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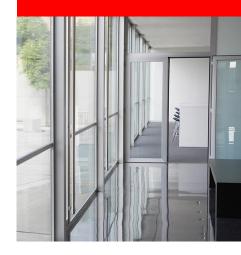
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BI with Fusion Applications: Embedded Analytics and Much More

Praveen Deshpande Principal Product Manager, Oracle BI EPM The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Agenda

- Evolution: BI for Fusion Applications
 - Analytics Drivers
 - Embedded Analytics
 - End User Experience & Capabilities
 - Supporting Infrastructure & Business Intelligence Products
 - Key Differentiators Fusion BI Roadmap
 - Areas of Investment
- Q & A



Why Fusion Applications?

Improved Insight - Better Decisions - More Pervasive

Challenges of Traditional BI	Business Value of Fusion Applications
Analysis and decision making only happen <u>after</u> the fact, primarily <u>backwards looking</u> .	Real-Time insight improves decision-making. Predictive analytics identify risks and opportunities.
Analysis as a <u>stand-alone task</u> , done by IT, or inside an individual line of business	Everyone has access to <u>contextually relevant</u> insight available directly in the Applications UI
BI participation is <u>limited</u> , due to complexity of tools or IT ownership of data structures	BI participation is <u>more pervasive</u> , especially for casual users by bringing insight to "where they work"
Multiple independent point reporting solutions across multiple lines of business	Single integrated BI Foundation supporting all types of reporting across multiple lines of business
Multiple data marts analyzing a single problem area without synchronization	Enterprise-wide, <u>common semantic</u> model provides a single source of truth for "same page reporting"
Corrective action requires <u>switching</u> back and forth between transactional and BI systems	Corrective actions (transactions or business processes) can be launched <u>directly from Fusion</u> .

Analytics for Fusion Applications Summary

Section 1 and 1 an

Solution Offerings

- Real-time, self-service reporting
- Historical and complex analysis with a data warehouse
- Domain-specific, specialized analytics

Key Features

- Consistent user experience
 - Identical tabular, graphical and visualization components used throughout
- Common semantic model
 - Unified definition of key entities—Customer, Invoice, Date, Account, etc.—and calculations
- Tight integration with Fusion Applications
 - Pervasive embedded analytics, role-based dashboards, and reports
 - Architected for Fusion Apps: seamless integration with flex, trees, security, ...
- Low cost of ownership
 - Easier installation, functional setups, and systems management

Oracle BI in Fusion Applications



Oracle Transactional BI (OTBI)

- Real time, self service reporting directly off Fusion Apps data
- Pre-packaged content covering major Fusion Applications
- Built on Oracle BI EE technology

Oracle BI Applications (OBIA)

- Unlimited historical analysis, including trending and cross-domain insight
- Pre-packaged data warehouse, ETL, metrics, and interactive dashboards
- Now available for EBS, Peoplesoft, JD Edwards, Siebel Extending to Fusion Applications
- Built on Oracle BI EE technology

Specialized Analytics

- Financial statements, sales territory planning, project performance, and more built on Essbase technology
- Whitespace analysis built on Real-Time Decisions and Oracle Data Mining technologies

Business Intelligence Applications

Fusion Apps v1 Coverage Map

Pillar	Bl Applications analysis coverage
CRM	Core Sales, Territory Management, Forecasting, Sales Prediction Engine, Quota Management, Core Marketing, Leads and Opportunity Landscape, Customer Interactions, Data Quality
FIN	AP, AR, GL, COGS, Revenue, Fixed Assets
НСМ	Workforce, Absence, Accruals, Payroll, Transfers
SCM	Item, Inventory, Shipping, Receiving, Costing, PIM, DOO
Procurement	Supplier, Purchasing, Self Service Purchasing, Sourcing
Projects	Costing, Billing, Control, Commitments, Cross Charge

^{*} Highlighted in red are new areas in Fusion V1

Transactional Business Intelligence

Fusion Apps v1 Coverage Map

Procurement	Projects	SCM	Financials	НСМ	CRM
Self Service Procurement	Project Control	Inventory	Receivables	Payroll	Territory Management
Sourcing	Project Costing	Cost Management	Payables	Performance Management	Sales (incl Forecasts)
Purchasing	Project Billing	Inventory Management	General Ledger	Goal	Quota Mgmt
	Project Foundation	Distributed Order Orchestration	Sub ledger Accounting	Core HR	Customer center, Customer Data Quality
		Receiving	Cash Management	Compensation	Partner Relationship Mgmt
		Shipping	Assets	Benefits	Marketing
		Product Model & Product Catalog Mgmt	Intercompany Transactions	Profile Management	Incentive Compensation

Empowering Customers with OTBI + OBIA Complementary, Comprehensive Solutions

	ОТВІ	OBIA		
Business Solution	Current state analysis What are the current deferred payment account balances?	Unlimited historical analysis What is the trend, and how does it compare to this period last year?		
Business Process Reporting	Tactical reporting Order more quantity?	Strategic reporting Change supplier?		
Target Users	Fusion Application operational user Purchasing Agent, Billing Clerk, Expense Report User	Managers and knowledge workers Executive, Manager, Sales Rep, Analyst		
Data Sources	Homogeneous – Fusion Applications-centric	Heterogeneous – Multiple business areas and disparate applications		
Data Preparation	Granular views, No data movement	Data warehouse model with transactional detail, persisted data, ETL, bulk and incremental data movement,		
Data Availability	Real Time	Updated periodically via ETL; latency determined by ETL refresh frequency		
Cross Functional Analysis	Single semantic model with conformed dimensions across both Analyze today's actuals against historic trends or averages			

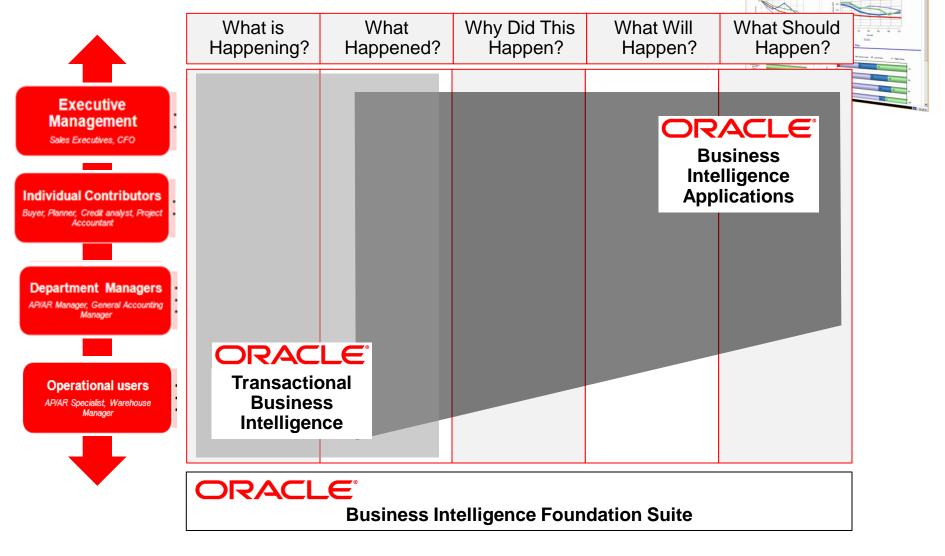
Business User Perspective

Analysis Requirements Span OTBI and OBIA

Role	Use Case	Info from OTBI	Info from OBIA
AP Clerk	Managing workload (entering invoices into the system)	Checks the number of pending invoices	
AP Manager	Managing team efficiency	Checks no of pending invoices, no of Clerks available	Average No of invoices processed daily by a clerk over the past two quarters
Finance Manager	Managing payment approvals	Checks number of past due payables 'as of now'	Checks average aging of payables & related interest penalties for the past few quarters
CFO	Managing Liquidity	'Current Payables' & 'Unapplied Payments' vs. 'Current Receivables' & 'unposted Invoices'	Trend of Working Capital and Liquidity Ratio over the past few quarters

Fusion Business Intelligence

Comprehensive Coverage with OTBI and OBIA



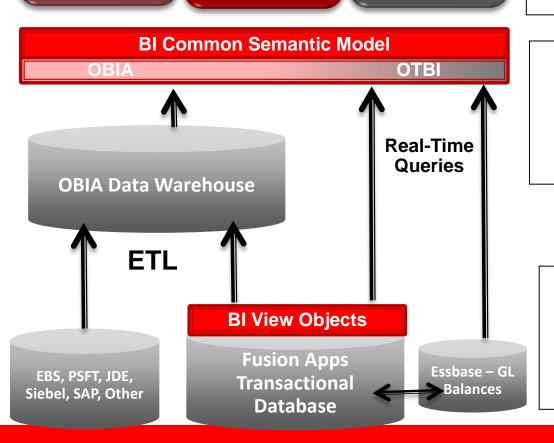
Fusion Analytic Applications Architecture

Pre-Packaged Reports & Dashboards Fusion
Embedded
Analytics

Self-Service
Query &
Reporting

Content Summary:

- 150+ embedded analytics
- OBIA: 3,000+ reports, 4,000+ metrics
- OTBI: Covers 30+ Fusion products



BI Common Semantic Model:

- Supports highly aggregated trending and real-time transaction listings from a single query model
- Ability to report across sources
- One place to go for BI extensions

BI View Objects:

- Are single source of truth for BI
- Represent facts and dimensions
- Implement Apps data security
- Handle MLS, flex, trees, date effectivity

Fusion Applications Data Extensibility

Reduce BI Cost of Ownership and Customizations

Category	Fusion Concept	BI Manifestation	Dee!eu
Metadata Ext.	Descriptive Flex	Attribute, or Measure	Desigr Time
	Key Flex	Joins between Dimensions & Facts	Wizar
	Trees	Dimension(Hierarchy) in BI	
	List of Values	Look up (Double column)	
	Set ID	Transparent to BI	. BI
Session Context	User Profile	Populated Session variables	Leveraç Apps
	ADF BC UI Hints	Bound to BI Objects at session init.	Setup
Security	JPS / LDAP	Supported in BI	Real-Ti
	Data Security	Respected within BI	11001111
	Role Management	Centrally defined, and managed in Fusion. BI Subscribes.	

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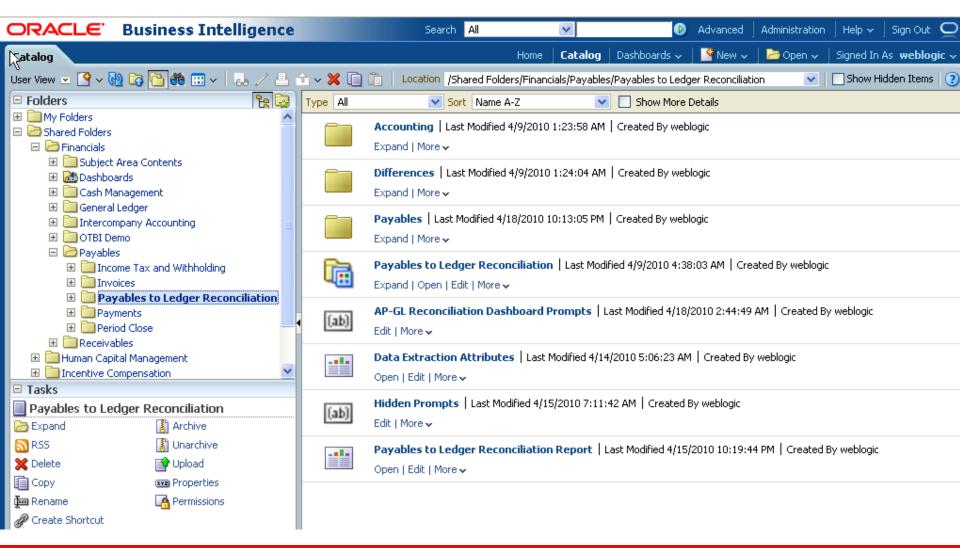
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Consolidated BI Catalog

OBIEE as Reporting & Analytics Home for Fusion Applications

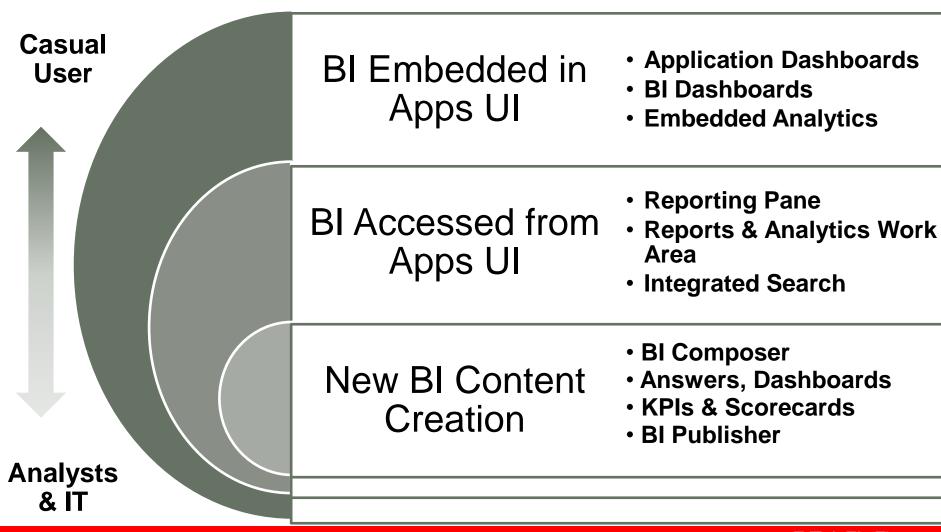
- Fusion Applications leverages the OBIEE web catalog to store all shipped reporting & analytics content in a single foldering structure
 - BI Publisher reports built by Fusion Applications teams
 - Transactional Business Intelligence reports & dashboards
 - BI Applications dashboards & scorecards
 - Financial Reporting
- BI Catalog folder structure matches Fusion Apps main menu structure
 - Ease of navigation for Fusion Apps users
 - Folder structure is content driven, not technology driven

Example: Financials BI Catalog



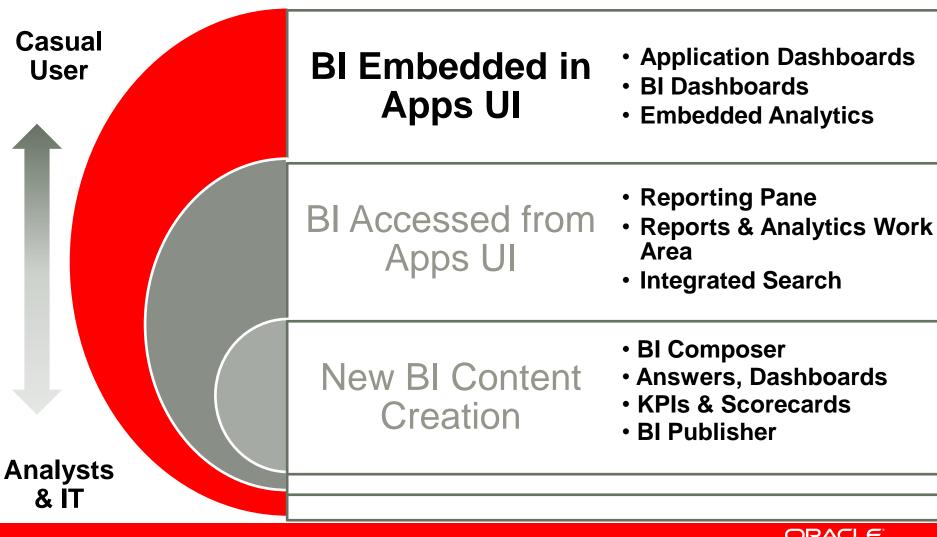
Accessing BI from Fusion Applications

Integration Points



Accessing BI from Fusion Applications

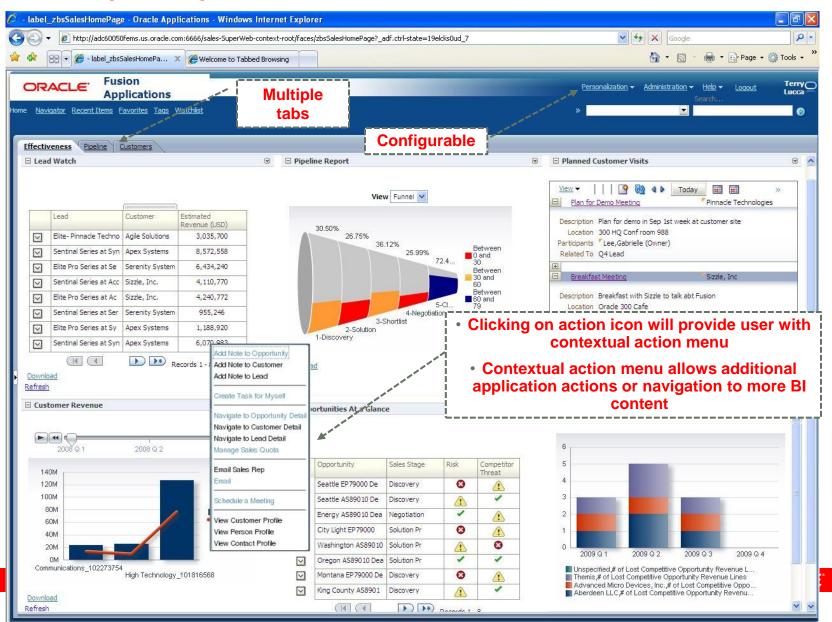
Integration Points



Application Dashboards

(1 item remaining)

Mash Up of Reports & Portlets

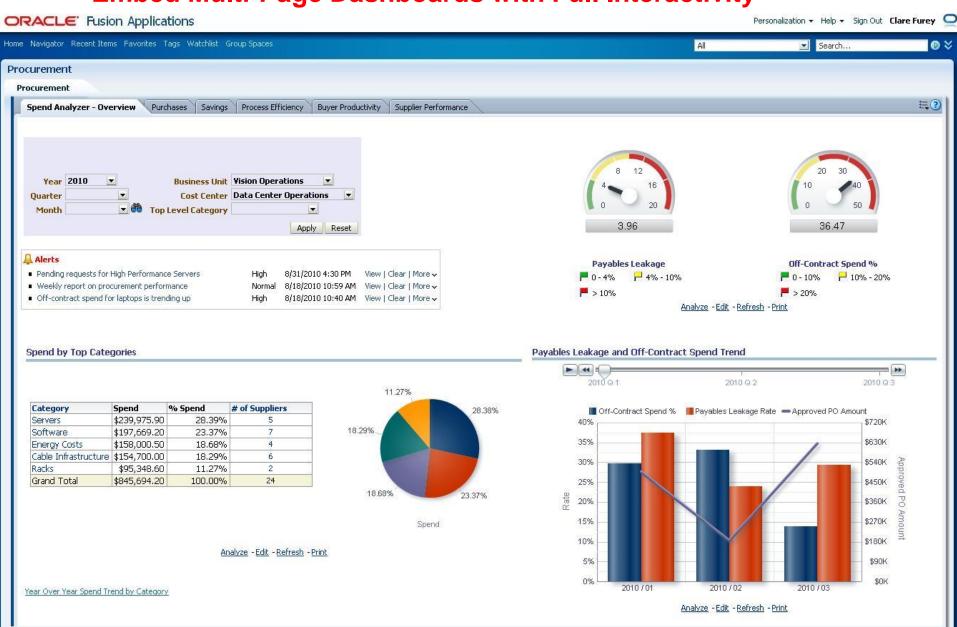


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Local intranet

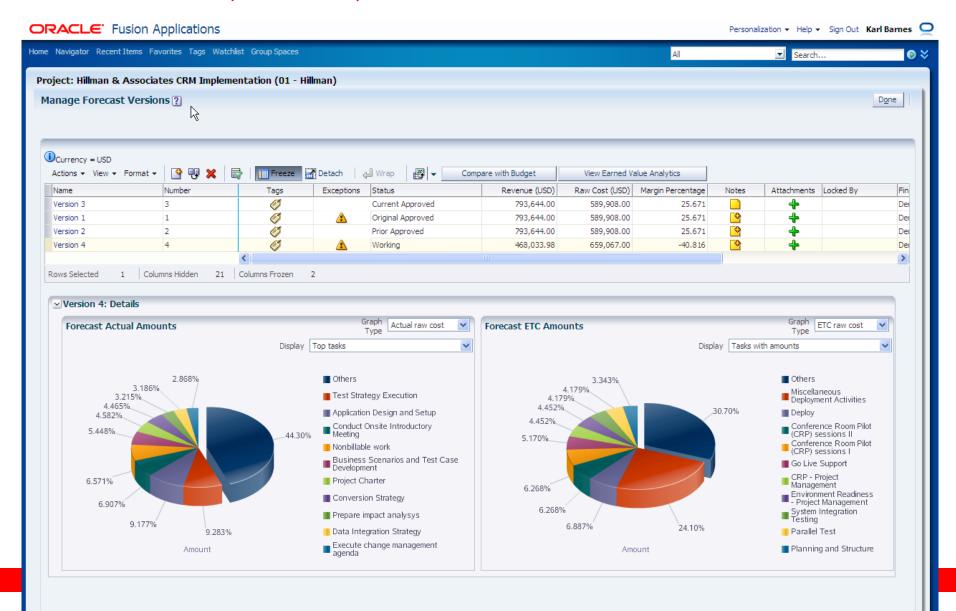
BI Dashboards

Embed Multi-Page Dashboards with Full Interactivity



Embedded Analytics in Transaction Pages

Contextual, Relevant, Actionable



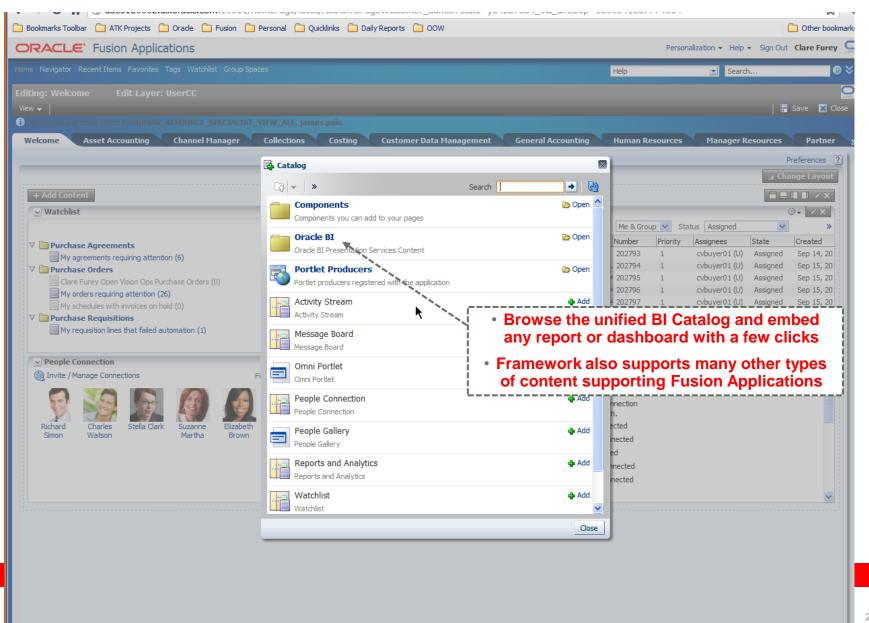
Fusion Applications v1: Product Family Summary

150+ Pre-Built Embedded BI Reports & Dashboards

Product Family	Examples
Financials	AP/AR Dashboards, Profitability Dashboard
SCM	Gross Margin Report, Change Order Cycle Time & Aging
Procurement	Requisition Aging, Processed Transactions (Orders)
Projects	Project Commitments Summary, Cross Charge Profitability
HCM	Turnover Trend, Headcount Demographics, Workforce Activity
CRM	Campaign Performance Trend, Pipeline Report, Customer Watch
Incentive Comp	Participant Dashboard, YTD Earnings and Payments

Personalization

Add, Edit, and Remove Reports and Dashboards



Additional Developer Capabilities

Programmatic Integration of BI Content

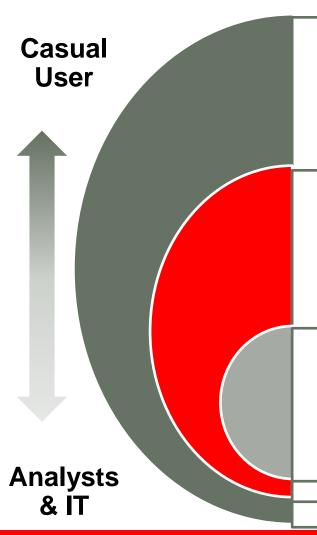
- Logical SQL BI View Object: BI as a data source for ADF
 - Retrieve BI data into the ADF model via a logical BI SQL statement
 - Bind BI data to an ADF visualization (dozens available)
- BI & Business Process Integration
 - Leverage BI metrics in BPEL flow branching points, kick off a BI agent from BPEL
 - Kick off Java programs or BPEL processes from a BI report, dashboard or programmatically via a BI agent.

Analytics Embedded in Applications Ul Summary

- Multiple embedding models to suit the requirement
- Context passing and bi-directional event integration between Applications and BI
- 150+ pre-built embedded analytics in Fusion v1
- All BI reports in the consolidated BI Catalog available via the Resource Catalog for easy embedding & personalization

Accessing BI from Fusion Applications

Integration Points



BI Embedded in Apps UI

- Application Dashboards
- BI Dashboards
- Embedded Analytics

BI Accessed from Apps UI

- Reporting Pane
- Reports & Analytics Work Area
- Integrated Search

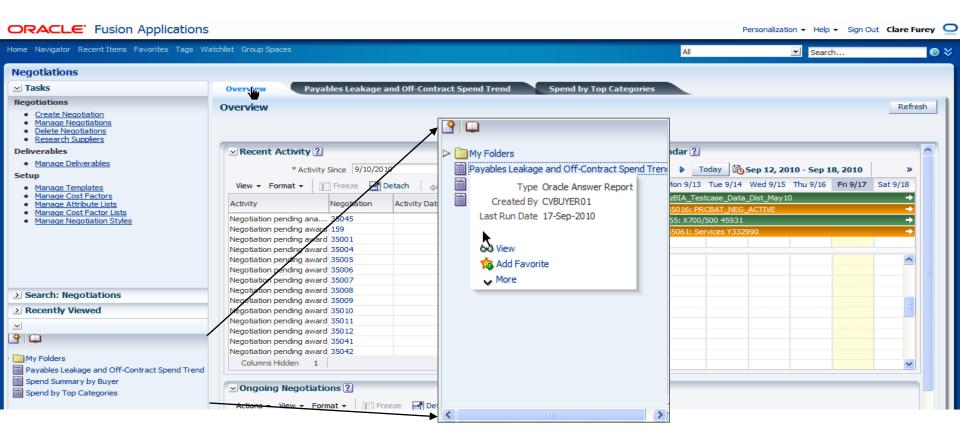
New BI Content Creation

- BI Composer
- Answers, Dashboards
- KPIs & Scorecards
- BI Publisher

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Accessing BI from Fusion Applications

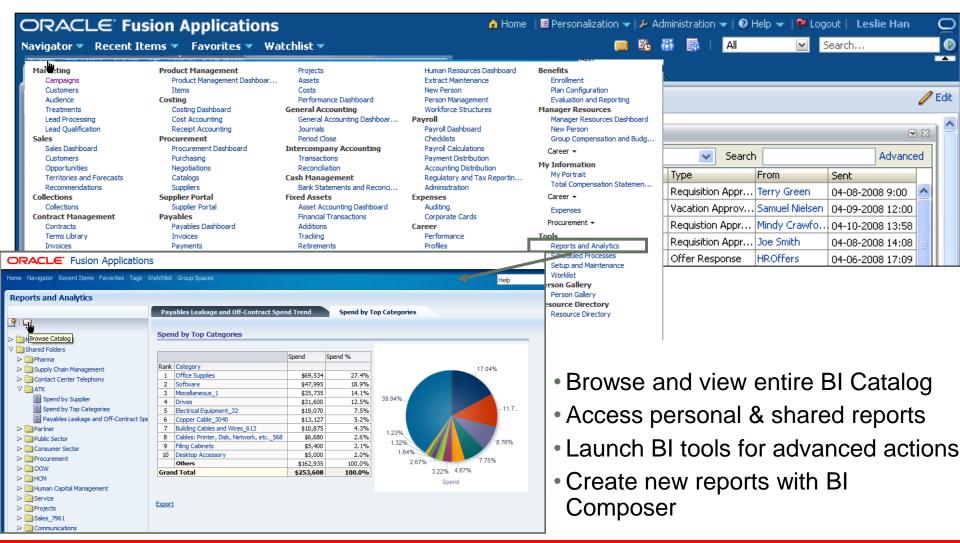
Reporting Pane



- One-click access to frequently used reports & dashboards
- Contextually relevant to current Apps work area
- Customer configurable content

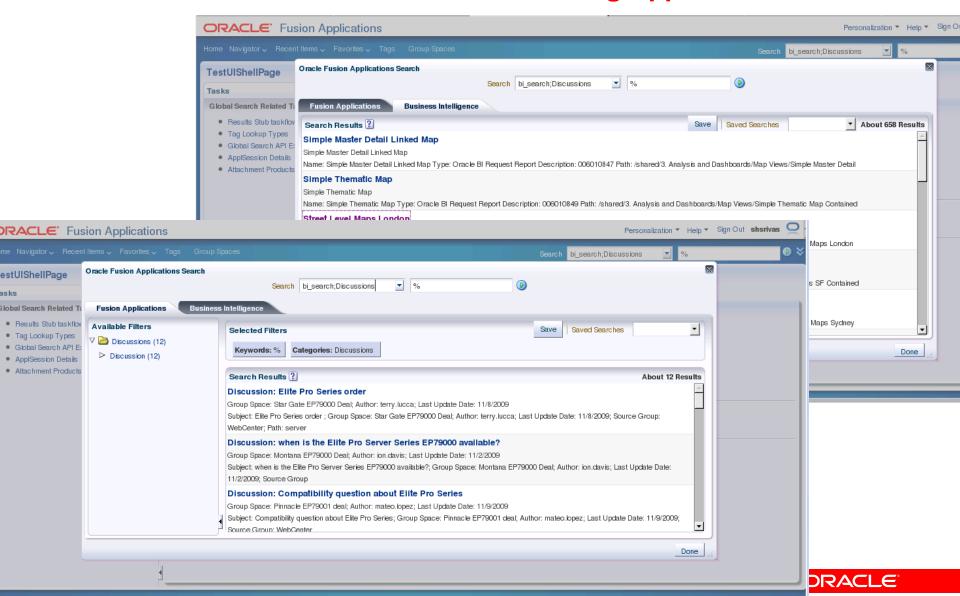
Reports and Analytics Work Area

Accessing BI from Fusion Applications



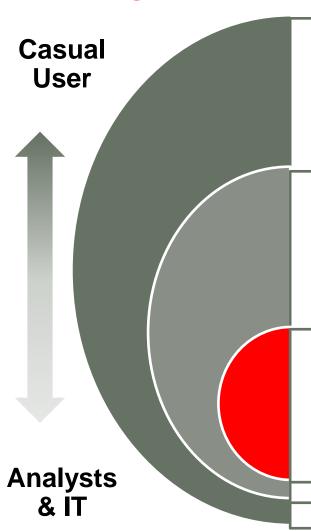
Search Integration

Find Relevant BI Content When Searching Applications



Accessing BI from Fusion Applications

Integration Points



BI Embedded in Apps UI

- Application Dashboards
- BI Dashboards
- Embedded Analytics

BI Accessed from Apps UI

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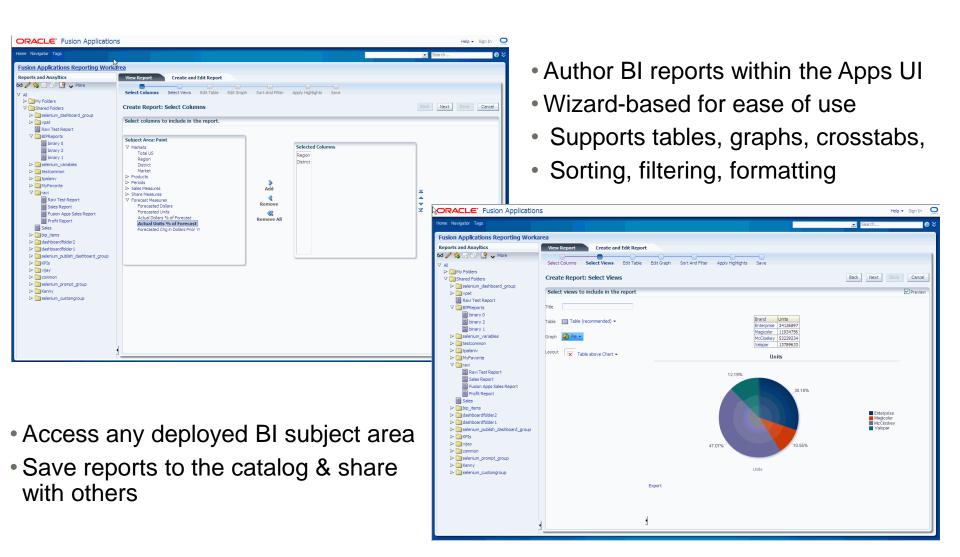
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New BI Content Creation

BI Composer



Oracle Mobile BI

Available as Part of Fusion BI

- Native mobile apps with full Dashboard functionality and all Bl content types
 - Dashboard Drill/Navigate
 - Catalog navigation
 - Favorites
 - Alerts
 - Search
 - Actions
- Write once, run many
 - Nothing to change
 - Dashboards dynamically adjust to exploit the form-factor of the device
- Device support
 - iOS iPhone and iPad with Fusion v1
 - Android & other platforms on roadmap





Oracle BI on Apple iPad

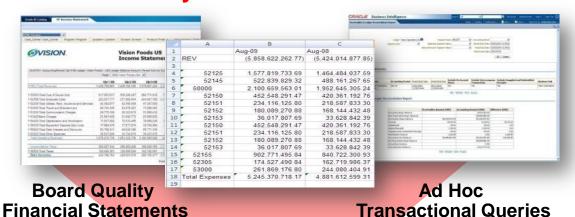
Example: Marketing Analytics





Enhancing the General Ledger

Flexibility and Performance with Essbase



Ledger Queries

GENERAL LEDGER

Multiple Reporting Methods

Transactional Queries

 Self-service reporting and analysis against real-time accounting information

Multi-Dimensional Balances

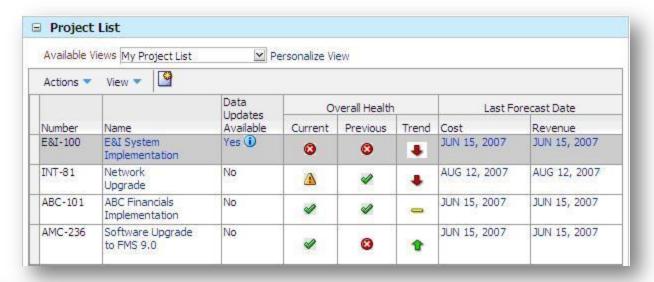
Pivot and drill to any level from anywhere

Instantaneous Results

Real-time updates to multi-dimensional balances that are embedded in the GL hyperledger architecture

Enhancing Project Reporting with Essbase

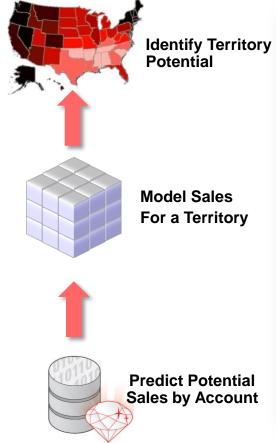
Combine Transactional and Analytical Content

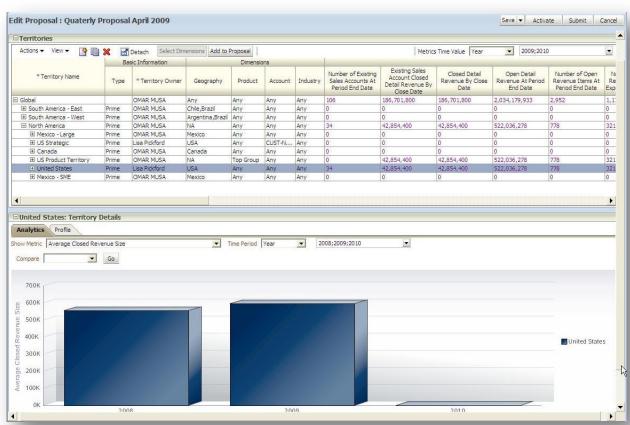


At Indicator Budget	At	At Completion		Period to Date		Inception to Date			
	Forecast	Variance	Budget	Actual	Variance	Budget	Actual	Variance	
Revenue	424, 100. 10	424, 100. 10	0.00%	10,600.00	6,275.00	2 -40,80%	186,900.00	182,575.00	-2.31%
Cost	264,980.00	292,811.00	10.50%	7,010.00	4,165.00	-40.58%	108,160.00	125,091.00	15,65%
Margin	159,120.00	131,289.00	-17.49%	3,590.00	2,110.00	-41,23%	78,740.00	57,484.00	-27.00%
People Effort	2,476.00	2,496.00	0.81%	68.00	41.00	-39.71%	1,018.00	1,178.00	15.72%
Equipment Effort	0	0	0	0	0	.0	0	0	0
Margin Percent	37.52%	30.96%	-6.56%	33.87%	33.63%	-0.24%	42.13%	31.49%	<u></u> -10.64%

Enhancing Territory Alignment

Optimize Sales Planning with Essbase and Predictive Analytics







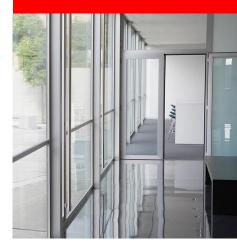
Summary

Embedded Analytics for Fusion Applications:

- 1. Improve decision making by providing contextually relevant, actionable information to Applications users
- 2. Include historical, real-time and predictive analytics
- 3. Support multiple models for embedding, accessing, and authoring BI content
- 4. Dramatically increase casual user adoption of BI
- 5. Are built on a complete, integrated BI foundation suite, and an extensible common enterprise semantic model

Agenda

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 - Key Differentiators
- Fusion BI Roadmap
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- Q & A



Get Ready for Fusion

with Oracle Business Intelligence Applications

TODAY BI Applications 7.9.6.x

Immediate Benefits

- Complete end to end analytics solutions for Apps Unlimited customers
- Deploy rapidly as data marts or as basis for conformed, complete enterprise warehouse
- Best practice, role-based reports and dashboards

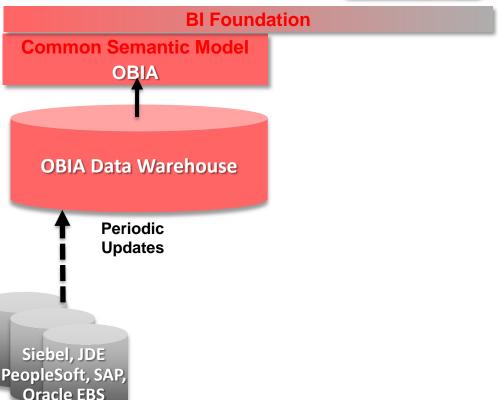
Improved Fusion Readiness

- Uptake of Fusion Middleware technologies, like OBIEE, Enterprise Manager, OID
- Reduced end user Fusion training

Continuity of Reporting During Coexistence or Upgrade

 End user reports and dashboards can be retained and will start working against alternate source Pre
Packaged
Reports &
Dashboards

Self-Service Query & Reporting



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Fusion BI Architecture

Supporting Tomorrow's Opportunities

TOMORROW
BI Applications
11g Family

Immediate Benefits

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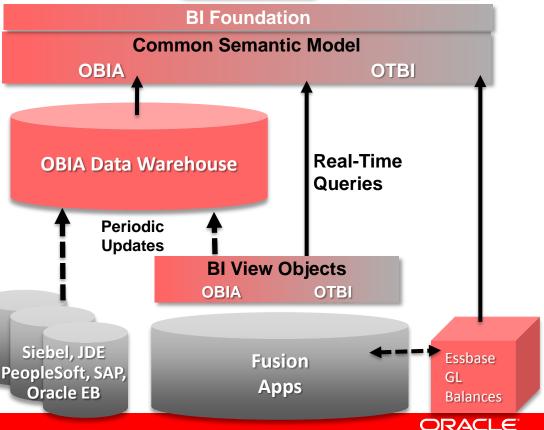
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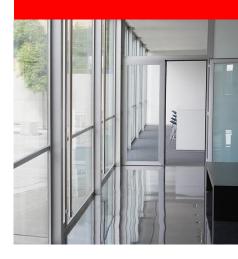
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Fusion Embedded Analytics Self-Service Query & Reporting



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Questions



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