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AGENDA

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Introduction

US-Analytics

- Dallas-based Industry Leaders, Pioneers and Trustworthy for 13 years
- Focused on enterprise performance management applications
- Over 50 professionals dedicated to EPM and BI
- Oracle Platinum Partner and Oracle BI Pillar Partner
- Oracle's highest level of partnership
- Advanced degrees and certifications (CPAs, CMAs, MBAs)
- Seasoned Infrastructure practice: 400+ installations/migrations
- Unique blend of deep technical expertise and business acumen with hundreds of implementation cycles, driven towards a results-oriented, customer ROI
- Strong project leadership & proactive account management
- Corporate culture of integrity with 100% customer commitment
- Full Service Solution Provider

Introduction

Brian Marshall

- Practice Manager over Planning, Essbase, and DRM
- 15+ Years IT and EPM/BI Experience
- 12+ Years with US-Analytics
- 100+ Projects with US-Analytics
- Began career as a software and database developer at a small software firm.
- Developed specialization in Microsoft BI offerings.
- Focused on Oracle EPM, primarily Hyperion Essbase and Planning, with some HFM.
- Presented at Kaleidoscope 2010-2014 (and 2015) and various regional events

Cash Forecasting Challenges

- Granularity of Data (Daily and Transactional)
- Number of Data Sources
- Number of Rules to Seed Forecast
- Duplication of Data
- Date Shifting
- Adjustments to Actuals

Granularity of Data

- Cash changes every day
- Planning doesn't handle days out of the box
- Essbase does alright with simple time math, but not once we introduce days
- There are a lot of days...
- AR and AP have a bad habit of combining transactions so additional data sources can be necessary...and now we have to blend data

Number of Data Sources

- Typically we have financial data and some high-level operational drivers
- Cash is impacted on a daily basis by so many things:
 - Accounts Payable (often more than one)
 - Accounts Receivable (often more than one)
 - Cash Accounts from various banks
- Not always at the same level of granularity
- Updated frequency is inconsistent

Number of Rules to Seed Forecast

- Think of cash forecasting like a driver-based model where there are potentially dozens of categories for our drivers
- Payroll has one or more rules
- Various large expenditures have their own rules
- Many of these rules have exceptions and time shifts

Duplication of Data

- If we have Oracle AR and SAP AR, what happens when we have a value that exists in both?
- For instance, SAP AR contains a lower level of granularity that is lost in the translation to Oracle AR
- Now we have to figure out how to blend the data between the two

Date Shifting

- Most transactions only happen on business days
- This means that when we say payroll is always on the 15th, we really mean its always on the last business day that is on or before the 15th
- If we have other monthly expenditure rules, these same shift issues will present themselves again and again

Adjustments to Actuals

- Something gets booked to AR but its not exactly booked the way we want to forecast it
- So now this gets forecast using either the wrong rule or the wrong data
- We need a way to adjust actual data but still maintain visibility and consistency with the data in total so that we don't artificially inflate or deflate cash

Granularity of Data

- Cash changes every day
 - Create a day-level application in Hyperion Planning
- Planning doesn't handle days out of the box
 - ► Add a custom dimension containing our days
- Essbase does alright with simple time math, but not once we introduce days
 - ▶ Use our ETL process to manipulate large scale date math (SQL is great with dates)
- There are a lot of days...
 - ► Great form and business rule design becomes paramount for both performance and usability
- AR and AP have a bad habit of combining transactions so additional data sources can be necessary...and now we have to blend data
 - ► More on this a little later

Number of Data Sources

- Cash is impacted on a daily basis by so many things
 - ▶ Use our ETL process to consolidate all of these items for our forecast
- Not always at the same level of granularity
 - Partially handled with rules and partially with ETL
- Updated frequency is inconsistent
 - ► Closely manage the frequency of updates to both the actuals, the seeded forecast, and the actual periods of the seeded forecast

Number of Rules to Seed Forecast

- Think of cash forecasting like a driver-based model where there are potentially dozens of categories for our drivers
 - ► Create an account categorization management methodology
- Payroll has one or more rules
 - ► Handle the rule in our methodology
- Various large expenditures have their own rules
 - ► Handle these rules in our methodology
- Many of these rules have exceptions and time shifts
 - Extend that methodology to allow for exceptions
 - ▶ Use the ETL process to handle time shifts based on the rules settings

Duplication of Data

- If we have Oracle AR and SAP AR, what happens when we have a value that exists in both?
 - Complex ETL processes match data between the systems
- For instance, SAP AR contains a lower level of granularity that is lost in the translation to Oracle AR
 - ► These ETL processes determine the detail from SAP that belongs to the summary data in Oracle
- Now we have to figure out how to blend the data between the two
 - ► These ETL processes also ensure that no data is doubled at any point
 - Provides matching of nearly 99% of all data at a transaction level

Date Shifting

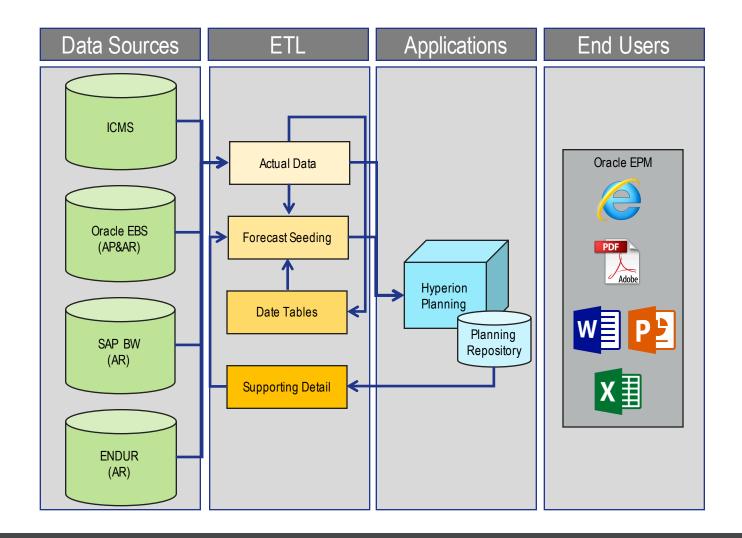
- Most transactions only happen on business days
- This means that when we say payroll is always on the 15th, we really mean its always on the last business day that is on or before the 15th
 - ▶ We create a set of tables for each of the category rules
 - ► Those tables properly swap dates based on business days versus week days:

| Date | 3/12 | 3/13 | 3/14 | 3/15 | 3/16 |
|-----------------|-------|--------|-------|--------|------|
| Day of the Week | Thur | Fri | Sat | Sun | Mon |
| Calendar | 1,000 | 1,200 | 1,400 | 10,000 | 900 |
| Shift | 1,000 | 10,000 | 1,400 | 1,200 | 900 |

Adjustments to Actuals

- We used supporting detail to provide the end users with the ability to see why things moved and how.
- We provided FR reports to show the supporting detail of all of the adjustments done.

High-Level Architecture



Q&A

