ORACLE
Oracle Global Leaders Program

# Oracle Analytics
# Product Management Update

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# 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, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.
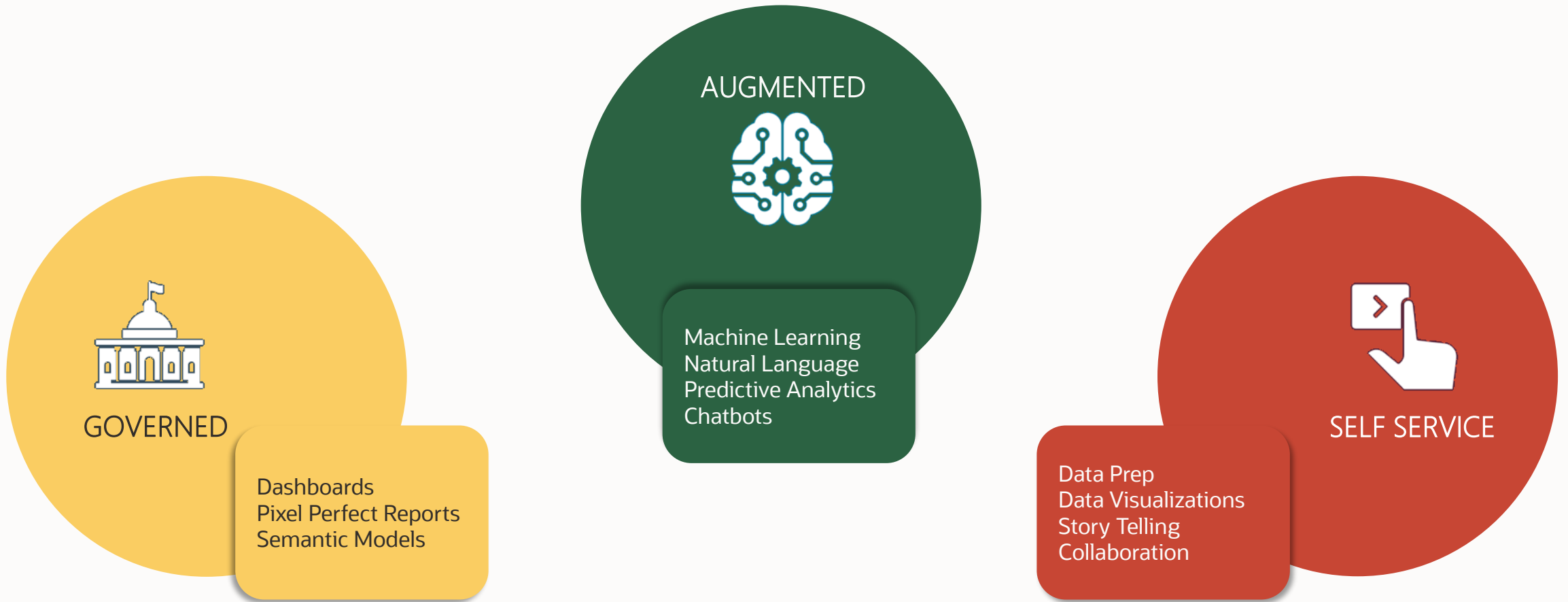
# Oracle Analytics

Complete Analytics Platform for
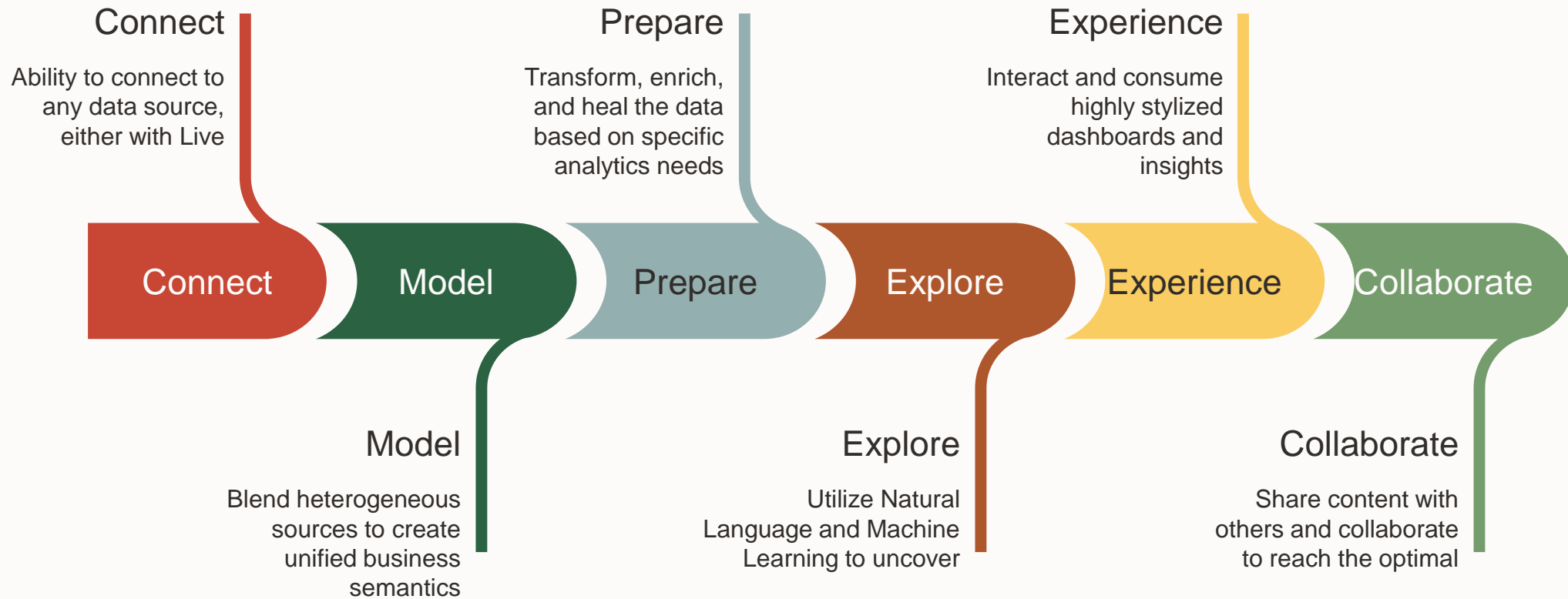Business Users, Developers and IT

Oracle Analytics
Cloud

Oracle Analytics
Server

Packaged Domain Analytics
built on ADW and OAC

Fusion
Analytics
Warehouse

NetSuite
Analytics
Wearhouse

# Analytics Needs Across the Organization



**GOVERNED**

Dashboards
Pixel Perfect Reports
Semantic Models

**AUGMENTED**

Machine Learning
Natural Language
Predictive Analytics
Chatbots

**SELF SERVICE**

Data Prep
Data Visualizations
Story Telling
Collaboration

# Oracle Analytics

Complete Analytics Platform for Business Users, Developers and IT



### Connect

Ability to connect to any data source, either with Live

### Prepare

Transform, enrich, and heal the data based on specific analytics needs

### Experience

Interact and consume highly stylized dashboards and insights

| Connect | Model | Prepare | Explore | Experience | Collaborate |

### Model

Blend heterogeneous sources to create unified business semantics

### Explore

Utilize Natural Language and Machine Learning to uncover

### Collaborate

Share content with others and collaborate to reach the optimal

# Open Connectivity

- Dozens of built-in connectors
  - Relational, NoSQL, Big Data, SaaS, 3$^{rd}$ cloud, on-premises

- **Secure access** to to Cloud Sources, On-Premises, SaaS Applications, and more
  - **Direct connectors to ERP**, CX, HCM, EPM Cloud, NetSuite, Salesforce, and more

- **Blend any data** regardless of source or type
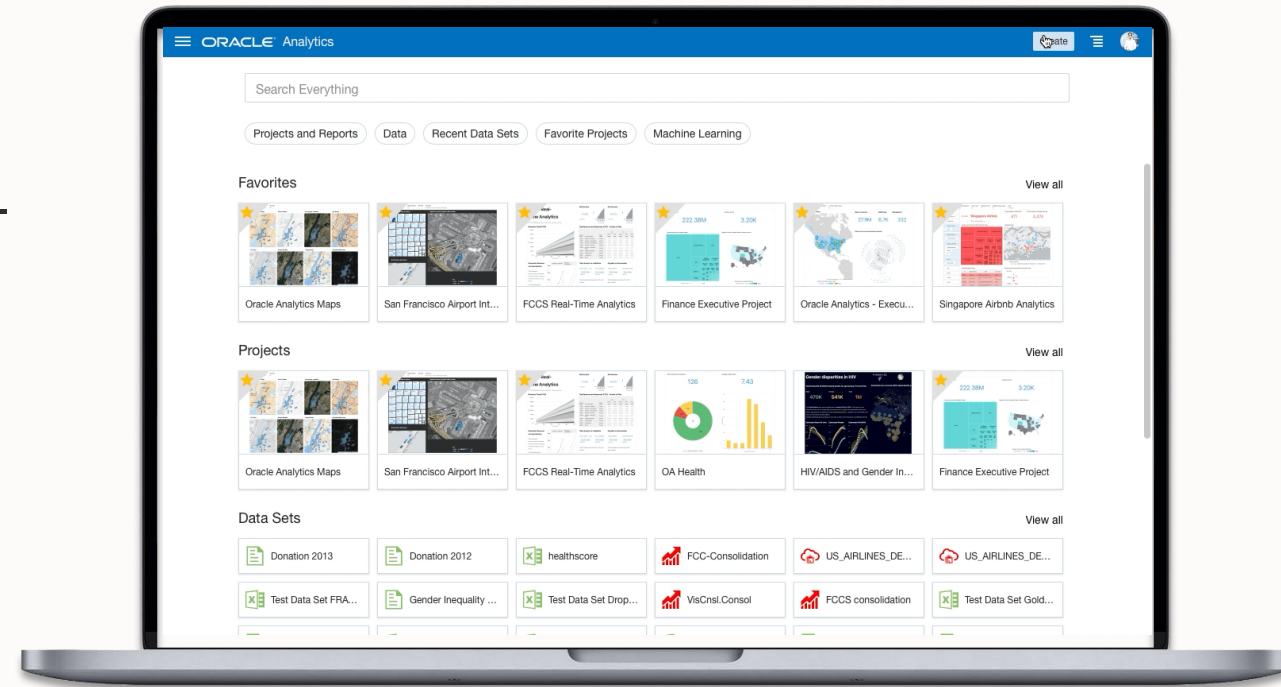
# Open Connectivity from Other Tools

- Open JDBC access to Semantics and Datasets

- Allow for organizations with diverse analytics tools
  - **Single source of truth** for metadata and metrics regardless of tool of choice

- Create homegrown applications accessing the Analytics data



JDBC

Data Virtualization
Logical Sematic Models
Query Federation
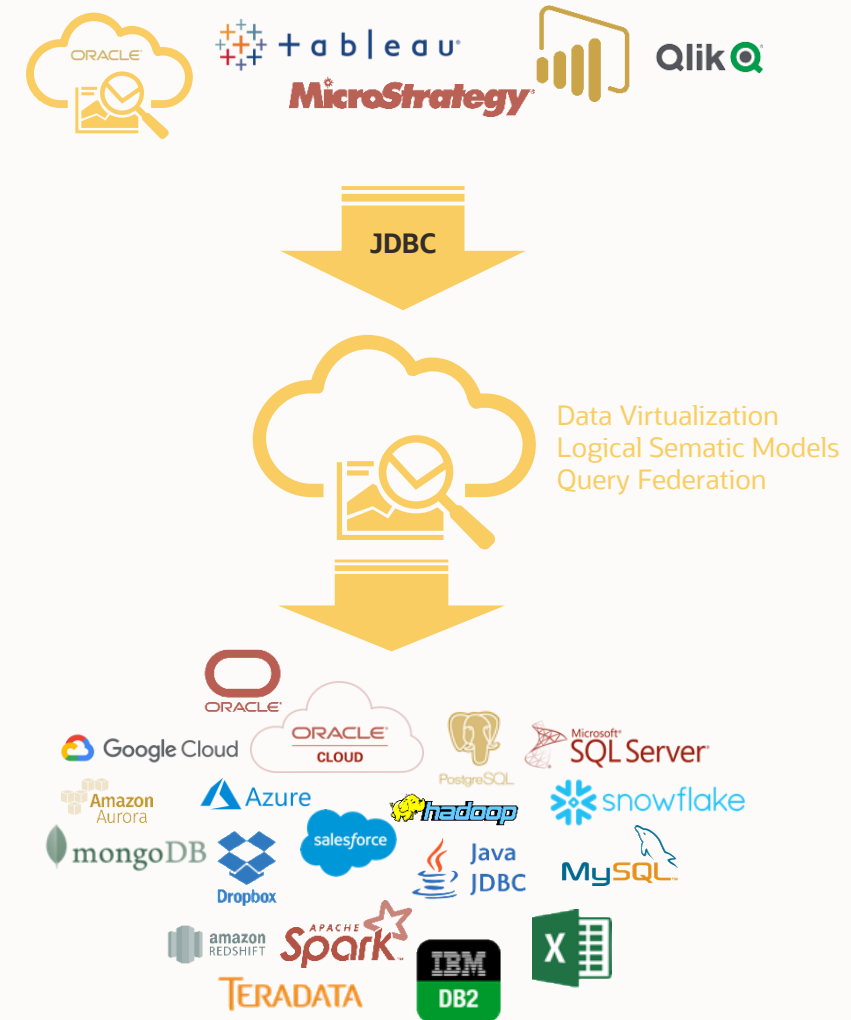
# Integrated Data Preparation

- **Visual data transformation** for Business Analysts
  - Reduce the 'Export to Excel'

- Vast array of transformation capabilities
  - Join, Branch, Bin, Group, Filter, Aggregate, Custom calculations, and more

- Integrated scheduler

- **Machine Learning** capabilities to train and use predictive models
  - Linear Regression, Random Forest, CART, K-Means Clustering and more algorithms.

- Ability to consume Database Advance Analytics directly from the UI
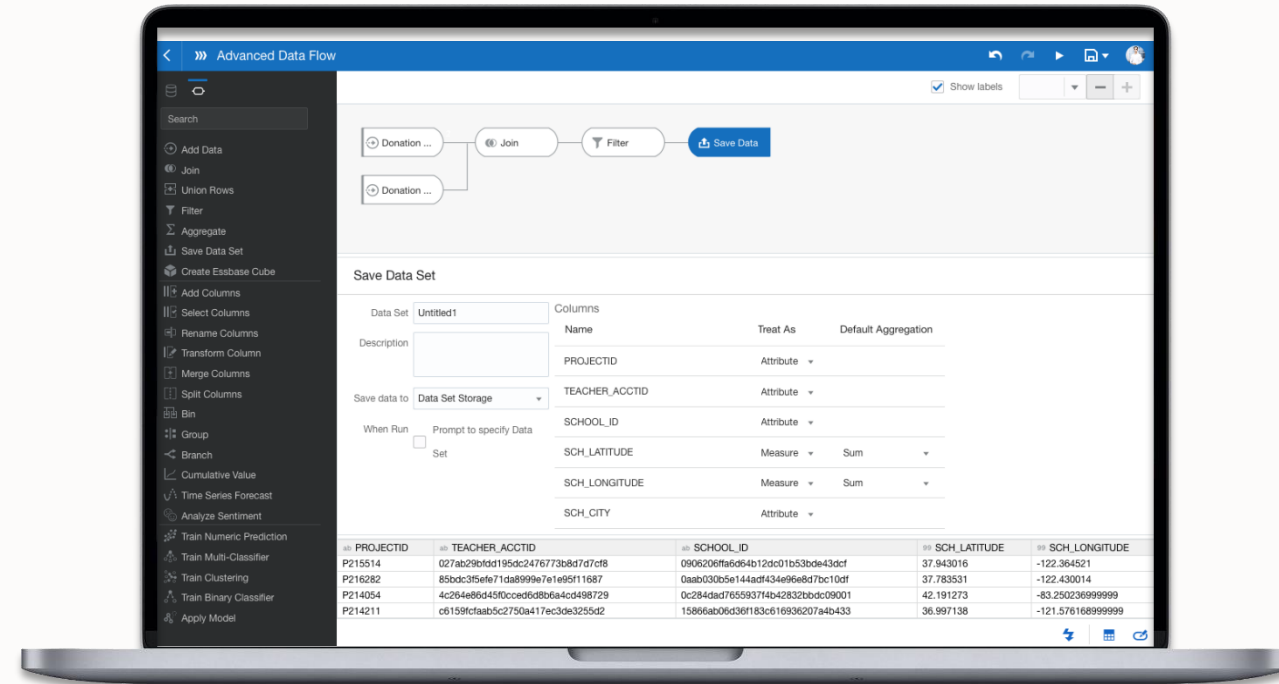
# Intuitive and Interactive Analytics

- Dozens of stunning visualizations
  - **>50 built-in visualizations**, dozens of plug-ins
  - "Beyond the basics" out-of-the-box visualization such as Sankey, Network, Pictogram, etc.

- Built in **geospatial analytics**, NLG, diagnostics and predictive analytics

- Create **custom visualizations in minutes** with built-in digitization tool

- **Open JS platform** (D3.js compatibility) for advanced plug-ins

# Data Discovery and Exploration Using Natural Language

- **Find the right data** – fast!
  - Customers report spending 20-40% of their time looking for the right data

- Ask any questions directly from the home page, mobile, or desktop

- Ability to scan all available sources for the best matched insight
  - Synonyms, abbreviations, auto-complete, dynamic filtering, dynamic calculation, time awareness, negation detection, and more

- Speech-enabled in 28 languages
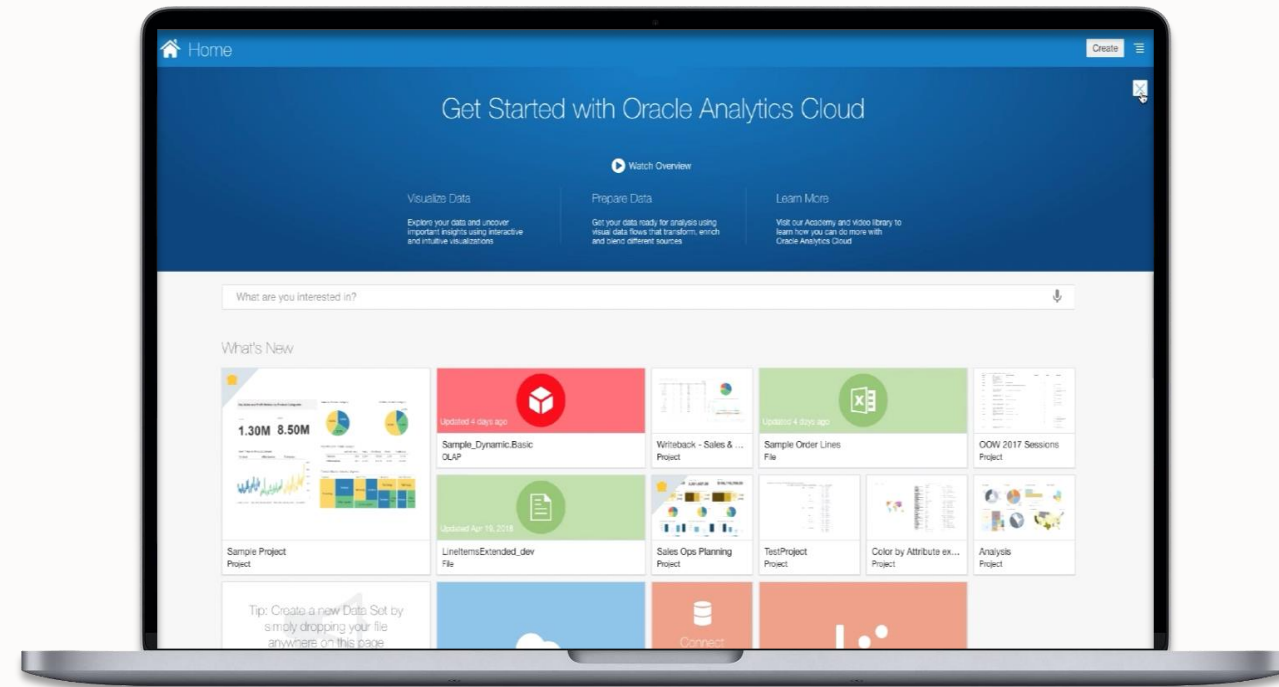
# Advanced Analytics At Scale

- Consume ML functions directly from the Oracle Database
  - Text Mining and Analytics
  - Market Basket Analysis
  - Graph Analytics
  - Pattern Matching
  - Approximate Analytics

- Register and use trusted ML models
  - Batch and/or transactional (live and interactive) predictions

- Compete explain-ability of the AI/ML logic for individual scored item
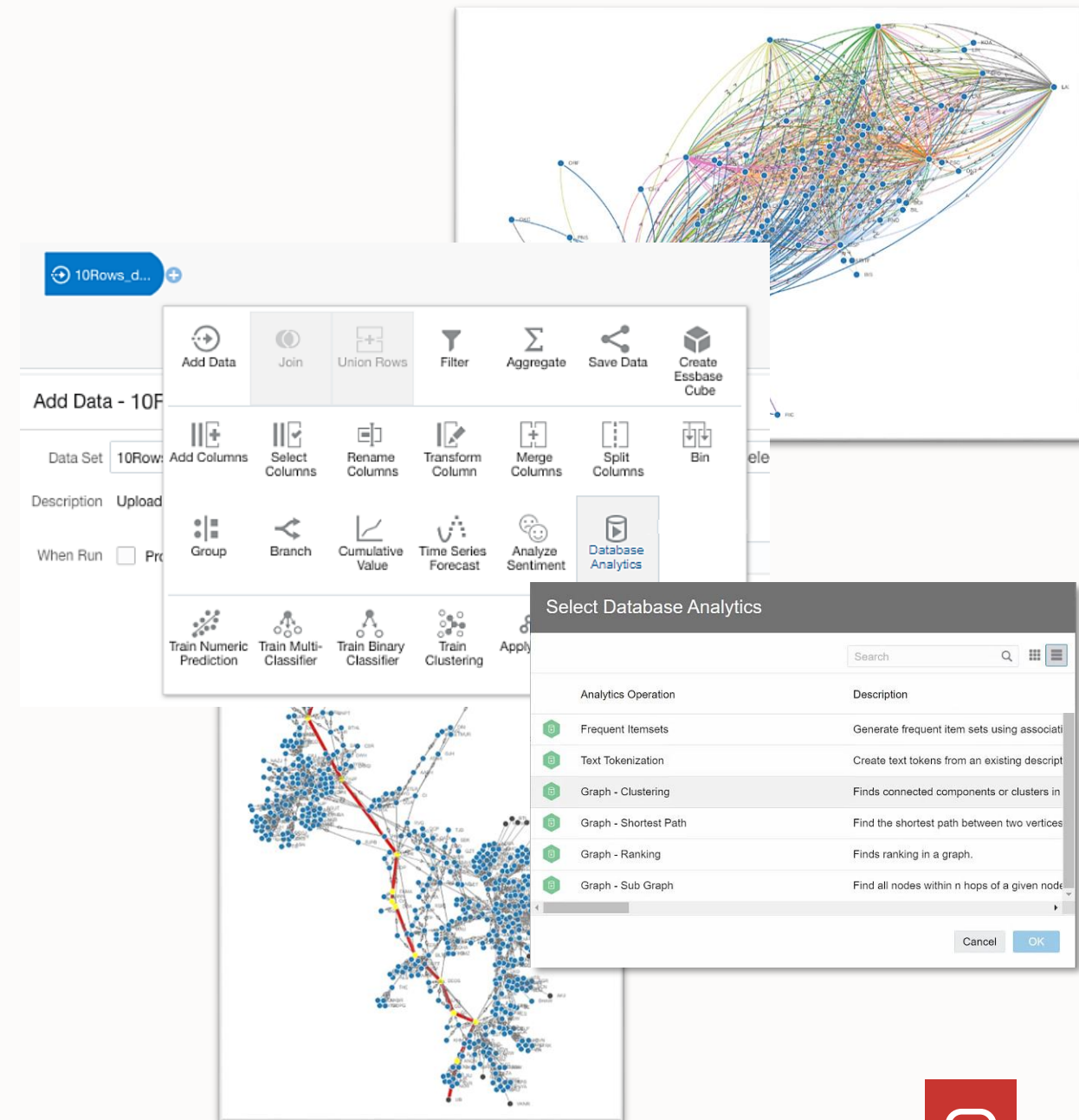
# Self-Service ML to Uncover Hidden Insights

- Automated Machine Learning Analysis and Insights

- With one click, ML algorithms analyze your data
    - Key drivers
    - Segmentation
    - Anomalies and outliers

- No PhD Required
    - Designed for users of any level

- Got a PhD?
    - Bring or train your own models
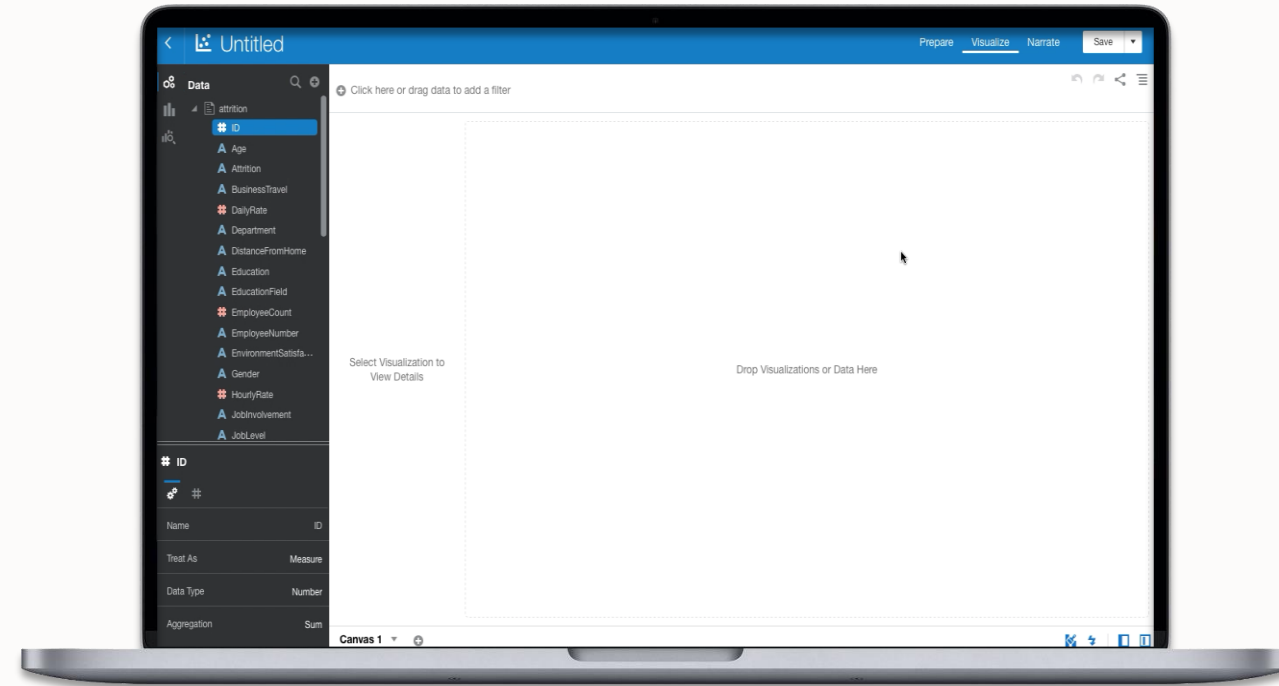
# Heal and Enrichment

- Patented deep data profiling identifies the specific role of each column

- ML based recommendations for
  - Fixing bad formatting
  - Transformations
  - Remove sensitive information
  - Enrichment based on system and custom knowledge

**Transformations**

| | |
|---|---|
| 📅 | **Extract** Day of Week from **birthdate** |
| 📅 | **Extract** Day of Month from **birthdate** |
| 📅 | **Extract** Day from **birthdate** |
| 📅 | **Extract** Day of Year from **birthdate** |
| 📅 | **Extract** Month of Year from **birthdate** |
| 📅 | **Extract** Quarter of Year from **birthdate** |
| 📅 | **Extract** Quarter from **birthdate** |
| 📅 | **Extract** Year from **birthdate** |

**Enrichment**

| | |
|---|---|
| | **Enrich** provider zip with **City** |
| | **Enrich** provider zip with **Lat** |
| | **Enrich** provider zip with **Lon** |
| | **Enrich** provider zip with **State** |
| | **Enrich** provider zip with **County** |
| | **Enrich** provider zip with **Population_Largest_City** |
| | **Enrich** provider zip with **Elevation_Meters** |
| | **Enrich** provider zip with **Timezone** |
| | **Enrich** provider zip with **State_Code** |

**Identify Sensitive Data**

| | |
|---|---|
| ** | **Obfuscate** Digits of **ssn** |
| ** | **Obfuscate** First 5 Digits of **ssn** |
| | **Delete ssn** |

**Healing**

| | |
|---|---|
| | **Repair phone** |

Transformation Script

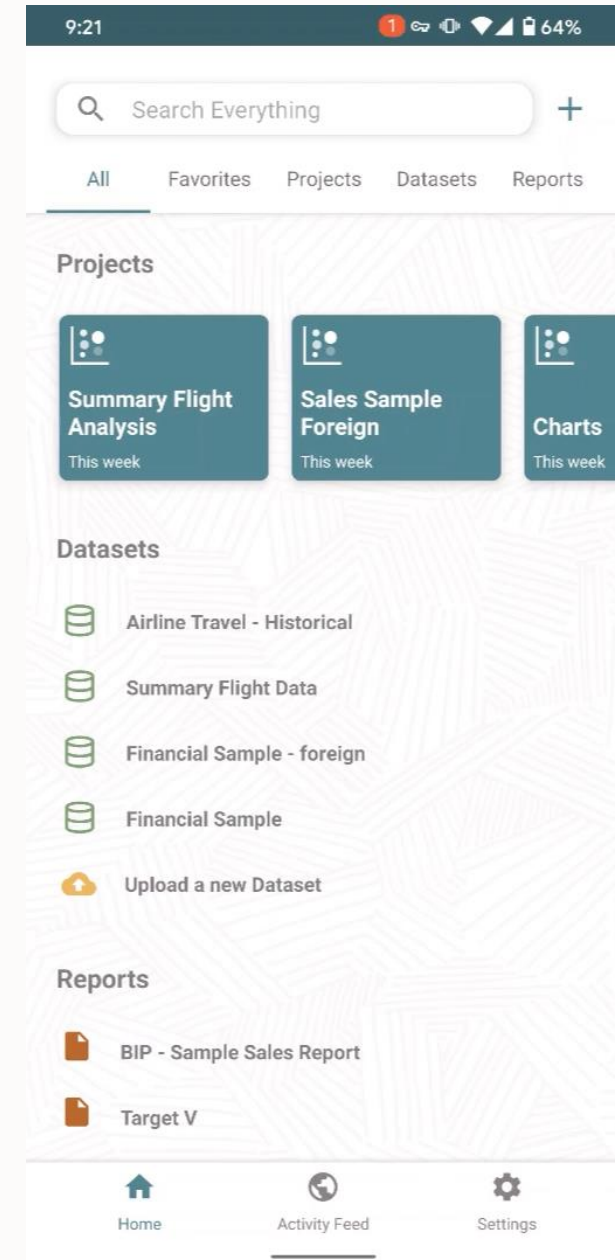Data and Live Metadata Preview

Recommendations

# Natural Language Narratives and Explanations

- Fully embedded NLG engine

- Describe data insights with a dynamically generated language narrative

- Multiple languages, various levels of verbosity, various observations (trends, outliers, clusters, etc.)
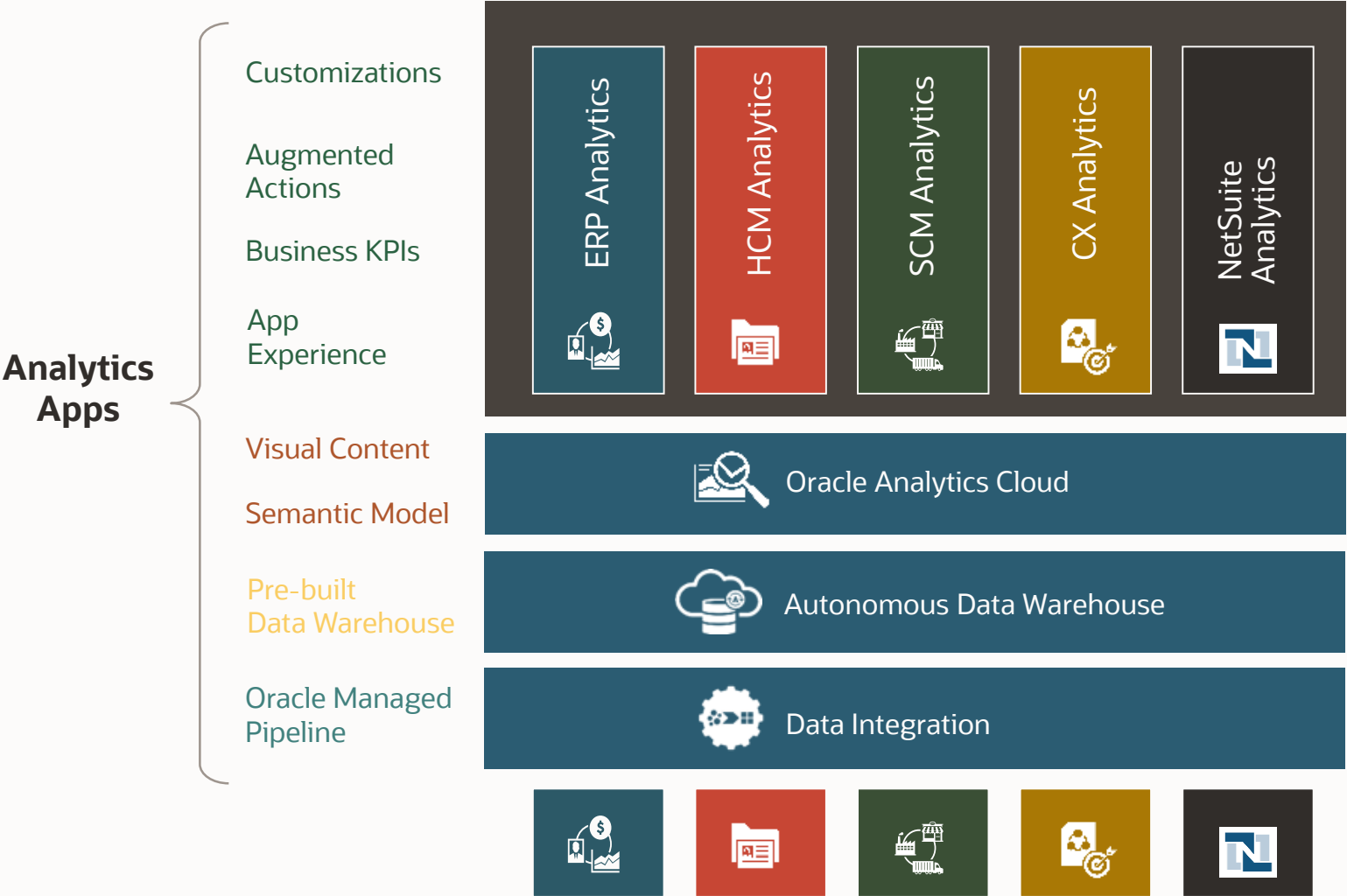
- Dynamic and fully automated
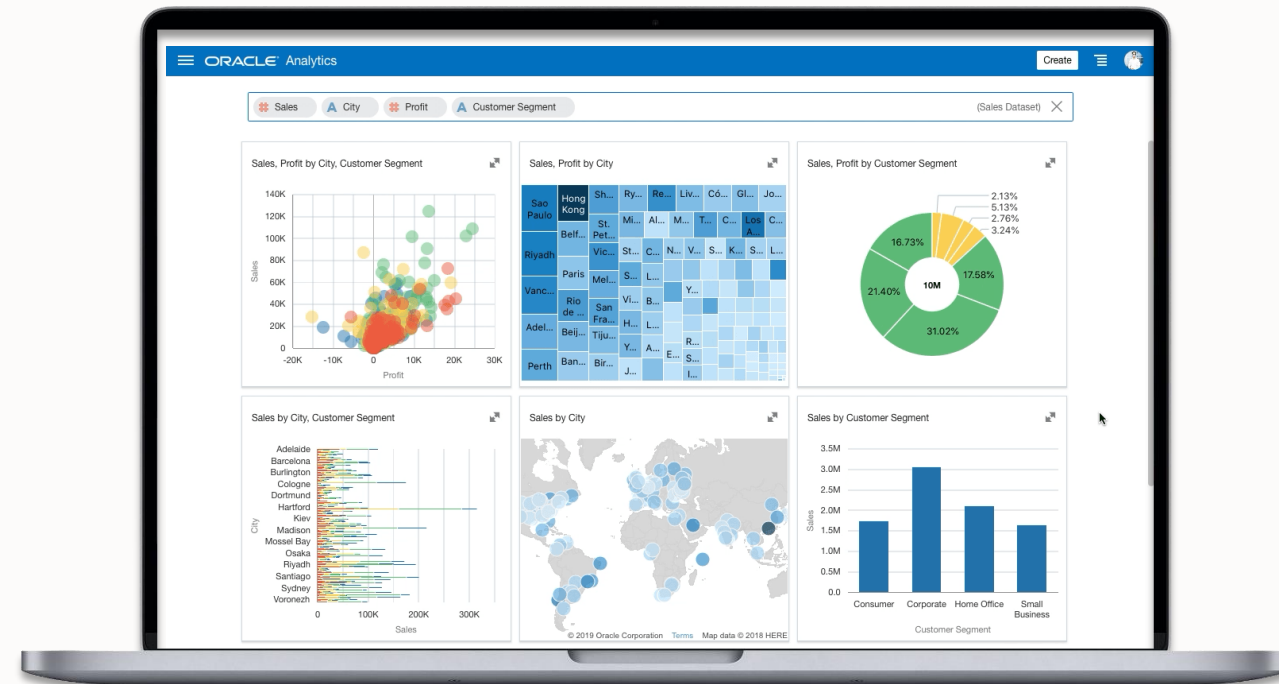
# NextGen Analytics on Mobile



- Access to predictive, personalized, and proactive analytics
  on iOS and Android devices

- Anticipates events and need to deliver appropriate insights
  proactively
  - Learned behavior, interests, and preferences
  - Infuse insights into daily activities based on your interests

- Mobile specific capabilities to fit on-the-go consumption
  of information

# Pre-Built Analytics Solutions



**Analytics Apps**

- Customizations
- Augmented Actions
- Business KPIs
- App Experience

- Visual Content
- Semantic Model

- Pre-built Data Warehouse

- Oracle Managed Pipeline

| ERP Analytics | HCM Analytics | SCM Analytics | CX Analytics | NetSuite Analytics |

Oracle Analytics Cloud

Autonomous Data Warehouse

Data Integration

# Oracle Analytics Server 5.9

Dozens of new features that came to OAC in 5.6, 5.7, 5.8, and 5.9

Advanced Visualizations with Digitized Imaged



Oracle Machine Learning Integration
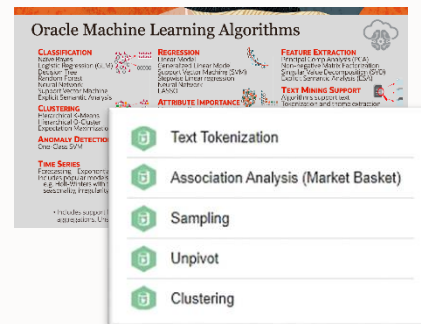


New Connectivity Options



Enhanced User Experience

# Oracle Analytics 5.9 **Selected Features**

| Visualization and Experience | Datasets and Platform | Machine Learning and Advanced Analytics |
|---|---|---|
| • Improved Overall Content Density<br>• Sorting Enhancements<br>• Pass multi-value selection in Data Actions<br>• Filters Experience Improvements<br>• WYSIWYG exports to PDF/PPT<br>• Viz Update - Area Chart<br>• Support WMS/XYZ Web Maps as backgrounds | • Increased data export limits (CSV, Excel)<br>• Data Prep Improvements - Auto-fix Zip codes, single click trim function<br>• Impersonation for Kerberos connection<br>• Snapshot bar option for Day by Day content<br>• Override Database-Feature-Support Configuration | • Explainable AI capabilities with Oracle Machine Learning<br>• Prediction Set and Prediction Details from the scoring process<br>• Model Metadata - Related Datasets within the model inspector<br>• Frequent Item-sets (Market Basket Analysis)<br>• Text Analytics: Text Tokenization |

# Available Resources

- Public OAC sandbox
  - Oracle.com/OACLive
- Oracle Analytics Library
  - bit.ly/OAClibrary
- Udemy Courses
  - bit.ly/OACourses
- YouTube Channel
  - bit.ly/OACtube
- OA Idea Lab
  - bit.ly/OAIdeaLab