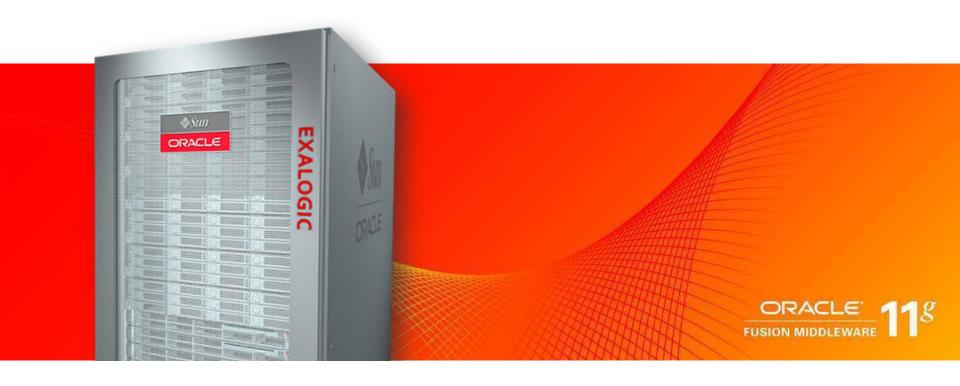
# Maps Change the World of Business Intelligence

How Executives Visualize Corporate Data with Oracle Business Intelligence 11g

NEOOUG September 16, 2011

Dan Vlamis
Vlamis Software Solutions
816-781-2880
http://www.vlamis.com



## ORACLE

## **How OBIEE 11g Enables Better Business Decision Making**

**Courtesy Oracle Corporation** 

#### **Product Strategy**

#### Overview – Oracle Business Intelligence 11*g*R1

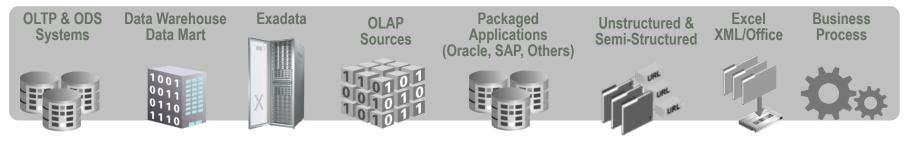
- Delivers best-of-breed products for Query and Analysis, OLAP, Reporting, Dashboards and Scorecards
- On a complete, open, and architecturally unified Business Intelligence Foundation
- Coupled with leading packaged business intelligence and enterprise performance management applications
- Providing customers with superior alignment, visibility, and fastest time to value

#### Complete.

#### **Oracle Business Intelligence 11***g*



#### Common Business Intelligence Foundation



#### Open.

#### **Oracle Business Intelligence 11***g*



#### Common Business Intelligence Foundation



#### Integrated.

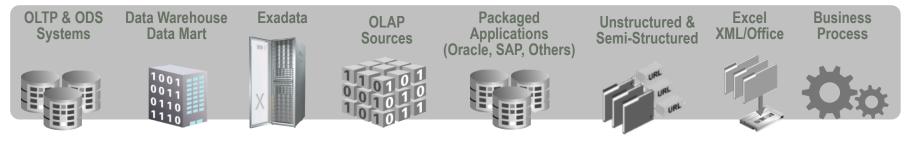
#### **Oracle Business Intelligence 11***g*



#### 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





## **Common Enterprise Information Model**

**Enables Consistency, Security, Reuse, Flexibility** 

#### PRESENTATION LAYER



- User roles, preferences
- Simplified view
- Logical SQL interface

#### **SEMANTIC OBJECT LAYER**



- Dimensions
- Hierarchies
- Measures
- Calculations
- · Aggregation Rules
- · Time Series

#### PHYSICAL LAYER



- Map Physical Data
- Connections
- · Schema

Role-Based Views of the Information Relevant to the User

**Consistent Definition of Business Measures, Metrics, Calculations** 

Model Once, Deploy Everywhere









**Across Any Data Sources** 

#### **Common Enterprise Information Model Benefits**

#### **BUSINESS BENEFITS**

- √ Consistent, accurate information
- √ Business user self service
- √ Choice of front-end tools
- √ Role-based, secure access
- √ Transparent information access

#### **IT BENEFITS**

- √ Model once, Deploy anywhere
- √ Reduced user support from IT
- ✓ Enables phased BI standardization
- ✓ Supports IT compliance initiatives
- ✓ Easier upgrades & changes

## Best in Class Performance, Scalability & Availability Continuous Improvement

- Performance
  - 100s of performance optimizations
  - 64-bit memory optimizations
  - Native huge page support
  - Support for multi-grain cache objects
  - Improved cache seeding & query rewrite
  - Improved local execution on in-memory cache for better reuse
- Massively scalable with flexible deployment options
  - Terabytes of data, 10s of thousands of concurrent users
  - On-premise single node or clustered
  - SaaS with single tenant or multi-tenant
  - Standalone or embedded
- Highly available with Active-Active Clustering
  - Automated user session & query failover
  - Online hot patching
  - Automated failover to disaster recovery

#### **Best-in-Class Query & Analysis User Interface**

- Powerful dashboards
  - Visually appealing
  - Intuitive
  - 100% thin client
- Across all styles of analysis
  - R-OLAP, M-OLAP, 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



## Oracle BI 11g Interactive Visualizations

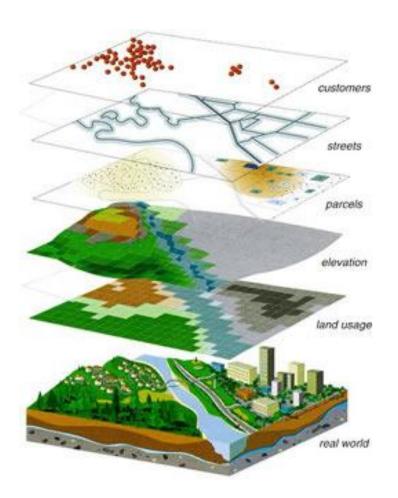
#### Gain Insight Quicker with Greater Visibility

- Rich interactive visualizations
- Animated transitions
- Range sliders
- Paging sliders
- Master-Detail linking
- Extensive and extended set of chart types
- Consistent, hi-fidelity charting across Oracle product line



## **Spatial Intelligence**

#### **New Depth and Breadth of Analysis**



- Most business data...
  - Contains geographic dimension(s)
- Oracle Business Intelligence
  - Delivers deeper analytical insights through Spatial visualization and data
  - Increases 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."



The world's largest resource for "all things location"

#### **Business Data...**

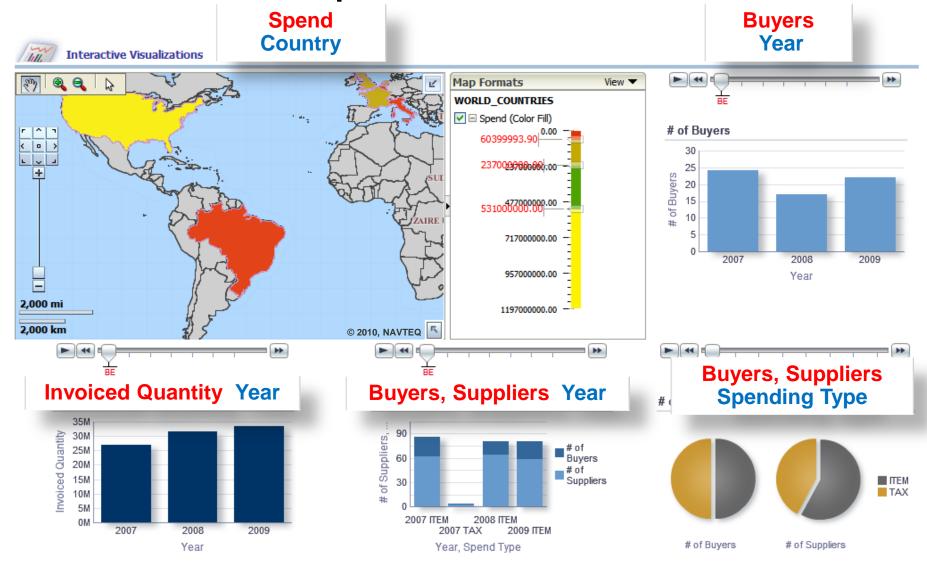


Year	Plant Location Country	Plant Location State	Spend Type	Spend	# of Suppliers	# of Buyers	Invoiced Quantity
	BE	Unspecified	ITEM	8,451,585	11	4	11,746
	DE	Unspecified	TAX	288,325	8	4	
	BR	SP	ITEM	706,542	2	3	848
	FR	Unspecified	ITEM	36,058,468	10	8	51,139
			TAX	958,229	9	8	
	GB	Unspecified	ITEM	22,308,436	14	15	45,025
			TAX	464,114	9	4	
	П	Unspecified	ITEM	8,406,679	11	4	14,435
			TAX	309,027	8	4	
	JP	Unspecified	ITEM	9,606	3	1	2.
	NL	Unspecified	ITEM	28,937,424	10	4	44,364
			TAX	461,415	8	2	-
	US	AZ	ITEM	136,853	2	1	18,90
		CA	ITEM	37,732,046	42	11	1,884,12
2007		CO	ITEM	1,080	1	1	9(
		DC	ITEM	17,771,255	9	4	74,600
		GA	ITEM	88,411	11	3	59,33
		IL	ITEM	44,876	1	1	2,50
		LA	ITEM	132,583	1	1	17,70
		MA	ITEM	68,870,319	6	1	472,98
		MI	ITEM	31	3	2	54
		NC	ITEM	8,546,510	7	1	5,36
			ITEM	50,640,285	21	5	17,139,79
		NY	TAX	29	2	2	17,100,77
		OH	ITEM	129,588	3	1	97
		OR	ITEM	84	2	1	2
		TX	ITEM	38,843,715	6	1	575,74
		WA	ITEM	115,436,145	14	5	6,463,98
	BE	110	ITEM	13,333,269	11	4	22,32
		Unspecified	TAX	58,493	6	3	22/52
	BR	SP	ITEM	870,357	2	3	1,06
	FR	Unspecified	ITEM	41,952,960	10	9	56,60
			TAX	136,779	4	7	30,00
	GB	Unspecified	ITEM	22,465,922	14	15	43,09
			TAX	63,570	8	3	73,05
	IT	Unspecified	ITEM	16,737,493	11	4	25,79
			TAX	47,759	6	4	25,79
	NL	Unspecified			10	1	E0 10
			ITEM	33,260,624	7		50,10
2000		47	TAX	76,018		1	2.64
2008		AZ	ITEM	33,430	1	1	3,64
		CA DC	ITEM	60,694,355	40	8	3,106,348

Year
Plant Location Country
Plant Location State
Spending Type

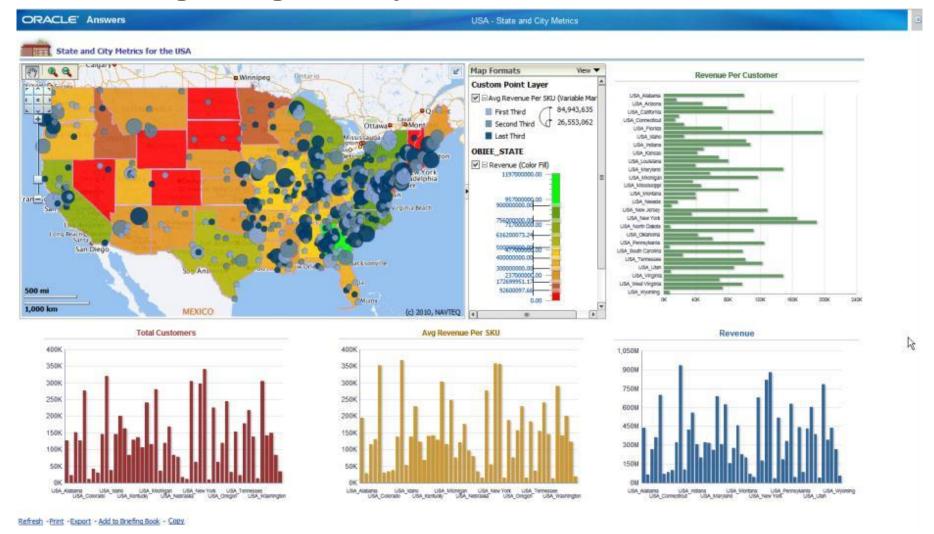
Spend
Suppliers
Buyers
Invoiced Quantity

### **Converted to Map and Dashboard**



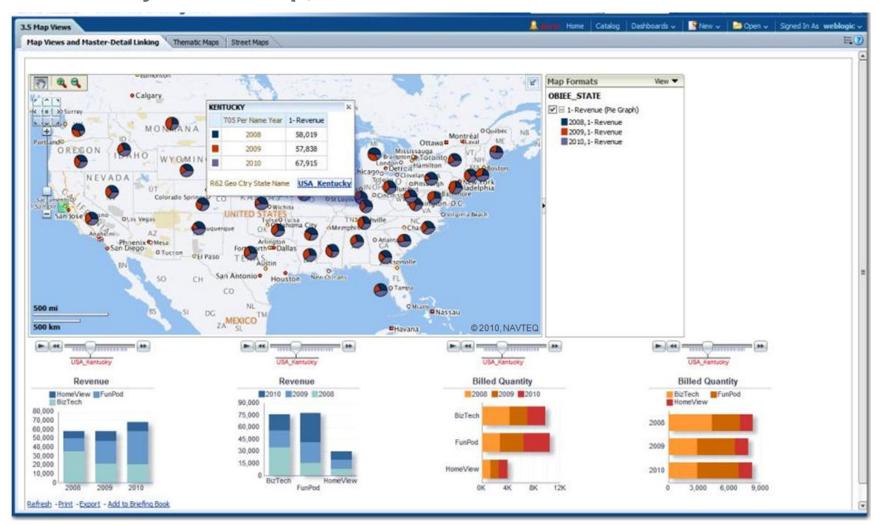
## Why Spatial Map Visualizations?

The Original High-Density Visualization



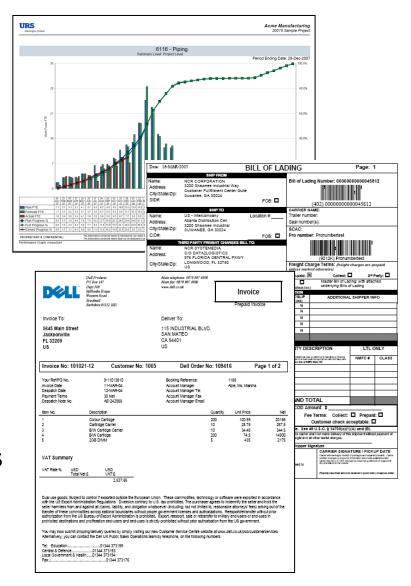
#### **Master-Detail linking:**

Country on the map, State details in charts.



### **Oracle BI Publisher 11g**

- Tighter integration with OBIEE
  - Web catalog integration
  - Home page integration
  - Security integration
- New Web report builder
- Redesigned Web interface
- Data Model Editor
- Scheduling & bursting enhancements
- Sub templates & Style templates
- PDF optimization
- JDeveloper & ADF integration

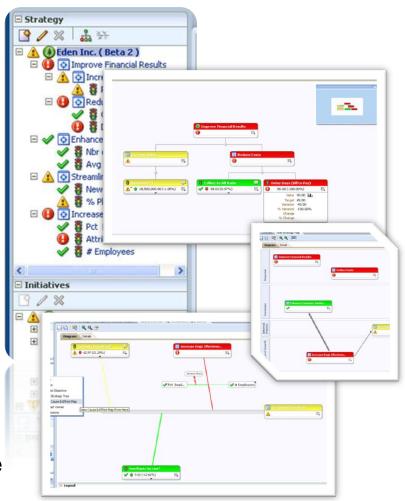




#### **Oracle Scorecard and Strategy Management**

#### **Strategy Management & Goal Setting**

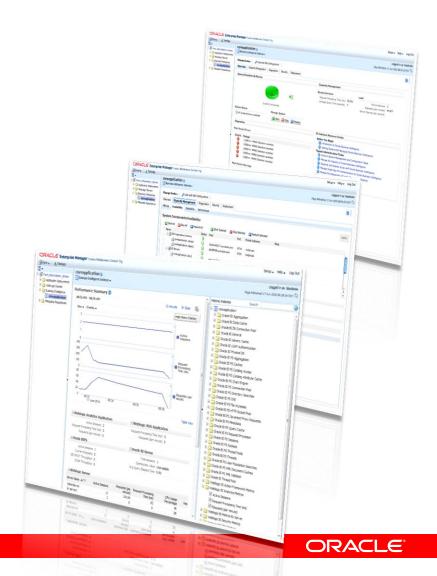
- Integrated BI component
  - KPIs as core metadata
  - Thresholds, owners, history
  - Auto-generated interactive analyses
  - Linked objectives & initiatives
- Automatic detection
  - KPI alerts triggered by thresholds
- Strategy visualization
  - Strategy Maps and Trees
  - Cause and Effects
  - Watchlists
  - Annotations & override
- All methodologies
  - Balanced scorecard, six sigma, Baldrige



## **Oracle BI Operational Management**

#### **Comprehensive Support in Enterprise Manager**

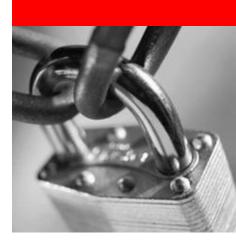
- Unified systems management
  - Across all components
  - Across entire lifecycle
  - Heterogeneous environments
- Performance monitoring & tuning
  - Diagnostics & troubleshooting
  - Across single instance & clusters
  - 1-click scale-out & online clustering
  - Dynamic capacity management
- Automate all operational tasks
  - Develop, test, deploy
  - Scale-out & tune
  - Patch & upgrade cycles
  - HA patching (rolling restart)



#### **Oracle BI Security**

#### **Integration with Identity Management**

- Strong security
  - Comprehensive SSL
  - Encrypted metadata catalog
  - Report encryption, watermarking & signing
- Authentication & Single Sign-On
  - Strong Authentication
  - Integrates with corporate directories
  - Integrates with corporate SSO
  - Externalizes authentication
  - Easy to configure & setup
- Application roles & authorization
  - Comprehensive set of application roles
  - Externalized for all metadata & data
  - Flexible authorization model
- Centralized auditing



## **Unified End User Experience**

Complete. Consistent. Accurate.





## **Oracle BI Mobile**

- Built on OBIEE Foundation
- Employs an embedded Dashboard approach
  - Supports Analyses, Dashboards, Publisher Reports, Action Framework, Scorecards, Alerts, Catalog Search
- Zero training to interact with data on mobile devices
- Gestural interactions, Orientation recognition, and Layout optimizations for tablet and smartphone platforms
- Technical
  - Will be Available from Apple iTunes App Store
  - Devices supported: iPhone 3GS, 4, iPad
  - Hybrid Application
    - Employs Webkit layout engine
    - Wrapped in a native iOS native shell
  - OBIEE Security Model (SSL and SSO)













Authenticating With Server Configuration Setting

Sample App Server



Cancel

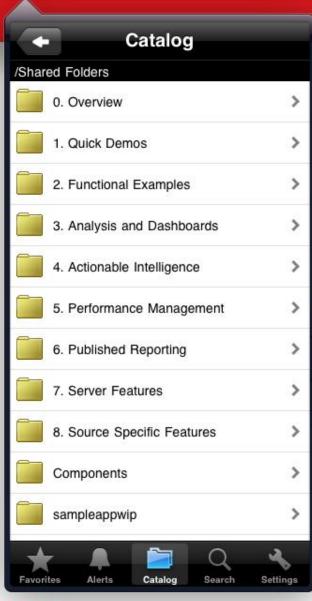






#### Oracle Business Intelligence Mobile

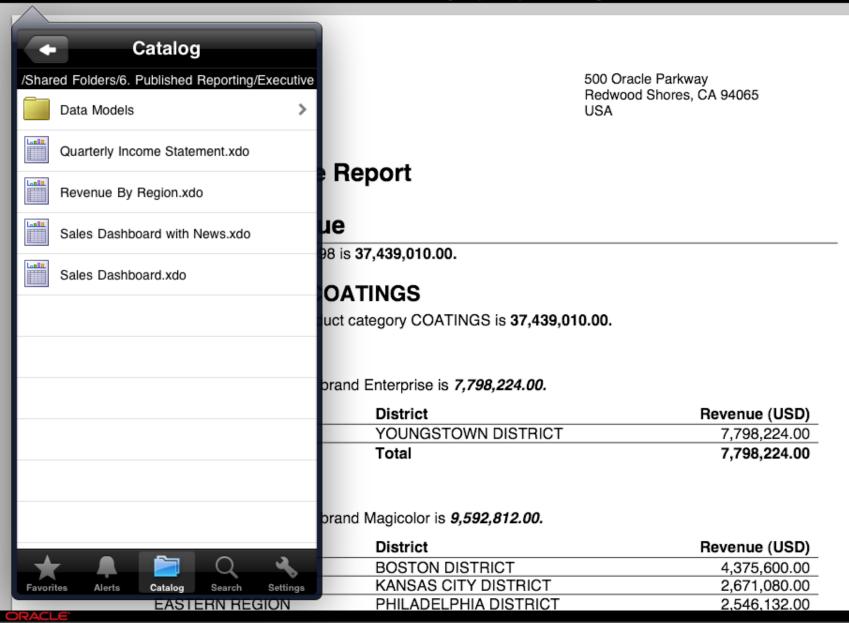
ORACLE"





#### Revenue By Region.xdo

#### Revenue grouped by Year, Region



Ħ

Ħ

#### 1.1 Simple Demo Dashboard

Geo Prompter



C





iPad 🤝 VPN

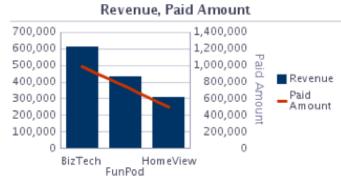
#### **Master Detail Events Linking**



## Time run: 2/2/2011 1:46:00 AM

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





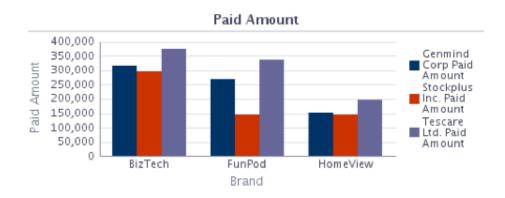


#### Genmind Corp

	Revenue	Paid Amount
Brand		
BizTech	175,158	313,817
FunPod	167,150	267,976
HomeView	80,809	152,449
Grand Total	423,117	734,242

#### Stockplus Inc.

	Revenue	Paid Amount
Brand		
BizTech	210,983	293,981











Select

#### Quarterly Income Statement.xdo

Standard Template

Done



Currency: USD

Revenue

Training

Miscellaneous

Total Revenue

COGS

Salaries

Benefits

Advertising & PR

Miscellaneous

Total Expenses

Hardware Revenue

Support Revenue

Consulting Revenue



 
 Commissions
 37
 1 4 2 /8
 107 ,720

 T&E
 446,685
 50,227
 1,084,779

 Other Operating Expenses Computers & IT
 6,300,829
 678,137
 17,603,448

9,585,124

 Facilities
 5,582,063
 688,198
 14,292,099

 Professional/Recruiting Fees
 1,206,825
 220,063
 3,187,062

 Shipping & Transportation
 5,976,174
 1,313,874
 14,945,138

 5,976,174
 1,313,874
 14,945,138
 4,284,443

 1,008,403
 141,668
 2,977,198
 608,409

 30,075,105
 16,799,323
 79,069,369
 45,599,696

276,426

Date:27-NOV-2006 22:48:33 Page:1

Today 1:21 PM





24,357,589

422,998

237,973

3.524.327

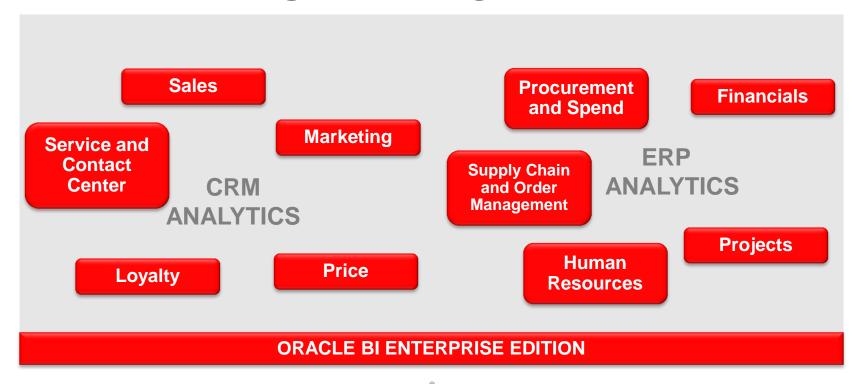
1,074,334

3,028,289

845,748

## **Packaged BI Applications**

## Business Intelligence EE 11gR1











AND OTHER OPERATIONAL AND ANALYTIC SOURCES



#### **Oracle Positioned in Leaders Quadrants**

## **Gartner Magic Quadrant for Business Intelligence Platforms**

Magic Quadrant for Business Intelligence Platforms, 2010

Magic Quadrant for CPM Suites, 2010

Magic Quadrant for Data Warehouse Database Management Systems, 2010



As of January 2010

Source: Gartner, Inc., "Magic Quadrant for Business Intelligence Platforms, 2010" by Rita Sallam, Bill Hostmann, James Richardson, Andreas Bitterer, 29 January 2010.

This Magic Quadrant graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report. The Gartner report is available upon request from Oracle.



### **Business Intelligence Customers**

#### **Business Analytic Tools and Applications**



**Communications** 















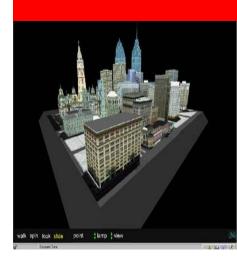








33



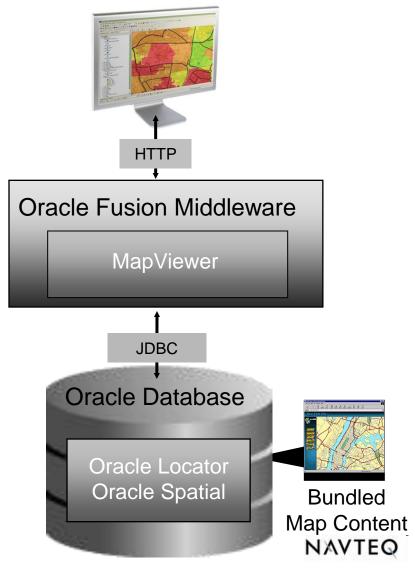
## **Oracle Spatial Technologies**

**Location Analysis for Better Business Solutions** 

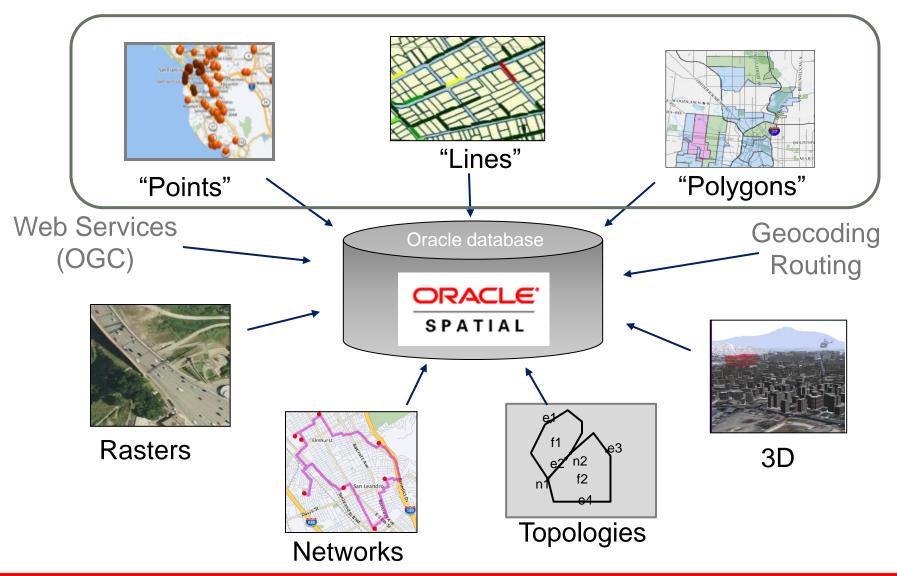


#### **Oracle Spatial Technologies**

- Oracle Locator: Feature of Oracle Database XE, SE, EE
- Oracle Spatial: Priced option to Oracle Database EE
- MapViewer: Java application and map rendering feature of Oracle Fusion Middleware
- Workspace Manager: Long transactions feature of Oracle Database SE, EE
- Bundled Map Content: Major roads, administrative boundaries (city, county, state, country) - worldwide coverage from Navteq



## **Natively Manage All Geospatial Data**



# **NEW VISUALIZATIONS IN OBIEE 11g**



#### New Ad-hoc, Dashboards and BI Publisher Features

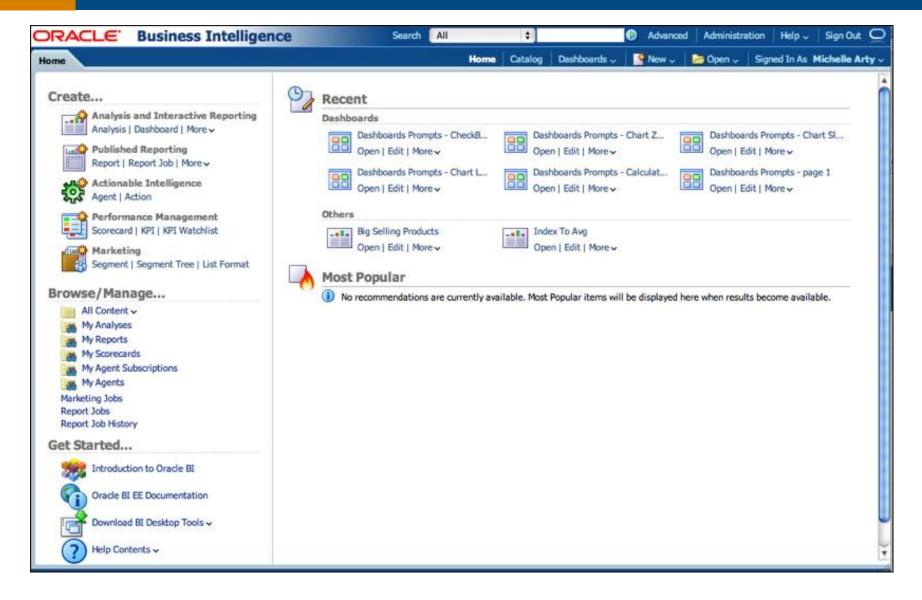
#### **New Features**

- Unified Framework
- Column Type Changes
  - Hierarchical Columns
  - Selection steps
  - Groups
  - Calculated Items
- Unified Prompting
- New Graph Features
- Maps
- BI Publisher Integration and Web Editor

Copyright © 2011, Vlamis Software Solutions, Inc.

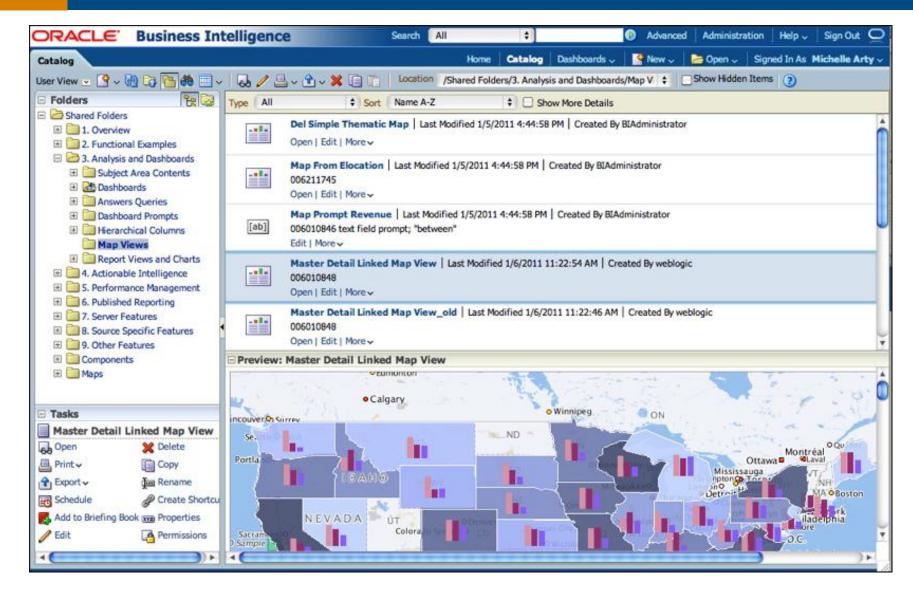


### **New Home Page**





# **Catalog with Viewer**

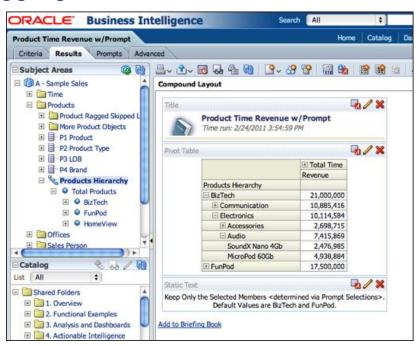


Copyright © 2011, Vlamis Software Solutions, Inc.



# **OBIEE 11g Changes in Ad-hoc**

- Improved support for OLAP-style reporting
  - Hierarchical columns
  - Support for ragged and skip-level hierarchies
  - Dynamic re-arrangement of pivot tables in the dashboard
- Dynamic grouping and custom aggregates
- New Prompts
- New dashboard controls
- New gauge types and graphics



-



### **Hierarchical Columns**

- Now supports expanding and compressing hierarchy in same column
- Just like other OLAP tools like Discoverer
- Supports ragged and skip level hierarchies
- Integrated with new grouping and custom aggregate capabilities
- Works with ANY datasource (OLAP, Relational, XML)

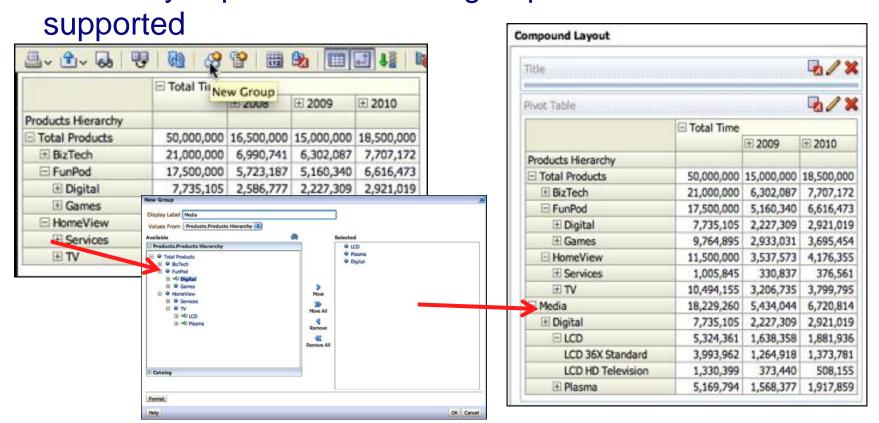
	Revenue		
NAME OF THE PARTY	■ Total Time		
∃ Total Products	50,000,000		
☐ BizTech	21,000,000		
Communication	10,885,416		
Electronics	10,114,584		
☐ FunPod	17,500,000		
Digital	7,735,105		
Games	9,764,895		
☐ HomeView	11,500,000		
⊞ Services	1,005,845		
⊕ TV	10,494,155		
Hot Products	18,822,801		
⊞ Cell Phones	5,917,903		
⊡ Camera	7,735,105		
MPEG4 Camcorder	3,995,040		
7 Megapixel Digital Camera	3,740,065		
Plasma	5,169,794		

Copyright © 2011, Vlamis Software Solutions, Inc.



Hierarchies can be used to build custom aggregates

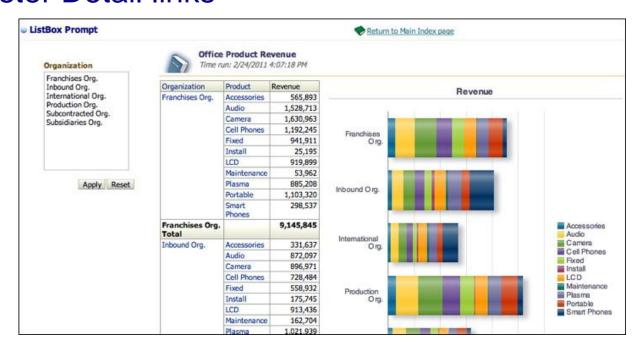
Hierarchy is preserved within group so drill down is





### **New Dashboard Prompts and Visualizations**

- Available Prompts has been expanded
- Check List, radio buttons, list box, slider etc
- Step Based Prompt builder
- Master Detail links



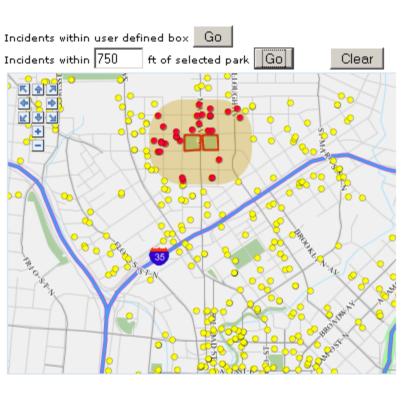


# **MapViewer Integration**

- Map is a new View Type!
- Integrates with spatial encoded and non-spatial encoded datasets
- Comes with NAVTEQ maps (State, County, Global)



# Some Analysis Is Possible Only with Spatial Analytics



Show incidents within 750 ft of selected park

#### **Complaint Detail**

Offense Desc	PD Desc	Date Key	Complaint Key	Service Area	Region
CRIMINAL MISCHIEF & RELATED OF	MISCHIEF, CRIMINAL 4, OF MOTOR	18-Feb-03	1026	28	Central -
DANGEROUS DRUGS	CONTROLLED SUBSTANCE, POSSESSI	10-Nov-02	30099	28	Central
		10-Mar-03	40099	28	Central
HARRASSMENT 2	HARASSMENT,SUBD 1,CIVILIAN	02-Aug-03	1064	32	Central
	HARASSMENT,SUBD 3,4,5	04-Mar-03	1027	28	Central
		04-May-03	31027	28	Central
		04-Sep-03	41027	28	Central
		19-Sep-03	41028	28	Central -
ROBBERY	ROBBERY,UNCLASSIFIED,OPEN AREA	09-Jan-04	41032	28	Central -



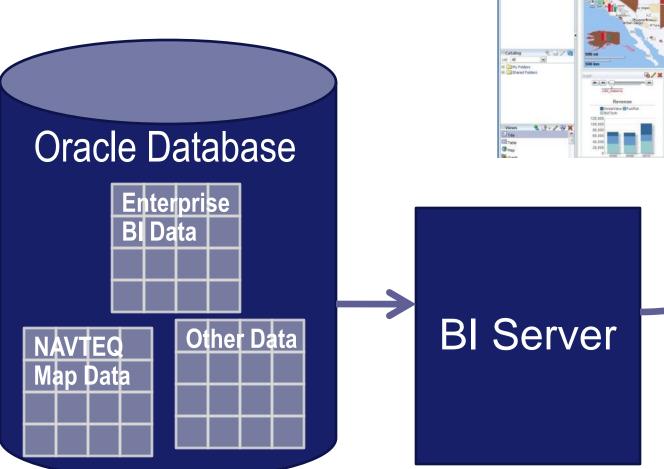
# When Are Map Views Useful

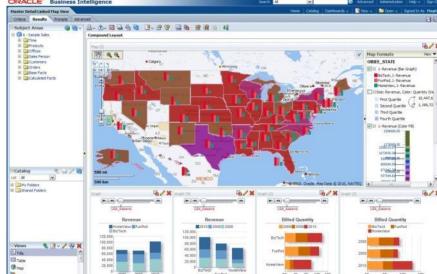
- Visualizing data related to geographic locations.
- Showing or detecting spatial relationships and patterns.
- Showing lots of data in a relatively small area.
- Drilling down from a (map) overview to a detailed report, chart, or graph.
- When location is important? Can the dimension be plotted on a map?



# Secure, Resident Data

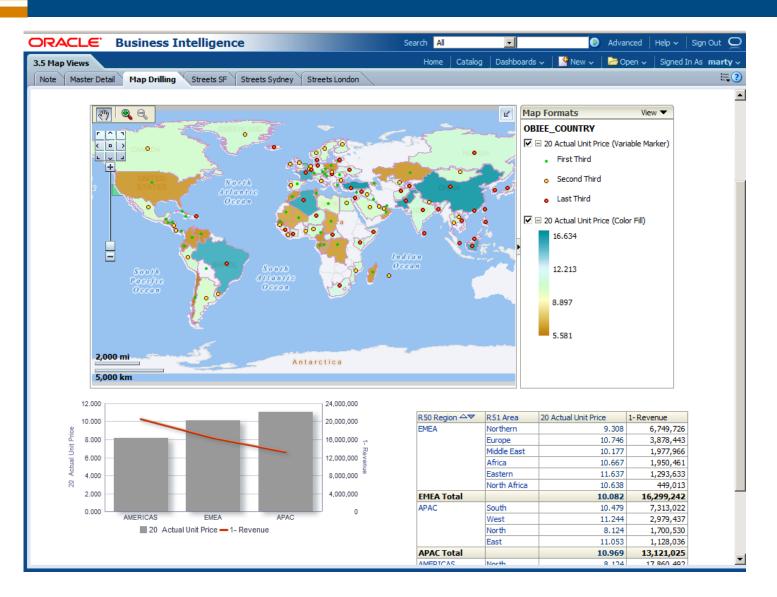
 With this solution, all NAVTEQ and BI Data is safely housed inside your Oracle Database





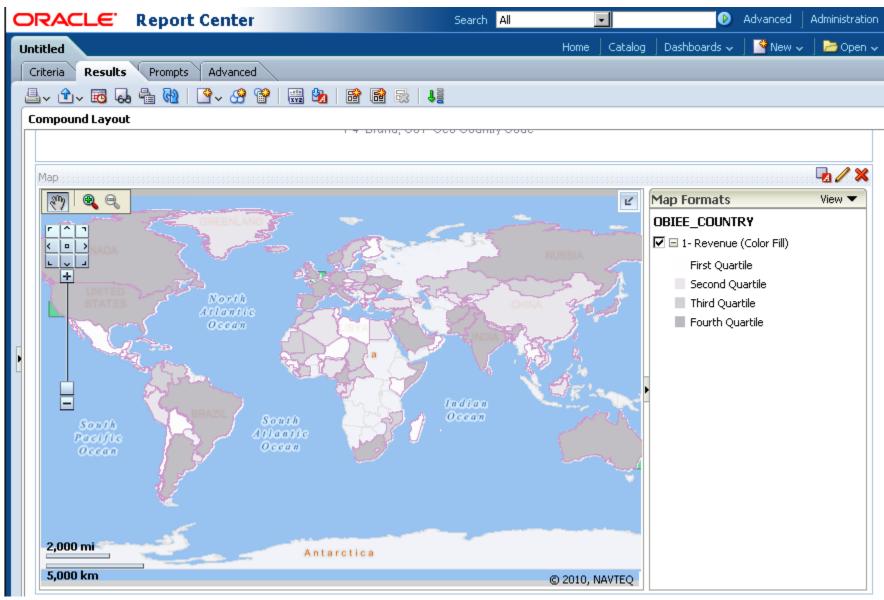


# **Demo of Oracle BI 11g Maps**





# **Creating New Map**



Copyright © 2010, Vlamis Software Solutions, Inc.

### **The Premier Provider of Digital Content**

NAVTEQ is the leading global provider of digital map, traffic and location data that enables navigation and location-based platforms around the world

### **NAVTEQ®** Maps are Everywhere

NAVTEQ is the leading provider of the digital map, traffic and location data that powers many of the world's most innovative navigation applications

In-Dash



**Mobile** 



**Fleet** 



**Telematics** 



**Cell Phones** 



**Enterprise** 



Internet



**Trip Planning** 



Government



#### **Global Market Leadership**

#### **Automotive**

- Virtually every major automobile manufacturer currently offering a navigation system in North America and Europe uses NAVTEQ® maps in one or more of their models
- More than 19 million navigation systems have been enabled with NAVTEQ® maps since 1999

#### Internet

- NAVTEQ Maps power major internet mapping portals in North America and Europe
- Billions and billions of map and route planning transactions each year

#### Wireless

The leading global wireless brand chooses NAVTEQ maps to help power their locationenabled devices

# Mobile Devices

- The foremost PND manufacturers in the world choose NAVTEQ, including some of the most trusted consumer brands, including Garmin, Magellan, Sony, LG, Navigon, Panasonic
- More than 45 million portable devices in EU and NA have been enabled with NAVTEQ maps since 2001

#### **Enterprise**

- Leading global supplier of digital maps to Federal Agencies, including National Geospatial-Intelligence Agency and the Department of Homeland Security
- Chosen by top fleet management companies, including Qualcomm and FedEx
- Enterprise software solutions using geospatial data, including Oracle and ESRI

On average, there are over 100 million uses of NAVTEQ data every day

### **Strong Customer Relationships**

**Automotive** 







































**Systems Vendors** 



















AISIN AW CO., LTD.

**Telematics** 



**Continental** 







Internet & Wireless









vodafone







Microsoft®











**Mobile Devices** 



















**Enterprise** 









**MEDION** 



NOKIA





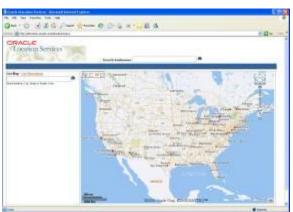


### **NAVTEQ ODF – A Global Footprint**

#### Oracle Delivery Format (ODF)

- Delivered "out of the box" using Oracle Transportable Tablespaces
  - All tables and indexes are pre-built
  - Simple file copy and metadata import
  - Over 100GB\* installed and usable in less than 10 minutes
  - Allows IT, system integrators, and developers to quickly and easily deploy the data that drives powerful mapping, geocoding, routing, and location analysis services used in Oracle Enterprise Solutions





Typical size for North American or European premium content