

ORACLE®

Safe Harbor Statement

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.

Oracle Business Intelligence 12C-next generation of BI Technology

CON7368

Raghuram Venkatasubramanian
Senior Vice President, Product Development
Oracle Business Analytics
October 25-29, 2015

ORACLE

Copyright © 2015, Oracle and/or its affiliates. All rights reserved. |

Oracle BI 12c Highlights

Oracle Business Intelligence Upgrade



Simplify Administration and Lower TCO



Enhance User Experience



Enable Advanced Analytics for Everyone



Improve Performance with In-Memory Computing



Enhance Mobile Experience



Support More Data Sources

Oracle Data Visualization



Visual Analysis



Rich Data Mash-ups

A woman with long brown hair and glasses is sitting at a wooden table in a bright, modern office or cafe. She is wearing a brown leather jacket over a blue patterned scarf. She is holding a black mobile phone to her ear with her left hand and looking down at a document or tablet on the table with her right hand. The background is slightly blurred, showing other people and large windows.

Oracle Business Intelligence 12c Oracle Data Visualization

Analytic offerings in the market today

IT friendly

1. Governance
2. Singular semantic
3. Enterprise ready

OR

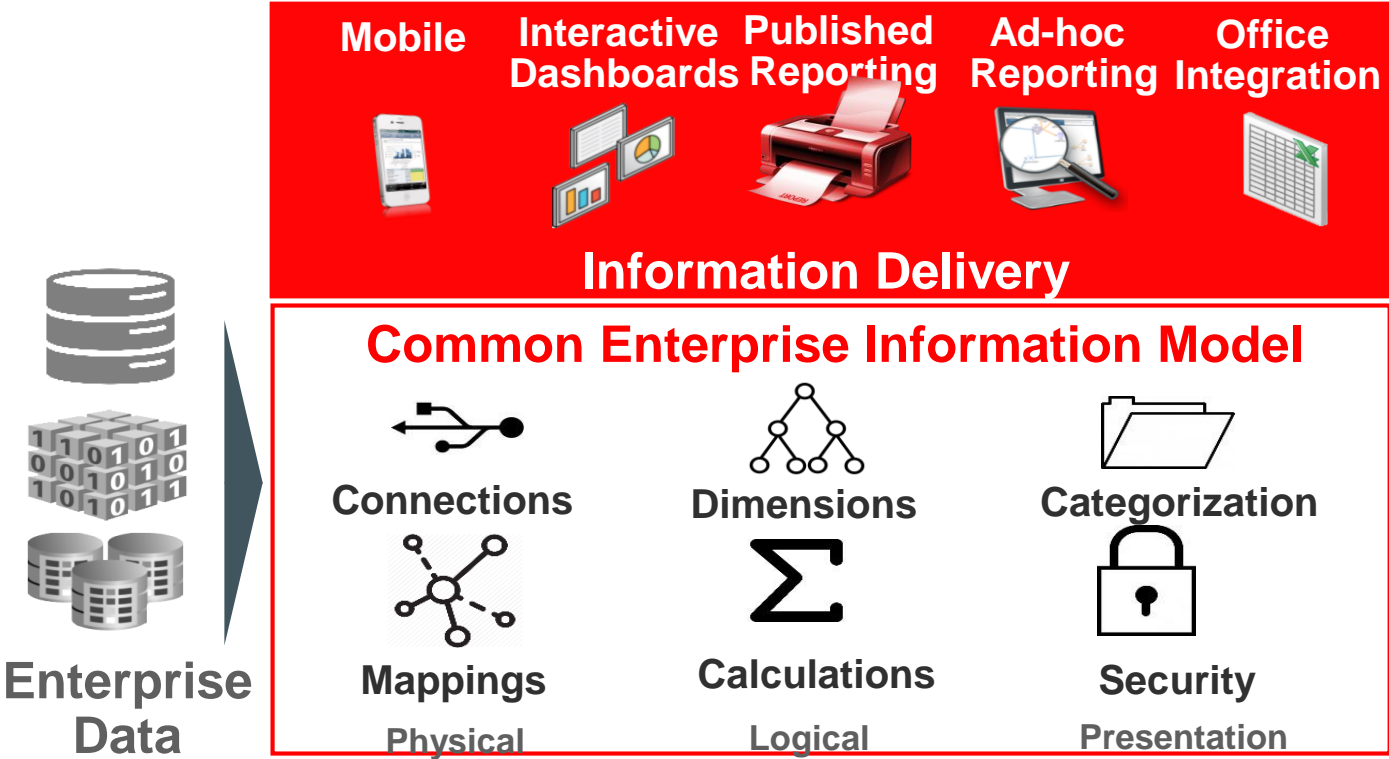
Business user friendly

1. Ease of Use
2. Agile
3. Self-service

Oracle Business Intelligence 11g

IT friendly

Governance, Singular semantic,
Enterprise ready



Oracle Business Intelligence 12c

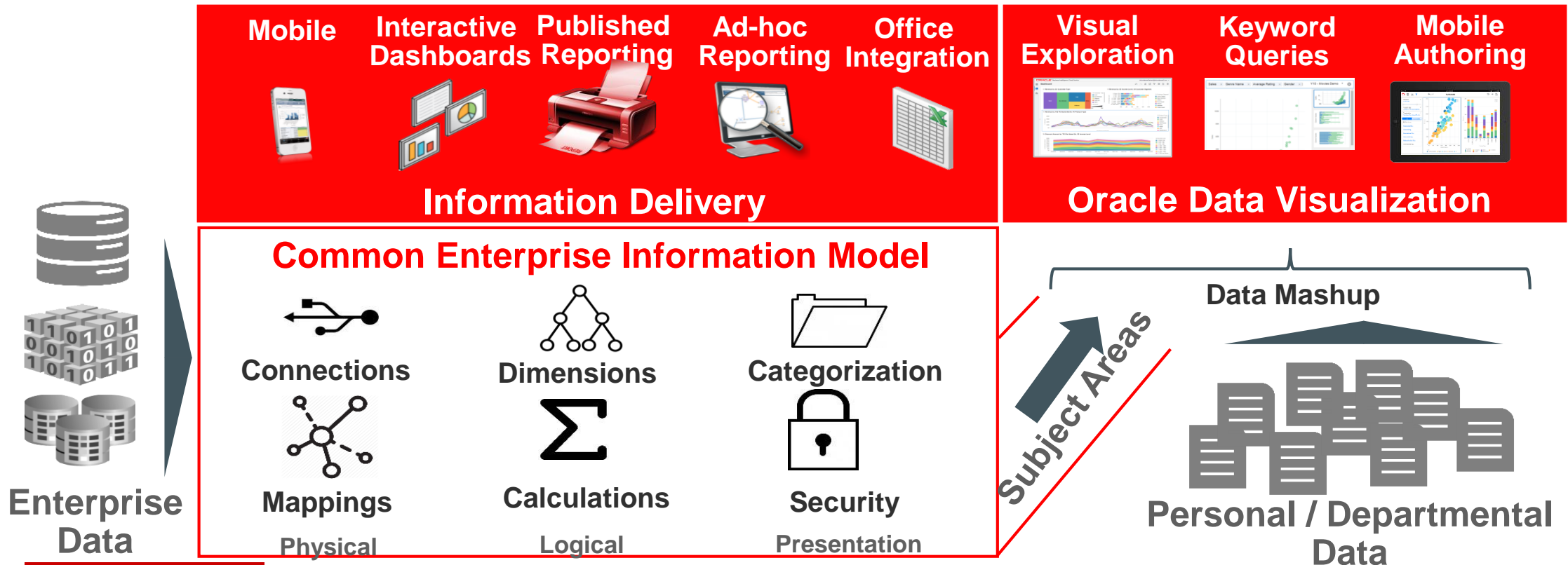
IT friendly

Governance, Singular semantic,
Enterprise ready

AND

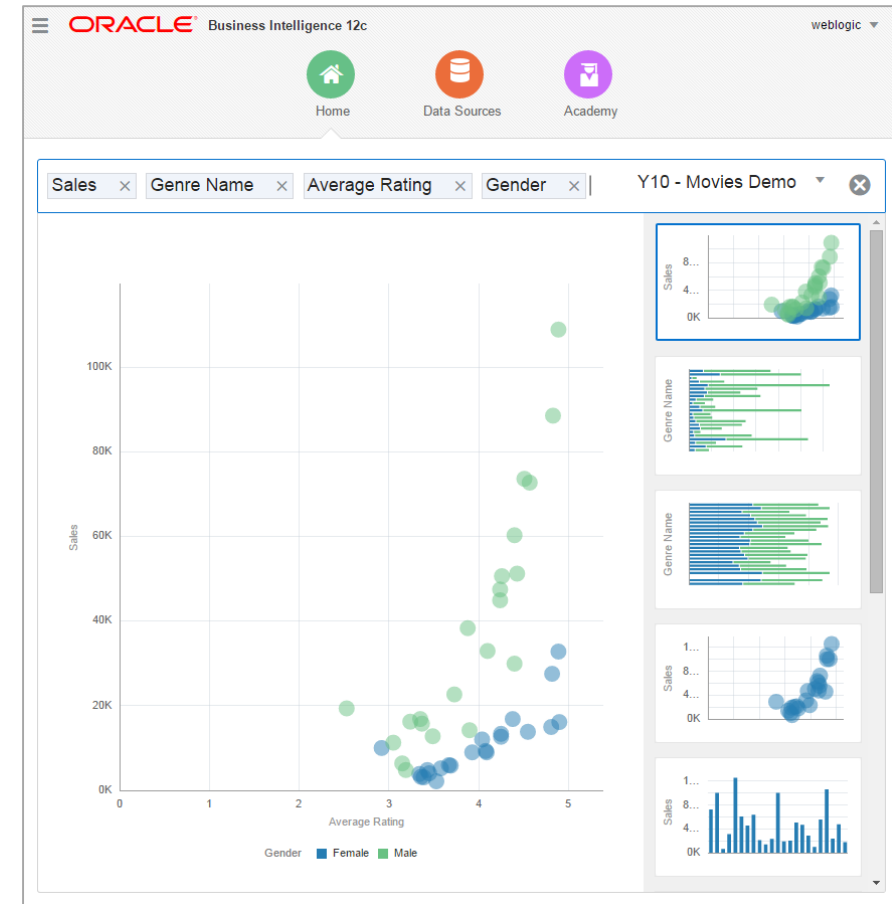
Business user friendly

Ease of Use, Agile, Self-service



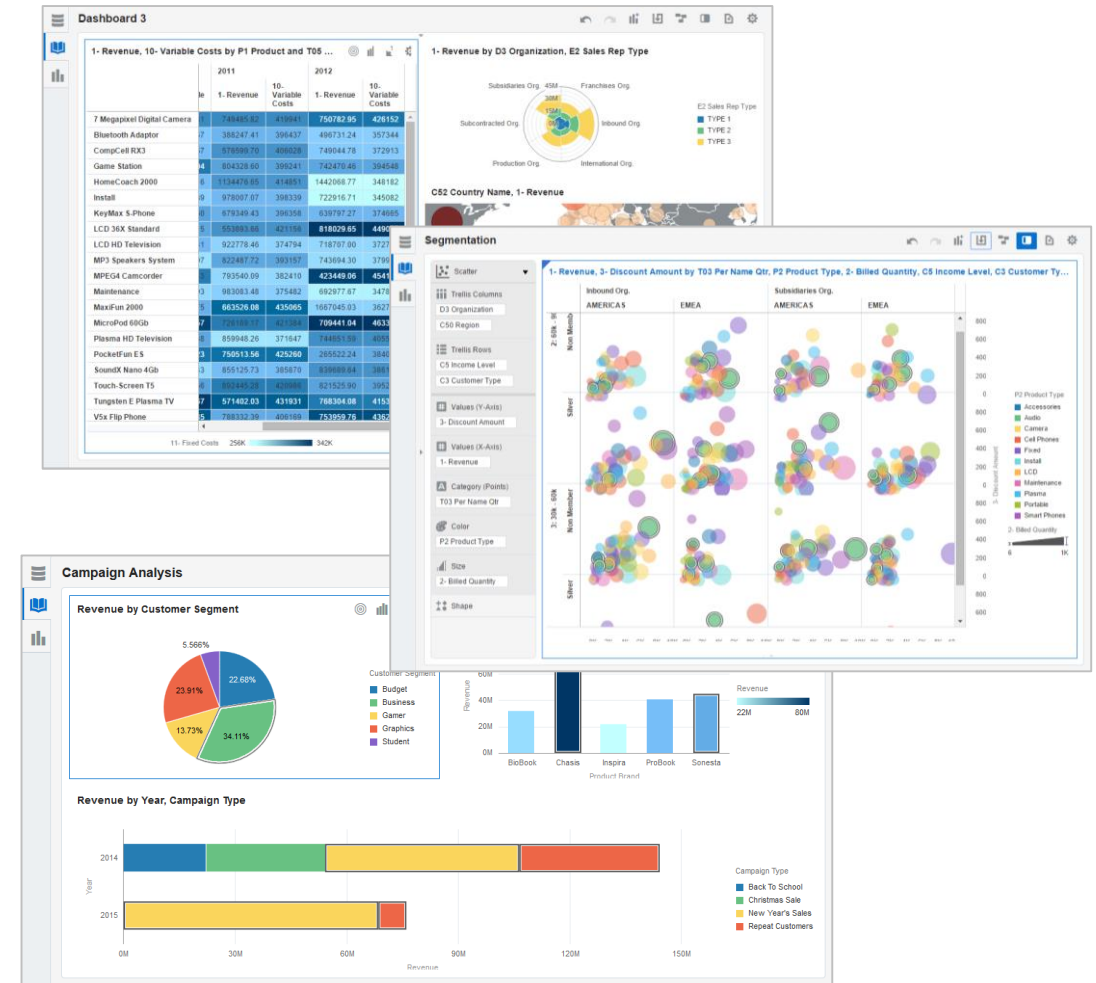
Quick Answers to Quick Questions

- Interprets semantic layer, catalog artifacts and underlying data using intuitive keyword search
- Generates on-the-fly queries - Visualizations auto-created while user types
- Easy entry point into authoring tools

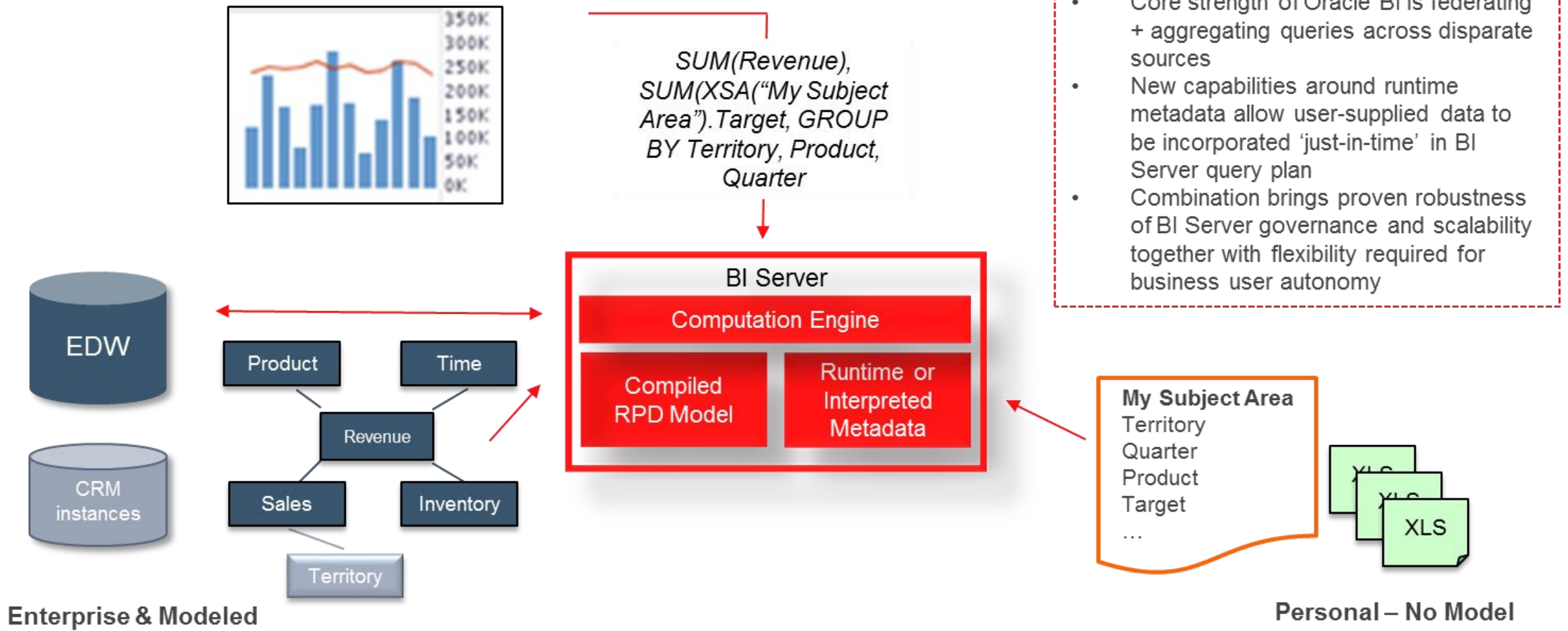


Visual Exploration for Everyone

- Intuitive visual grammar guides users during analysis
- Automatic brushing enables discovery of new patterns
- Consumer-style filtering and exploration
- Rich library of visual components
- Advanced trellising exposes hidden patterns in data
- Canvas model seamlessly blends reporting & dashboarding



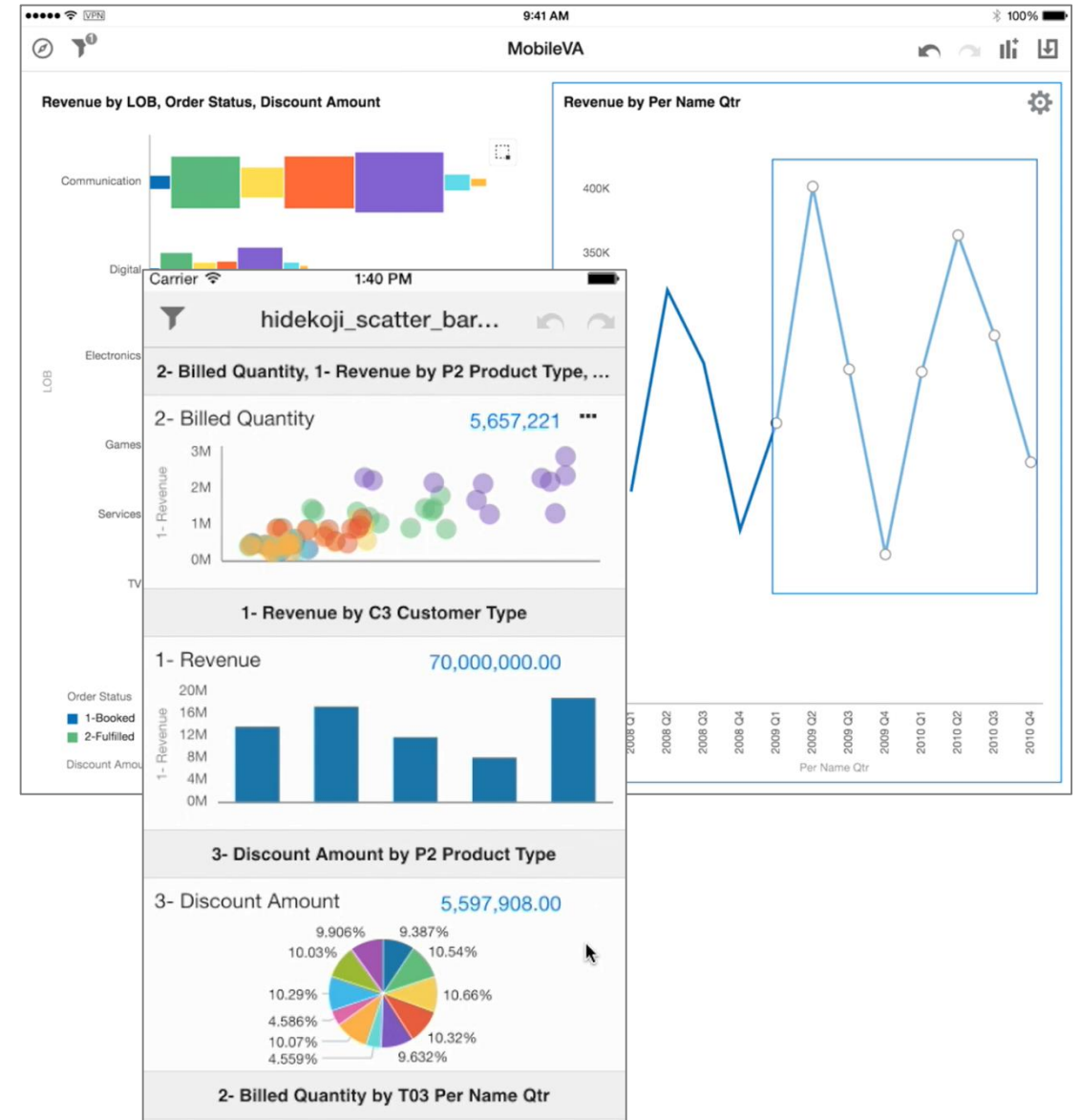
Self Service: Model Extensibility and Data Mashup



- Core strength of Oracle BI is federating + aggregating queries across disparate sources
- New capabilities around runtime metadata allow user-supplied data to be incorporated 'just-in-time' in BI Server query plan
- Combination brings proven robustness of BI Server governance and scalability together with flexibility required for business user autonomy

Data Discovery on the Go

- Adaptive mobile design for self-service analytics optimized for tablet and phone form factors
- Touch-friendly functionality for authoring new analytics on-the-go
- Based on HTML5 – works on any tablet device



Demo



BI Technology 12c Release **Simplify Administration and Reduce TCO**

Simplify Administration and Reduce TCO

Motivation

- Oracle Cloud has the largest OBIEE deployment
 - 1000+ instances in cloud
- Customer feedback
- Foundation for new and upcoming capabilities
 - Data Visualization
 - Interoperability for hybrid cloud deployments
 - Future private cloud enhancements



Key Enhancements – Installation and Configuration

OBIEE Download Oracle BI download compared with 11g	50% smaller
Installation and Deployment Creation of OBI 12g domain, when compared to 11g on an Exalytics Server	25% faster
Scale-out install of OBIEE For high availability compared with 11g	30% fewer steps
Re-starts required for OBIEE configuration All system and application configuration can be done offline. 11g required 3 restarts	0
SSL Configuration Scripts available for SSL configuration	50% fewer steps
Scripts for Automation Scripts instance management, clone, diagnostics, import/export etc	12 new scripts

Key Enhancements – Operations

One Application = one file (BI Application Archive – BAR file)

Backup and Restore of Applications

One application = one file.

Test to Production

Copy one file to move from test to production

Clone Service Instance

Copy one file to clone an instance of an application

Move Service Instance

Move one file to clone an instance of an application

Upgrade

one file to upgrade to upgrade an application

1

file to rule them all

Includes RPD, Webcat, Security policies, & dependencies

Radically Simple and Robust Upgrade from 11g

- Move a single file from 11g to upgrade applications to 12c
- Automated testing via **free** Baseline Validation Tool
 - Works across 11g and 12c
 - Can be used for future 12c upgrades

Baseline Validation Tool

Data Verification

Compare results (actual numbers and text)

Visual Verification

Visually compare reports and dashboards

BI Catalog Verification

Compare catalog object metadata

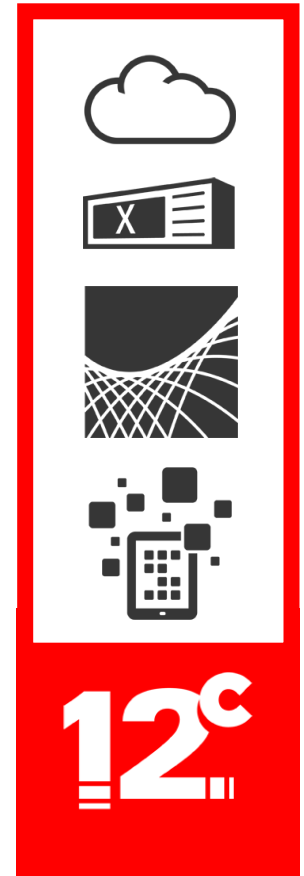
Logical Query Verification

Capture system-generated logical SQL

Single Release Stream for On-Premises and Cloud

Oracle 12c platform underpins all Oracle BI distributions

- Improves interoperability between products & releases
 - Oracle Cloud Service
 - Oracle BI Enterprise Edition
 - Oracle Fusion Applications
 - Oracle BI Applications
- **New features** available to all users more quickly regardless of product used
- Improved product **quality and performance** due to variety of use, expanded adoption, and additional testing



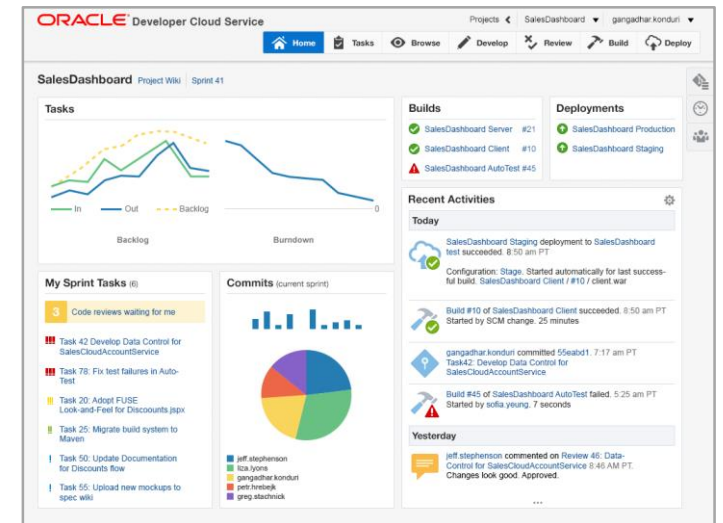
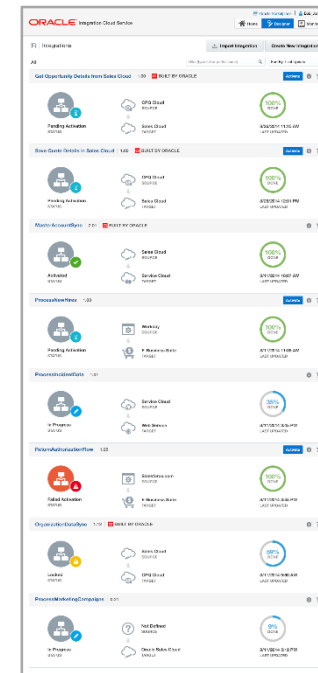
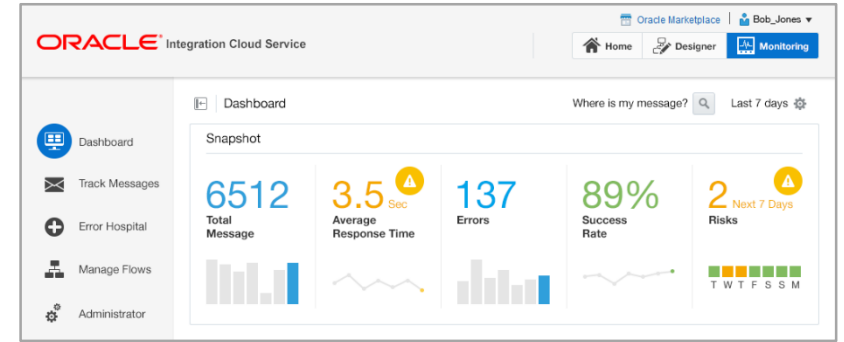


BI Technology 12c Release **Enhanced User Experience**

New Oracle Alta UI

A modern application design system

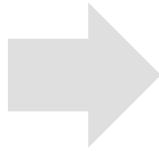
- Focus on Data
- Minimal Chrome
- Browser and mobile support
- Clean page design
- Consistent across Oracle products - cloud and on-Premises



Improved Look and Feel for Answers and Dashboards

- More **visually appealing**, better use of space, and easier to navigate

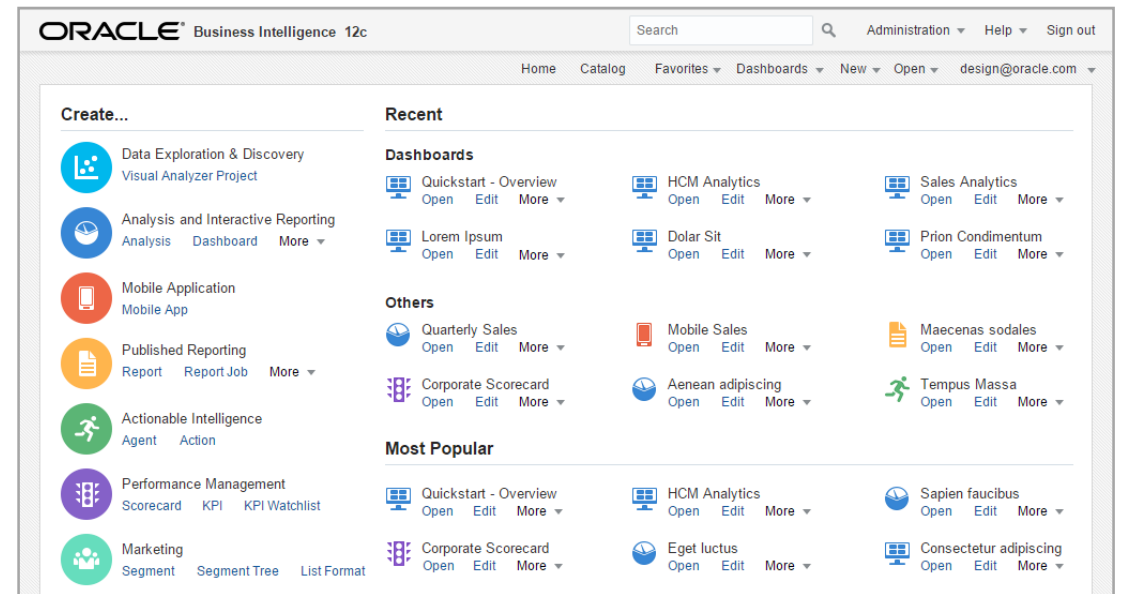
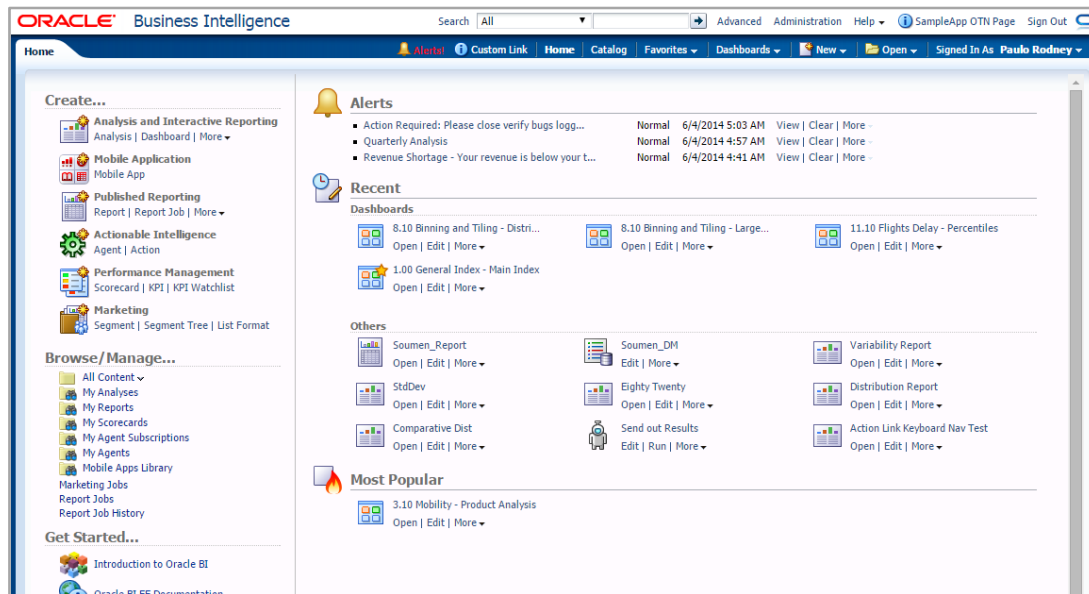
Oracle Business Intelligence interface showing the 'Criteria' pane with a 'Selected Columns' list and a 'Filters' section. A context menu is open over the 'Selected Columns' list, showing options like 'Sort', 'Edit formula', 'Column Properties', 'Filter', and 'Delete'. Below the 'Criteria' pane is a 'Catalog' pane showing a tree view of folders like 'My Folders' and 'Shared Folders'. At the bottom is a 'Standard Visuals' pane displaying various chart types such as Stacked Vertical Bar Chart, Stacked Line Chart, Area Chart, Bubble Chart, Time Series Line Chart, 100% Stacked Bar, and Stacked Low-Bar Chart.



Updated Oracle Business Intelligence interface showing the 'Criteria' pane with a 'Selected Columns' list and a 'Filters' section. The 'Catalog' pane is also updated with a cleaner look. The 'Standard Visuals' pane at the bottom shows the same chart types as the previous screenshot, but with a more modern and visually appealing design.

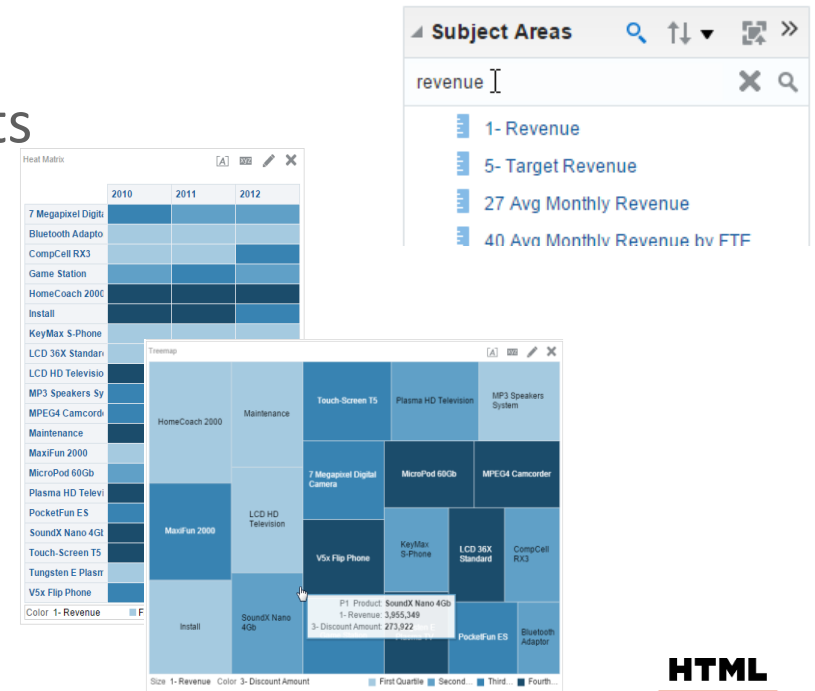
Refined “Classic” BI Home Page

- Makes better use of space and incorporates common Oracle 12c header
- Strikes a balance between new design patterns and providing a **familiar environment** for 11g users



Many More Usability Improvements..

- Enhanced Subject Area pane
 - Search, reorder, refresh and reload metadata elements
- Improved view rendering
 - New **Heat Matrix** view type
 - **HTML-5** graphics
- Direct interaction with results
 - Directly edit view properties
 - New Graph and Pivot Table Sorting Capabilities
 - Easily create New Groups, Calculated Items and Measures





BI Technology 12c Release
Enable Advanced Analytics for Everyone

New Advanced Analytics Capabilities

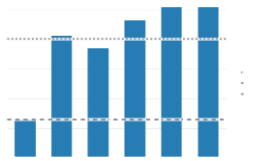
Built into Oracle BI



- Instantly answer predictive and statistical questions
- Add custom R scripts without heavy IT
- Can be run online or batched mode

Pre-built Functions

All accessible via expression editor



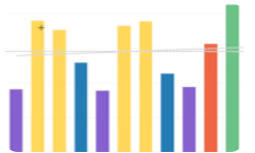
Reference Line

How does the metric vary from average & median?



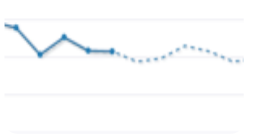
Trend Line

What direction are we headed in?



Bin/Histogram

What buckets should I use to chart my data?



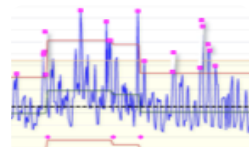
Forecast

What is likely to happen based on history?



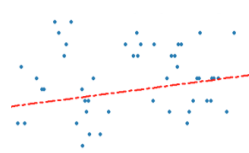
Clustering

What are the inherent groupings in data?



Outliers

What data elements stand apart from others?



Regression Analysis

How are the various factors correlated?

Easily Add New Functions

Without heavy IT or RPD changes



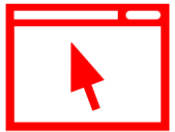
Risk Analysis

(survival) What is the risk of default on a loan?



Root Cause Analysis

(survey) What caused a drop in product margin?



Google Analytics Integration

(RGoogleAnalytics) What's my web traffic forecast?



Sentiment Analysis

(NLP) Are customer comments positive?



Market Basket Analysis

(arules) What products sales are correlated?

And many more....

Choose from 100s of packages available for free or write custom R code to extend analytics



Oracle Business Intelligence 12c **Mobile Business Intelligence**

Oracle Mobile BI

Mobile HD and MAD Updates

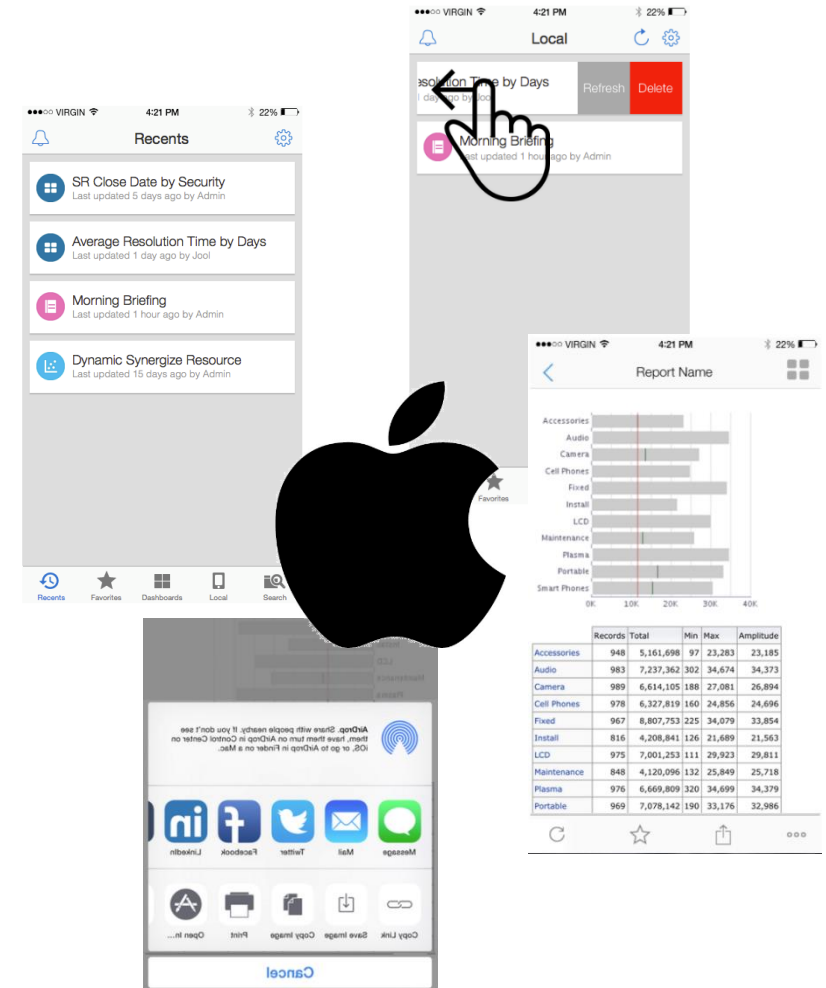
- One App for Cloud and On-Premise
- **Visual Analyzer** on your mobile device
- Oracle Mobile Security Suite certification with continued updates
- Support rich **sharing** use cases with deep integration into native OS sharing frameworks



Mobile BI for iOS

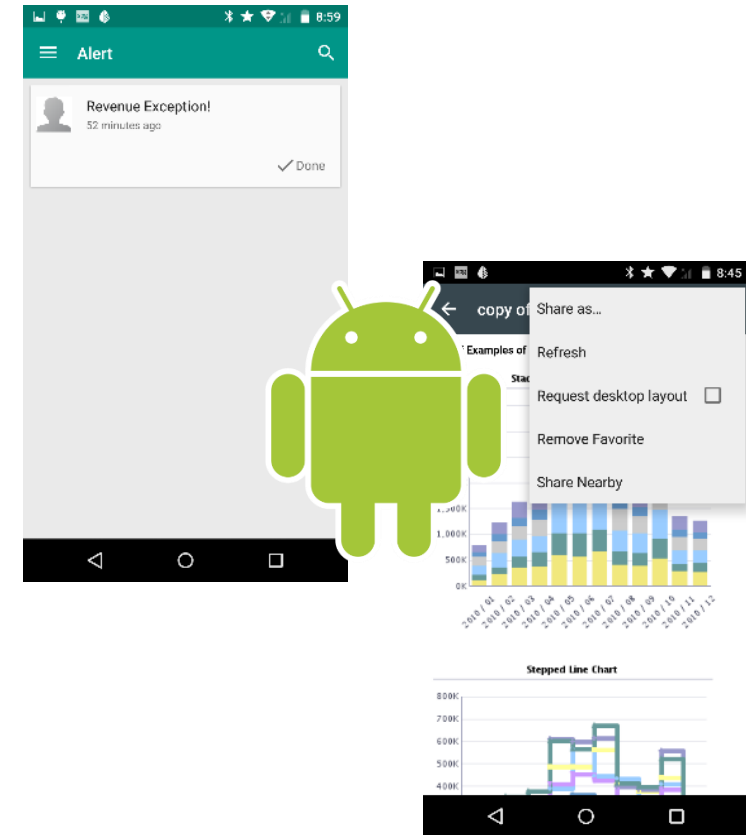
Fully Redesigned UI

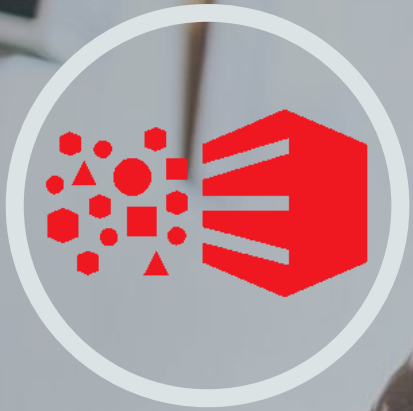
- Native sharing with other apps
 - Oracle Social Network, Skitch, etc...
- **Hand-off** support provides seamless continuity from phone to tablet to Mac
- **Spotlight** Search integration
 - Find dashboard and reports directly from Apple search box
- Alerts as **notifications**
 - Includes Apple Watch



Mobile BI for Android

- Native app sharing (image)
- **Share and Follow** along with nearby devices
- Project dashboard and stories to any **GoogleCast** enabled device
 - Sony, Sharp & Phillips TVs as well as ChromeCast and Android TV devices
- Alerts as **notifications**
 - Including Android wear





Oracle Business Intelligence 12c Expanded Data Source Support

More Data Sources ...

- EPM Data Sources
 - Full fidelity reporting
 - Single sign-on
- Cloudera Impala
 - Optimized Query Support
- Spark
 - Native Spark SQL generation
 - Caching on Spark





Oracle Business Intelligence 12c **In-Memory Enhancements**

OBIEE 12c In-Memory Analytics



In-Memory Computing in OBIEE

Faster rollups, sorting, in-memory compression, etc.



In-Memory Databases Oracle DB and Essbase

Certified with Oracle 12c In-Memory Option, extensive In-memory enhancements in Essbase



Offloading computing to Spark

Spark as an in-memory cache for BI server (roadmap)

ORACLE®