Business Intelligence in Oracle Fusion Applications

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Agenda

- Overview
- Evolution of BI
- Features and Benefits of BI in Fusion Applications
- BI Fusion Applications Components
- Fusion BI Architecture
- Fusion BI Terminology
Global provider of business & technology consulting services

Founded in 2002 – Consistent Growth
- 500+ employees
- Boston, New York, Chicago, Atlanta
- Germany, Netherlands, India, Oman

Recognized as one of the fastest growing private US companies by Inc 500/5000 (2011)

Strategic Partnerships & Certifications
- Oracle Platinum Partner & BI Pillar Partner
- Oracle Specializations (EBS, BI, SOA & Database)
- Amazon WS Certified
- CMMI Level 3 Certification

Flexible & Cost Effective Global Delivery Model
About Speakers

• **Brahmaiah Yepuri**
  - Principal Consultant
  - 8+ Years in DWH & BI Development

• **Kumar Paloji**
  - Principal Consultant
  - 7+ Years in DWH & BI Development

• **Poorna Rekha Jalakam**
  - Associate Consultant
  - 2 years in DWH & BI Development
Typical Current Usage of BI Tools & Analytics:

- Business Intelligence & Analytical tools are predominantly being used by Executives, Managers & Knowledge Workers
- Near real-time and historical data analysis has empowered the BI users to take better and informed decisions
- Transactional Data gets transformed into useful information for reporting and analytical usage through ETL processes
- Business owns the data while IT department owns the data structures
- Existence of multiple data marts for analyzing a single problem area

The Evolution – Demand for More Efficient and Pervasiveness

- As the businesses grow with improved decision making processes using Business Intelligence, need for more efficient and pervasive tools has become a necessity.
- Typical demands are Real-time insight, integration with transactional systems, relevant and secured information for all levels of organization.
Overview

Features and Benefits of BI in Fusion Applications
**Overview**

**Fusion Applications:** Oracle Fusion Applications is Oracle's next generation suite of applications that eventually replace E-Business Suite. It will assimilate best of breed features from

- E-Business Suite
- JD Edwards
- PeopleSoft
- Siebel.
### Why Fusion Applications?
**Improved Insight - Better Decisions – More Pervasive**

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

Business Intelligence in Oracle Fusion Applications provides self-service, role based, and contextually focused content directly into the business processes of every Fusion Application module. Organizations can sharpen their competitive edge with business intelligence that’s:

- Pervasive
- Actionable
- Easy-to-use
BI Fusion Applications Components

- Oracle Transactional BI (OTBI)
- Oracle BI Applications (OBIA)
- Specialized Domain
- Oracle BI Publisher
<table>
<thead>
<tr>
<th></th>
<th>OTBI</th>
<th>OBIA</th>
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<tbody>
<tr>
<td><strong>Business Solution</strong></td>
<td>Current state analysis</td>
<td>Unlimited historical analysis</td>
</tr>
<tr>
<td><strong>Business Process Reporting</strong></td>
<td>Tactical reporting</td>
<td>Strategic reporting</td>
</tr>
<tr>
<td><strong>Target Users</strong></td>
<td>Fusion Application operational user</td>
<td>Managers and knowledge workers</td>
</tr>
<tr>
<td><strong>Data Sources</strong></td>
<td>Homogeneous – Fusion Applications-centric</td>
<td>Heterogeneous – Multiple business areas and disparate applications</td>
</tr>
<tr>
<td><strong>Data Preparation</strong></td>
<td>Granular views, No data movement</td>
<td>Data warehouse model with transactional detail, persisted data, ETL, bulk and incremental data movement,</td>
</tr>
<tr>
<td><strong>Data Availability</strong></td>
<td>Real Time</td>
<td>Updated periodically via ETL; latency determined by ETL refresh frequency</td>
</tr>
<tr>
<td><strong>Cross Functional Analysis</strong></td>
<td>Single semantic model with conformed dimensions across both</td>
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</table>
### Business Intelligence

**Comprehensive Coverage with OTBI and OBIA**

<table>
<thead>
<tr>
<th>What is Happening?</th>
<th>What Happened?</th>
<th>Why Did This Happen?</th>
<th>What Will Happen?</th>
<th>What Should Happen?</th>
</tr>
</thead>
</table>

**Executive Management**
- Sales Executives, CFO

**Individual Contributors**
- Buyer, Planner, Credit Analyst, Project Accountant

**Department Managers**
- AP/AR Manager, General Accounting Manager

**Operational Users**
- AP/AR Specialist, Warehouse Manager

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**Business Intelligence Applications**

**Analytics in Fusion**

**Transactional Business Intelligence**
Fusion BI Architecture

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

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

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

Fig: Fusion BI Architecture
Fusion BI Architecture

**BI View Objects:**
- These are single source of truth for BI
- Represent facts and dimensions
- Apps data security been implement
- 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
BI Common Semantic Model:

- Supports highly aggregated trending and real-time transaction listings from a single query model
- Single RPD with one Business Model
- Single Business Column and Entity shared across OTBI and Oracle Business Intelligence Application (OBIA)
- Common Conformed Dimensions ensure cross fact, cross subject areas and federated OTBI/OBIA reporting
Fusion BI Architecture

Oracle BI Applications (OBIA):
OBIA is used for unlimited historical analysis - trending and cross-domain insight. Pre-packaged DW, ETL, metrics, and interactive dashboards.

Oracle Transactional Business Intelligence (OTBI):
- Real time window into the transactional System where business users can create their own reports using prepackaged functional metadata
- Co located & semantically integrated with the Data Warehousing metadata
- Reads security, flex fields and trees from Fusion Applications
- Reports / charts from OTBI can be embedded into Fusion Applications
Fusion BI Terminology

- Security Roles
- Query Redirection
- BI Composer
Security Roles:

Oracle Fusion Financial Applications contains a new paradigm for security: Role Based security.

The concepts involved include:

- Job roles and their types
- Duties
- Privileges
- Functional security
- Data security
Query Redirection:

The subject areas in the presentation layer can be built for real-time analysis using the transactional tables, for historical analysis using the Business Analytics Warehouse, or for both. Based on the subject area, the underlying query should use the common logical and physical content and be able to source the data from the transactional tables, the historical reporting, or both. The underlying feature that facilitates this is called query redirection.

There are two scenarios for source redirection between Transactional Business Intelligence and Oracle BI Applications use cases:

- Transactional Business Intelligence specific subject areas
- Shared subject areas
BI Composer:

Business Intelligence Composer is a simple-to-use wizard that allows organizations to quickly and easily create, edit, or view data without requiring an engineering background. With this capability Human Resource organizations can build and deliver reports that the business needs whenever they need it, without waiting for IT support. It is built for the business user.
Analytics in Fusion Application

Embedded Analytics
Individual BI reports in transactional screens
Entire BI Dashboard as tab on Fusion Page

Navigator / Main Menu
Menu link to launch BI Homepage
Browse BI content catalog or create new reports

Reporting Pane
Displays list of contextually relevant reports
One-click launch of report in new window
Customer configurable
Creation Of New BI content

BI Composer

- Author BI reports within the Apps UI
- Wizard-based for ease of use
- Supports tables, graphs, crosstabs,
- Sorting, filtering, formatting

- Access any deployed BI subject area
- Save reports to the catalog & share with others
Creation Of New BI content

BI Composer

- Author BI reports within the Apps UI
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- Access any deployed BI subject area
- Save reports to the catalog & share with others
Business Intelligence in Oracle Fusion Applications provides self-service, role-based, and contextually focused content directly into the business processes of every Fusion Application module. Users at all levels of an organization can link better insight to action and create more intelligent business processes. Along with the Oracle Transactional Business Intelligence (Real Time Reporting), it delivers complete, consistent analytic information, to support the full range of decision making needs from tactical to strategic.