Oracle Business Intelligence 11g
Most complete. Most integrated.

DOE Information Management Conference 2012: Oracle Business Intelligence - Breakthrough Analytic Capabilities
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Safe Harbor Statement

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Fact: BI Requirements Continually Evolve

- 50% of analytic requirements changed in the first year
- Difficult to incorporate new or emerging data sources
- Expensive to integrate BI with IT infrastructure
- Development risk is result
Oracle Business Intelligence Foundation
Built to Last and Made For Change

First Intelligent Business Process
Improve business performance by linking insight to action

Lowest Cost of Ownership
Reusable analytic assets deliver productivity and provide consistent enterprise metrics

Start Simple and Evolve
Manage risk with single analytic framework across a range of schemas and deployment options
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Intelligent Business Processes
Insight in Every Decision

1. **What Happened?**

   - View Performance Details
   - Monitor KPIs

2. **Why Did it Happen?**

   - Analyze Common Enterprise Information Model

3. **How to Model Alternatives?**

   - Model Business Intelligence Foundation
   - Detect Trends

4. **Take Action**

   - Who Does What?
   - Act on Findings

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First Closed-Loop Business Intelligence Solution

THE OLD WAY

Disconnected. Open Ended.

The New Way:
ACTION FRAMEWORK

Integrated. Actionable.
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Manage risk with single analytic framework across a range of schemas and deployment options
Reusable Analytic Assets

Common Enterprise Information Model Enables Scale

**PRESENTATION LAYER**
- User Roles, Preferences
- Simplified View
- Member Selection
- Logical SQL Interface

**SEMANTIC OBJECT LAYER**
- Dimensions
- Hierarchies
- Measures
- Calculations
- Aggregation Rules
- Time Series

**PHYSICAL LAYER**
- Map Physical Data
- Connections
- Schema

MORE VALUE
- Insulates Users from Complexity
- Consistent Definition of Business Metrics & Calculations
- Easier Maintenance
- Model Once, Deploy
- Any Set of Data Sources

REUSABLE
First Intelligent Business Process
Improve business performance by linking insight to action

Lowest Cost of Ownership
Reusable analytic assets deliver productivity and provide consistent enterprise metrics

Start Simple and Evolve
Manage risk with single analytic framework across a range of schemas and deployment options
Start Simple and Evolve Your BI Strategy
Single BI Foundation For All Analytic Functionality
Direct Reporting Against Any Data Source
Any Data Source Becomes an Information Asset
Choice of Deployment Options

- Public Cloud
- Private Cloud
- On Premise
- Hybrid
Task Oriented User Experience
Focus on the Answer, Not the Tool

- Extensive user interface improvements
- Find what you want quickly
- Do want you want easily
New Interactive Visualizations

Gain Insight Quicker with Greater Visibility

- Rich Interactive Visualizations
- Animated transitions
- Range and Paging sliders
- Legend-based interactions
- Master-Detail linking
- Extensive and extended set of chart types
- Consistent, hi-fidelity charting across Oracle product line
Oracle Scorecard and Strategy Management

Strategy Management & Goal Setting

- Integrated BI component
  - KPIs as core metadata
  - Thresholds, owners, history
  - Auto-generated interactive analyses
  - Linked objectives & initiatives

- Automatic detection
  - KPI alerts triggered by thresholds

- Strategy visualization
  - Strategy Maps and Trees
  - Cause and Effects
  - Watchlists
  - Annotations & override

- All methodologies
  - Balanced scorecard, six sigma, Baldrige
Best-in-Class Query & Analysis User Interface

- **Powerful dashboards**
  - Visually appealing
  - Intuitive
  - 100% thin client

- **Across all styles of analysis**
  - ROLAP, MOLAP, Scorecards, Reporting, Collaboration, Actions

- **Across all data sources**
  - Simplified model for users
  - Federated data access
  - On-the-fly calculations, even with complex share and time series
  - Custom members & groups
  - Share, collaborate, & publish
  - Consistency & alignment
Best-in-Class MOLAP User Interface

- First, seamless ROLAP & MOLAP Browser Interface
- OLAP Query Building with member selection
  - Member selection
  - Calculated members
  - Hierarchical calculations
  - Custom aggregates
- Navigate across relational and multidimensional sources
  - Shared metadata, calculations, dimensions, security
  - Ragged & skip-level hierarchies
  - Performance for each source
- Microsoft Office Integration
Best in Class Report Builder

- 100% pure thin client interface
  - No plug-ins, native AJAX

- 100% lifecycle support
  - Access data, design, schedule, manage all in thin client

- For interactive reporting
  - Web-centric design

- For production reporting
  - Pixel-perfect documents

- Microsoft Office Integration
  - Excel, PowerPoint, Word
  - Microsoft Office 2003, 2007 & 2010
Spatial Intelligence
New Depth and Breadth of Analysis

- Most BI data *already* contains geographic dimension of analysis
- Deliver deeper analytical insights through Spatial visualisation and data
- Increase the ROI of BI & GIS systems

In effect, Oracle is "flipping the switch" and turning spatial into a product feature when such a capability is needed. It will be daunting to compete against this company.

Microsoft, beware... we haven't heard much about geospatial and SQL Server integration lately... you are in danger of becoming a non-player. And IBM continues to play with ESRI only, and resists striking out on its own in what could be a missed opportunity.
Immediate Benefit for Mobile Users

Fast Time to Mobile Value

• Download from Apple iTunes AppStore

• No learning curve – same self-service content accessed on other computers

• Integrated strategy management, operational reporting, and forward-looking scenario analysis

• Initiate actions or workflows in response to insights from mobile device

• Instant access to existing custom, embedded, or pre-built BI Apps
Supports Standardization and Infrastructure Simplification

• Built on Oracle BI Foundation

• Always on – nothing to install, no separate server deployment

• 100% reuse of design & implementation effort in existing BI Apps

• Reuse same security model and Enterprise Information Model

• Instant ROI – Zero end-user training

• Best TCO – No additional infrastructure, development or maintenance
## Revenue Breakdown

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Revenue</th>
<th>Paid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 Q1</td>
<td>2,707,686</td>
<td>737,035</td>
</tr>
<tr>
<td>2008 Q2</td>
<td>8,109,716</td>
<td>5,113,334</td>
</tr>
<tr>
<td>2008 Q3</td>
<td>4,338,844</td>
<td>7,780,625</td>
</tr>
<tr>
<td>2008 Q4</td>
<td>1,343,754</td>
<td>2,223,477</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>16,500,000</strong></td>
<td><strong>15,854,471</strong></td>
</tr>
</tbody>
</table>

## Product Analysis

### Revenue by Product Type

<table>
<thead>
<tr>
<th>Brand</th>
<th>Target Revenue</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>BizTech</td>
<td>142,462</td>
<td>119,964</td>
</tr>
<tr>
<td>FunPod</td>
<td>363,708</td>
<td>259,010</td>
</tr>
<tr>
<td>HomeView</td>
<td>663,489</td>
<td>567,142</td>
</tr>
<tr>
<td>Smart Phones</td>
<td>806,265</td>
<td>779,928</td>
</tr>
<tr>
<td>Plasma HomeView</td>
<td>1,079,602</td>
<td>966,739</td>
</tr>
<tr>
<td>LCD HomeView</td>
<td>1,494,221</td>
<td>1,114,703</td>
</tr>
<tr>
<td>P2 Product</td>
<td>286,012</td>
<td>281,269</td>
</tr>
<tr>
<td>Textbooks</td>
<td>239,733</td>
<td>140,134</td>
</tr>
<tr>
<td>Tescare Ltd</td>
<td>230,443</td>
<td>178,032</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>741,234</strong></td>
<td><strong>181,943</strong></td>
</tr>
</tbody>
</table>

## Paid Amount

### Brand Breakdown

<table>
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<tr>
<th>Brand</th>
<th>Paid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>BizTech</td>
<td>96,938</td>
</tr>
<tr>
<td>FunPod</td>
<td>34,458</td>
</tr>
<tr>
<td>HomeView</td>
<td>50,547</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>181,943</strong></td>
</tr>
</tbody>
</table>

## Billed Quantity, Revenue, Paid Amount

### Company, Brand

<table>
<thead>
<tr>
<th>Company, Brand</th>
<th>Billed Quantity</th>
<th>Revenue</th>
<th>Paid Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genmind Corp</td>
<td>500,000</td>
<td>400,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Stockplus Inc</td>
<td>300,000</td>
<td>200,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Tescare Ltd.</td>
<td>200,000</td>
<td>100,000</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>1000,000</strong></td>
<td><strong>600,000</strong></td>
<td><strong>350,000</strong></td>
</tr>
</tbody>
</table>
Data Discovery – Unstructured & Structured Data
BI And Data Discovery Are Peers

Drives need for

**Business Intelligence**
Proven Answers To Known Questions

**Data Discovery**
Fast Answers To New Questions

Creates new KPIs for
Data Discovery Solves New Problems

• More kinds of data drive the need for fact-based decision-making in more kinds of decisions

• In this new world, traditional data modeling is an unaffordable luxury

• For more people to use more data, interfaces must make the complex simple
Simplicity of Search, Power of BI

- **Walk-up ease of use**
  - Derived from 10 years ease of use experience
- **Search + Faceted Navigation + Visual Analysis**
  - Search and select attributes in unstructured and structured data
- **Interactive Exploration**
  - Responsive Guide Search
Interactive Exploration and Discovery

User experience optimized to foster discovery

Advanced Search
- Search look-ahead
- Spell-correction
- Data-driven filtering

Faceted Navigation
- Select attributes, like a web site

Visual Analysis
- Charting & crosstabs
- Geographic visualization
- Tag clouds
Data Discovery Application Lifecycle

Diverse and changing information

Automatically unified and enriched in Oracle Endeca Server – no predefined model required

Drag-and-drop application composition

Interactive search, navigation and analytics for exploration and analysis

Structured

Semi-Structured

Unstructured
Oracle Endeca Information Discovery
A platform for data discovery applications across the enterprise

Oracle Endeca Information Discovery helps organizations quickly explore all relevant data

- Combine structured & unstructured data from disparate systems
- Automatically organize information for search, discovery & analysis
- Rapidly assemble easy to use analysis applications

Oracle Endeca Server
Faceted Data Model Integration Enrichment

Unified Querying Interactive Exploration App Composition
Oracle Exalytics BI Machine
First Engineered System for Analytics
Oracle Exalytics

• **Super fast** R-OLAP and M-OLAP
• **Super fast** Financial & Operational Planning
• **Optimized Hardware**
  • Memory: 1 Terabyte DRAM
  • Processors: 40 Intel Cores
• **Software Breakthroughs**
  • Adaptive In-Memory Caching
  • In-Memory Columnar Compression
  • Optimized Storage Block Access
  • Free Form Data Exploration
  • High Density Visualizations
  • Optimized for Exadata
• **Best Cost/Performance**
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Oracle Exalytics
Extreme Performance for Enterprise Analytics

- Speed-of-Thought Analysis at Enterprise Scale
  - 20x better response times
  - Sub-second performance enables speed-of-thought analytics
  - Grow to 50,000 enterprise users on one appliance

- What-if Analysis and Forecasting
  - 16x better response times
  - More accurate – use more detail, include more scope, evaluate wider operations
  - More scale – more users and higher volumes at busy periods
  - Greater agility – do daily instead of monthly

- Enterprise Planning
  - Reduce planning cycle times with 5x better response time and 6x better throughput
  - Run more planning models with finer grained operational detail to improve accuracy
  - Extend beyond Finance to every LOB, with 10,000 Planning users on one appliance
End-user Experience with Exalytics

Speed of Thought Interactive Analysis

- Highly Interactive Analysis
- Free Form Data Exploration
- High Density Visualizations
- View Auto Suggestions
- Contextual Actions
- All on Mobile

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Data Integration
Oracle GoldenGate 11g

Low-Impact Real-Time Data Integration & Transactional Replication

- Log-based, changed data
- New DB/HW/OS/APP
- Fully Active Distributed DB
- Reporting Database
- Data Warehouse
- ODS
- Data Integrator
- Global Data Centers
- Message Bus

- Zero Downtime Upgrade & Migration
- Highly Available / Disaster Recovery
- Query Offloading, Disaster Recovery
- Real-time BI, Operational Reporting, MDM
- Data Synchronization across the Enterprise
- Event Driven Architecture, SOA
Oracle Data Integrator 11g

Fastest ETL/E-LT, Simpler Time-to-Value, Lowest TCO

Oracle Data Integrator Enterprise Edition

- Best in class performance, scalability
- Lowered TCO, lightweight deployment
- Improved usability and manageability
- Heterogeneous
- Open, standards-based

Legacy Sources

Application Sources

OLTP DB Sources

Any Data Warehouse

Any Planning System
Integrated Data Quality with ODI
Oracle Data Quality Runtime with Data Integrator

• **Best of breed Quality**
  – Proven, scalable DQ engine
  – Rich capabilities for cleansing, standardization, validation, match and merge
  – Extensible by customers

• **Out-of-box integration**
  – ODI integrates with Quality functions via pre-built ODI OpenTool
  – Drag and drop graphical icon for inserting DQ flows into ODI
Oracle Data Integration for Big Data

Improving Productivity and Efficiency for Big Data

Benefits

• Improves productivity for transforming Big Data
• Optimizes the loading of Big Data with Oracle Loader for Hadoop
• Reduce complexities of processing Hadoop through graphical tooling
• Consistent tooling across BI/DW, SOA, Integration and Big Data
Summary
Complete.
Oracle Business Intelligence 11g
Common Business Intelligence Foundation

Open.
Oracle Business Intelligence 11g

Data Integration | Scorecards | Interactive Dashboards | Reporting & Publishing | Ad-hoc Analysis | Office Integration | Search | Detect & Alert | Collaborate | Mobile | Embedded

OLTP & ODS Systems | Data Warehouse | Data Mart | Exadata | OLAP Sources | Packaged Applications (Oracle, SAP, Others) | Unstructured & Semi-Structured | Excel XML/Office | Business Process
Integrated.

Oracle Business Intelligence 11g

Common Enterprise Information Model

- Common Metadata Foundation across all Data Sources
- Common Security, Access Control, Authorization, Auditing
- Common Request Generation and Optimized Data Access Services
- Common Clustering, Workload Management, & Deployment
- Common Systems & Operational Lifecycle Management

OLTP & ODS Systems
Data Warehouse
Data Mart
Exadata
OLAP Sources
Packaged Applications (Oracle, SAP, Others)
Unstructured & Semi-Structured
Excel XML/Office
Business Process
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