# A Comprehensive Tour of Oracle Analytics Cloud

John Hagerty VP Product Strategy Oracle Analytics October 3, 2017 ORACLE OPEN WORLD

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# Opportunity is Well Known

- Data driven organizations projected to grow 8x faster than GDP
- 84% of S&P 500's market value is intangible assets
- \$430b advantage to those who analyze *all data* and deliver actionable insights



The

Economist



### Key Trends in Data Analytics

- Data-driven disruption in all industries
- Data savvy workforce is emerging
- Time to business scale is compressed
- Data Lake is the new norm for all data
- ML provides productivity advantage

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# Setbacks are Significant

 Business agility constrained by analytic system complexity

Data silos create organizational chaos

Analytic talent shortfall

ONLY 20% POTENTIAL BUSINESS VALUE REALIZED IN LAST 5 YEARS



# **Common Cloud Journeys for Big Data Analytics**



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# Enter New Markets

# Skanska

Centralized on a single cloud environment for management reporting worldwide

Today information is ready in 7 minutes for executives to analyze and annotate

Completed implementation in 17 days



### AIRBUS

Accelerate new product introduction without compromising safety

50X growth in test flight data with 450TB generated from A320

Sequential data and analytic processes could not scale to demand



# Personalizing the Customer Experience KEY RESULTS

14%

Increase in Online Booking Rate **41**%

Passengers Convert To Top 3 Recommendations

### **30k**

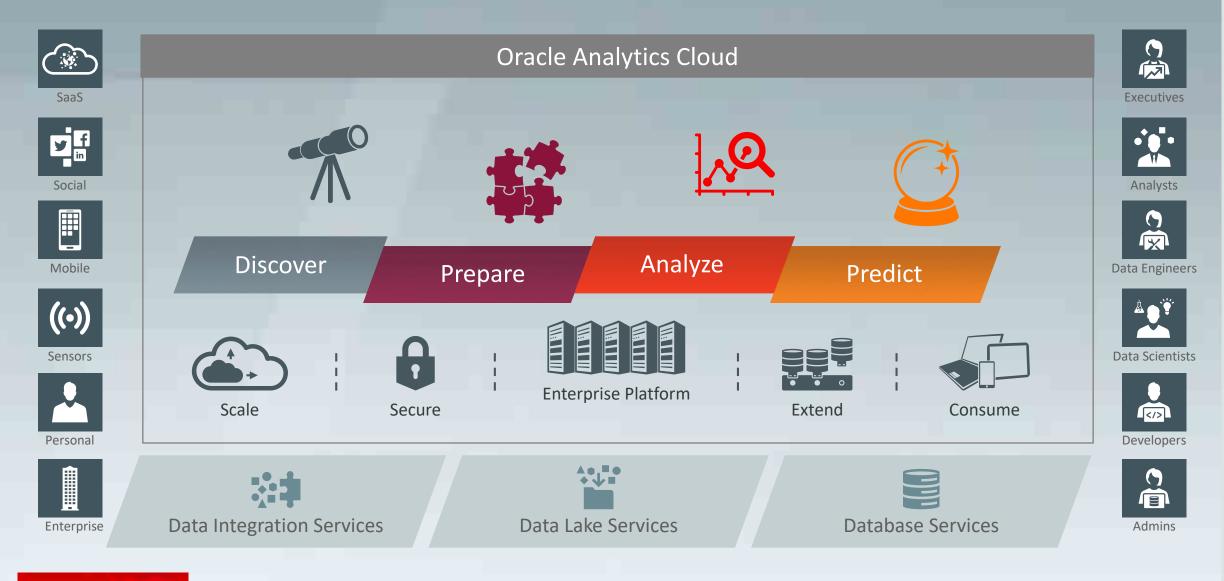
Customers Targeted Weekly Increased incremental revenue for Shore Excursions, Indulgences, Spa and Dining by optimizing cross-sell and up sell offers through adaptive learning and multi goal arbitration

Effectively integrated data from multiple sources to deliver targeted offers and create a continuous learning loop

Offered more personalized experience through various channels – online, email, and onboard



## Oracle Cloud for Big Data Analytics





## What Makes Oracle Big Data Analytics Compelling?

### PERVASIVE



### COMPREHENSIVE



### ANYWHERE



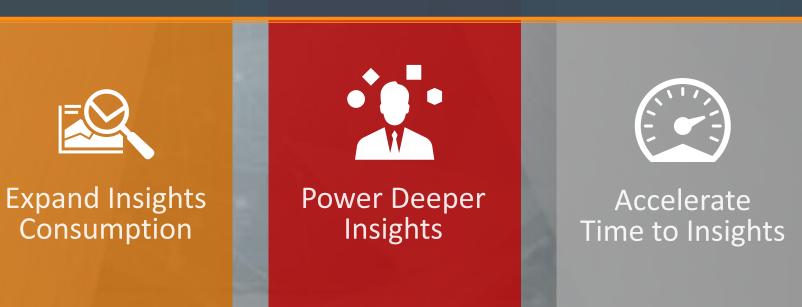
Oracle Analytics delivers business insights to millions of users every day across Oracle SaaS and Oracle PaaS. Enrich your data with Oracle Data cloud (including 5 Billion consumer profiles) to achieve actionable insights

Empower every type of user in a community via easy, intuitive experiences. Single platform for all types of users to engage, collaborate and elevate community wisdom Run your analytics anywhere (Cloud, Cloud@customer, On Premises), manage your data anywhere. Enjoy the flexibility of changing your mind anytime.



# Oracle Analytics Vision and Strategy Pillars

### Power All Actions To Be Data-driven



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#### **STRATEGY PILLAR**



# Expand Insights Consumption

### Simplify asking questions

- Ask questions in natural language
- Get answers as visualizations or natural language

### **Increase relevance of insights**

- Personalized answers
- Pro-active push rather than poll

### Make insights easier to absorb

- Visualization/charts are commodity
- AR, VR

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# Adaptive Intelligence Platform

•	Machine to Human					
•	Auto Explain	Recommend Best Action	Contextual Insights	Self-Learning Algorithms		
	Discover	Prepare	Analyze	Predict		
	Consolidate Many Sources	Programmatic Integration	Interactive Visualization	Defined Models		
Human to Machine						
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### **Smart Visualizations**

#### **Best Data Visualization Capabilities**

- Rich palette of chart types, combo charts of lines, areas, bubbles, and more
- Smart Chart advisor automatically selects best fit visualization based on selected attributes
- Trellising for every visualization; customizable color palette
- Brushing highlight correlations within data across visualizations, all auto-wired to work/update in unison, leveraging in-memory cache/execution layer



# Enhanced Storytelling – "Narrate"



#### What is it?

- Easy to customize and share stories
- Canvases can be mixed and matched across any data set
- Simple PowerPoint-like model for building Story

#### Why it matters?

- Not everyone is a data scientist. You've analyzed your content with assistance from Machine Learning, NLP, NLG, and interactive discovery. Now you want it to power decisions everywhere in your organization
- Reach a broad audience easily through formats that are best for your audience(s) – OAC, PDF, PPT, Mobile Web, Desktop)





## Natural Language Processing

#### What is it?

- Oracle Day by Day's smart feed continuously delivers meaningful analytics throughout the day
- Based on what's going on in the business, in a user's day (calendar, location, etc.), who they collaborate with

#### Why does it matter?

- Consumers have grown accustomed to a world in which data flows to them, letting them dip into the stream of knowledge whenever, wherever, and however they want
- Understanding context and intelligently delivering the right data takes the guess-work out of important data-driven decisions





### Natural Language Generation



#### What is it?

- NLG as standard visualization type
- Narrative auto-generated based on visual grammar
- Building block for other conversational interface capabilities

#### Why it matters?

- As analytic interfaces become more conversational, you need words in natural language to enhance the meaning of visualizations
- Summarizing and highlighting salient points on a chart allows users to focus on what matters and helps filter out the noise





## **Chatbot Integration**

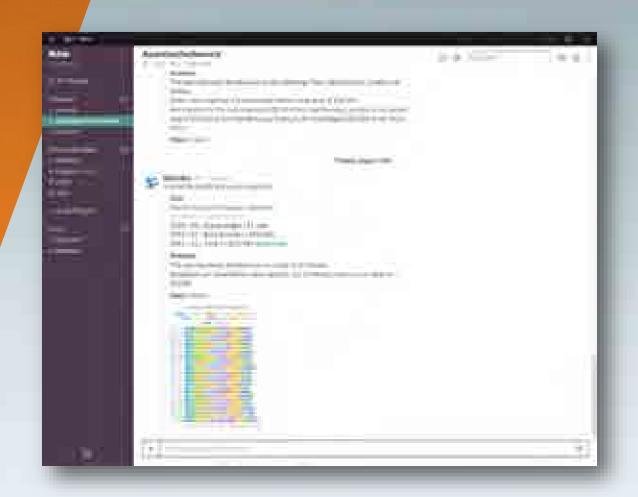


#### What is it?

- The NLP interface to long-established "ASK" capabilities
- Available across a multitude of UI channels, including: "BI ASK" on the homepage, Day by Day on Mobile and API's for integrating with Chatbot frameworks (e.g. Slack, Google Assistant)

#### Why does it matter?

- Conversational interaction is the most natural way to get information—Ask a question, get an answer using voice or text
- The best UI is the one that isn't there. The "ASK" NLP interface allows OAC to hide the complexity of analytics behind a conversational interaction. This combines NLP, NLG and Analytics.





#### **STRATEGY PILLAR**



# Power Deeper Insights

### **Machine assisted insights**

• Explain business metrics

### **Project the future**

- What if
- Scenario modeling

### **Amplify human intelligence**

- Man + Machine > Machine
- Social, crowdsourcing

### Day by Day Powers Collective Intelligence

#### Anticipates questions through self-learning

- Infuse data-based insights into daily activities
- Get customized feeds based on what you are interested in, when and where you are interested in it, and who you collaborate with
- Anticipates your needs and delivers appropriate information to help you make better informed decisions throughout the day
- Use your device's voice capabilities to obtain answers





## Automated Data Diagnostics – "Explain"

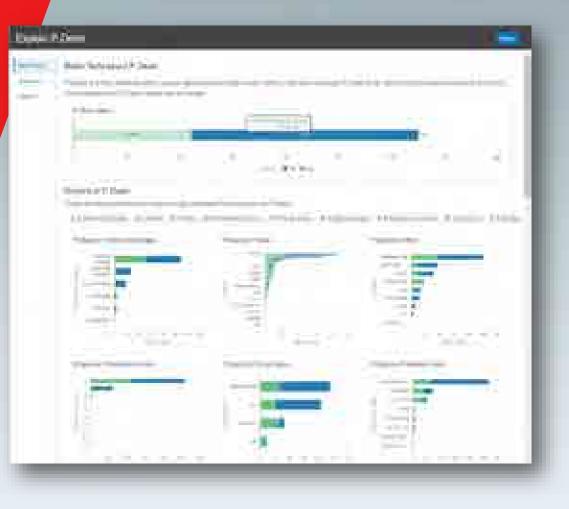


#### What is it?

- In-line Machine Learning for the business user with no specialty skills required
- Uncovers hidden drivers and recommends areas of exploration without user actively analyzing specific factors

#### Why does it matter?

- Guide the user to areas of interest they might not know to look at
- Freedom to explore data more fully without specialist intervention
- In-depth statistical analysis on contextual data enriches the interactive analytic experience





### Simple Access to All Data

#### Easy access to a variety of data sources

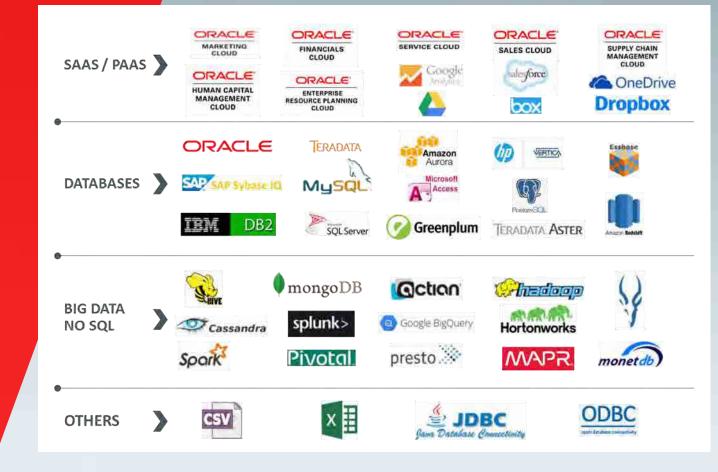
- Few clicks to setup and use
- Vast number of sources supported

#### **Special Oracle SaaS Integration**

- Access to business entities, not just tables and columns
- Respects security, business rules, and governance on source systems
- Leverage calculations and business logic in reports

#### Inline or "Extract-and-Analyze"

• IP built over two decades in function shipping (sourcespecific code generation) and internal execution now powers business user self-service





### Quickly Enrich and Prepare Any Data

#### No coding skills required

- Provides an intuitive user driven data preparation interface
- Standardize inconsistent values, replace null values and remove duplicates
- Create custom groups and expressions

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### New Data Flow Capability



#### What is it?

- Library of advanced analytic transforms
- Automate Essbase cube generation for new use cases
- Intuitive editor make data prep quick and efficient

#### Why does it matter?

- Data preparation should be as streamlined as possible, eliminating process steps wherever you can
- Enabling Data Preparation and Data Flows to create Essbase cubes significantly improves important integration points within OAC services and opens up rich data prep capabilities to Essbase use cases





### New Scheduling Interface



#### What is it?

- Variety of scheduling options for data preparation jobs
- New 'Sequence' execution allows one flow to execute after another completes
- Monitor active jobs and resolve execution problems

#### Why does it matter?

- Improves productivity of data prep for data engineers
- Minimizes dependencies on IT-centric ETL tools for data flow

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## What-if, Collaboration & Workflow

#### Modernized architecture for Cloud

- Personal to enterprise business modeling
- New enterprise grade capabilities such as user session recoverability, parallel security refresh, hot backup
- REST API

#### **Full Essbase Capabilities**

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- User scripting support with MAXL and a new CLI
- Access to custom optimization and configuration
- New capabilities for Sandboxing and scenario management
- Wide-range of business modeling and management reporting applications



#### **STRATEGY PILLAR**



# Accelerate Time to Insights

Machine assisted self-service

**Integrated functionality** 

**Pre-built connectors, KPI's** 

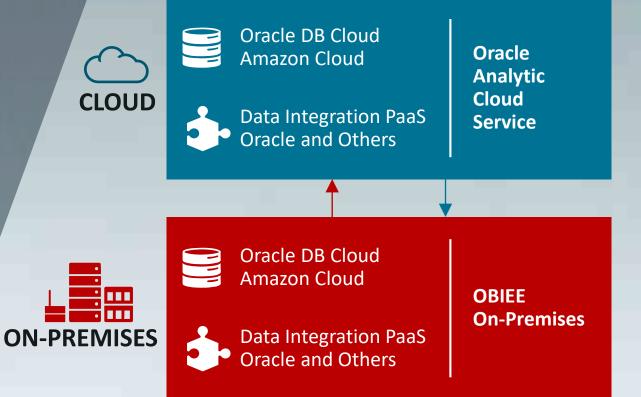


### Build Once, Run Anywhere

#### **Complete choice of deployment**

- Build on-premises, deploy on cloud
- Deploy new applications on cloud
- Enable workgroups on cloud, allow them to access on-premise semantic layer as a data source
- Run analytics on the cloud, keep your data on-premises

Change your mind anytimeLift and shift your applications to the cloud (or on-premises)





Move Existing OBIEE implementation to the Cloud
Lift and shift data model and reports/dashboards





Move Data Model For quick self-service enablement



Move Reports & Dashboards for quick App migration

Cloud

On-premises



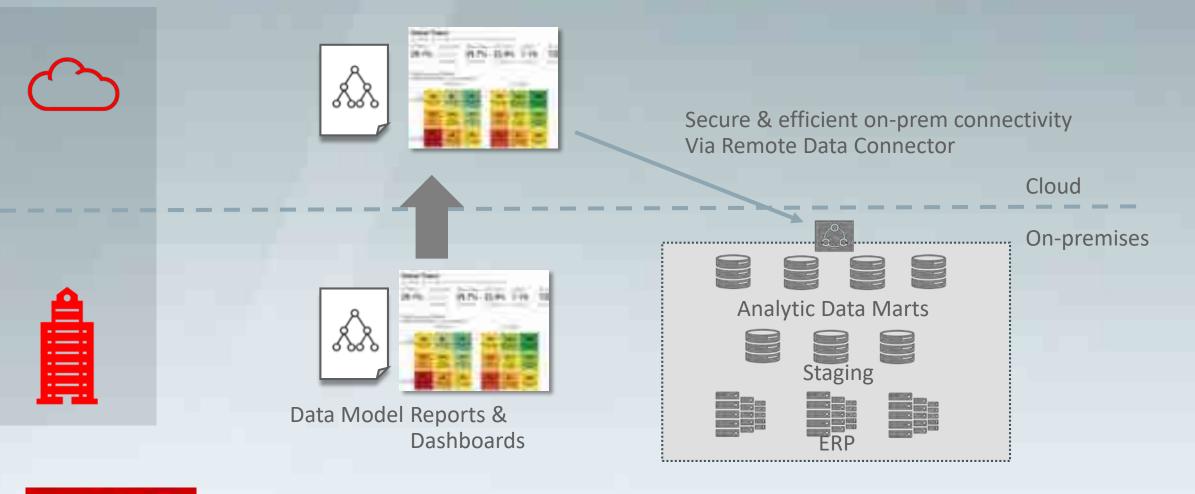
Data Model



Reports & Dashboards



### Move OBIEE Applications, Keep Databases On-Premises Secure and efficient connection to on-premises databases





### Oracle Cloud Machine

- Same Oracle Cloud behind your firewall
- Same subscription (IaaS, PaaS) and Pay-as-You-Go (PaaS) pricing
- Oracle owns hardware and software; manages the platform remotely
- Leave the stack to Oracle; focus on consuming analytic services
- Single vendor handshake

# **Oracle Cloud**

laaS | PaaS

Oracle Data Center Oracle Cloud

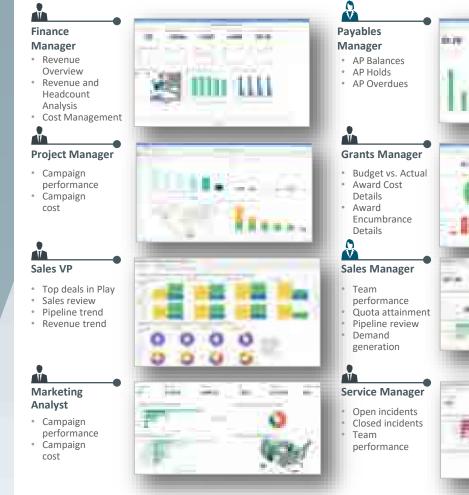
Your Data Center Oracle Cloud at Customer



### Pre-built Content by Role

#### Pre-built data visualization content

- Included with Oracle Data Visualization Platform
- Extends OTBI insights with pre-built data visualization sample content
- Targets specific line-of-business personas
- Identifies difficult-to-spot business opportunities, innovations and patterns
- Blends data across business functions, lines of business and applications
- Quick ad-hoc exploration of OTBI and other data with intuitive business user interface
- Near real-time access to data from OTBI and other Oracle application sources





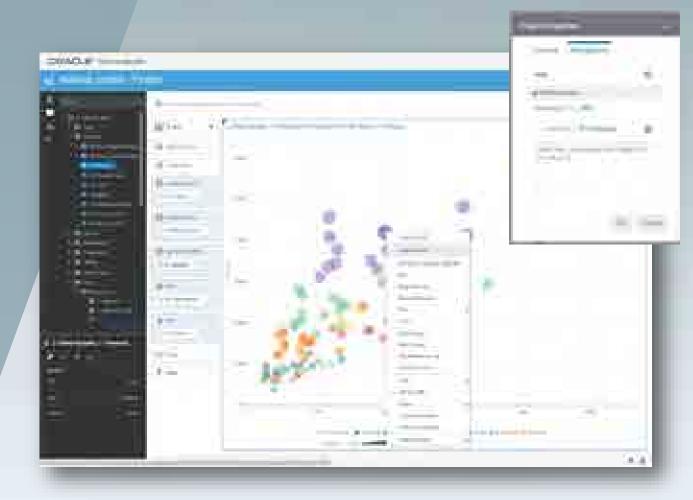
## Actionable Insights

#### What is it?

- Taking specific action based on insights discovered during analytic process
- Integration to external systems and trigger compelling contextual actions
- Stepping stone on Oracle's journey to infusing recommended actions along with proactive delivery

#### Why does it matter?

- Business process powered by analytics is a natural marriage of two functions that have been living parallel lives
- Enabling the connection between the two where "A" drives "B" enables data driven processes and recommendations



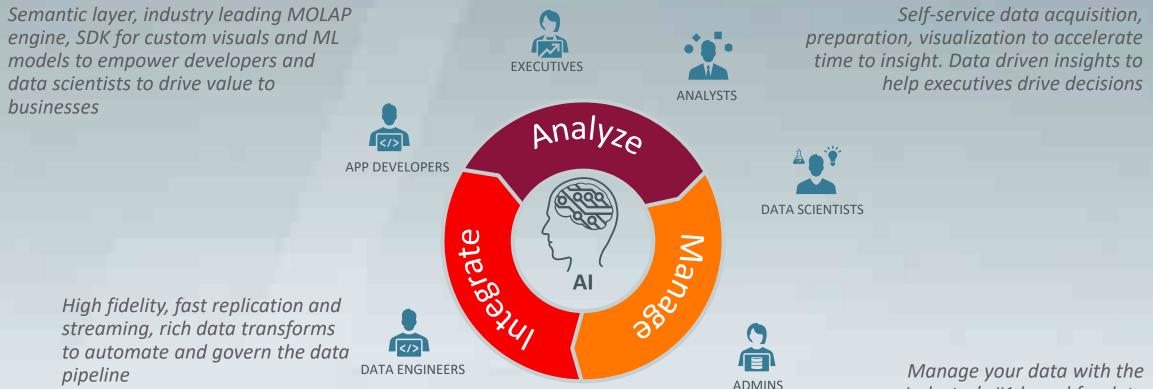


## Unparalleled Deployment Choices

<b>Oracle Managed</b> Automatic config, patching, availability, tuning*	&	<b>Customer Managed</b> APIs– patching, configuration, topology, backup
<b>User pricing - Unlimited Resources</b> Auto-sizing, Prod and test env.	&	<b>Processor pricing – Unlimited Users</b> APIs - resources, availability, DR, instances
Oracle Data Center Choice of Data Centers	&	<b>Customer Data Center</b> Same pricing and interface
Subscription model Pay per month for a term	&	Pay As You Go Pay for resources by the hour



### Oracle Cloud for Big Data Analytics One Adaptable Solution Serving All Consumers



Industry's #1 brand for data management



# Next Steps

Prioritize your use cases

Plan your cloud journey

• See a demo

• Start your 30 day trial here

#### Introducing Oracle Utilities Enterprise Analytics

+ Wednesday, Dct 04, 12:00 p.m. - 12:45 p.m. | Park Central (Floor 2) - Metropolitan I

Technology advancements and market changes have utilities rethinking how they manage and use data. According to a UAI survey, 84 percent of utilities are already planning or implementing an enterprisewide data analytics strategy. As utilities look to other industries, they will find that CIOs leading successful digital transformations are taking an end-to-end strategic approach rather than traying targeted analytics tools. With Oracle Utilities' expertise and software that span the entire utility value chain, we have the data utilities need to uncover insights, and we have the ability to apply those imights to drive automation with our software. Altend this session to team how to jumpstart analytics iidoption ledices your burness.

Intelligent Cloud Applications: Industries: Utilities Code: CON7436 Session Type: Conference Session

SPEAKERS

Califin Hewitt, Product Marketing Manager, Oracle Tom Mercer, Senior Director, Product Management, Oracle

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### Extend Your Analytics Expertise

Looking for more ways to learn about Analytics and contribute your expertise?

See Analytics in action at these conferences in 2018:

 Analytics and Data Summit, March 20-22 (formerly BIWA)

- Collaborate, April 22-26
- Kscope, June 10-14

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