DATA TRANSFORMERS

Solving Complex Consolidations with Essbase and HFM in a Decentralized Environment

Jay Short – Global Hyperion Reporting Lead

Jessica Benbow – Director of Consolidations, Reporting and Financial Close

About MindStream

·MindStream Analytics is a leading consulting and managed services provider with a proven track record for helping leading global companies address their enterprise challenges, focused on delivering sustainable profitability and competitive advantage.

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·Data is a new economic asset that is rapidly expanding and changing. You're challenged to figure out how to use it to your organization's advantage. We work collaboratively with our clients and bringing innovative strategies that enable organizations to gain competitive edge and win with data.

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·MindStream has been recognized by *CIOReview* in November 2015 as a 100 "Most Promising Oracle Solutions Provider," ProformaTech for our innovation, and others for our innovative thinking and business analytic applications expertise. In 2015, MindStream was named by MSPmentor as a "Top 501 Managed Services Provider." We were recently named "Top 10 Fastest Growing Data Analytics Company 2016" by *The Silicon Review.*

About Cigna

·Cigna is a global health service company dedicated to helping people improve their health, well-being and sense of security. We trace our roots back more than 200 years, but we became the company you know today in 1982 with the merger of INA Corporation and Connecticut General Corporation. Ever since, we've continued to innovate and expand around the world. We have sales capability in 30 countries and jurisdictions, and more than 90 million customer relationships throughout the world. Our more than 39,000 employees serve customers just about everywhere.

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Agenda

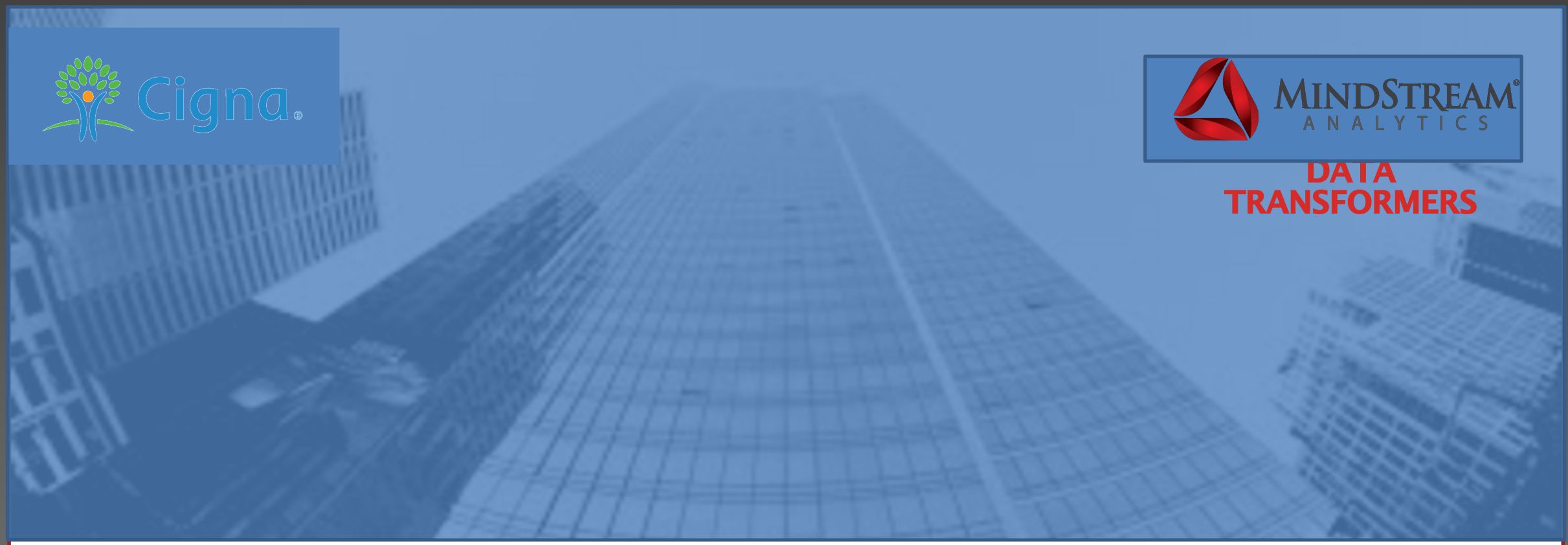
- Introduction
- Audience Participation
- Cigna prior to Global Hyperion Implementation
- Global Hyperion Implementation Objectives
- The Solution
- Lessons Learned
- Questions

About the Presenters

- Jay Short
  - Global Hyperion Reporting Lead
  - 8 Years with Cigna
  - 5 Years of experience with Hyperion Tools (Planning, Essbase, HPCM, HFM, and FDM(EE))
  - Contact Information
    - Jason.Short@cigna.com
- Jessica Benbow
  - Director of Consolidations, Reporting and Financial Close
  - 8 Years of EPM Consulting Experience
    - Including over 12 HFM/ FDM(EE) Implementations
  - BS in Accounting
  - Contact Information
    - JBenbow@mindstreamanalytics.com

Audience Participation

- How many people use HFM?
- How many people use HFM & Essbase?
- How many people are supporting decentralized consolidations?
- Has anyone replicated consolidation functionality within Essbase?



Cigna Prior to Global Hyperion Implementation

Prior to Hyperion Implementation

- All International financial data collected within consolidated Oracle 11i set of books
- International Oracle 11i data sent to Domestic Oracle R12 for further consolidation and fed to Domestic HFM
- Financial and Management reports from Oracle 11i took an average of 2-3 hours to generate, as long as 7 hours in some locations
- Current level of available data did not support Cash Flow reporting requirements or full Management reporting
- Limited to no visibility into the International Close Process, leading to delays in the close cycle

Prior to Hyperion Implementation - App

- One Oracle 11i Application
  - ~30 Local Books (i.e. Local/Functional Currency)
    - 5 Local Books with unique Chart of Accounts
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  - 1 Global Book (i.e. USD Currency)
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  - 10 “Custom” Data Segments within Oracle
    - Excludes standard data segments (i.e. Entity, Account, etc.)
    - 4 “Custom” Data Segments required for External Reporting
    - Additional Custom Dimensions required for new requirements (i.e. Rollforward)
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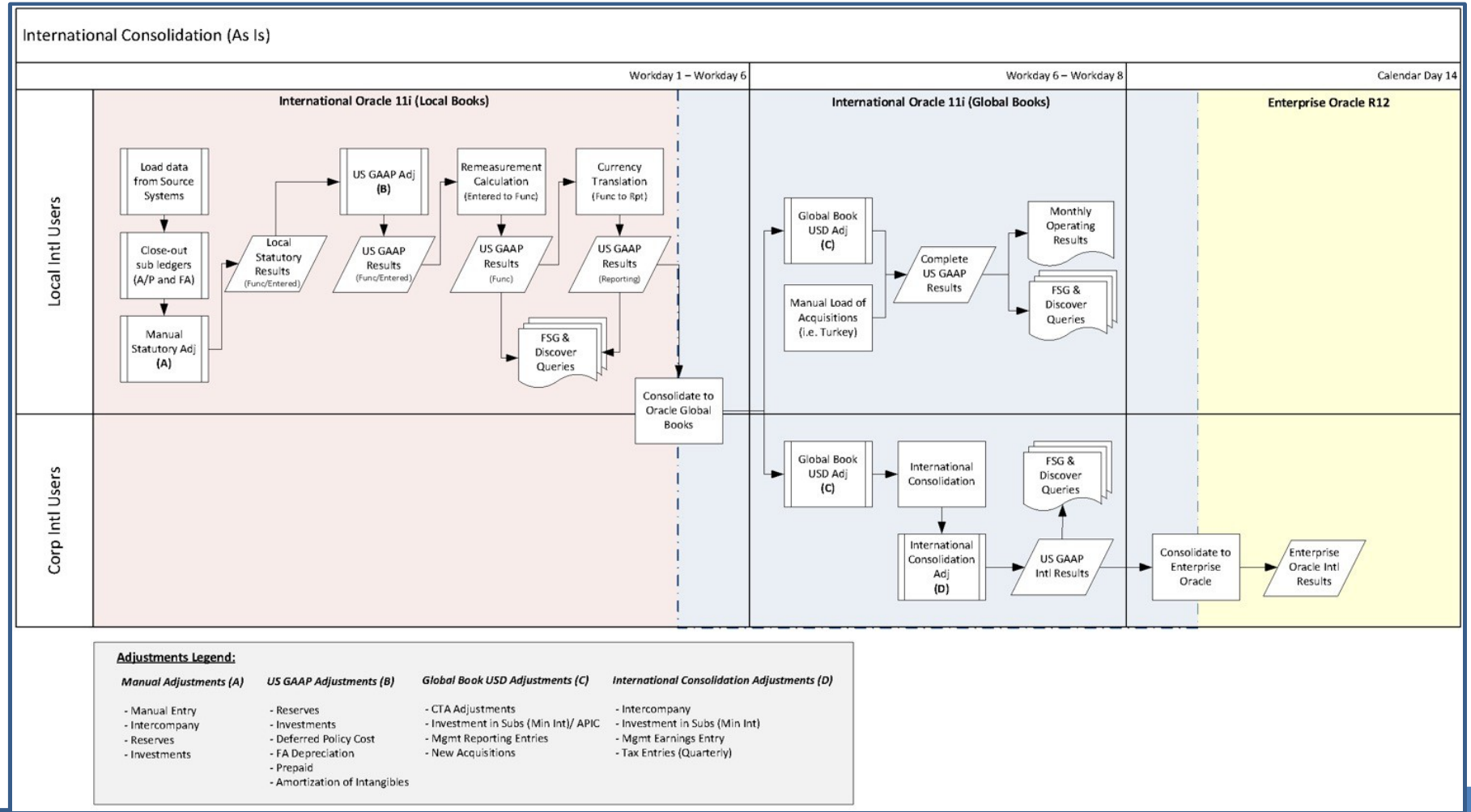
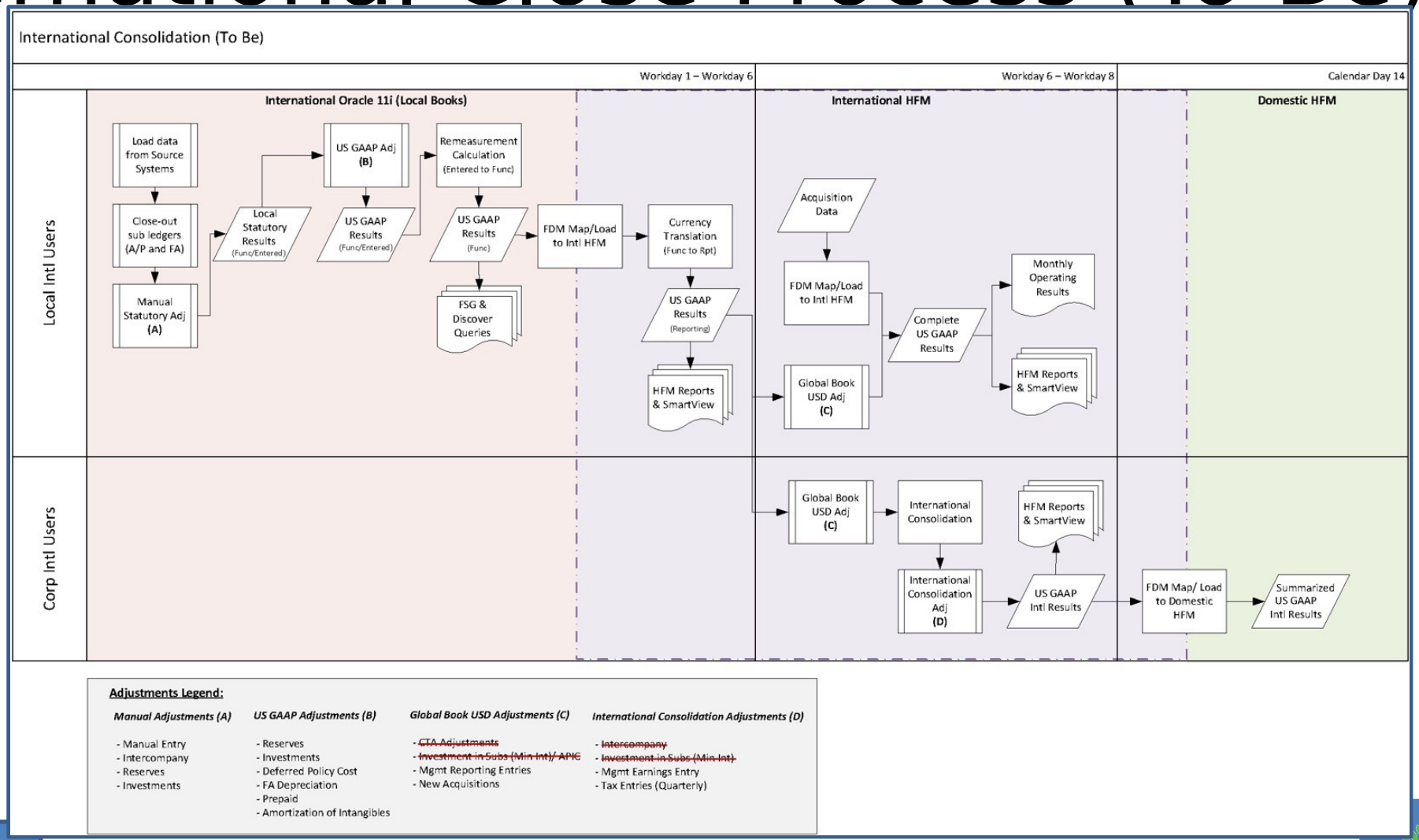
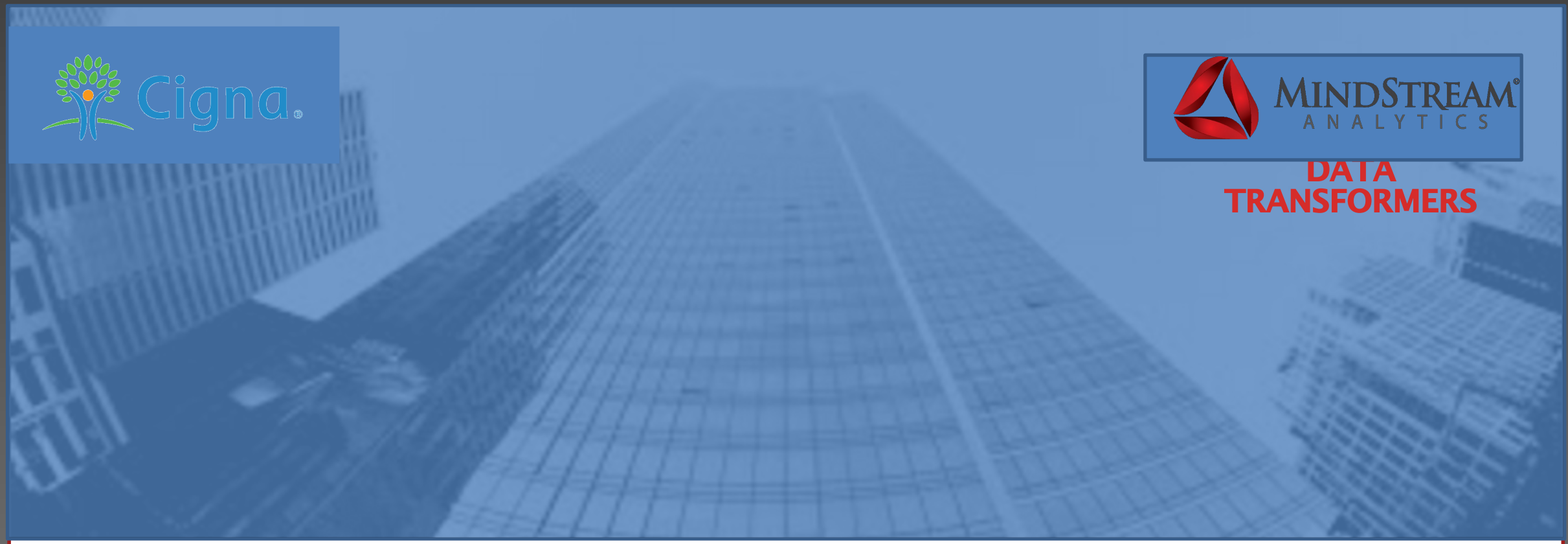
International Close Process (As Is)



International Close Process (To Be)





Global Hyperion Implementation Objectives

Implementation Objectives

- Accelerate the International Close Cycle
- Provide detailed reporting capabilities which generate reports timely
- Automate Minority Interest/Joint Venture entries
- Support Cash Flow requirements by generating FX Impact by Account
- Include Footnote and Disclosure needs, similar to existing Domestic HFM
- Support inclusion of Plan/Projection data
- Automate Constant Currency analysis
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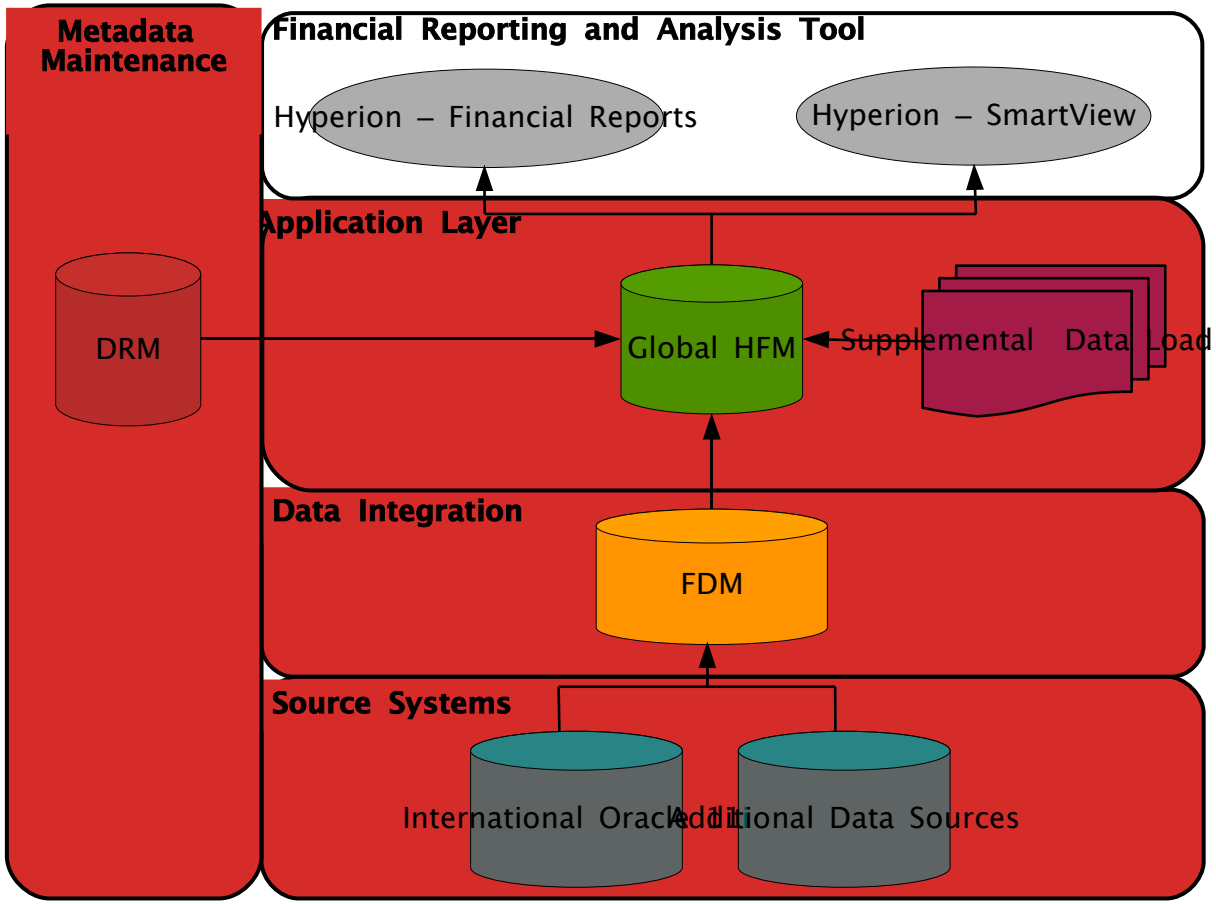
Initial Solution Design



Design Discussions

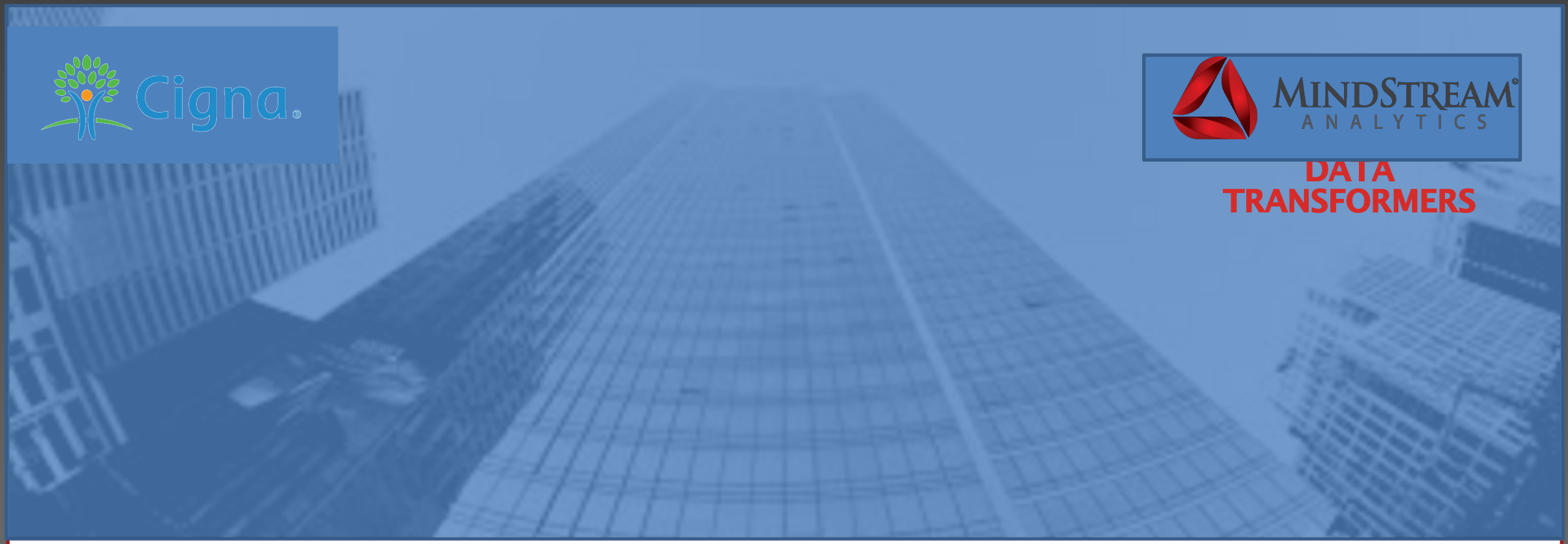
- Ability to perform currency translation and consolidate all 10 “Custom” Data Segments from Oracle
  - Chart contains

2,200 Accounts	359 Product (Cust 5)
500 Entities	9 Reinsurance (Cust 6)
480 Cost Center (Cust 1)	1,295 Service Type (Cust 7)
67 Distribution Channel (Cust 2)	650 Sponsor (Cust 8)
1,295 Network (Cust 3)	49 STAT/GAAP (Cust 9)
372 Operating Unit (Cust 4)	2,621 Sub Accounts (Cust 10)

  - Opportunity for approx. Six Nonillion combinations, for one Scenario. Multiply that by 9 Main Scenarios
- Calculate 8 different Constant Currency analysis types
- Ability to “data dump” base level member of all dimensions in Local or USD
- Ensure data synchronization between applications
- All source data files provided in YTD

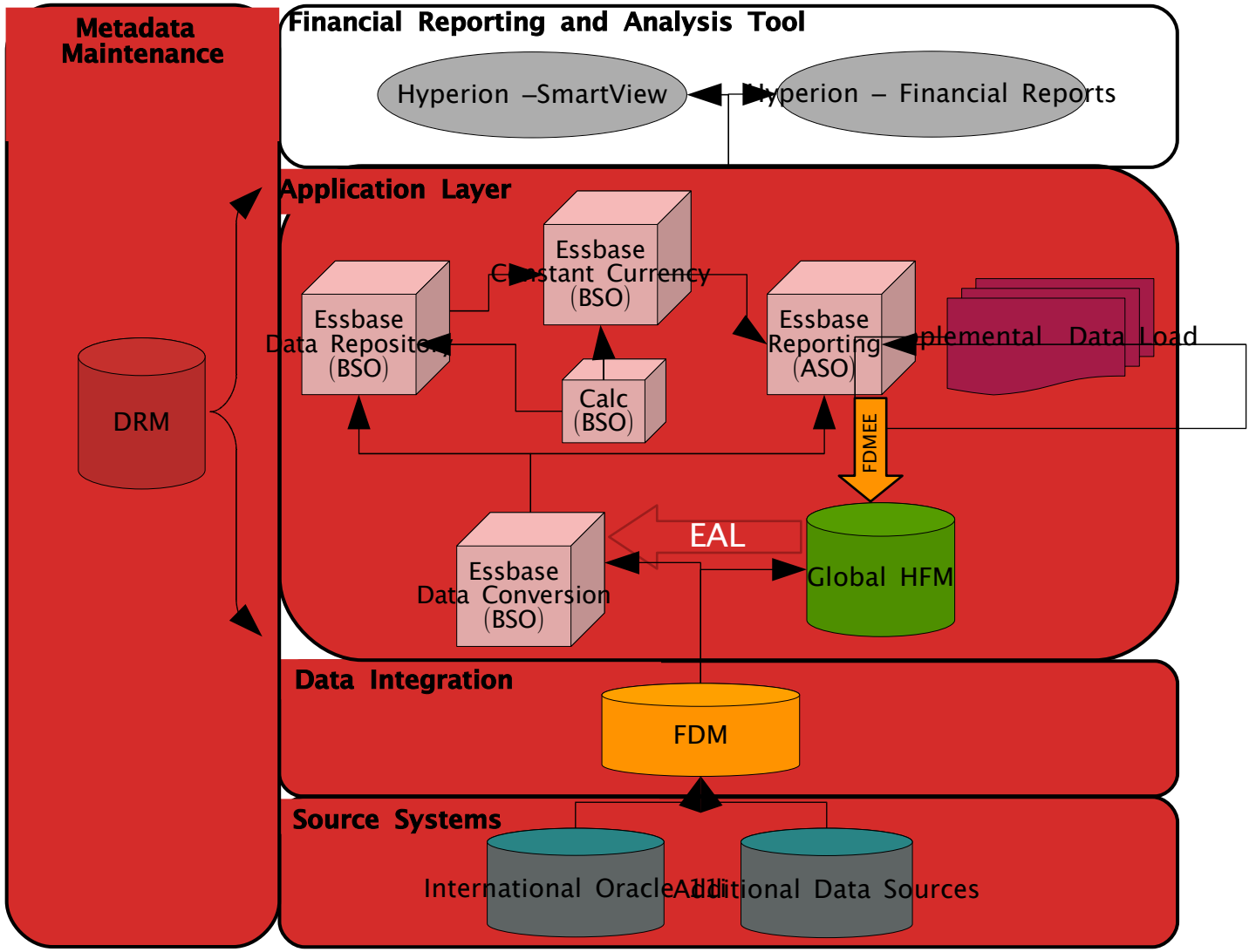
Unique Solution Points

- Mimicking standard HFM currency translation for a large volume of data, with processing Start to Finish not taking more than 30 mins
    - Separate Essbase cube for processing
    - Leverage UDA field within Essbase
- Calculating 8 Constant Currency analysis types with different data components
    - Speed up processing by utilizing a separate Essbase cube
    - Trigger calculations manually to ensure no disruption in the data movement process
- Utilize EAL to ensure data synchronization and supplement data available within Essbase
    - Replicate the standard intercompany elimination logic



The Solution

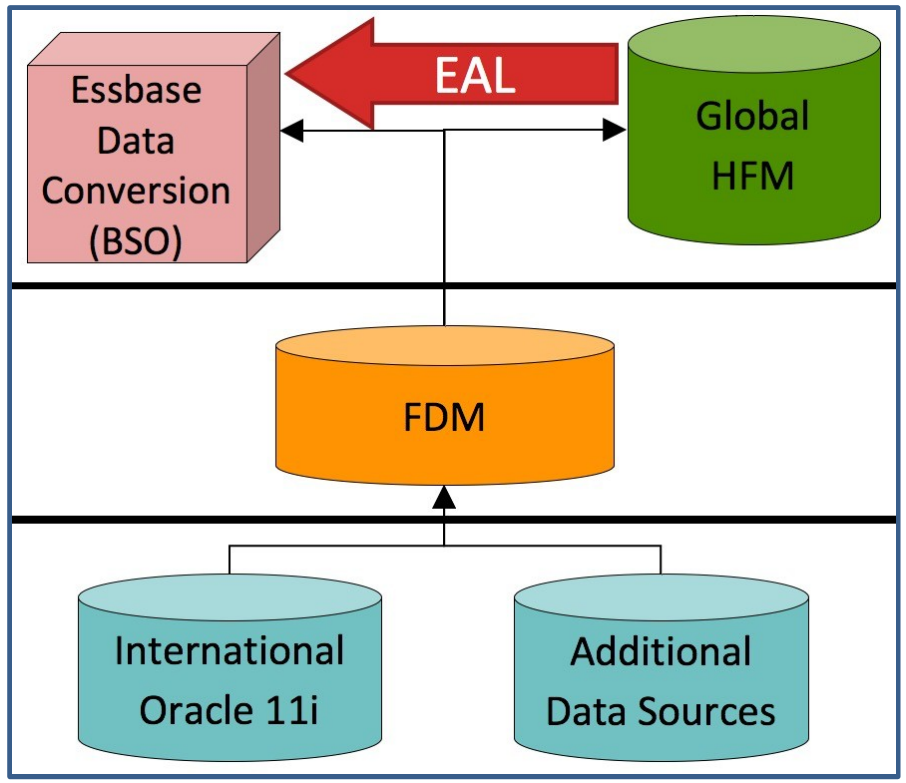
Final Solution Design



Solution Explanations

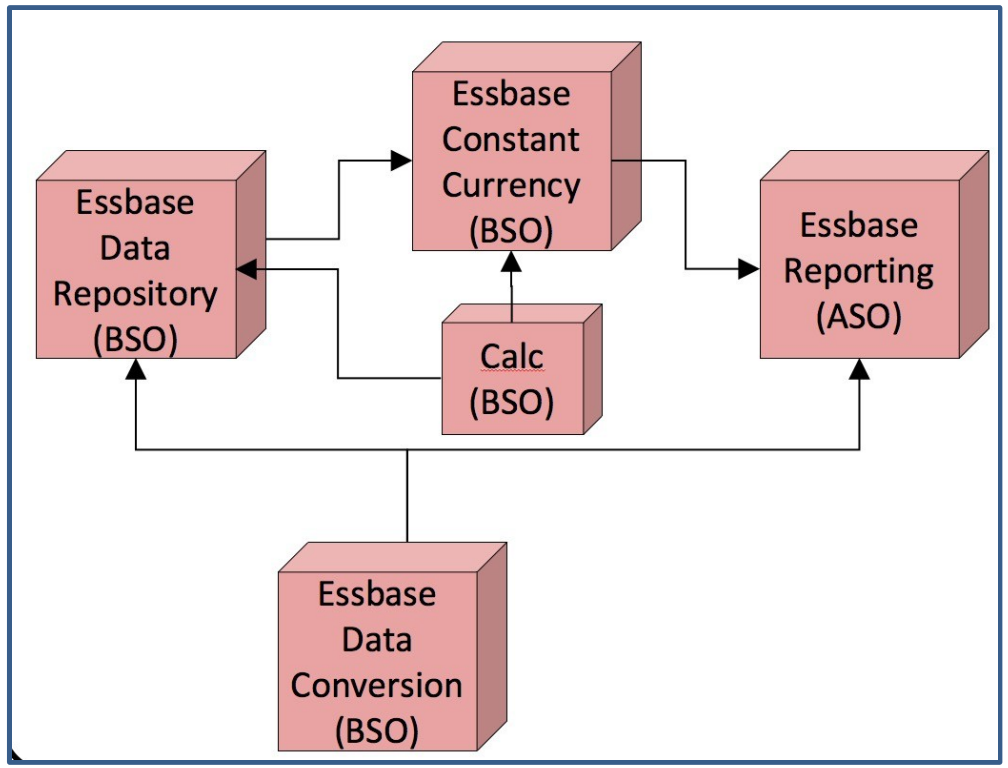
- **Data Conversion** is used to convert the YTD source file into Monthly values. This is required to support the standard currency translation of the Income Statement and Balance Sheet. Perform Currency Translation from Functional to USD currency. HFM data loaded into this cube through EAL process.
    - Limitation: Contains only two periods of data at all times.
- **Data Repository** is used to store the Monthly Functional and USD balances for all dimensions to be utilized for specialized reporting needs. This cube is used by a small subset of users
- **Constant Currency** is utilized to calculate and report out the 8 unique Constant Currency scenarios required for Management Reporting.
- **Calc** is utilized to:
    - Trigger movement of Actual data to Constant Currency cube
    - Trigger the FX Translation Plan/Projection, Constant Current Calculation by Scenario and partition data to Reporting cube
    - Trigger production of specialized reporting out of **Data Repository** cube
- **Reporting** is the main reporting cube utilized by the majority of users. Supplemental data is submitted into this application to support management reporting and footnote disclosure.

Detailed Process



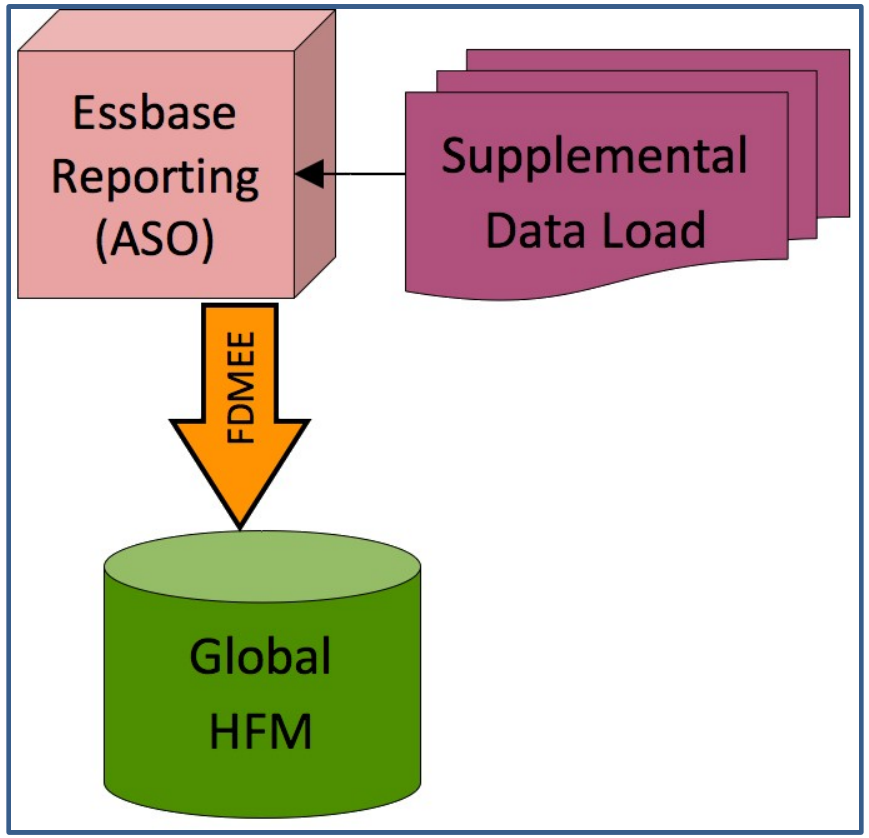
- YTD files from Oracle and additional data sources loaded into **Data Conversion** and **HFM**, through FDMEE.
- EAL utilized to move Eliminations, Minority Interest, and other calculated values to Data Conversion
- YTD data transformed to Monthly data, Currency Translation occurs

Detailed Process (cont.)



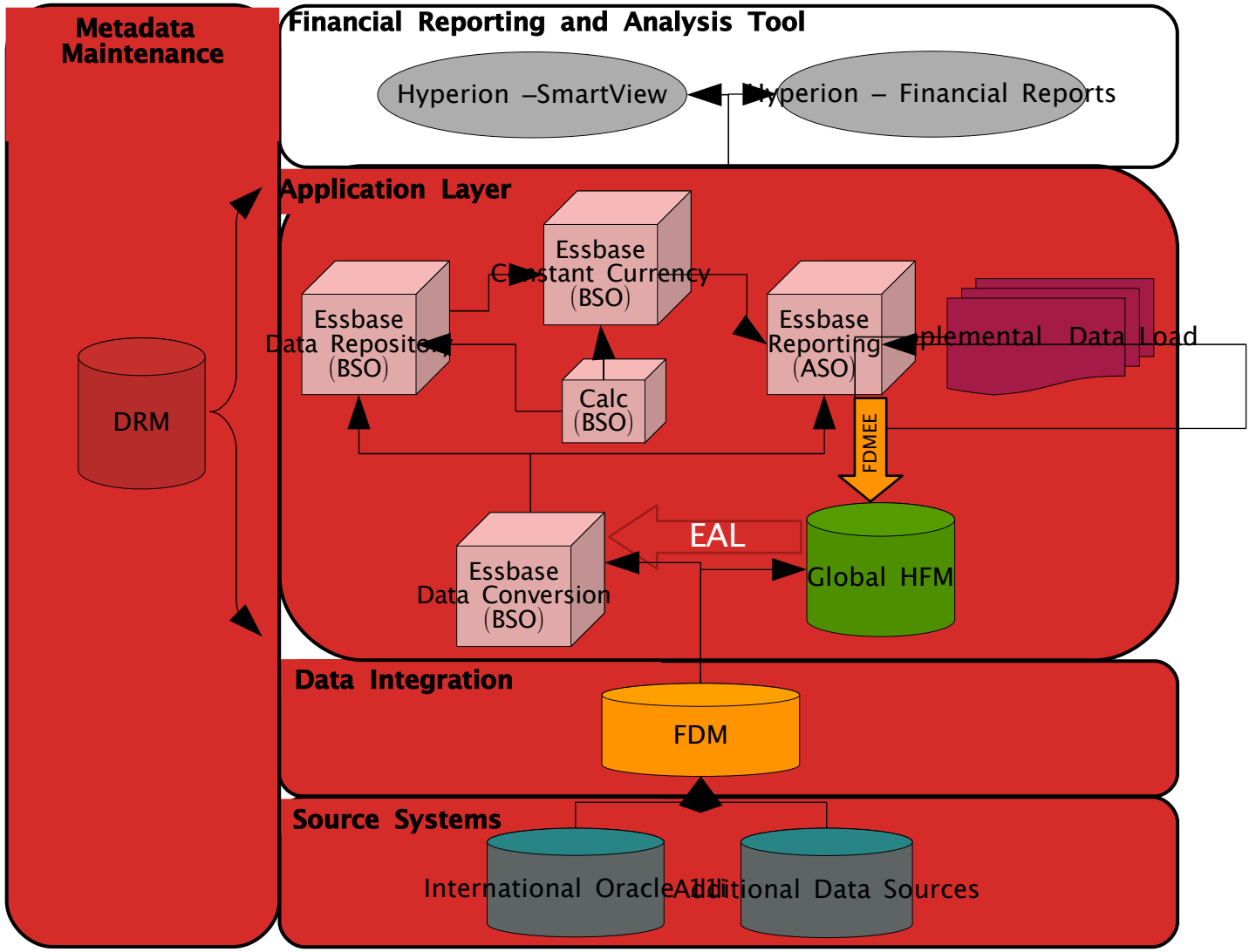
- **Data Conversion** partition data to **Reporting** and **Data Repository**, from FDMEE trigger
- **Calc** utilized to:
  - Trigger movement of data from **Data Repository** to **Constant Currency**
  - Trigger the FX Translation Plan/Projection, Constant Current calculation by Scenario and partition data to **Reporting** cube
  - Trigger production of specialized reporting out of **Data Repository** cube
- Access to **Data Repository** and **Data Conversion** cubes is restricted to Admins

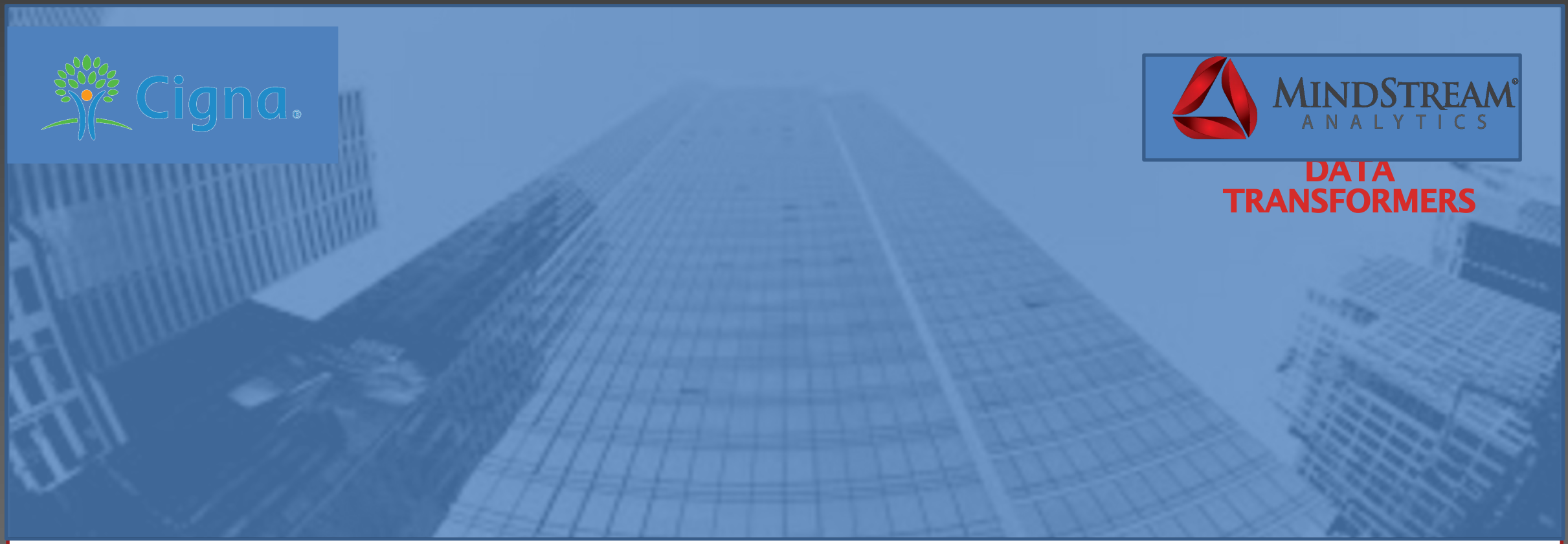
Detailed Process (cont.)



- Supplemental Data is input into ASO through SmartView
- Plan and Projection data which is available within the Reporting cube is moved into HFM, through FDMEE

Final Solution Design





Lessons Learned

Managing a Decentralized Team

- Background: International Close Process was not well understood or documented. It was known that a standard set of operating procedures were not followed by all locations.
- Result: Initial design was based on a smaller group of local users, which caused the need to continually review/alter Design assumptions well into Build
- Impact: Slowed down the overall delivery of the project and impacted the general adoption of the new applications.
- Recommendation:
    - Communicate early and often
    - Work to understand different cultures and styles to craft messages appropriately
    - Identify the “key” person in each major location to work with
    - Offer training/live meetings at a variety of times

Project Buy-in/ Accountability

- Issue: Based on the decentralized environment it was challenging to get full project buy-in and accountability from all key stakeholders.
- Result: Lack of accountability resulted in missed deadlines and challenges getting key decisions made.
- Impact: Slowed down the overall delivery of the project and impacted the general adoption of the new applications.
- Recommendation:
    - Ensure that Key Stakeholders are identified during the Planning Phase of the project. Note: Key Stakeholders are not necessarily based on title but also overall impact to the process
    - Hold all stakeholders accountable for the overall delivery and adoption of the application. Examples: key deliverables, internal communications, training, etc.
    - Confirm that all stakeholders understand the basics of SDLC

Replicating HFM functionality in Essbase

- Issue: Project required the standard HFM consolidation log to be re-built within Essbase, however, Essbase inherently handles data differently than HFM.
- Result: Careful consideration is required during the Design phase of the application as well as build to ensure HFM/Essbase stay in sync.
- Impact: Without considering the limitations of HFM and Essbase fully through Design there may be the need to perform rework
- Recommendation:
    - Work with both an HFM and Essbase expert when designing of the overall process.
    - Particular areas of interest: ASO Member Formula limitations, Partition Errors, Minimizing metadata differences between HFM and Essbase

EAL Movements

- Issue: Data between HFM and Essbase must stay in sync.
- Result: EAL can be leveraged to support the data movement, however, limitations of EAL must be considered.
- Impact: Requires additional Essbase cubes to support EAL
- Recommendation:
    - Within HFM isolate the members that contain data to be moved through EAL.
    - Understand the impacts of YTD v MTD Journal Entries
    - Review the full data movement to ensure that FDMEE, EAL and other Data Partitions can work together

Data Reconciliation - Background

- Included 27 Periods (month/year) of Historic Data
    - Beginning Dec 2013 thru Go Live Feb 2016
- Functional and USD had to be reconciled in both HFM and Essbase
- Initial data reconciliation focused on Account/ Entity level reconciliations
- Many-to-One Mapping relationships within FDMEE
- New calculations within HFM replacing manual data Journal entries
- Difficulty separating manual adjustments in Oracle from translated Local Book balances

Data Reconciliation - Challenges

- Issue: Translated balances in Dec 2013 for the Income Statement required a historical blended average rate
- Result: Used USD Override functionality to override standard USD translation to alleviate blended rate concern
- Impact: During the Override process, manual Oracle adjustments were buried in the translation process. These manual adjustments caused data reconciliation issues when data was rolled forward.
- Recommendation:
    - While Override functionality is standard, ensure data components are fully understood before Data Reconciliation begins
    - Ensure that a comprehensive reconciliation is performed

Data Reconciliation - Challenges

- Issue: Minority Interest calculations enabled beginning in 2014 being performed Monthly (new process), in contrast to Quarterly within Oracle
- Result: Manual journal adjustments were made monthly to “clear” the impact of Minority Interest calculations within HFM
- Impact: Reversing the Minority Interest calculations limited the users ability to fully test functionality and understand impacts period over period
- Recommendation:
    - Ensure business users understand the impacts of enabling a rule at a certain point in history
    - Once enabled new business process should be followed (i.e. do not reverse calculations)
    - Ensure business users fully test and comprehend new requested

Data Reconciliation - Challenges

- Issue: Inability to isolate manual adjustments within Oracle from standard translation between Local and Global book.
- Result: Journal Entries were utilized to “Plug” the variance between HFM USD values and Oracle USD values.
- Impact: Plug values had to be fully investigated and understood to ensure consolidations within HFM performed correctly. Plugs also required modification after Period was reconciled based on findings form a subsequent period.
- Recommendation:
    - Although “Plugs” can ensure timeline are met, they can produce more problems then they solve and should be used sparingly
    - In the first few periods (typically Year End, Beginning of New Year, and First Quarter) users should create journals to build to the right balance to ensure all data movements are understood.

MindStream Analytics and Cigna brings you…

Solving Complex Consolidations with Essbase and HFM in a Decentralized Environment

Thank you!
Questions?

Jessica Benbow Director Consolidations, Reporting, Financial Close		**Jay Short** Global Hyperion Reporting Lead
Office: 800.497.0151 ext. 732 jbenbow@mindstreamanalytics.com		Office: 415.340.3323 lspencer@mindstreamanalytics.com