

# Everyone on the Data Bus?

*Providing VITA tools to enable data analytics – EDM, SOA, Analytic Rules Engine, Data Stewards*

**Rich Barnes, Shared Services Manager**  
**Nicole Helmantoler, Enterprise Architect**

***Virginia Information Technologies Agency***

**September 30,  
2014**

*Virginia's Services Oriented Architecture*

**ENTERPRISE DATA MANAGEMENT AND  
ENTERPRISE SERVICE BUS**

# Enterprise Data Management in Virginia

*Is this the same person?*

Name	NPI	DOB	Address 1	Zip Code	Phone	IRS TIN#
Deborah Becker		06021964	43776 Maison Blanc Square		312-334-1012	
Dr. Debbie Becker	1821125661	02-06-64	19456 Madison, Suite 207	60606	312-334-1012	454-76-1211

# Enterprise Data Management in Virginia

*Is this the same person?*

Name	NPI	DOB	Address 1	Zip Code	Phone	IRS TIN#
Deborah Becker		06021964	43776 Maison Blanc Square		312-334-1012	

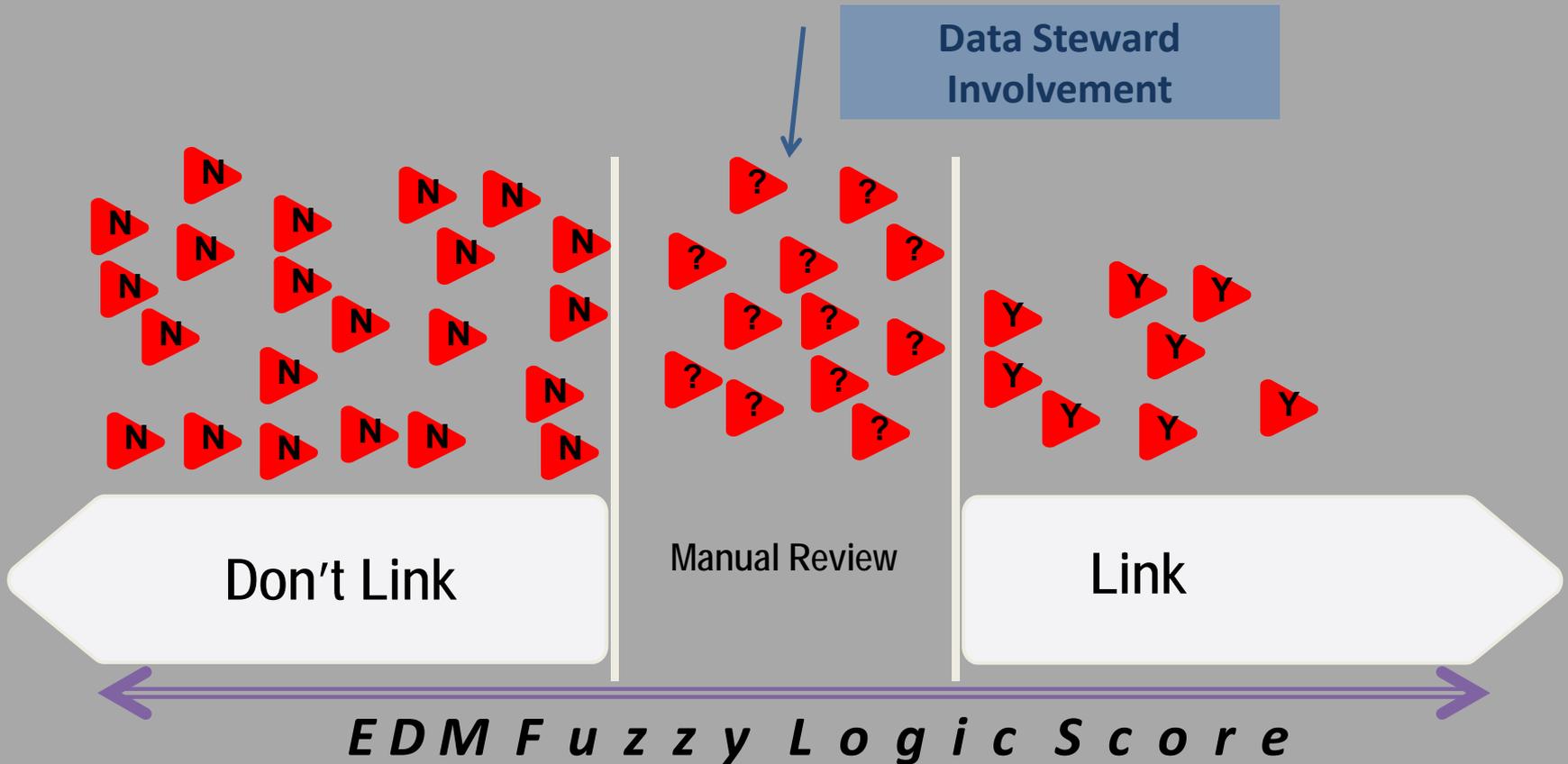


Deborah Becker	1821125661	06-02-1964	43776 Maison Blanc Square	60054	312-334-1012	454-76-1211
----------------	------------	------------	---------------------------	-------	--------------	-------------

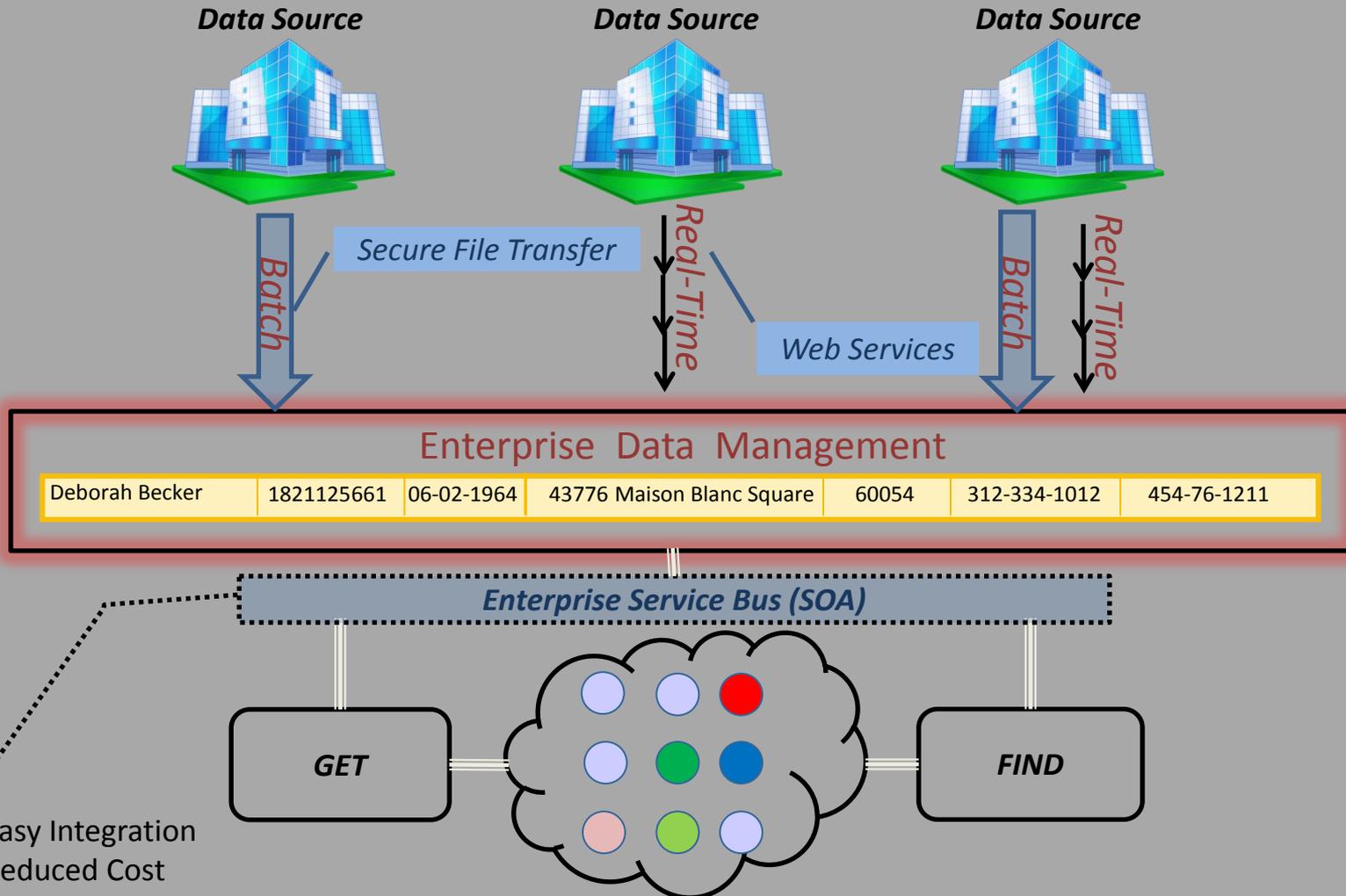


Dr. Debbie Becker	1821125661	02-06-64	19456 Madison, Suite 207	60606	312-334-1012	454-76-1211
Name	NPI	DOB	Address 1	Zip Code	Phone	IRS TIN#

# Enterprise Data Management in Virginia



# Enterprise Data Management in Virginia



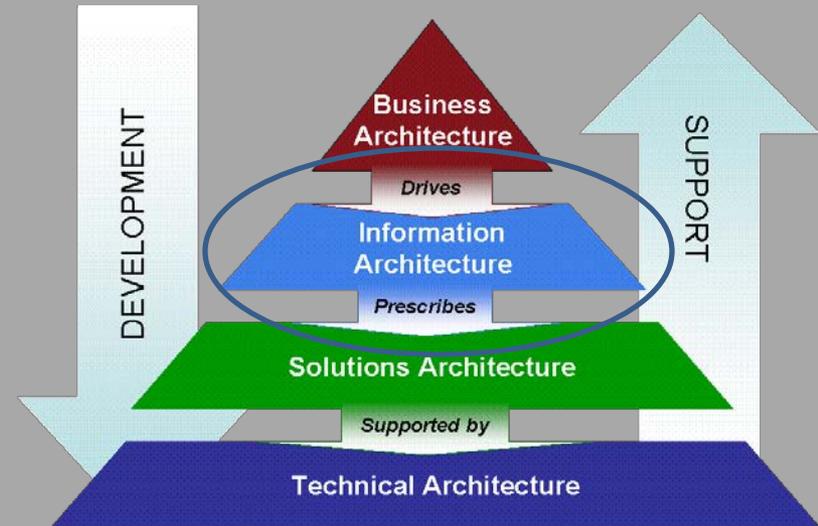
- Easy Integration
- Reduced Cost
- Increased Support
- Fast

*Virginia's Enterprise Information Architecture*

# **A BROADER PERSPECTIVE**

# Enterprise Information Architecture

- Enterprise Information Architecture (EIA) provides the framework to enhance the Commonwealth's ability to quickly discover, access, and understand data in order to support decision making



**Dr. Peter Aiken** *"You can accomplish advanced data practices without basic data practices but it will: take longer, cost more, deliver less and present greater risk"*

# Virginia's EIA Strategy

- Adopted by Secretary of Technology on August 14, 2013  
<http://www.vita.virginia.gov/oversight/dm/default.aspx?id=10340>
- A strategic plan to support interoperability and enterprise information sharing across Commonwealth agencies and their partners
- Developed over an 8 month period by 120+ data stewards, business leads and technical staff representing 30+ Commonwealth agencies

# Virginia's EIA Goals

## Data Governance

- *Forge a disciplined approach to data governance across the Commonwealth with formal roles for data stewards and other stakeholders*

## Data Standards

- *Promote the use of standardized data and shared data definitions as a means of supporting business-driven information exchange across agency systems, government domains, and levels of governance*

## Data Asset Management

- *Manage information as an enterprise asset, with an emphasis on quality, security, efficiency, accessibility, reduced redundancy, and a higher return on investment*

## Data Sharing

- *Leverage the sharing of information based on business need and in compliance with governing laws, statutes, and regulations to increase government performance, improve service to citizens and more effectively achieve business outcomes*

# Data Governance



- Commonwealth Data Stewards Group
  - Executive, Functional and Technical Working Groups
- Data Standards Adoption/Compliance Process
- Embedded within IT Strategic Planning and Project Management Oversight

# Data Asset Management

- Open Data – Published to [Data.Virginia.Gov](https://data.virginia.gov)
- “Enterprise” Data – EDM Person Hub is an example
- Exploring “de-identification” (also known as anonymization) technologies for sensitive data
- Investigating Data Asset and Metadata Repository

# Data Interoperability/Exchange

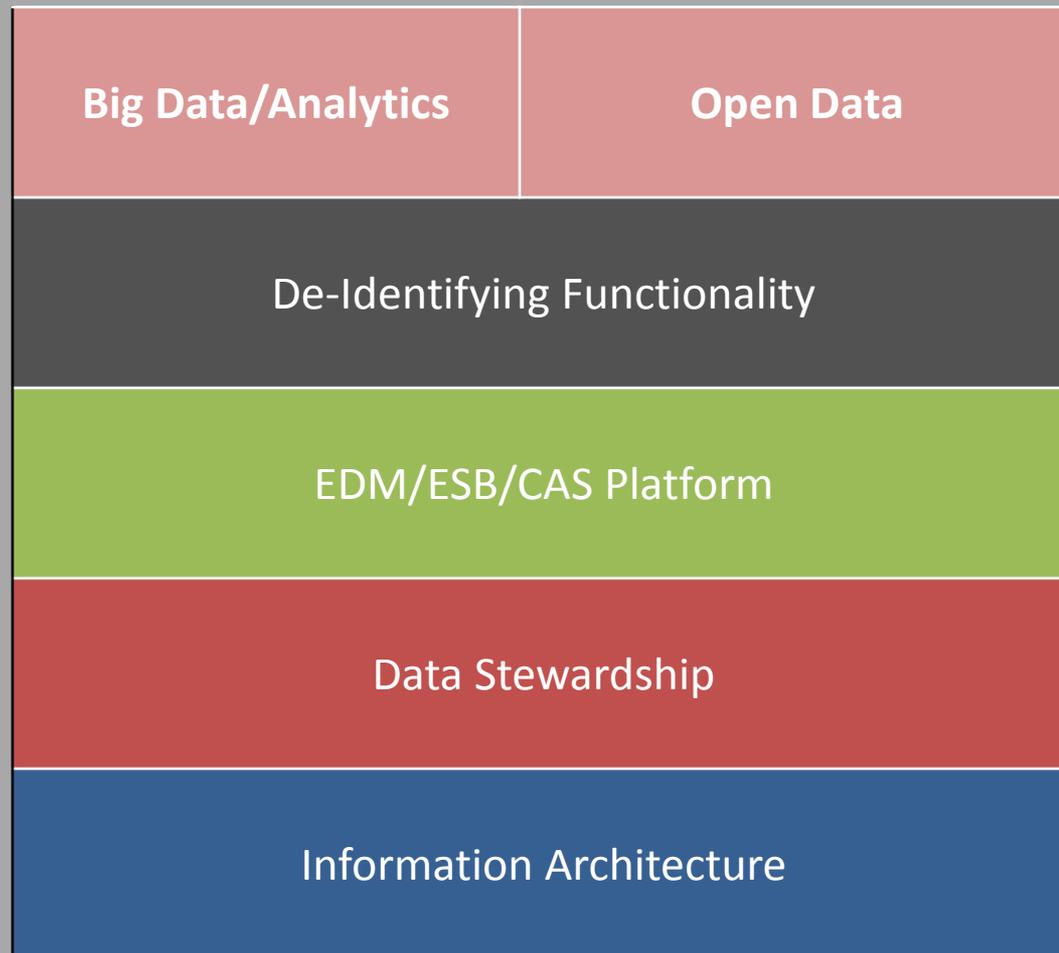
- Standards Repository - adopting national standards when possible (XML, HL7)
  - <http://www.vita.virginia.gov/oversight/dm/default.aspx?id=10344>
- Adopted NIEM (National Information Exchange Model) Standard for Person data exchanges
- Enterprise Service Bus, Transformation Tools to facilitate data exchange
- All data sharing must comply with state/federal statutes

# How Can Virginia's Data Be Leveraged?

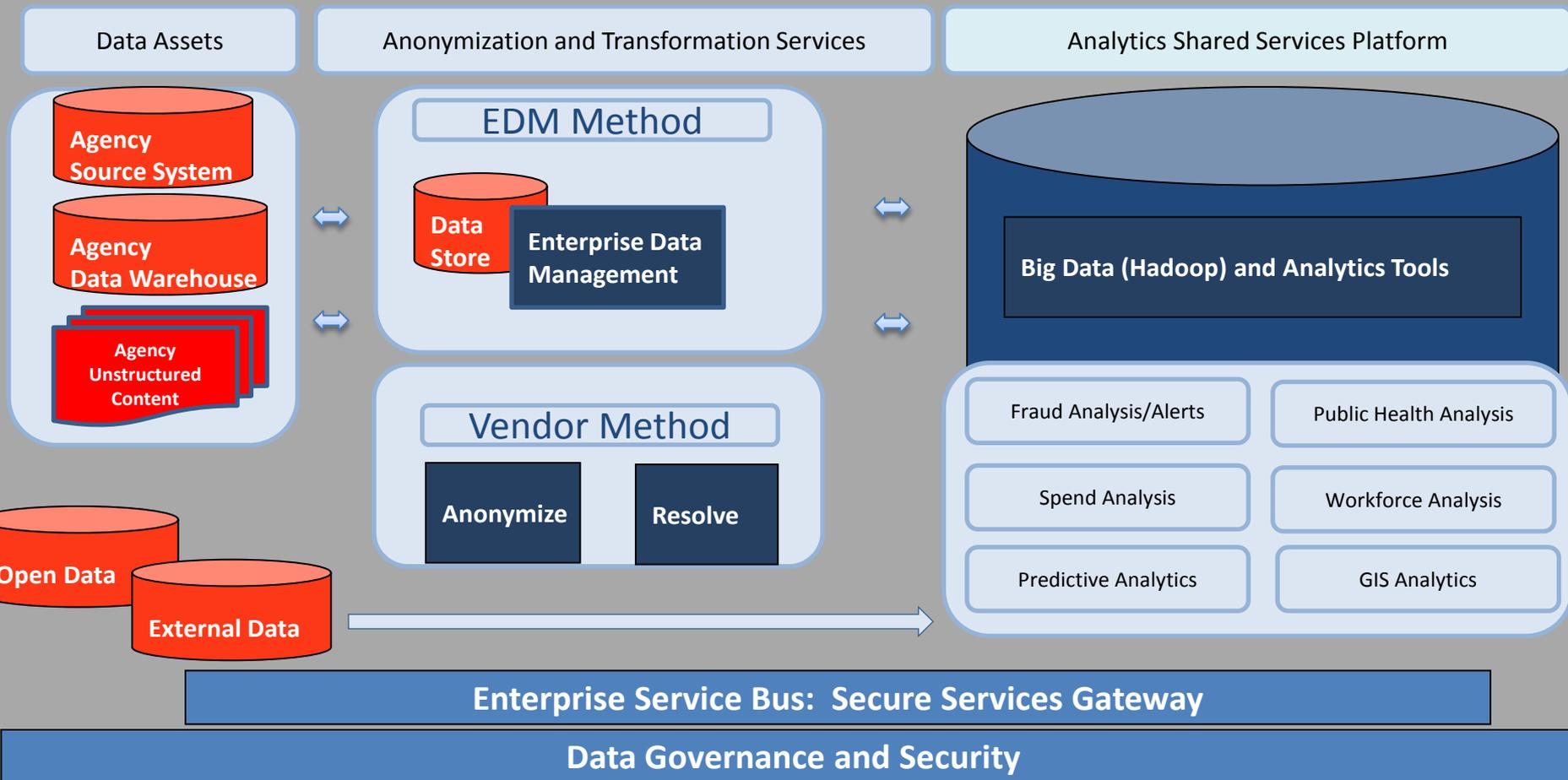
- Being informed by data on what programs are effective vs. which ones are not
- Ability to coordinate programs or create new programs for targeted populations based on data
- Detecting fraud, waste, abuse
- Alerts/Notifications – from one agency to another
- Multi-factor authentication, reduce identity fraud
- Predictive analytics – data forecasting what services are needed 1,3,5 years into the future



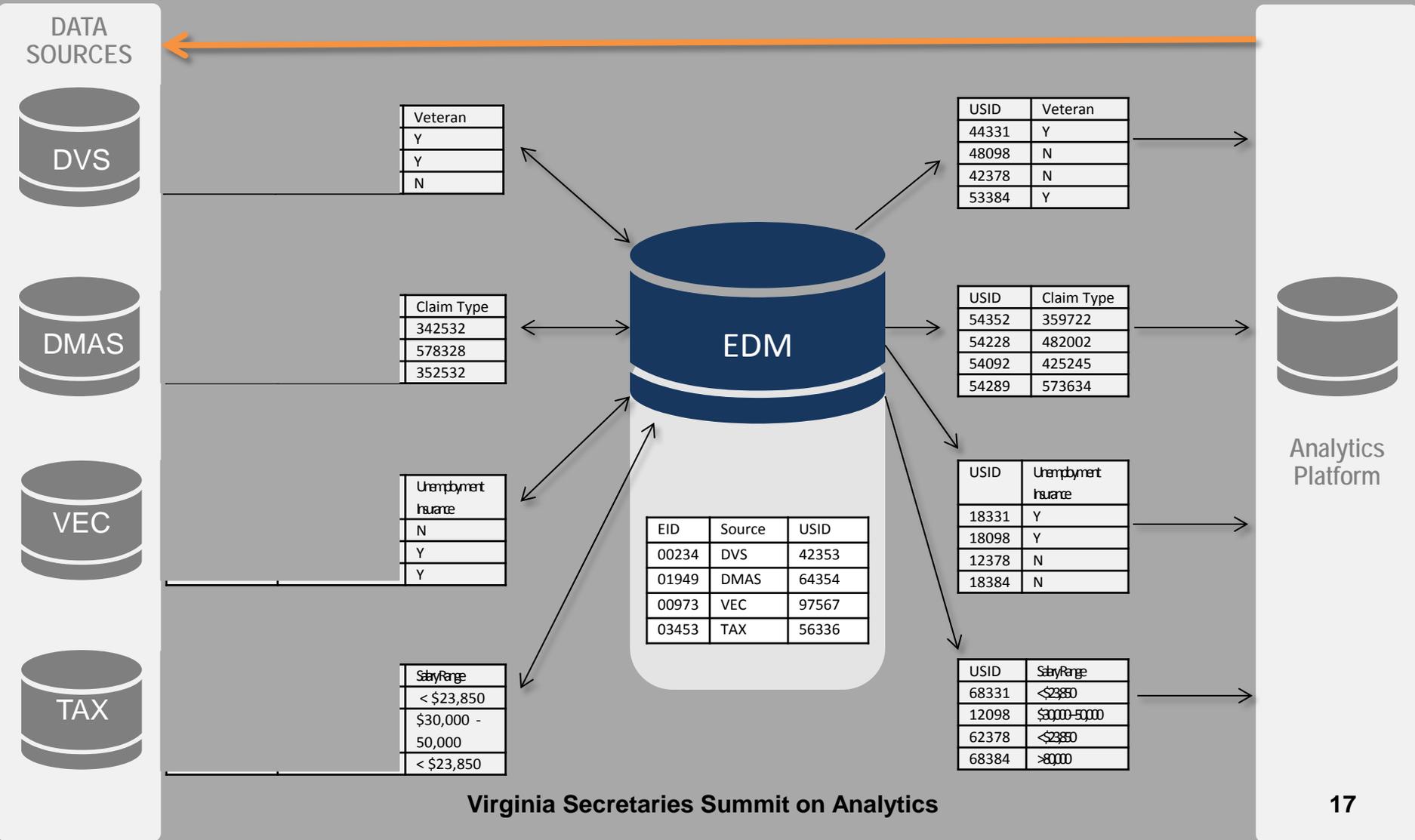
# A Convergence of Efforts



# A Notional Analytics Platform



# Anonymization with EDM



# Summary

- **Law before technology - All data sharing must comply with state/federal statutes**
- **VITA facilitates data stewardship – education, knowledge sharing**
- **VITA provides standards and tools to facilitate data interoperability/exchange**
- **VITA committed to safeguarding data – exploring anonymization technologies**
- **VITA assisting agencies with identification of use cases for analytics**