Emerging Technologies in Oracle EPM Cloud [PRO5547]

Marc Seewald
VP Product Management
Oracle EPM Cloud

Al Marciante
Sr. Director, Product Management
Oracle EPM Cloud
Safe Harbor

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Agenda

1. EPM Cloud Emerging Technology Strategy
2. Financial Close
3. Financial Planning and Analysis
4. Emerging Tech Roadmap/Wrap-up/Q&A
Oracle EPM Cloud: Comprehensive. Proven.

GLOBAL  MOBILE  SOCIAL  COLLABORATION  MARKETPLACE  SELF SERVICE  VISUALIZATION  INTEGRATIONS

LINE OF BUSINESS

Marketing  Operations  Finance  HR  IT  Sales

ORACLE EPM CLOUD

MANAGEMENT & REGULATORY REPORTING


ENTERPRISE DATA MANAGEMENT

COMMON USER EXPERIENCE  DATA, METADATA & APPLICATION MODELS  COMMON INFRASTRUCTURE  INTELLIGENCE & AUTOMATION  STANDARDIZED PUBLIC INTERFACES

EPM CLOUD PLATFORM
Use the abundance of data to drive better outcomes

Move from operations to innovation

See the signals and adapt faster

Run your organizations smarter, more efficiently, securely
Emerging Technology

NEXT-GENERATION ERP/EPM APPLICATIONS

MACHINE LEARNING AUTOMATION

INTELLIGENT APPS

IoT

BLOCKCHAIN
INTELLIGENCE & AUTOMATION

- MACHINE LEARNING
- PATTERN RECOGNITION
- PREDICTIVE ANALYTICS
- NATURAL LANGUAGE PROCESSING
- INTELLIGENT PROCESS AUTOMATION
- AUTOMATED OPERATIONS

OUTPERFORM WITH INTELLIGENCE

- Align Enterprise Data
- Connect all Planning
- Close with Confidence

REINVENT ANALYTICS & REPORTING

- Operations
- HR
- Sales
- Marketing
- Finance
- IT

ORACLE EPM CLOUD: Completely Agile
“Virtual workforce” that performs repetitive, clearly defined tasks

Algorithms that use statistical analysis to assess diverse types of data and provide insight

Technologies that enable users to interact with information in new ways

Technologies Influencing the Future of EPM for superior business outcomes
Embedded Intelligence & Automation

**INTELLIGENT PROCESS AUTOMATION**

Automate tasks related to account reconciliations, transaction processing, consolidation, close process orchestration, and disclosure management

**INTELLIGENT PERFORMANCE MANAGEMENT**

Inform planning decisions with predictive analytics and machine learning
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Intelligent Process Automation

• An Evolution of Robotic Process Automation
• Don't simply replicate manual processes with automation
  • Improve process flows
  • Eliminate steps where possible
  • Re-engineer processes to be more effective
Intelligent Process Automation in Financial Close

- Account reconciliations
- Financial close orchestration
- Automated consolidation
- Reporting
Automate 70-90% of high-volume reconciliations to allow accounting staff to focus on complex cases.

Support needs of Corporate Accounting in all industries:
- Bank Accounts, Intercompany Accounts, Accounts Receivable, Accounts Payable, High volume accruals
- Address industry-specific high volume requirements
  - Banks: ATM / Fed Funds, Retail: Store Deposits / Credit Card, Insurance: Trade Settlement

Flexibility for daily and period-end matching and balancing.
Automated Consolidations

- Run financial consolidations in the background without explicit user action
  - Intelligent
  - Configurable
  - Granular operation
  - Optimal performance
- Major step towards Continuous Close vision

Use Case: Automated Consolidation
Intelligent Process Automation

Manage

Automate

Predict

Use Case: Close Orchestration

Close Calendar Evolution
Intelligent Process Automation - Flow

Oracle EBS, PeopleSoft, JDE, Fusion APPs, SAP R/3

Integration Connector

ERP Cloud

Other Systems

EPM Cloud

EPM Cloud

EPM Cloud
epmbot

Conversational Interface for EPM

- Type of Intents
  - epmbot has memory
  - Simple conversations
  - Scrolling and Paging
  - Data drill down
  - Charts and Images
  - Access to Web UI

- Example intents/conversation
  - Login
  - Set/Get POV
  - List of Journals
  - Action on Journals
  - Review Close Status
  - Review Reconciliations
  - Help
  - and more…
Challenges in Regulatory Reporting

- New XBRL filers need to:
  - Create a taxonomy
  - Create documents and financial exhibits
  - Tag, validate and publish
  - Issues: Effort & Expertise since XBRL tag selection is both an art and a science

- Existing filers tend to reuse and roll forward their previous XBRL filing to the next reporting period.
  - Creates a barrier to entry and cost to switch software as most documents are not “portable” between vendors
Using AI to Perform Tagging

Level 4 Tagging Delivered in 18.10
• Auto Tagging will occur within the table

Pre Requisites
• Level 3 Table Tags must be done
• DEI tags must be mapped

Level 1-3 Auto Tagging in R&D for future delivery
Intelligent Narrative Generation (19.08)

- Utilize the Conditional Formatting framework to generate dynamic text based on predefined conditions.
- Combine text and text functions.
- Automate the “What” – allowing users to focus on the “why”, “how”, etc.
- Retrieve member labels and data values to complete the resulting text.
Intelligent Narrative Generation V2
What’s Next?

• Automatically generate narrative based on defined conditions
  • Top 5 variances in a given visualization
• Generate in natural language
  • Per user language preferences
• Integration with IPM Insights
  • Common narrative across EPM Cloud
  • Proactively generate reporting decks and packages adding the “Why”
Monte Carlo Simulation in Strategic Modeling (19.06)

Risk Adjusted Modeling

**Business Problem:** Long Range Plans have significant risk due to numerous variables and a longer planning horizon. How can the business understand these risks and the range of most likely outcomes with the LRP?

**Value of Simulations:**
- Enables an understanding of the full range of outcomes
- Calculates the probability of outcomes
- Provides immediate visibility into inherent risks and opportunities
Predictive Planning

Faster, more accurate planning through data science (time series regression):

✓ Predictive Planning Use Cases:
  1. Generate a forecast
  2. Seed a forecast
  3. Validate a forecast

✓ Roadmap: Auto Predict (CY Q4)
  • Easier to report on variances
  • Predictions run at data import, and calculated in a ‘Prediction’ scenario
  • Foundational IPM framework for future Machine Learning enhancements

Auto Predict
Oracle EPM Cloud:
Intelligent Performance Management (IPM)

Reveal Hidden Correlations & Realize Faster Time-to-action:
1. Signal Detection
2. Root Cause Analysis
3. Insight Discovery
4. Action Recommendation
5. Collaborative Reporting
6. Intelligent Narrative
IPM: Reimagine what’s possible

EPM Cloud

Predictions
How can I improve the accuracy of my planners?

Simulations
How can I reduce the risk in my forecast?

Correlations
How can other data improve my forecast?

IPM Insights
How can I reduce time spent in data analysis?

What-if Analysis & Scenario Modeling

Business User

Technical User

AutoML Engine
Embedded in EPM Cloud

Oracle ADW + ML
Integrated with EPM Cloud (REST API)

3rd Party ML
Integrated with EPM Cloud (REST API)

Oracle ADW + ML

AutoML Engine

Oracle ADW + ML

3rd Party ML

Oracle ADW + ML

3rd Party ML
DEMO: Predicting Win Probability
Sales Forecasting

EMBEDDED MACHINE LEARNING
in Sales Planning Cloud

Click to Demo
DEMO: Predicting Salary Cost Workforce Planning

3rd PARTY MACHINE LEARNING integrated with EPM Cloud

Click to Demo
## AutoML Algorithms in EPM Cloud

<table>
<thead>
<tr>
<th>Regression</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear</td>
<td>Naïve Bayes classifier</td>
</tr>
<tr>
<td>Logistic regression</td>
<td>Support vector machines (linear, RBF, polynomial)</td>
</tr>
<tr>
<td>Polynomial regression</td>
<td>Decision trees</td>
</tr>
<tr>
<td>Support vector regression</td>
<td>Nearest neighbor</td>
</tr>
<tr>
<td>Stepwise regression</td>
<td>Random forests</td>
</tr>
<tr>
<td>Lasso regression</td>
<td>Boosted trees</td>
</tr>
<tr>
<td>Elastic net regression</td>
<td>Gradient descent</td>
</tr>
</tbody>
</table>
Move to Oracle EPM Cloud Now

REDUCE TOTAL COST OF OWNERSHIP

LEVERAGE BEST PRACTICES

ENABLE A MORE AGILE ORGANIZATION
Thank You

Marc Seewald & Al Marciante

EPM Product Management