EXTRE//E FILANCE

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SMARTER FASTER RICHER





> What is opportunity for Machine Learning? > What is required to become an Extreme Finance leader? > How can Embedded ML help you work SMARTER? > What is NLG and how can it power FASTER cycles? > How can a cloud platform provide RICHER analysis? > What steps should I take to ready my organization?



Polling Question #1

How would you characterize your organizations proficiency in using data across the enterprise?

- 1. Lots of tools with nominal results
- 2. Departmental success, significant investment
- 3. Enterprise strategy but suboptimal results
- 4. Enterprise strategy meeting expectations



McKinsey&Company

G Machine Learning is based on algorithms that can learn from data without relying on rulesbased programming.



WELL KNOWN USE CASES FOR ML IN FINANCE

PROCESS TRANSFORMATION

- Optimized Payment Terms
- Best-Fit Suppliers
- Optimized Demand Sensing
- Inventory Management

- Employee safety
- Consumer fraud
- Employee theft
- Physical & Cyber-security



- Autonomous Discovery
- Narrative Automation
- Expense Audit
- Tax Analytics
- Smart Forecasts
- Account Reconciliations

Polling Question #2

On a scale of 1-5, how prepared is your finance organization to embracing the potential of machine learning?

- 1. Research not yet started
- 2. Early days, skill gap exists
- 3. Have skills and started to explore potential
- 4. Project identified and scoped
- 5. Using Machine Learning technology today



EXTREME OPPORTUNITIES FOR INSIGHT-DRIVEN BUSINESSES

Projected Growth to be 7X Global GDP

Revenue forecast of insights-driven businesses (\$ billions) \$1,250 Global GDP will grow \$1,000 only 3.5% annually. \$750 Insights-driven 27% annual growth public companies \$500 \$250 Venture-backed 40% annual growth startups 2015 2016 2017 2018 2019 2020

Note: The data point for public companies in 2015 is actual revenue; all other data points shown are estimates or projected figures.

Source: Economic Intelligence Unit, Morningstar, and PitchBook Data

EXTREMEEXTREMEFINANCEPERFORMANCE

NHS

Identified £1.2B in potential savings Delivers healthcare to 65 million UK citizens Optimized treatment by reducing use of less effective medical procedures

Deloitte.



In today's highly competitive business environment, companies need more from Finance than accurate financial statements and reports. They need forward-looking, predictive insights that can help shape tomorrow's business strategy and improve day-to-day decision-making in real time. In short, they need finance analytics.



ARE YOU STILL DOING THE SAME OLD THING? EVERYONE ELSE 5 ADAPTING.

43%

of companies fell short of investor expectations McKinsey



WHO ISN'T BUSY? Never enough time.

62%

are buried in basic duties with little time for analytical work Ventana 56%

cannot focus on strategic priorities due to time spent on compliance, controls and costs EY 51%

cannot focus on strategic priorities due to time spent on operational activities EY

WHO'S DATA ISN'T GROWING? More data than ever.

47%

say they lack the right capabilities/skills to meet the needs of strategic priorities EY

40%

of all compute will revolve around edge computing, IoT and analytics by 2020 IDC



of finance trade globally will use blockchain by 2020 Gartner



EXTREME STATE

SMARTER FASTER RICHER



VESTERDAY'S TECHNOLOGY GOT YOU THIS FAR.



SMARTER FINANCE **MOVES YOU FORWARD**

ADAPTABLE

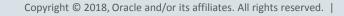
TRUSTWORTHY

ORACLE

58%

need to build a better understanding of digital, smart and sophisticated analytics EY





PROACTIV

15

SMARTER

EVALUATE MORE BUSINESS DRIVERS

BUILD TRUSTWORTHY PREDICTIONS

CREATE NEW OPPORTUNITIES



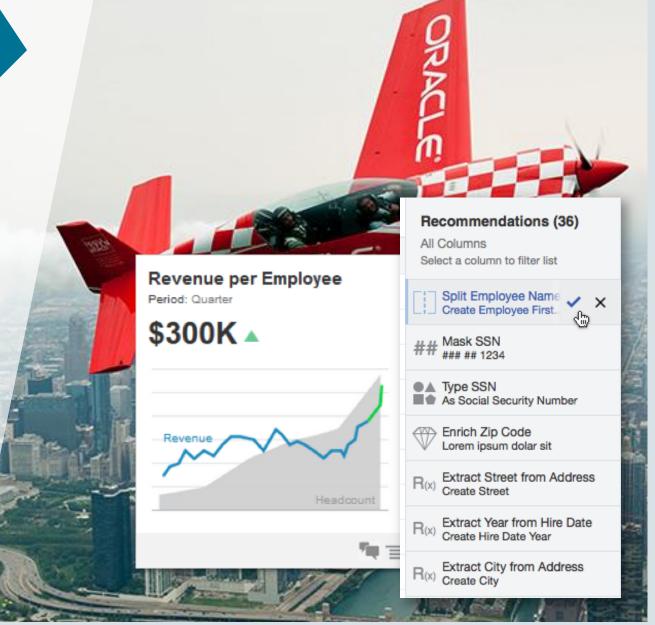
ORACLE

Autonomous Analytics

RECOMMENDATIONS TO GUIDE YOU

ADAPTIVE PERSONA DRIVEN KPIS

INFUSE DATA-DRIVEN INSIGHTS INTO DAILY ACTIVITIES



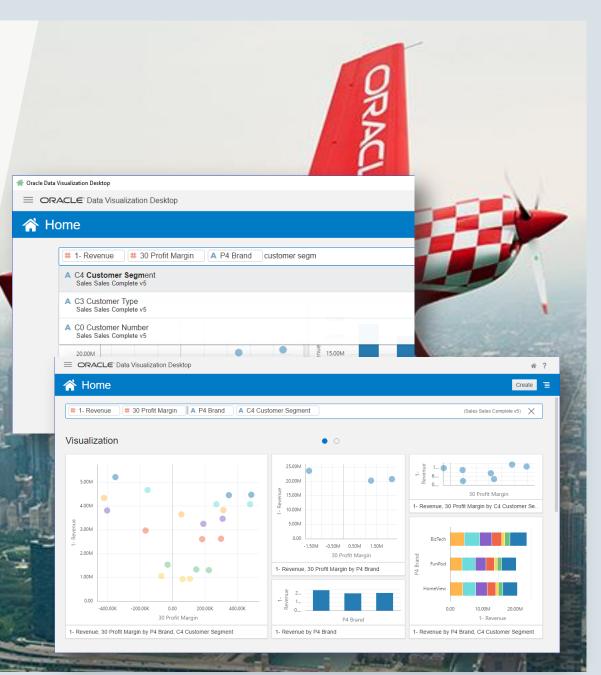


Natural Language Processing

SINGLE SEARCH ACROSS ANY DATA

NON-AUTHORED DYNANMIC VISUALIZATIONS

VOICE AND MOBILE ENABLED





Polling Question #3

What % of financial analysis queries do you think will be executed using voice in the next 12 months?

- 1. 0% tech isn't ready
- 2. 20% maybe for the simple stuff
- 3. 50% semantics are there
- 4. 80% will follow path of consumer tech



EXTREME ENARCE

SMARTER FASTER RICHER



CURRENT ANALYTICAL PROCESSES MISS DEADLINES.



FASTER FINANCE BEATS DEADLINES

SIMPLIFY

PROCESSES

ACCELERATE BUSINESS

AUTOMATE TASKS

> MORE CYCLES

BOOST O PRODUCTIVITY 25%

of future FP&A users' time will be dedicated optimization and efficiency Argyle

40%

of transactional accounting work will be replaced by automation by 2020 Accenture

ORACLE

FOCUS ON

STRATEGY

48%

CxOs will take action

in the next year to

automate admin

& low skill roles



Agile Scenario Modeling

TIME TO PRODUCE AND ADJUST FINANCIAL INTEGRITY OF SCENARIO CAREFULLY SELECTED DRIVERS STAKEHOLDER ALIGNMENT CLEAR FEEDBACK LOOP EASY TO GRASP



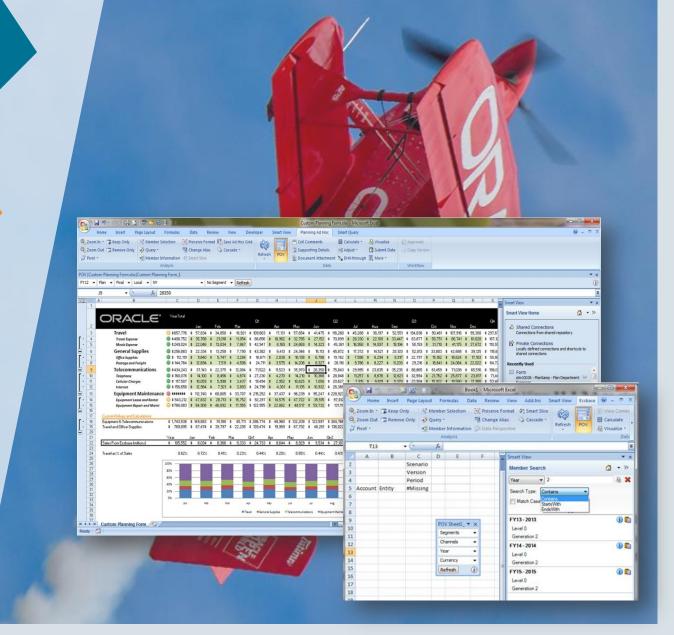


Business Modeling Cloud Platform

ACCELERATE FP&A ACTIVITIES

CENTRALIZED DATA FOR CONSISTENCY

ENHANCED COLLABORATION AND SHARING



3D Business Modeling

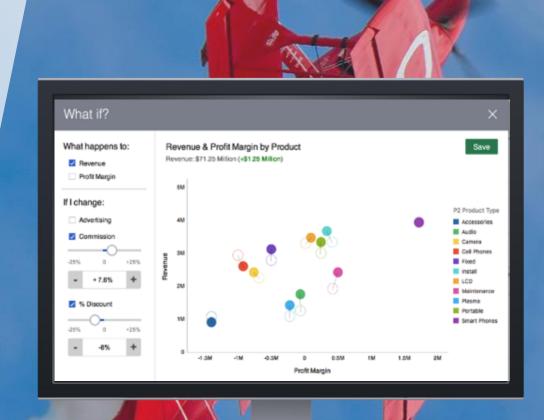
MULTI-DIMENSIONAL BY DESIGN

BUILT FOR BUSINESS

EXTREME PRODUCTIVITY

GOVERNED CALCULATIONS

FAST AND SECURE





Excel to Essbase in 60 Seconds

DO EVERYTHING IN THE CLOUD

ONE CLICK PROVISIONING, NO IT ZERO LEARNING CURVE NEW DESIGN TOOLS

DO IT ALL IN EXCEL PRIMARY MODELING TOOL DOZENS OF PREBUILT TEMPLATES EXPORT CUBES TO EXCEL FORMAT

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Scenario Sandbox

EXTREME AUTOMATION

CREATE PRIVATE COPY OF DATA FOR WHAT-IF AND SENSITIVITY ANALYSIS

REFRESH BASE DATA AND MERGE INTO SANDBOX

ONLY DELTA ENTRIES ARE SAVED

APPROVAL FLOWS SUBMISSION BACK TO BASELINE



Polling Question #4

The extent of our scenario modeling in our company is:

- 1. Manual and done using Excel
- 2. Partly automated but still many macros
- 3. Forecasting is automated but not iterative scenario modeling
- 4. Enterprise can easily re-plan and model new scenarios



Natural Language Generation

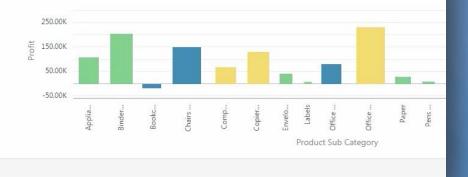
GENERATE DYANMIC CONVERSATIONAL NARATIVE

SUMMARIZE SALIENT POINTS

SIMPLIFY VARIANCE ANALYSIS

•	Narration of Product SubCateory with Sales	
Row)	The data represents Sales for a total of 17 Product Sub Categories.	-
ao	Breakdown per Product Sub Category	
40	 When taken together, the 17 Product Sub Categories amount to a total value of 8,500,000, an average of 500,000. 	
;)	The data was able to be divided into 4 distinct categories.	
	 Telephones and Communication is the most important, with Sales of 1,379,944. Office Machines, Chairs & Chairmats and Tables are the next three in terms of Sales, with 1,051,535 on average (37.11% of the total Sales, about 12.37% each). Binders and Binder Accessories, Storage & Organization. Copiers and Fax and five others are the next eight in terms of Sales, with 457,994 on average. This group makes up the majority of Product Sub Categories (43.11% of the total Sales, about 5.39% each). 	-





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Narration

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Polling Question #5

What % of management reporting and/or variance analysis do you believe could be automated using natural language generation?

- 1. None requires complete human cognitive skills
- 2. 20% perhaps a small fraction
- 3. 50/50 lots of opportunities
- 4. 80/20 majority of data collection and analysis could be automated







ENTERING NEW MARKETS

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

EXTREME ENARCE

SIARTER FASTER RICHER



CONVECTED SYSTEMS FOSTER INACCURACY AND COST YOU.



RICHER FINANCE IS A UNIFIED PLATFORM

ALL DATA

VISUALIZATION

DATA-PREPARATION

TRUSTWORTHY

57%

of CFOs believe that delivery of data and advanced analytics is a critical capability of tomorrow's finance EY

24%

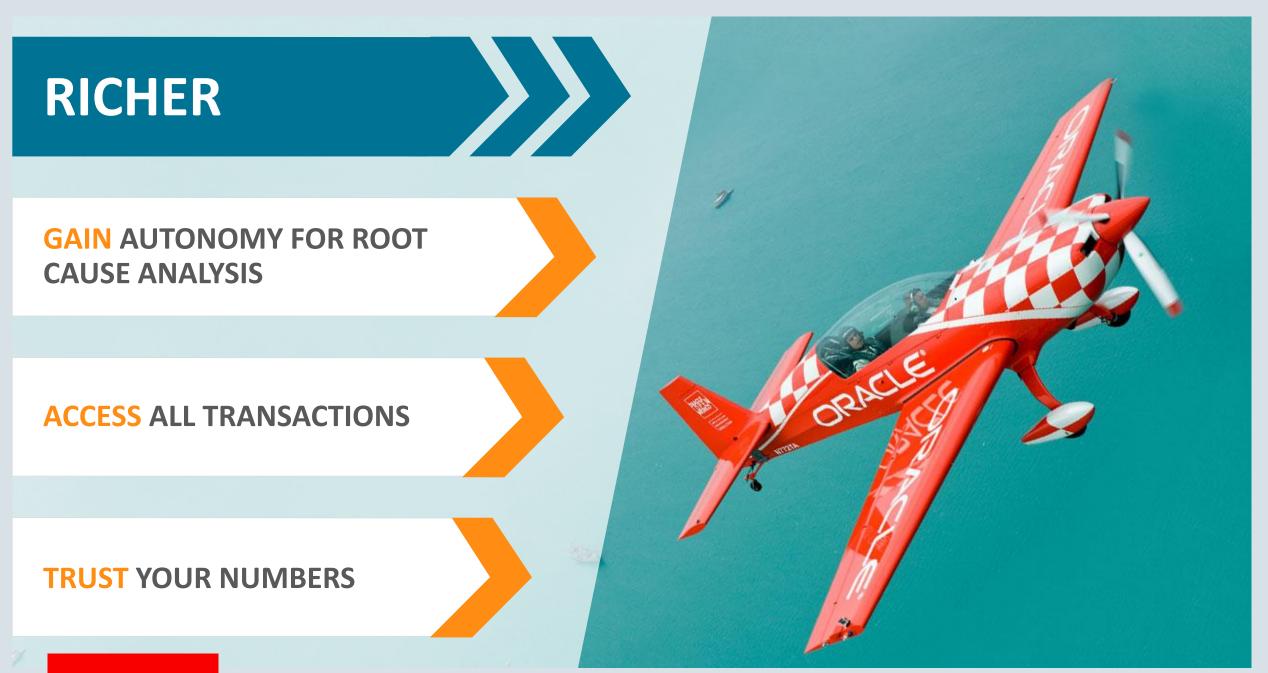
of future FP&A users' time will be dedicated to leveraging data and analytics Argyle

SELF-SUFFICIENT

39%

of future CFOs recognize big data and advance analytics as critical for strategic "decision-making EY



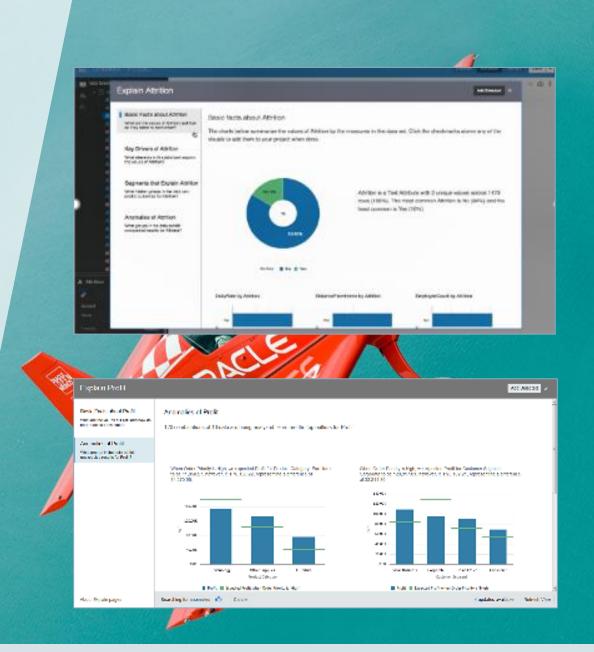


Discover Deeper Patterns

ML ANALYZES AND EXPLAINS ALL ATTRIBUTES

AUTOMATICALLY DETECTS OUTLIERS AND DRIVERS

EASILY IDENTIFIES KEY SEGMENTS



Data Blending

CONNECT DATA INTELLIGENTLY

CONSIDER ALL RELEVENANT INFORMATION

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REDUCE RISK AND EXCEL TIME



Autonomous Data Enrichment

ML DRIVEN TRANSFORMATIONS

PREDEFINED SEMANTIC TYPES

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Polling Question #6

What % of your analysts time do they spend combining, fixing and preparing data?

- 1.20%
- 2.40%
- 3.60%
- 4.80%
- 5. Unsure



Smart Visualizations

SURFACE UNSEEN PATTERNS

UNDERSTAND YOUR BUSINESS

FORESEE THE FUTURE



Transforming at Scale

Innovative retail company looking to streamline financial reporting while increasing governance and audit controls

> Incorporated new data and saved 5-7 days for financial reporting



Data Lake

COMPLEMENTARY TO SYSTEMS OF RECORD

REDUCE COST OF STORING DATA

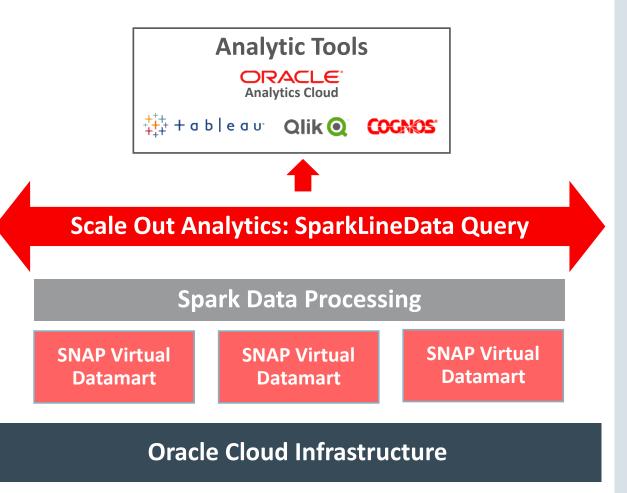
LEVERAGE MORE DATA FOR RICHER ANALYSIS



ORACI

Data Lake Analytics: SparkLineData Brings Interactive Query to Data Lakes Built on Cloud Storage

- Scale Out Data Lake Analytic Query Engine – For all BI tools: Tableau, Qlik, Cognos, BI EE, OAC
- Built on Standard Open Source Spark
 - Same APIs, Same Operational Model
- Enables Subject Area Data Marts on Data Lakes
 High Performance Cubes for SQL Based Analytics
- Run Traditional BI Directly On Entire Data Lake



Polling Question #7

What is your finance team's experience in using Data Lakes?

- 1. None
- 2. Researching
- 3. Pilot Project
- 4. Data Lake in Production



EXTRE//F

DIGITIZE AND SAVE ALL DATA

EMBRACE CLOUD; IT'S FASTER!

FORM DATA ETHICS COMMITTEE

CREATE DATA LAB FOR EXPERIMENTATION

BUILD MACHINE LEARNING COMPETENCIES

ACTION PLAN

EXTREME FINANCE

ORACLE SMARTER BUSINESS FASTER ANALYTICS RICHER

