurring between what should be stored relationally vs. multi-dimensionally
  - 20+ dimensions / millions of members in ASO Essbase
  - Drill through capabilities with Essbase Studio and FDM
  - Relational cubes – XOLAP

There is some overlap…Essbase versus BI Server

Essbase		BI Server
Optimally stores data for reporting and analysis	**Data Storage**	No data stored; Data is dynamically moved through the BI Server
Winner	**Query Performance**	Good but head-to-head, Essbase wins out
Winner	**Analytic Capabilities**	Good but head-to-head, Essbase wins out
Possible in some cases but definitely a weakness for Essbase	**Rows and Columns Reporting**	Winner
Winner	**Analytic Reporting**	Good but head-to-head, Essbase wins out
Good, especially with Essbase Studio, but head-to-head, BI Server wins out	**Unified Sources**	Winner
Hands down, BI Server is the best	**Definition of a Common Enterprise Model**	Winner
Good with options like trickle feeds and XOLAP but head-to-head, BI Server wins out	**Real Time Data Access**	Winner
Winner	**Calculation Capabilities**	Technically possible but doesn't compare to Essbase
Winner, native to Essbase functionality	**End User Write Back**	Technically possible but requires configuration steps

I have Essbase. Why do I need BI Server?

- Federated data consolidated into virtual schemas especially if I don't have a data warehouse or I have many data warehouses
- Best mechanism for unifying sources and creating a common enterprise model
- Provides relational reporting for rows and columns detailed reporting and text reporting
- Report on both relational and flat Essbase data in one tool
- Report on both relational and flat Essbase data at the same time
- Join both relational and flat Essbase data for analysis

I have OBI Server. Why do I need Essbase?

- Fast, powerful advanced analytics against large volumes of data
- OBIEE is a strong tool but …“You don’t know what you’re missing” in reporting and analysis
- Built in write back capabilities to any level in an Essbase database
- Powerful calculation engine

I have both Essbase and OBI Server – What should I do?

- Most importantly remember it is not an either / or discussion
- Take advantage of strengths of both tools
- Create virtual schemas with BI Server to unify sources
- Build cubes in the Essbase Studio with the BI Server as a source
- Use BI Server for relational reporting needs
- Use Essbase for advanced analysis, fast performance, calculation engine and more
- Integrate the solutions together
- Use the Workspace to present information via the Web for both BI Server and Essbase
- Use Smart View against both Essbase and OBIEE
- Look for full Essbase support in Answers and Dashboards coming soon in 11g

One Presentation Layer for Reporting and Analysis

Must Haves for End User Presentation

Consistent	Easy to use	Interactive
Flexible	Fast	Seamless
Efficient	Thin client	Minimal training required

Reporting & Analysis Needs

- Ad Hoc Querying
  - Easy to use adhoc capabilities – drag and drop, drill, pivot, filter
  - Advanced analytic capabilities like traffic lighting, filtering, etc.
- Dashboards
  - Present key information in dashboard format, including key metrics and graphs
  - Drill / link capabilities to additional detail and information
- Standard Reports
  - Formatted, printable reports
  - Dynamic reports based on end user selections
- Office Integration

Workspace

- Single thin client environment bringing all of the Hyperion products together in one tool
- Standardizes the delivery of business intelligence
- Provides a centralized repository
- Meets full range of reporting requirements
  - Empowers users with personalized dashboards
  - Provides advanced analytic capabilities
  - Accesses any data source – relational, multi-dimensional, file based systems
- “Windows on the Web”
- Personalize document preferences, search explore and access, “Save a favorite report”

One Presentation Layer to Access Relational, Multi-dimensional and EPM Content

Folder for organization

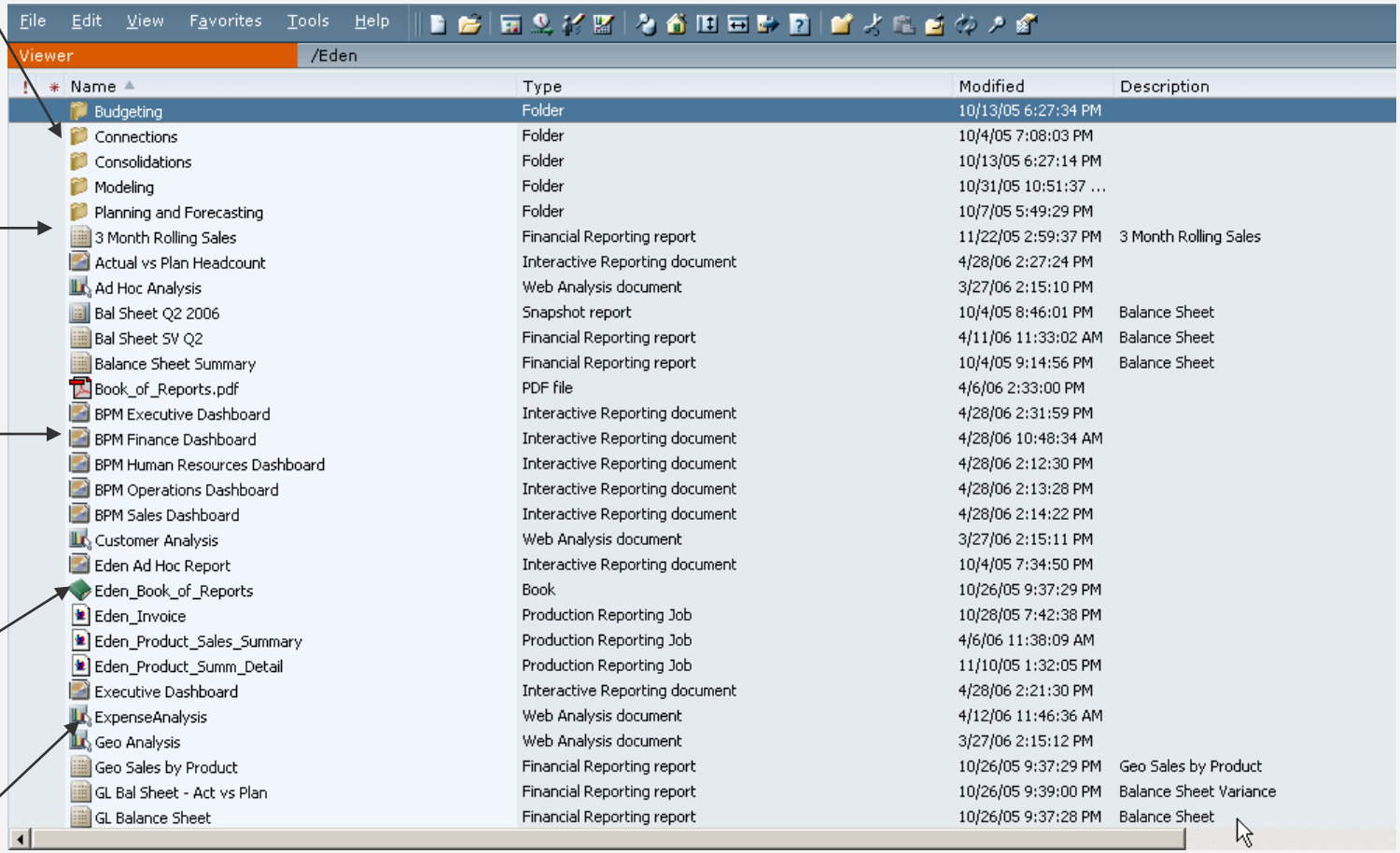
Financial Reporting report or book

Interactive Reporting dashboard

Financial Reporting book

Answers Query

OBI Dashboard



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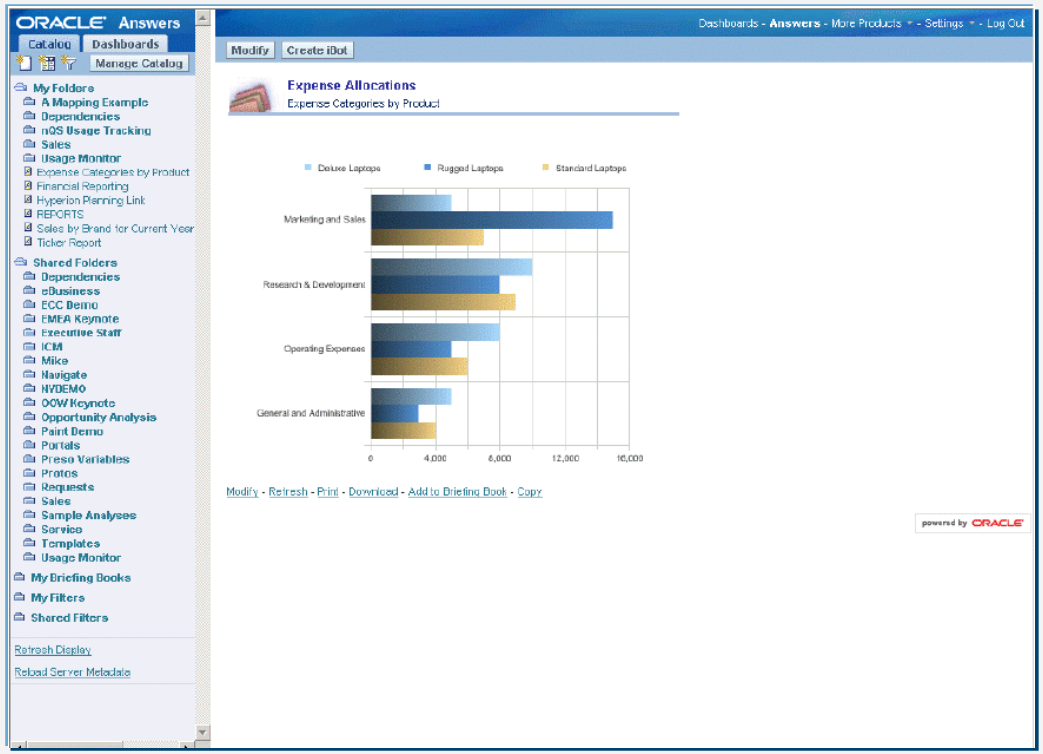
Connections	Folder	10/4/05 7:08:03 PM	
Consolidations	Folder	10/13/05 6:27:14 PM	
Modeling	Folder	10/31/05 10:51:37 ...	
Planning and Forecasting	Folder	10/7/05 5:49:29 PM	
3 Month Rolling Sales	Financial Reporting report	11/22/05 2:59:37 PM	3 Month Rolling Sales
Actual vs Plan Headcount	Interactive Reporting document	4/28/06 2:27:24 PM	
Ad Hoc Analysis	Web Analysis document	3/27/06 2:15:10 PM	
Bal Sheet Q2 2006	Snapshot report	10/4/05 8:46:01 PM	Balance Sheet
Bal Sheet SV Q2	Financial Reporting report	4/11/06 11:33:02 AM	Balance Sheet
Balance Sheet Summary	Financial Reporting report	10/4/05 9:14:56 PM	Balance Sheet
Book_of_Reports.pdf	PDF file	4/6/06 2:33:00 PM	
BPM Executive Dashboard	Interactive Reporting document	4/28/06 2:31:59 PM	
BPM Finance Dashboard	Interactive Reporting document	4/28/06 10:48:34 AM	
BPM Human Resources Dashboard	Interactive Reporting document	4/28/06 2:12:30 PM	
BPM Operations Dashboard	Interactive Reporting document	4/28/06 2:13:28 PM	
BPM Sales Dashboard	Interactive Reporting document	4/28/06 2:14:22 PM	
Customer Analysis	Web Analysis document	3/27/06 2:15:11 PM	
Eden Ad Hoc Report	Interactive Reporting document	10/4/05 7:34:50 PM	
Eden_Book_of_Reports	Book	10/26/05 9:37:29 PM	
Eden_Invoice	Production Reporting Job	10/28/05 7:42:38 PM	
Eden_Product_Sales_Summary	Production Reporting Job	4/6/06 11:38:09 AM	
Eden_Product_Summ_Detail	Production Reporting Job	11/10/05 1:32:05 PM	
Executive Dashboard	Interactive Reporting document	4/28/06 2:21:30 PM	
ExpenseAnalysis	Web Analysis document	4/12/06 11:46:36 AM	
Geo Analysis	Web Analysis document	3/27/06 2:15:12 PM	
Geo Sales by Product	Financial Reporting report	10/26/05 9:37:29 PM	Geo Sales by Product
GL Bal Sheet - Act vs Plan	Financial Reporting report	10/26/05 9:39:00 PM	Balance Sheet Variance
GL Balance Sheet	Financial Reporting report	10/26/05 9:37:28 PM	Balance Sheet

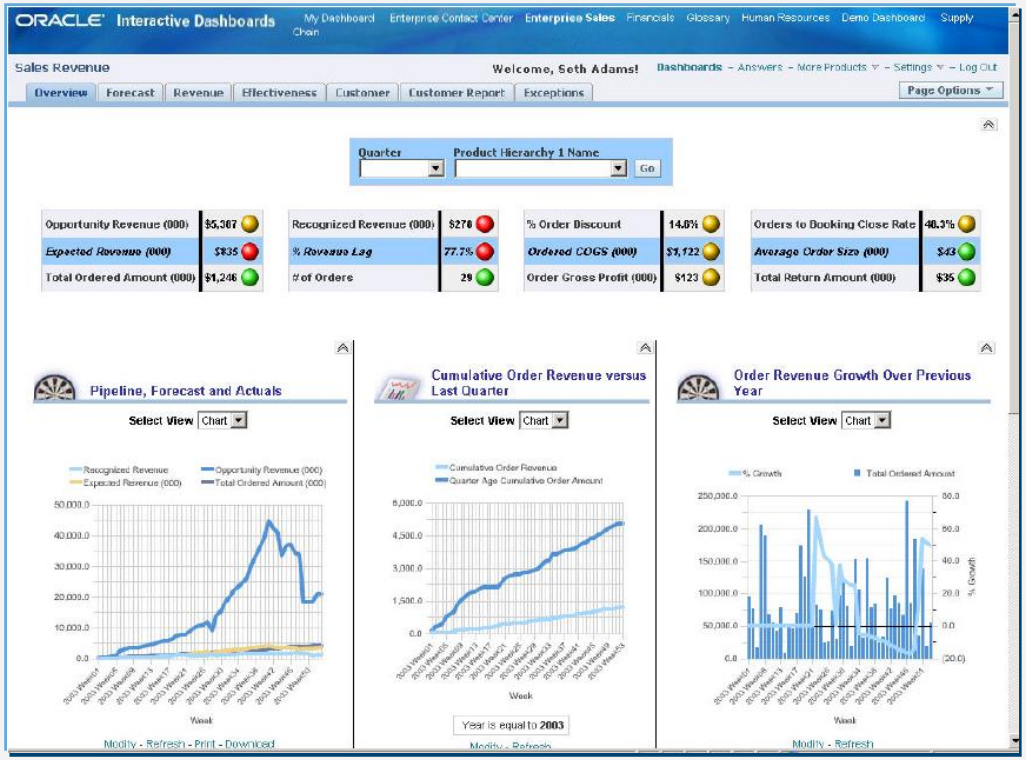
Answers

- Part of the OBIEE suite
- Adhoc reporting interface, pivot, charts
- Point and click
- Save organize and share
- Sources data from the OBI Server
- Link content to Dashboards
- Answers+ coming soon … full Hyperion feature support (Essbase connections)

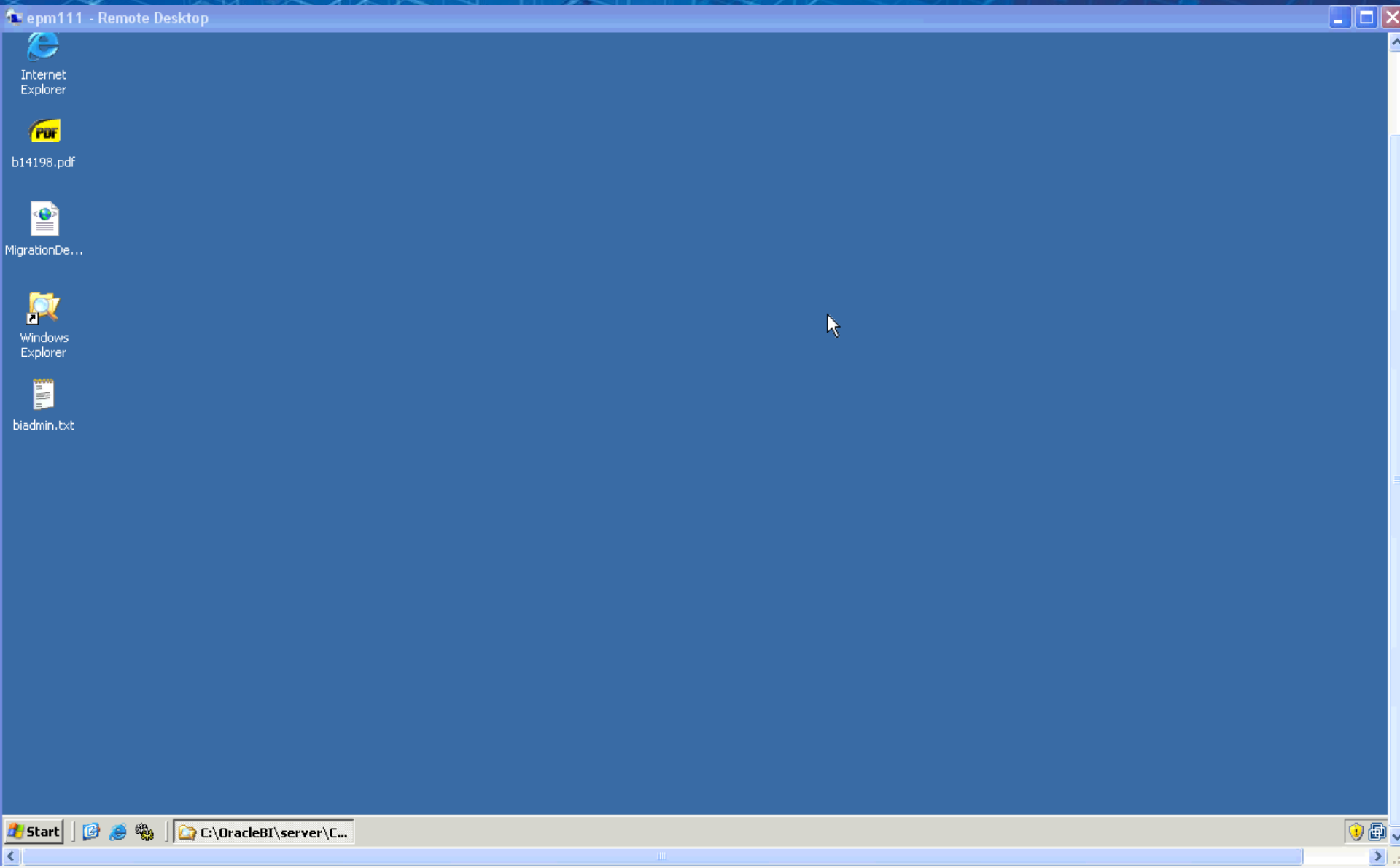


Dashboards

- Part of the OBIEE suite
- Fully interactive graphical dashboards
- Real time data across enterprise sources
- Point and click to create and use
- Guided analytics – intelligent links to aid users in their investigations
- Dashboards+ coming soon … full Hyperion feature support

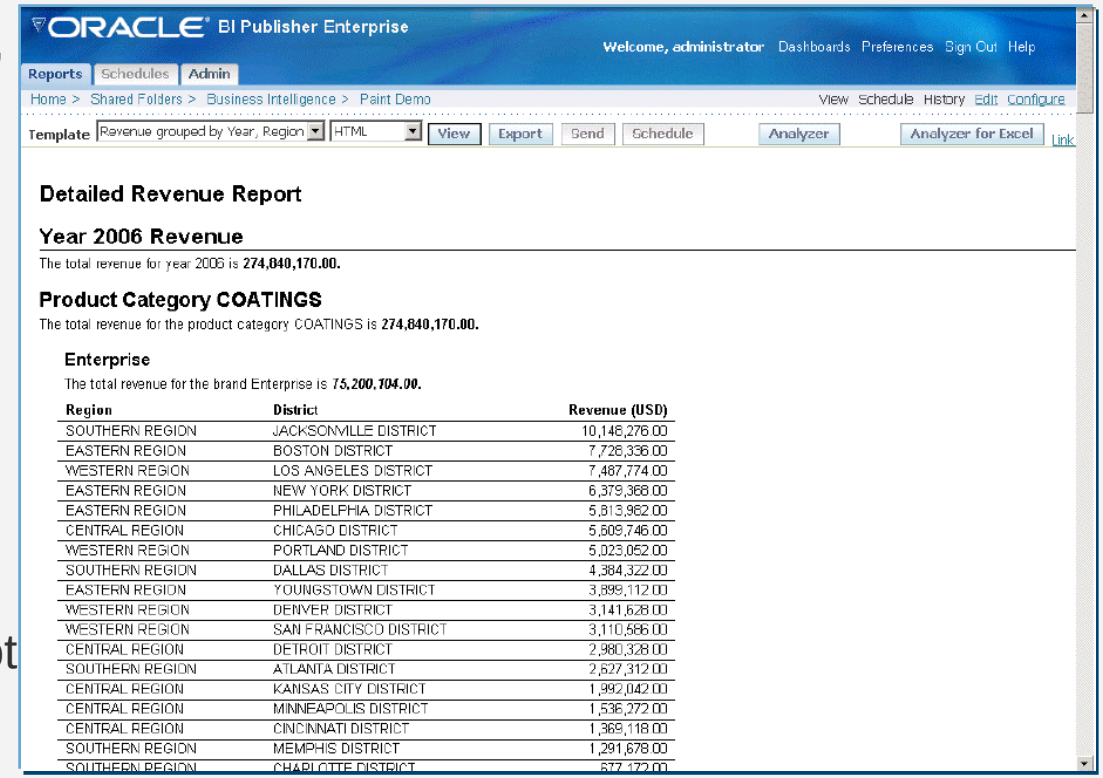


Demo


epm111 - Remote Desktop
Internet Explorer
b14198.pdf
MigrationDe...
Windows Explorer
biadmin.txt
Start
C:\OracleBI\server\C...

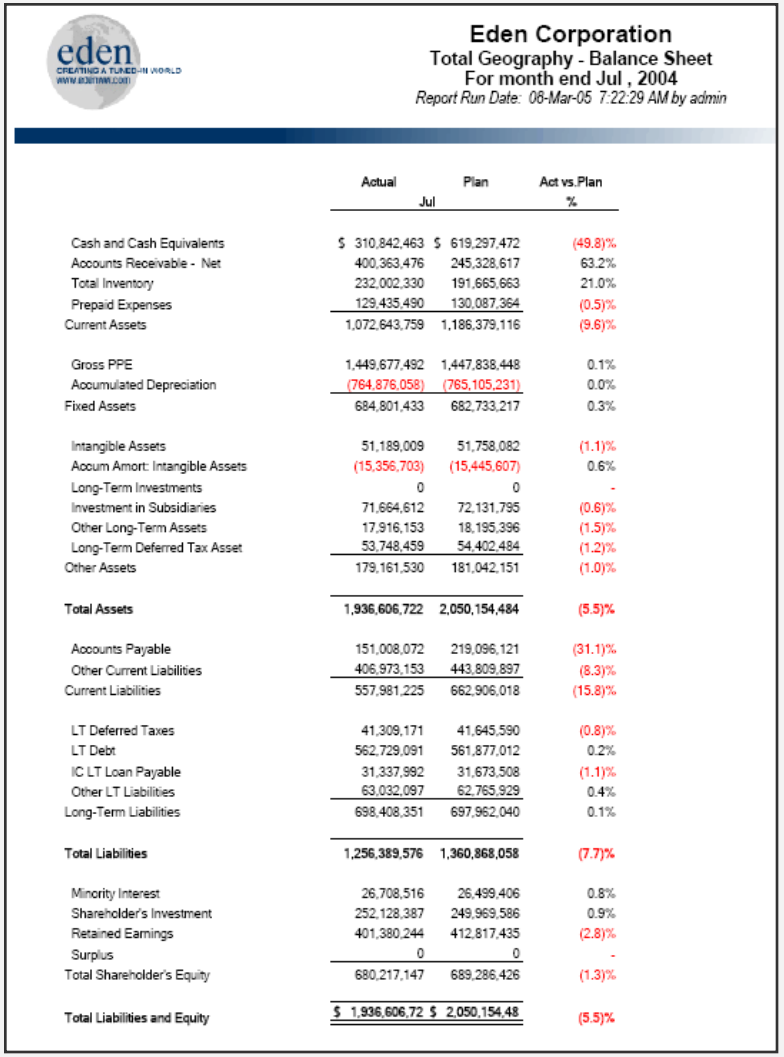
OBI Publisher

- Part of the OBIEE suite
- Pixel perfect reports
- E.g. Standard reports, checks, invoices
- Multiple data sources
  - OBI Server
  - Databases
  - Files
  - Web Services
  - URLs
- Multiple output formats
  - Word, Excel, PDF, XML, ot
- Delivery online, email or FTP
- Batch processing and report bursting
- High volume printing



Financial Reporting

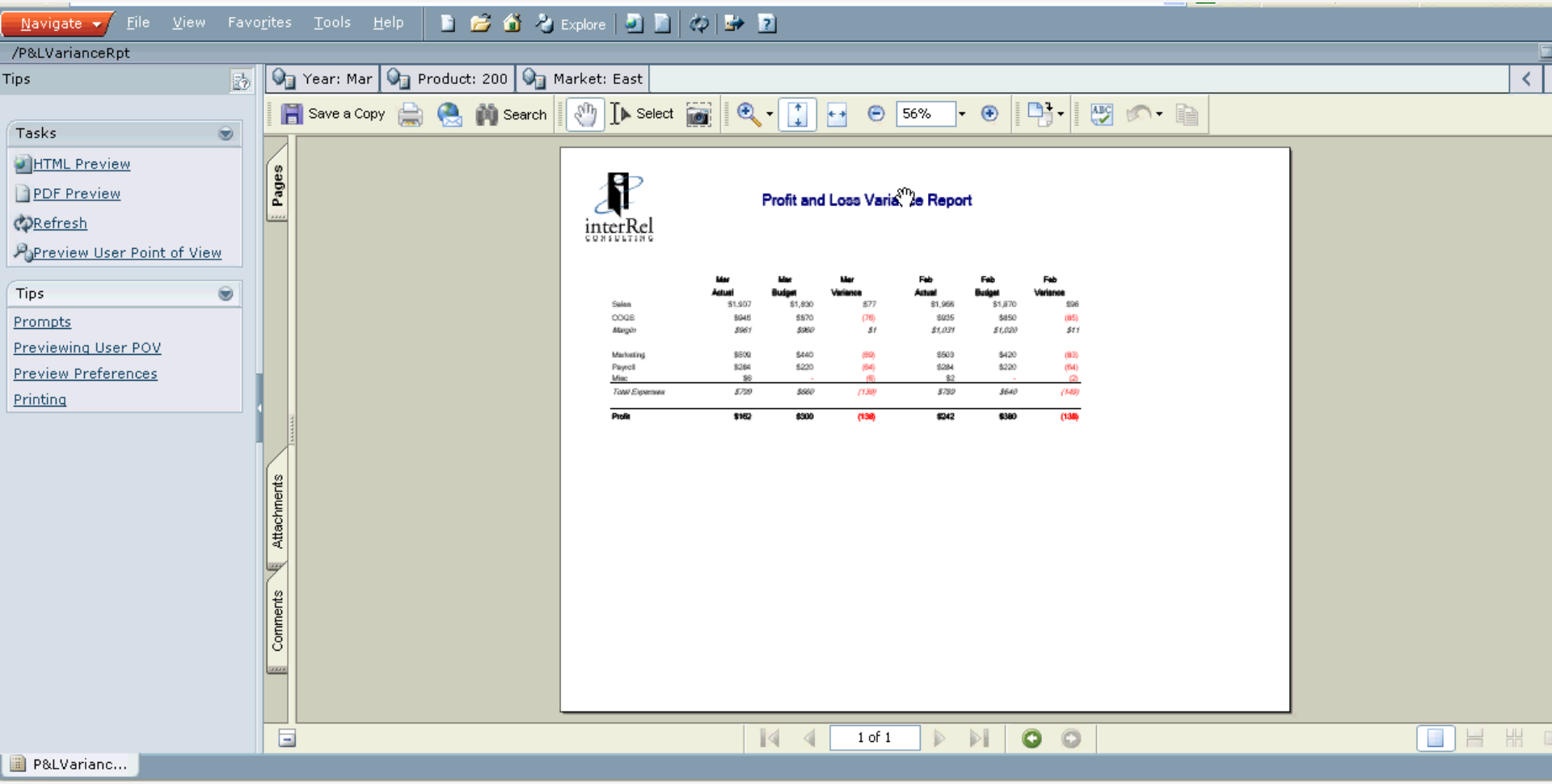
- Module primarily utilized for highly formatted financial and operating reports against OLAP, Planning, and HFM sources
- Create books and batches
- Schedule process
- Previously known as Hyperion Reports



Eden Corporation
Total Geography - Balance Sheet
For month end Jul , 2004
Report Run Date: 08-Mar-05 7:22:29 AM by admin

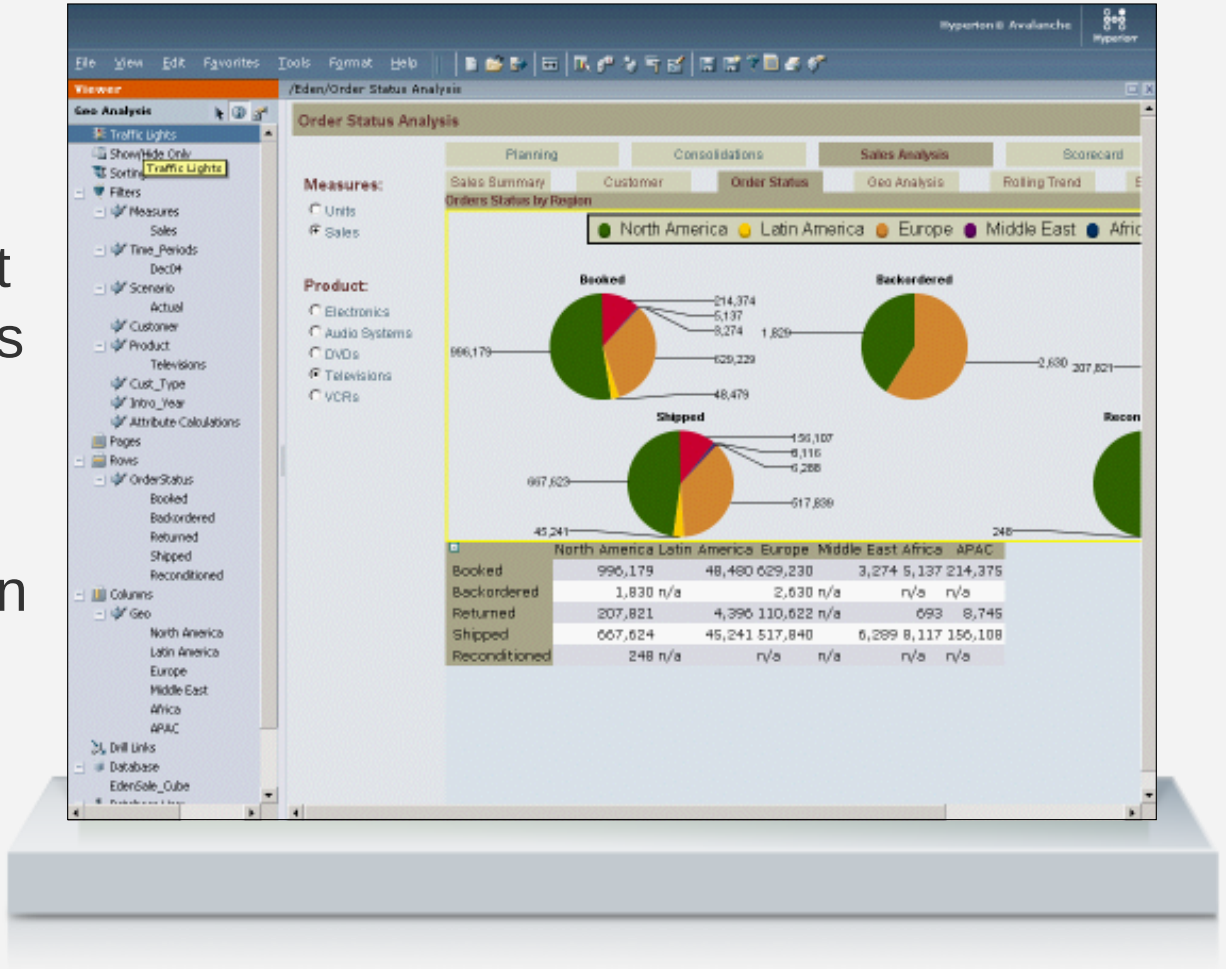
	Actual Jul	Plan Jul	Act vs.Plan %
Cash and Cash Equivalents	$ 310,842,463	$ 619,297,472	(49.8)%
Accounts Receivable - Net	400,363,476	245,328,617	63.2%
Total Inventory	232,002,330	191,665,663	21.0%
Prepaid Expenses	129,435,490	130,087,364	(0.5)%
Current Assets	1,072,643,759	1,186,379,116	(9.6)%
Gross PPE	1,449,677,492	1,447,838,448	0.1%
Accumulated Depreciation	(764,876,058)	(765,105,231)	0.0%
Fixed Assets	684,801,433	682,733,217	0.3%
Intangible Assets	51,189,009	51,758,082	(1.1)%
Accum Amort: Intangible Assets	(15,356,703)	(15,445,607)	0.6%
Long-Term Investments	0	0	-
Investment in Subsidiaries	71,664,612	72,131,795	(0.6)%
Other Long-Term Assets	17,916,153	18,195,396	(1.5)%
Long-Term Deferred Tax Asset	53,748,459	54,402,484	(1.2)%
Other Assets	179,161,530	181,042,151	(1.0)%
Total Assets	**1,936,606,722**	**2,050,154,484**	**(5.5)%**
Accounts Payable	151,008,072	219,096,121	(31.1)%
Other Current Liabilities	406,973,153	443,809,897	(8.3)%
Current Liabilities	557,981,225	662,906,018	(15.8)%
LT Deferred Taxes	41,309,171	41,645,590	(0.8)%
LT Debt	562,729,091	561,877,012	0.2%
IC LT Loan Payable	31,337,992	31,673,508	(1.1)%
Other LT Liabilities	63,032,097	62,765,929	0.4%
Long-Term Liabilities	698,408,351	697,962,040	0.1%
Total Liabilities	**1,256,389,576**	**1,360,868,058**	**(7.7)%**
Minority Interest	26,708,516	26,499,406	0.8%
Shareholder's Investment	252,128,387	249,969,586	0.9%
Retained Earnings	401,380,244	412,817,435	(2.8)%
Surplus	0	0	-
Total Shareholder's Equity	680,217,147	689,286,426	(1.3)%
Total Liabilities and Equity	**$ 1,936,606,72**	**$ 2,050,154,48**	**(5.5)%**

Financial Reporting



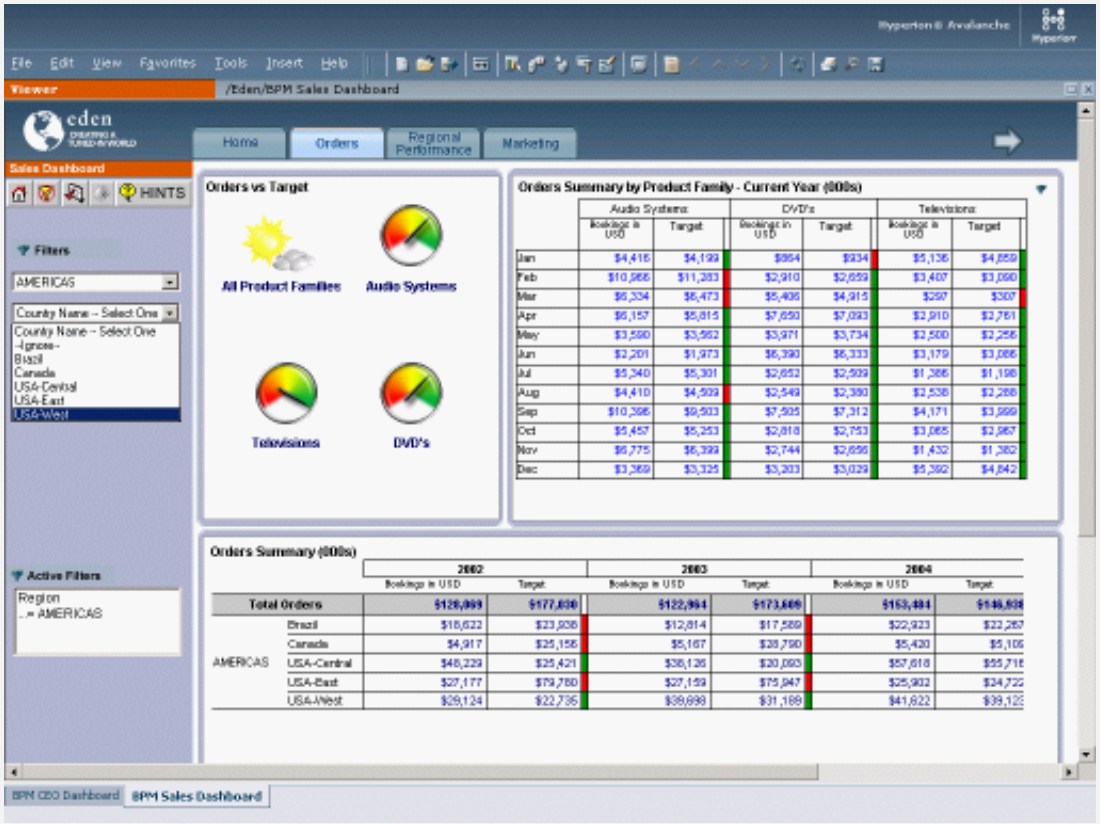
Web Analysis

- Module primarily utilized for advanced analysis capabilities against OLAP data sources
- Analysis focused
- Adhoc querying
- Dashboard creation
- Previously known as Hyperion Analyzer



Interactive Reporting

- Module primarily used to create ad-hoc, relational queries and dashboards
- New in 9.3.1 – CubeQuery for Essbase
- Dashboard creation via wizards and templates
- Previously known as Hyperion Intelligence (Brio)



Delivers

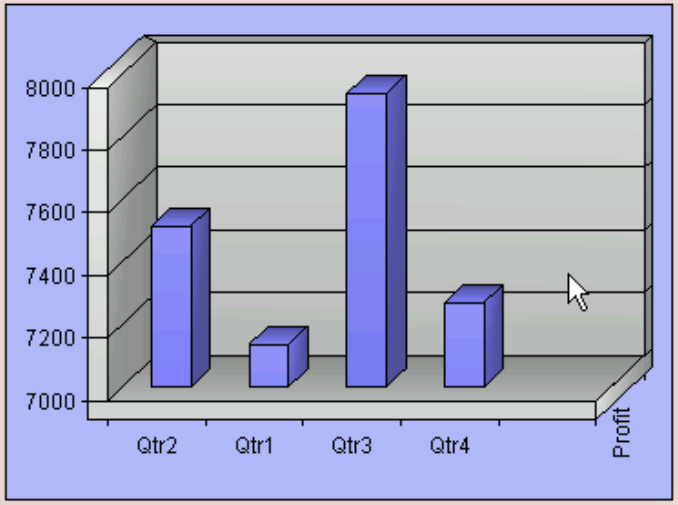
- Delivers
  - Automated detection and alerts for proactive insight
  - Delivery of content to mobile devices in multiple formats
  - Multi-step analysis and analytic workflow
- Disconnected Analytics
  - Full analytics for the mobile professional
  - Same experience both on and offline
  - Full and incremental data synchronization for rapid updates and minimum data set size

Smart View

- Common Microsoft add-in for Oracle BI technologies
- Integrate Oracle EPM System data to Word, PowerPoint, Excel, and Outlook
- Supported Smart View sources include: Oracle BI Server, Essbase, Financial Management, Planning, Enterprise, Web Analysis, Financial Reporting, and Interactive Reporting
- Perform analysis and create highly formatted reports
- Other
  - Enter plans and run Business Rules in Excel
  - Run consolidations and enter journal entries in Excel for Financial Management
  - Provides single Excel interface for HFM and HP

Dynamic BI Content in PowerPoint

	Profit	Inventory
GSP-1700	4593	334
GSP-1600	-510	200
Satellite Handsets	4083	535
Globalstar GCK-1410	1656	281
Globalstar GPDK-1410	5013	496
EDK-1410 Extreme Docking Kit	3058	397
SPK-1410 Portable Docking Kit	-	
Vehicle Docking Kits	9727	1175
Marine/Extreme Antenna Enclosure	5354	359
Globalstar GSP-2900-ST	1769	175
SeaTel WaveCall 3000	3608	352
Marine and Extreme Weather Units	10731	888
308 Systems TAC-PAK	4800	320
Delta Wave Fixed Industrial Package	4254	315
Tracer 3 Package - Adaptable GPS	-3200	316



Summary by Market

Canada | United States | Denmark | Finland | Germany | France

Market - United States

Comparing the Front End Tools Today

	Interactive Reporting	Financial Reporting	Web Analysis	Smart View	Answers / Dashboards	BI Publisher
Relational Data Source	●		◒	◓ OBIEE in v11.1.1	●	●
Essbase, FM, Planning Data Source	● (9.3.1; No FM)	●	●	●	◓ (Coming soon)	◓
Printable, Formatted Reports	●	●		●	◓	●
Adhoc Analysis	●		●	●	●	
Dashboards	●		●		●	
Charting	●	◓	●	●	●	●
Web	●	●	●		●	●

The Supporting Cast

Common Foundation Layer - Shared Services

- User Provisioning
  - Enables user management across all Oracle EPM products
  - Enables single sign on
  - External authentication to LDAP, MSAD, or NTLM
- EPM Architect
- Life Cycle Management
- Core Services (the underlying “plumbing”)
  - Session management
  - Authentication and authorization
  - Repository services
  - Logging and usage

Integration Tools

- ODI (Oracle Data Integration)
  - The future
- Financial Data Quality Management
- DIM (Data Integration Management)
  - Informatica repackaged
  - True ETL tool
- Enterprise Performance Management Architect

- Hyperion adapters for all

Steps to Integrate Essbase and OBIEE+ with your Data Warehouse

1. Assess the current state of your data warehouse

- Assess and understand your biggest pain points and needs
  - E.g. Collecting information from too many sources and systems for consistent reporting?
  - E.g. Putting adhoc analysis and advanced analytics in the hands of end users, replacing SQL generated reports?
- Other important questions
  - Where is data stored? Where should I store data? How many sources?
  - Do I have a data warehouse? Is it complete?
  - What are the query performance requirements?
  - What are the requirements for the timing of data delivery (e.g. real-time, nightly)?
  - What are the subject areas?
  - What do the reports look like?
  - What is the time frame for implementation?
  - Who are my users and what do they need to be able to do?
  - How do users need to visualize and analyze data?
  - What calculations and business rules need to be included?
  - Are write back capabilities required?

2. Prioritize and Plan

- Prioritize the requirements – this will help you understand where your focus should be
- Take a phased approach in the implementation and remember you don't have to build everything at once
- Build the right team
- Ensure communication between data warehouse resources, BI server resources, and Essbase resources
  - You are all on the same Information Delivery team! Work together!
- Start small
  - Subject area in BI Server or subject area in Essbase

And Finally…

- 3. Implement / Show Success

- Next Phases / Continual Improvement

In Summary…

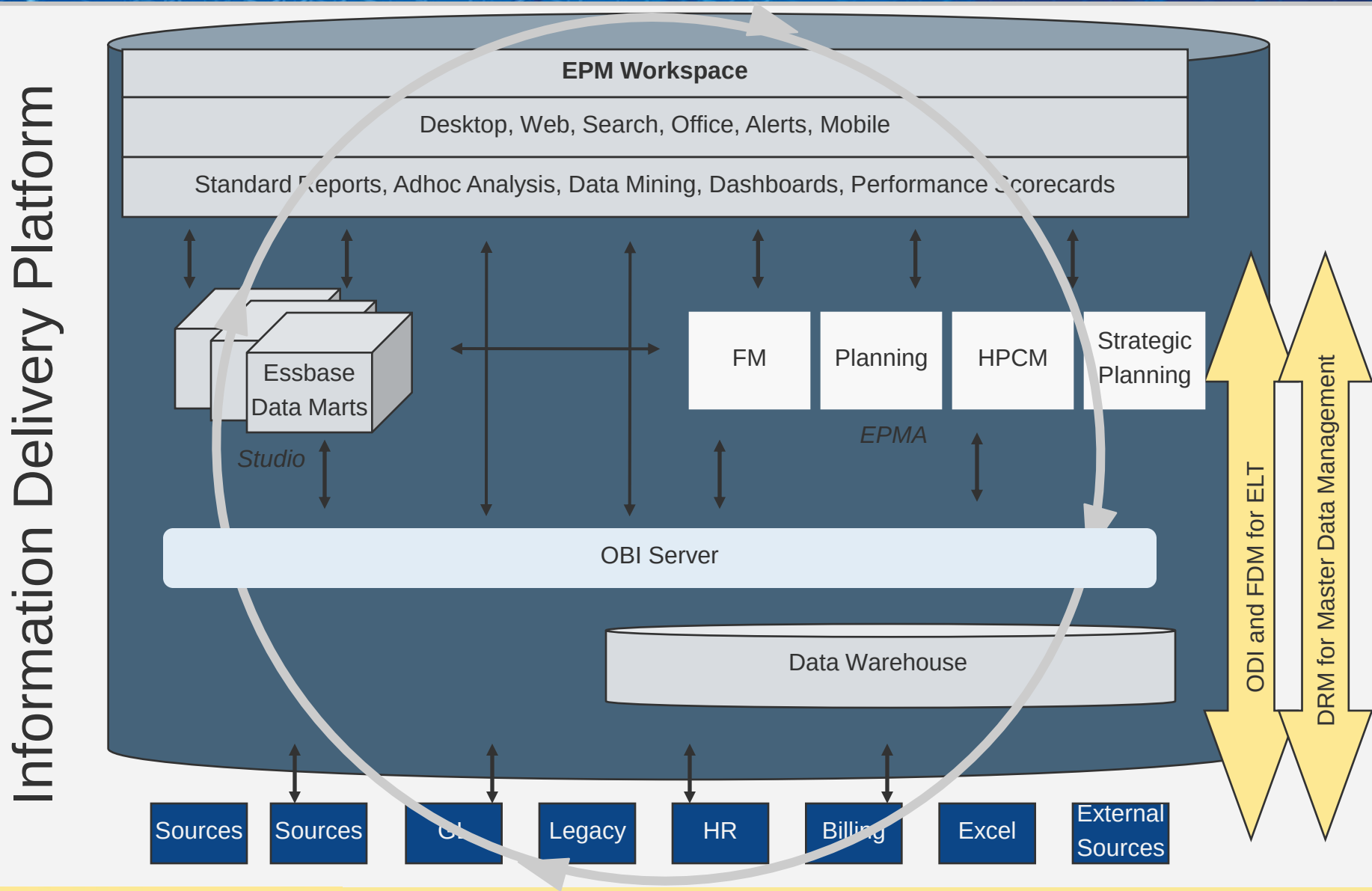
Solving Common Data Access Issues

Common Data Access Issues	The Solution
No single strategy for information delivery	Essbase and OBIEE+ along with your data warehouse delivers a complete information delivery system
IT vs. end user queries	Common workspace with user friendly tools puts reporting and analysis in the hands of end users
Silos of information	Oracle BI server delivers a common enterprise model to eliminate silos of information across databases and systems
Limited visibility	Essbase and BI Server provide better visibility to key metrics and factors that drive business performance
Limited correlations	Essbase and BI Server provide a way to correlate relevant information across database and systems
Different end user needs	A common workspace provides information access for both advanced and basic end users BI Server and Essbase allow customization to different end user groups sourced from the common enterprise model

Common Data Warehouse Issues

Common DW Issues	The Solution
Time consuming data warehouse changes	Incorporate changes and new sources to the data warehouse in BI Server (virtually) vs. in your data warehouse (physically) Immediate reporting access for new sources as they are included in logical schemas
Politics of what data should be stored	Gain more flexibility in this debate as no data is stored in BI Server and/or efficiently stored in Essbase
Data latency	Provide real time / near real time access with BI Server and Essbase incremental loads
Costly aggregate structures	Essbase's main purpose in life is to store aggregated data for fast reporting and analysis; Remove aggregations from the DW and use Essbase
Ever changing Business Definitions	Both BI Server and Essbase provide a model for easy updates to business definitions
Common dimensions and common definitions	Both BI Server and Essbase provide a common enterprise model for information; at the same, they allow customized presentations and views of end user specific terms and dimensions

Integrating Essbase and OBIEE+ with your Data Warehouse

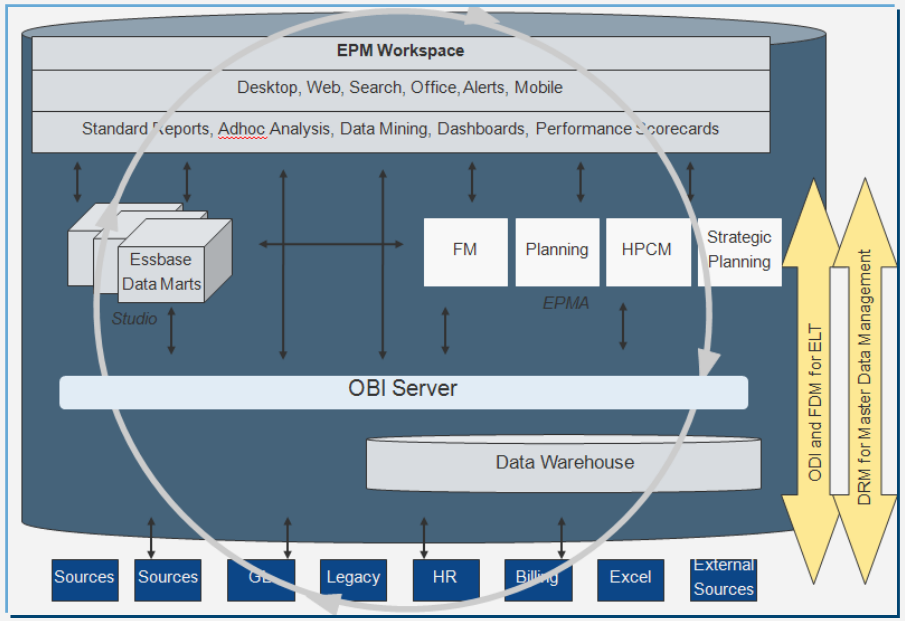


In Summary…

- Proven integration between ERPs, data warehouses and Essbase / OBIEE+ (Oracle's BI Foundation Layer)
- Essbase and OBIEE+ fill in the Knowledge Gap
  - Reporting, Dashboards, and Advanced Analytics
  - Supports all user communities from the experienced to the novice
  - User community workspace / personalization
- Oracle EPM enhances and adds to your ERP and data warehouse
  - Integration
  - Reduced deployment costs
  - Functionality

In Summary…

- Common Workspace
- Common reporting, analysis and dashboarding tools with comprehensive delivery options
- Common Foundation services
- Take advantage of the EPM applications and enabling technology
- Virtual data warehouse for unifying sources with OBI Server



- Send EPM information back to the data warehouse
- Powerful analysis with Essbase marts
- EPM and Essbase reporting and analysis with Smart View, FR, Dashboards, Answers, & Publisher
- Relational reporting with Smart View, Dashboards, Answers, & Publisher
- Share information between Essbase marts and other EPM apps
- ODI and/or FDM for data integrations
- Manage enterprise dimensions with Data Relationship Management

Thank you!!

Free webcasts – Thursday, 1pm CST

Edward Roske, interRel Consulting: eroske@interrel.com