

THE TRANSFORMATION TO DATA-DRIVEN BUSINESS STARTS HERE

# ENTERPRISE DATA WORLD

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## Utilizing a Hub-n-Spoke Data Architecture Across the Enterprise

Presented by  
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OneAmerica

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#EDW13

# Who We Are

- OneAmerica Financial Partners, Inc
  - Foundation traced back 135 years in Indianapolis
  - Companies of OneAmerica
    - American United Life Insurance Company®
    - The State Life Insurance Company
    - OneAmerica Securities, Inc.
    - McCready and Keene, Inc.
    - Pioneer Mutual Life Insurance Company
    - AUL Reinsurance Management Services, LLC

- Products

- Life Insurance
- Retirement
- Employee Benefits

Financials	Year End 2012*	Year End 2011*
Assets:	28.6B	25.8B
Revenue:	1.4B	1.3B
*GAAP Totals		
Ratings		
A.M. Best	A+ (Superior) - Stable outlook	
S & P	AA - (Very strong) – Stable outlook	

# Who I Am



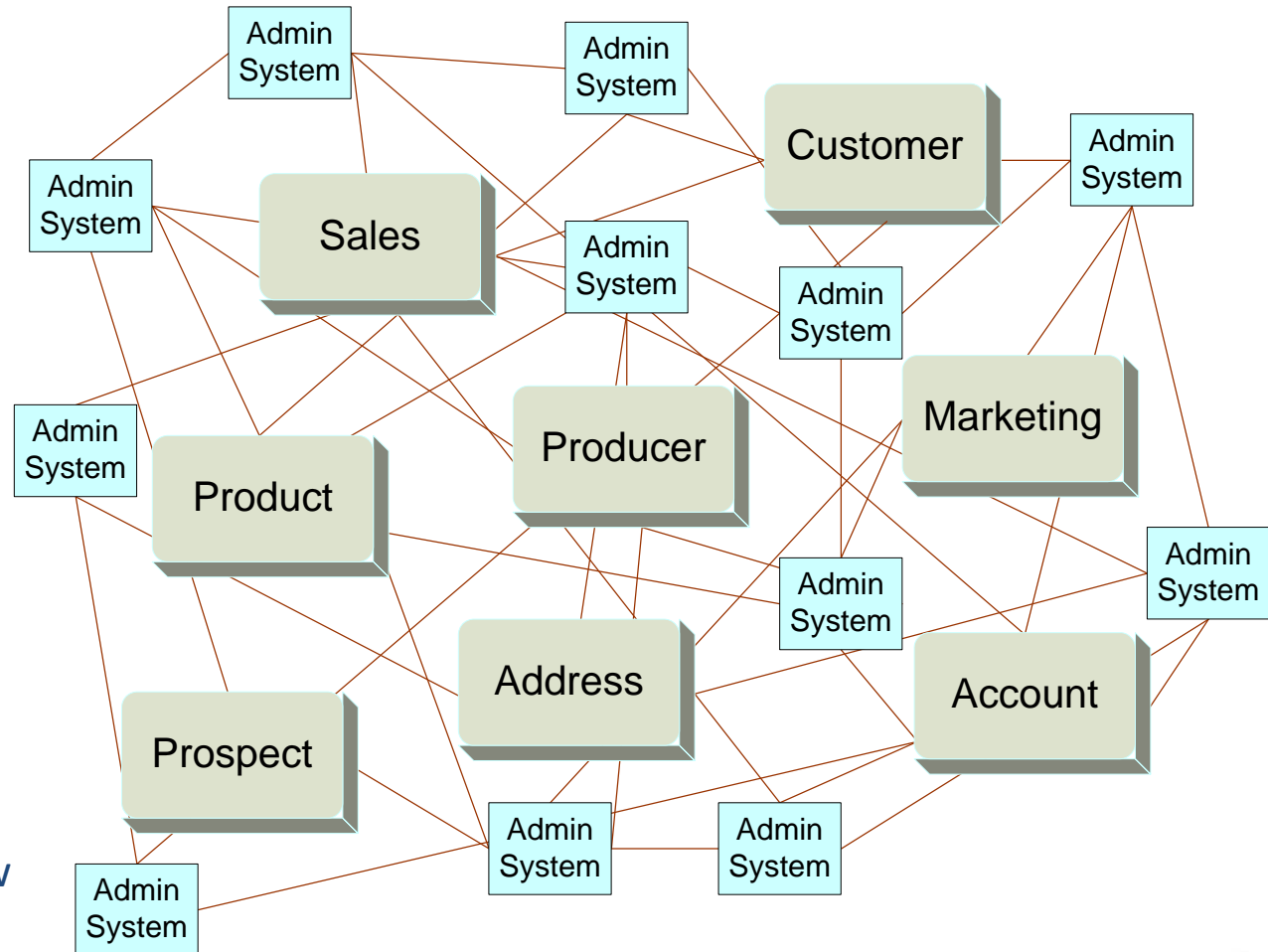
- Gene Boomer, CDMP (2010)
  - Employed by OneAmerica since 2005
    - Enterprise Data Architect
    - Manager – Enterprise Data Management (EDM)
  - Responsibilities
    - Enterprise Data Strategy
    - Database (SQL Server, Oracle, DB2/zOS, DB2/UDB)
    - Integration/ETL (Informatica)
    - Services/ESB (Mule)
    - Business Intelligence (SSRS, SSAS, PowerPivot)
    - Enterprise Data Sharing (Hub-n-spoke)
  - My Team
    - Application DBA (2)
    - Data Architect (1 direct, 3 dotted-line)
    - BI Architect (2)
    - Integration Architect (1)
    - ETL Developer (1)

# Agenda

- Discussion topics include:
  - The Early Years
    - Initial MDM project, focus and approach
  - The Realization
    - sharing data across the Enterprise via hub-n-spoke
  - The Artifacts
    - design approach and reference architecture
  - The Success & Struggle
    - effect on the Enterprise, culture and organization
  - The Look Ahead
    - keep moving forward, still much to do

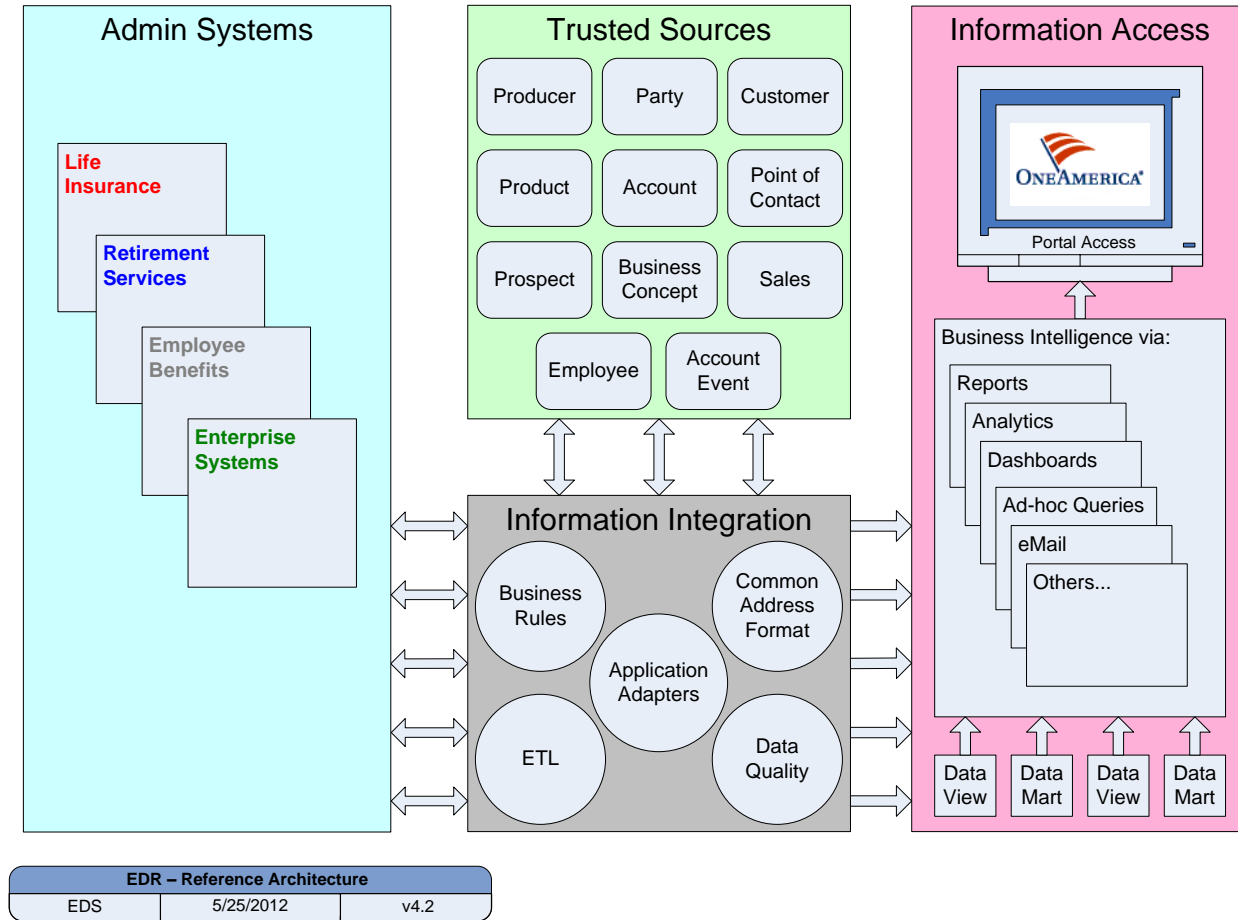
# The Early Years

- No defined strategy or approach
- Sharing data meant building point-to-point (P2P) interfaces
- Main issues with P2P
  - Minimal to no reuse opportunity
  - Data redundancies
  - Data integrity
  - Business rule integration
  - Does not scale
  - Hindrance to growth
- No real data “geeks”
- Information maturity low
- Timeline before 2005



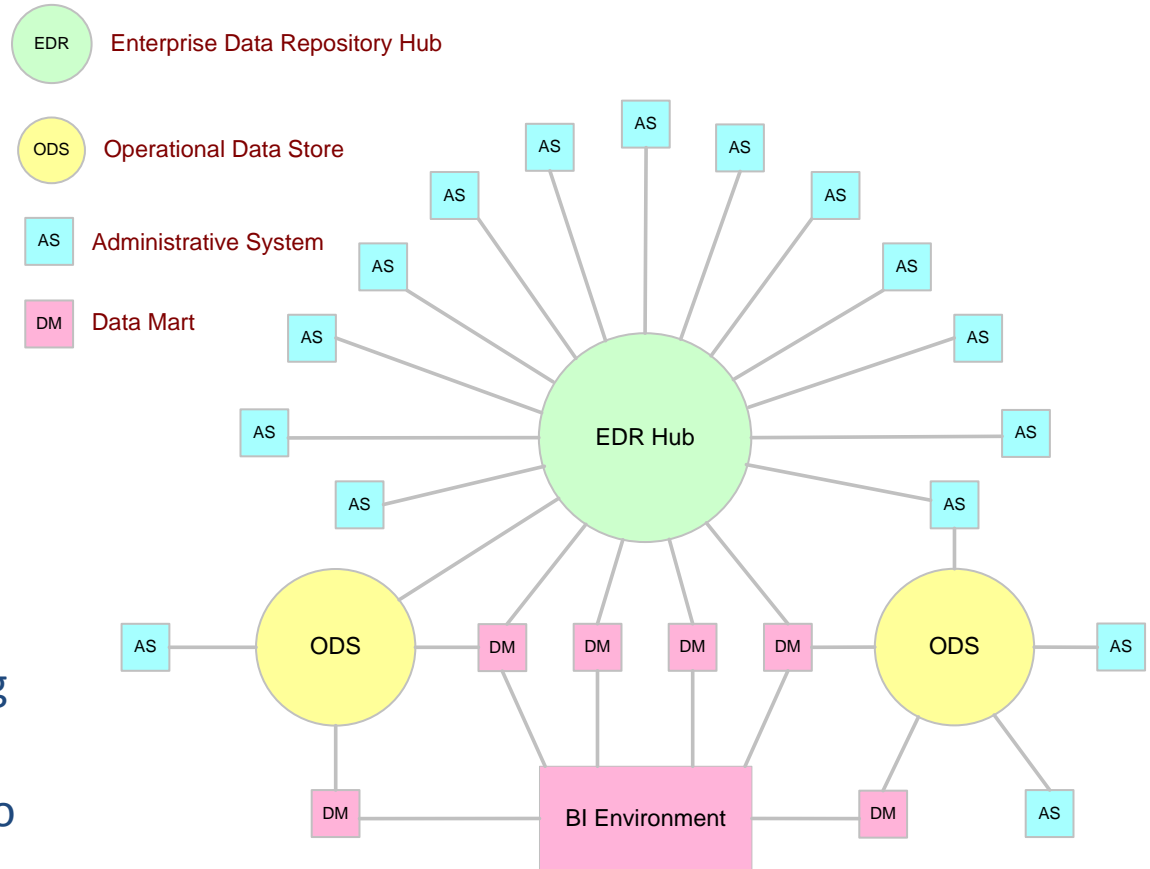
# Initial MDM Approach

- Initial focus was an MDM like approach
- Initial project sponsored by CMO
- EA team led design and construction
- Central repository of Trusted Sources – EDR (Enterprise Data Repository)
- Guiding tenets
  - No “boil the ocean”
  - No data cleansing
  - No “system” codes
- Initial Data Glossary
- Timeline 2005 – 07



# The Realization

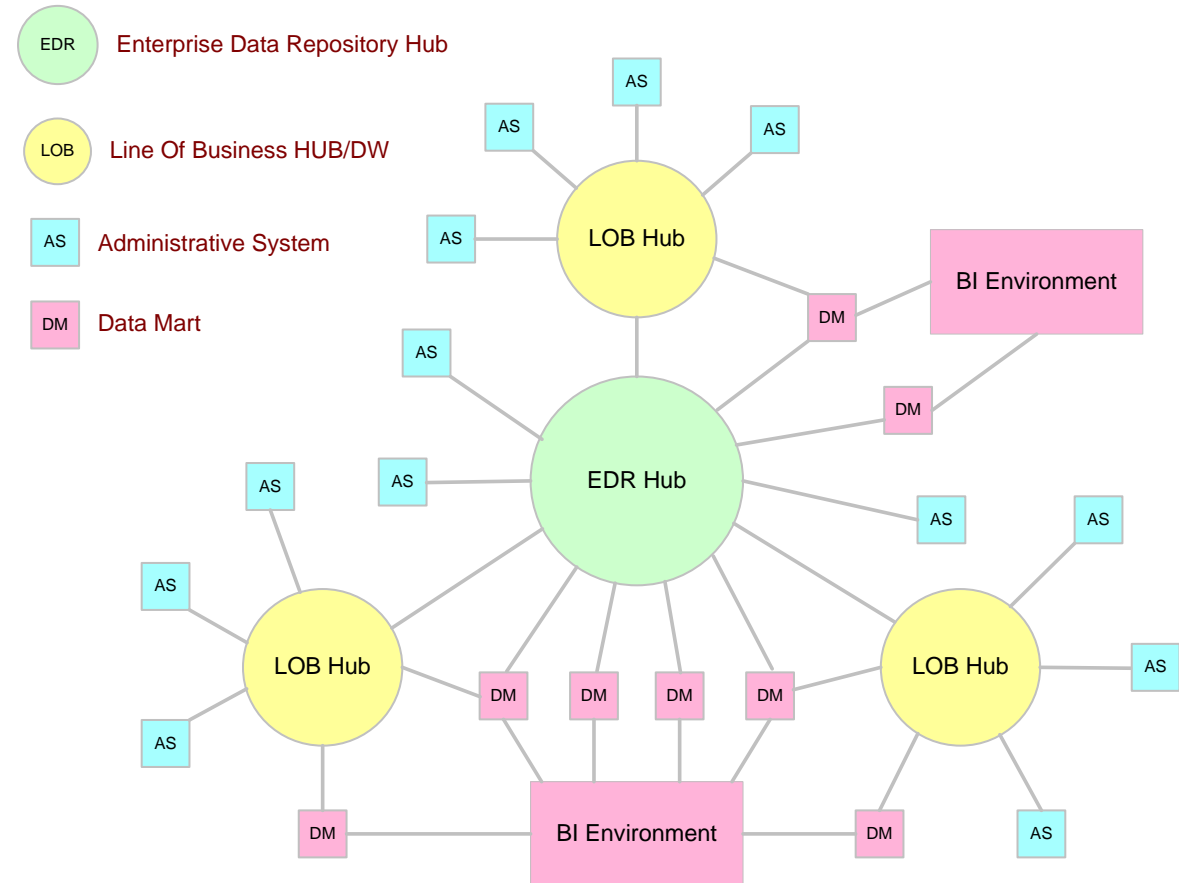
- Continued adding content on project by project basis
- Continued to build out contributors and subscribers
- Stood up a couple data marts
- Discovery period
- Semantic issues encountered [AS term → EDR term → AS term] within same business line
- Overriding issue sharing data within the business lines along with across the enterprise
- Direction shifted from MDM to Data Sharing approach
- Timeline 2007 – 09



EDR - Hub Design Pattern		
EDS	1/22/2010	V1.5

# Hub-n-spoke

- Data sharing approach via hub-n-spoke design established
- Reuse of design and integration patterns from EDR to build from inside out
- Provided guidance to IT and business to build out LOB hubs
- Add each LOB hub one at a time
- External assessments conducted
- Data Strategy validation
- Timeline 2007 – 09

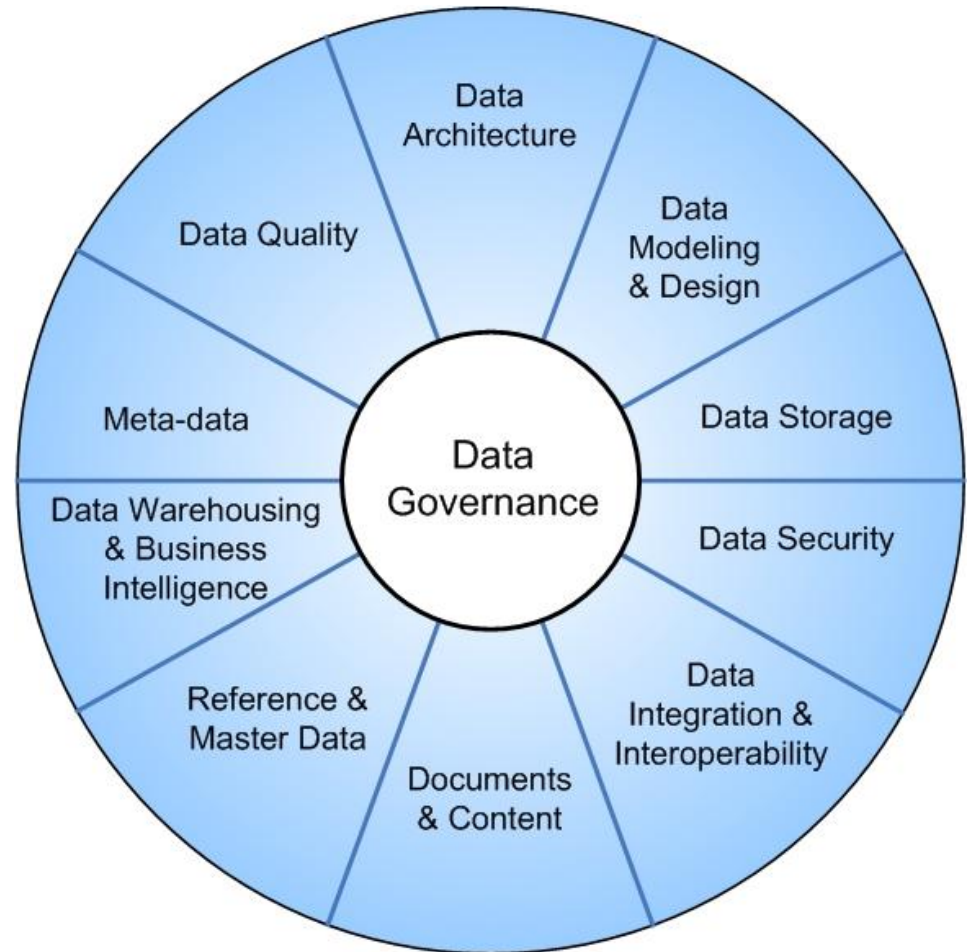


Hub-n-spoke – Common Template		
EDS	5/25/2012	v2.1



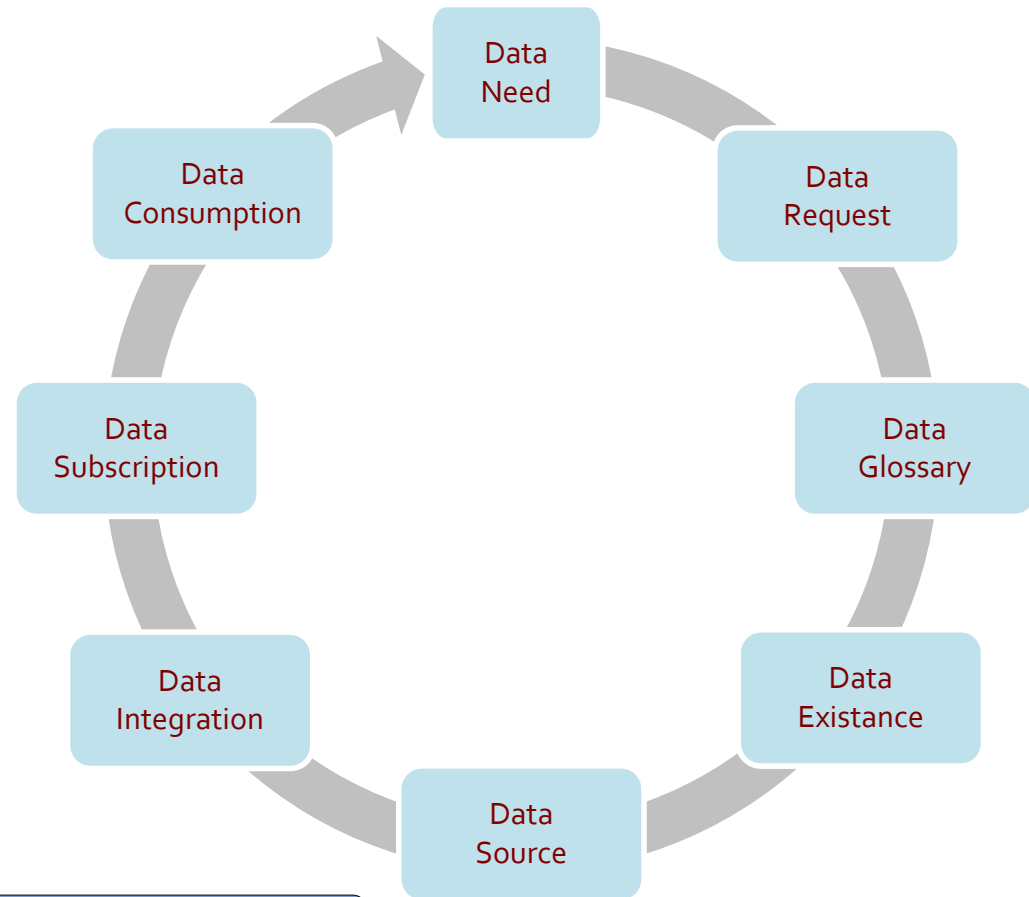
# The Artifacts

- Adopted the DM-BOK framework (we will adopt DM-BOK2)
- Data at rest – established common data model patterns for hub subject areas
- Data in movement – established common and reusable integration patterns to move content into and out of hub-n-spoke
- Enterprise Data strategy (EDS) presented to IT and Business staff
- Formation of Enterprise Data Management (EDM) Team
- Identified ADA's (Area Data Architects) in the IT business lines
- Timeline 2009 – 11



# Data Process Flow

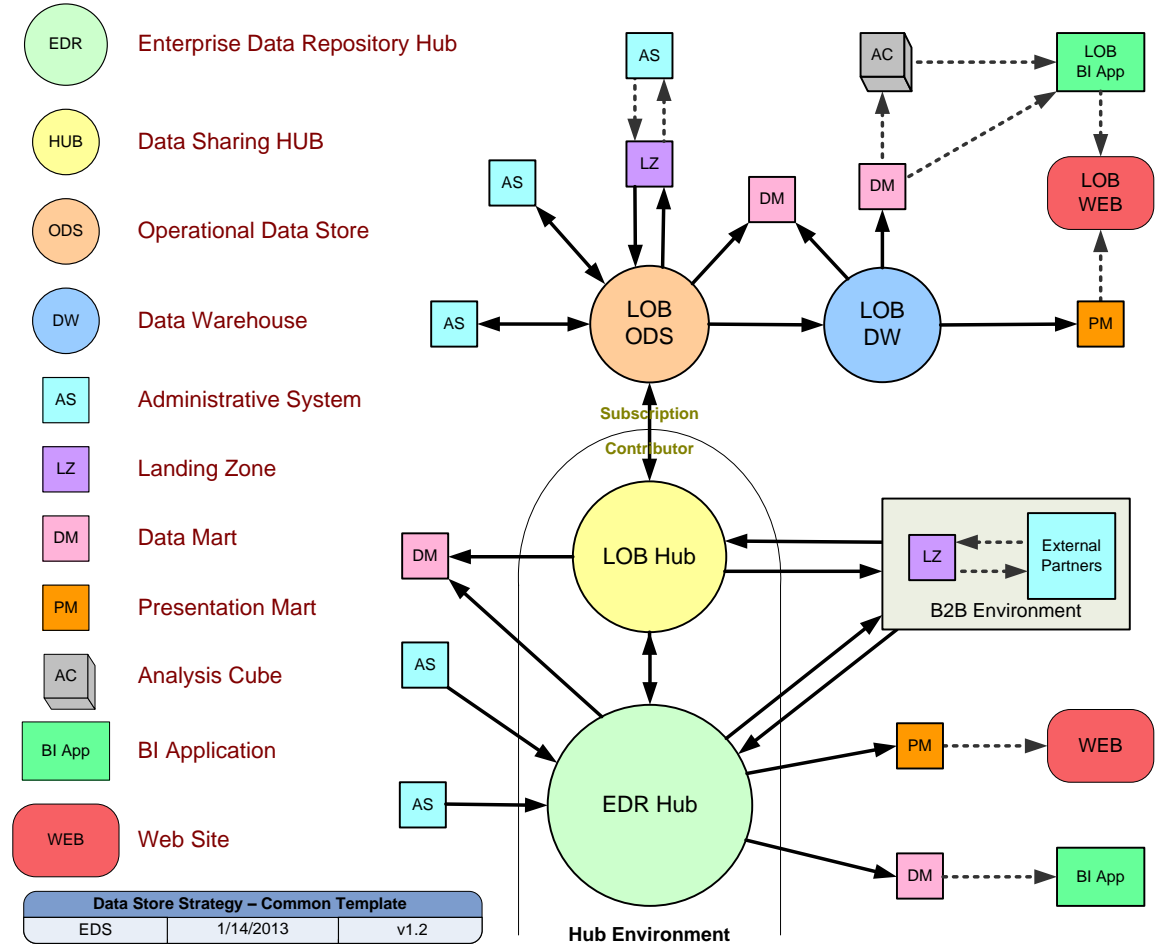
- Attempt at data governance approach although formal data governance structure lacking
- Business involvement with the process although official data stewardship is lacking
- Help address semantic issues across enterprise and within business lines
- Potentially treat flow like an agile sprint.
- Goal to share content quickly
- Determined that same flow can be used for report process
- Timeline 2009 – 11



Governance – Data Process Flow		
EDS	10/28/2010	v2.1

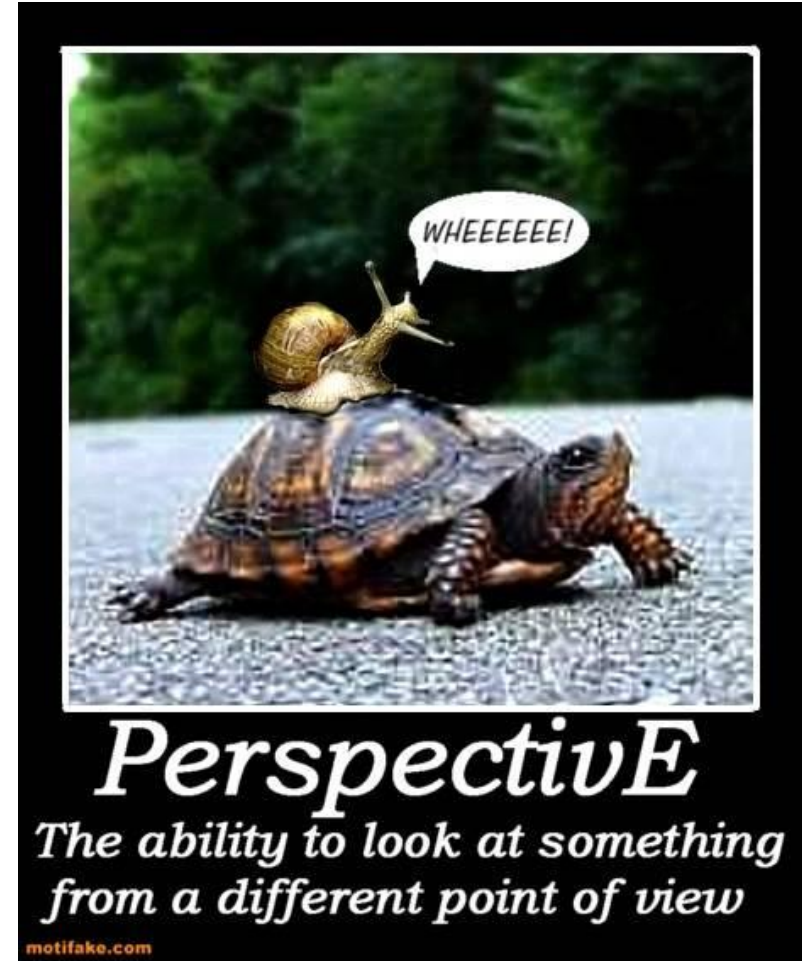
# Reference Architecture

- Data store reference architecture established
- Common template adopted by the LOB areas
- Hub components utilized:
  - Data Glossary
  - Subject areas
  - Relationship context
  - Transaction events
  - Content lineage
  - Cross reference hash key
  - Common contributor layout
  - Common subscription layout
- Align entire hub environment within the EDM team
- Timeline 2011 – 13



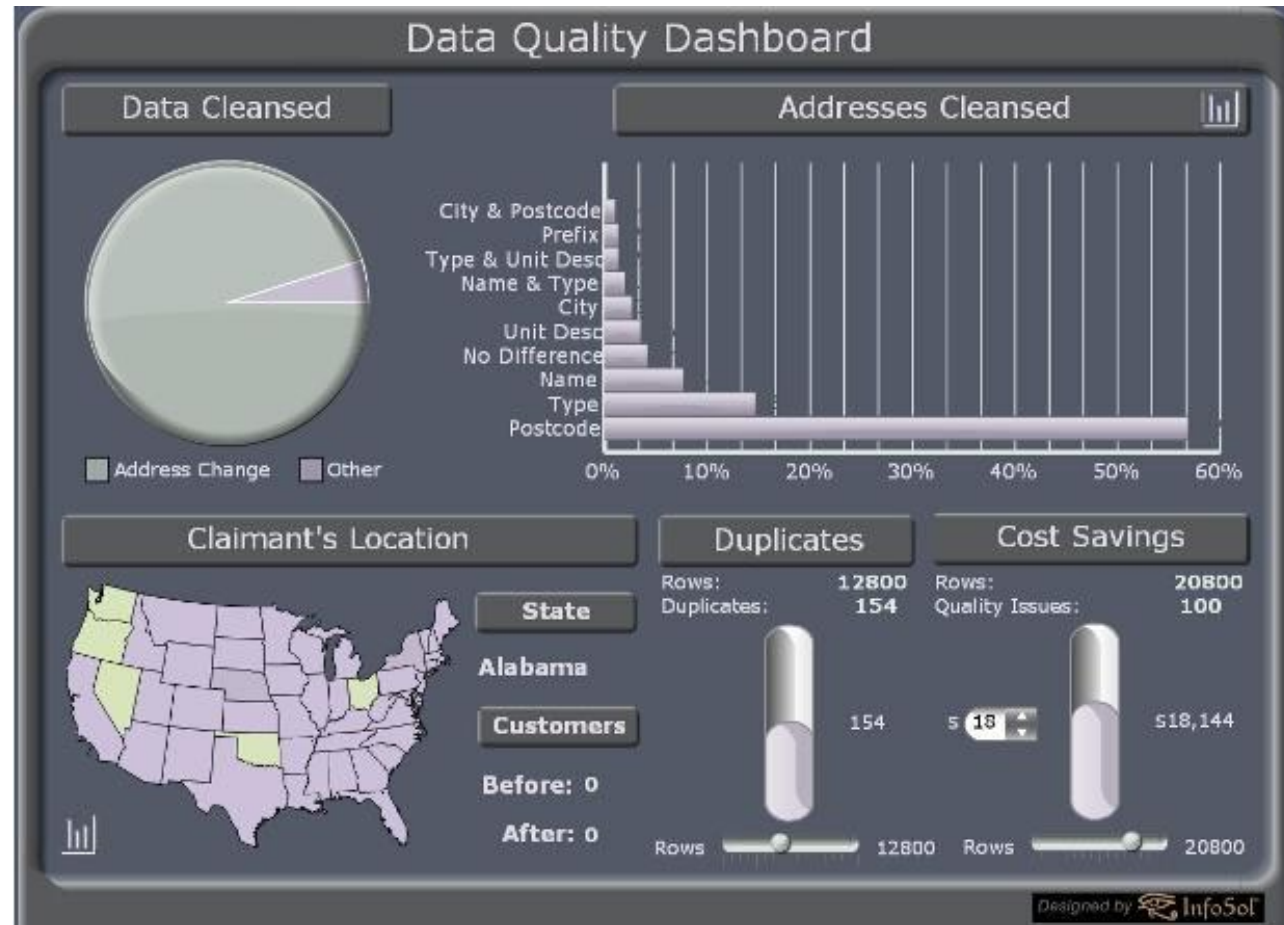
# The Success & Struggle

- Utilization metrics
  - 8 of 11 subject areas contain content
  - 16 Admin systems supply content
  - 783 attributes defined, 447 attributes shared
- Affect of culture to success
  - Culture is resistant to change
  - Consensus driven
  - Moving too fast vs. moving too slow
- Affect of organization to success
  - Too many active projects
  - Vision exists but too slow to act
  - Shortage of skill set
- Affect of success on organization
  - All LOB IT areas have adopted the data strategy
  - Business is aware of “the EDR”
  - Gaining traction on data governance & stewardship
- Timeline 2011 – 13



# The Look Ahead

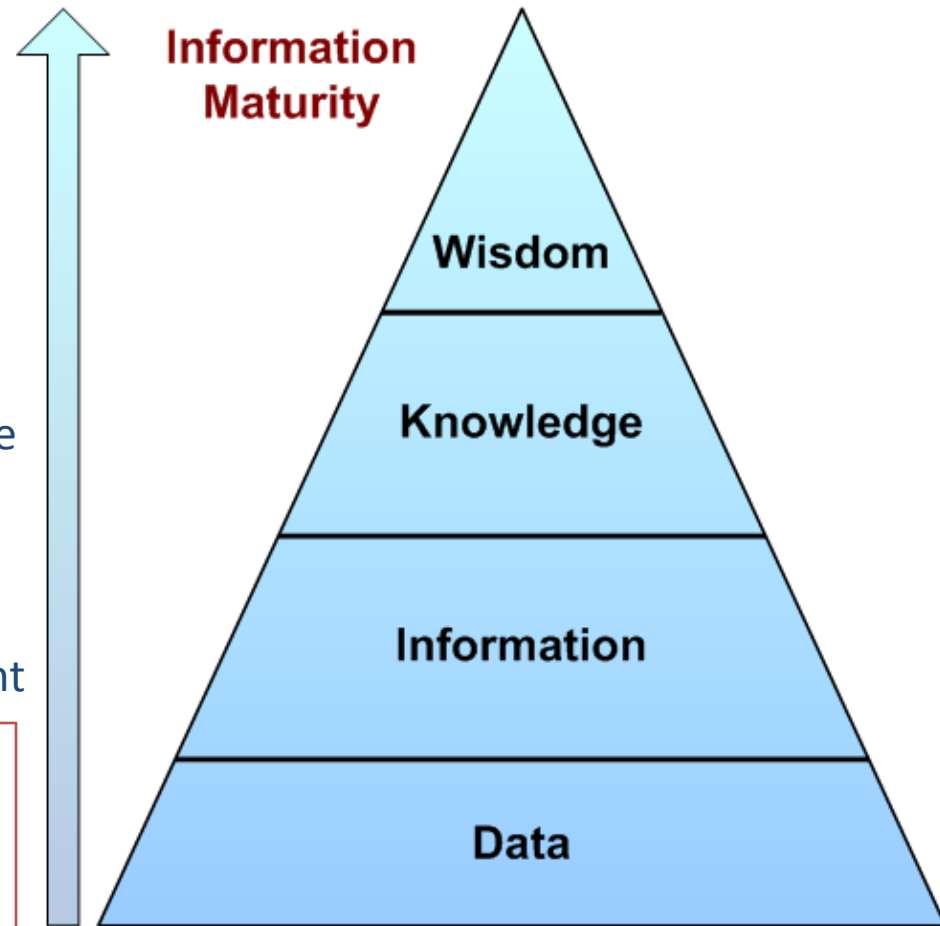
- Implementation of a formal governance structure & stewardship
- Data quality viewpoint
  - Established DQM's (Data Quality Monitors)
  - Data Quality dashboards
  - Confidence index
- Hub enhancements
  - Refactor subscription
  - Improve data glossary
  - Services based integration
- Data Strategy viewpoint
  - Establish Client Master
  - Data virtualization
- Timeline 2013 – 15



# Recap

- Timeline review
  - before 2005: no defined data strategy
  - 2005 – 2007: EDR environment established
  - 2007 – 2009: EDR evolved into hub-n-spoke
  - 2009 – 2011: data strategy established
  - 2011 – 2013: reference architecture established
  - 2013 – 2015: governance and quality metrics
- Information maturity has progressed in the right direction but still more to do
- Utilizing the hub-n-spoke architecture has effectively helped our overall information maturity and supports our vision statement

*Data is recognized as an asset to the Enterprise. Information derived from our data assets supports OneAmerica's vision. Information needs of all the stakeholders in the Enterprise will be met in terms of information availability, security, and quality.*



# Questions



Thank you for  
your time and  
interest

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