AOE Testimony: Introduction to the Education Data Program

Testimony To: House Committee on Education Respectfully Submitted by: Wendy I. Geller, Ph.D., Division Director, Data Analysis & Management Date: January 10, 2020



Current State: AOE's Historic Data/Tech Landscape

- Point to Point
- Brittle

- Reliance on Data Program Staff
- Labor Intensive

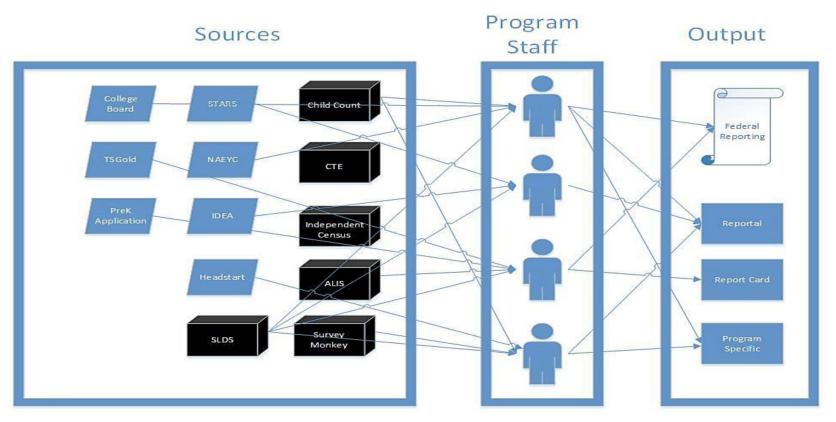


Figure: Diagram of an overly complex process that moves between too many data sources to various data program staff and outputs.



Future State: Enterprise Infrastructure

- Data Centric
- Resilient to Change

- Support Continuous Improvement
- Free up Resources for valueadded work

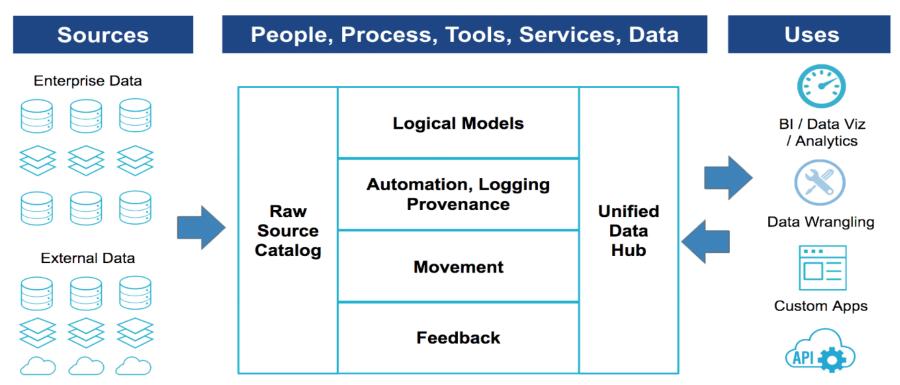


Figure: Logical model showing linear processes between data sources, people, processes, tools, services, and data, and then uses as an end result. [Image Credit: The Eckerson Group]



Resource constraints \$cant budget Struggling morale

Aging infrastructure

Overallocated staff

Technical debt burden

Deferred maintenance

Fear of change

But how to get there?

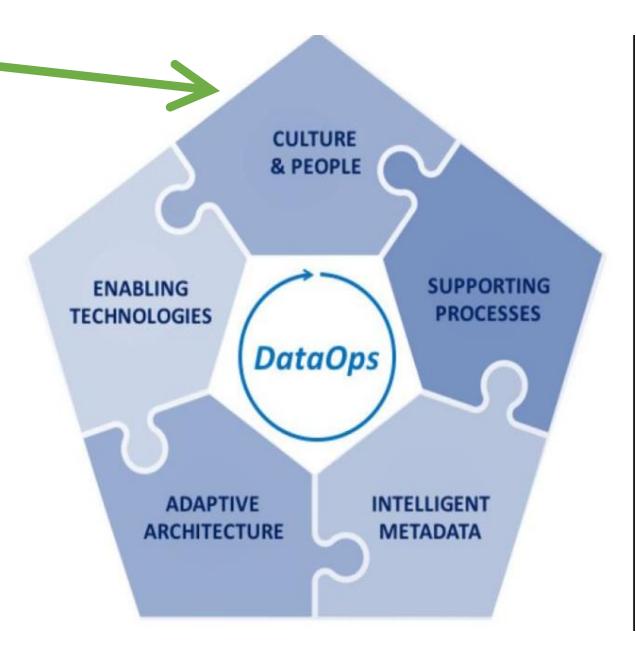




Start here

Emphasis is on:

- Communication
- Collaboration
- Integration
- Automation
- Measurement, and
- Cooperation between <u>data</u> <u>scientists</u>





From 4 Teams to 1 Work Family

Vermont Agency of Education
Data Managment and Analysis Division

updated January 6, 2020

SECRETARY OF EDUCATION

Daniel M. French

Deputy Secretary

Heather Bouchey

Division Director Wendy Geller

Education Data Administrator Jennifer Perry

> Education Research and Information Specialist Glenn Bouchard

Education Research and Information Specialist Nicole Gray

Education Research and Information Specialist Andrew McAvoy

Data & Reporting Coordinator Jean-Jacques Maury State Assessment Director (vacant)

Education Programs Coordinator Mabika Goma

Education Programs Coordinator Gabriel McGann

Education Programs Coordinator Linda Moreno Education Analysis & Data Management Director Glenn Bailey

> Business Analyst Justin Goulet

Business Analystt Namsoo Park Education Project Manager Bob Keeley

IDEA Data Administration Director Cassidy Canzani

> Business Analyst Lila Denton

Business Analyst Beth-Ann Wiley

Ed Statistician II Brandon Dall Research & Statistics Section Chief David Kelley

> Ed Statistician II Drew Bennet

Business Analyst (vacant)





Partner with Extended (ADS) Work Family

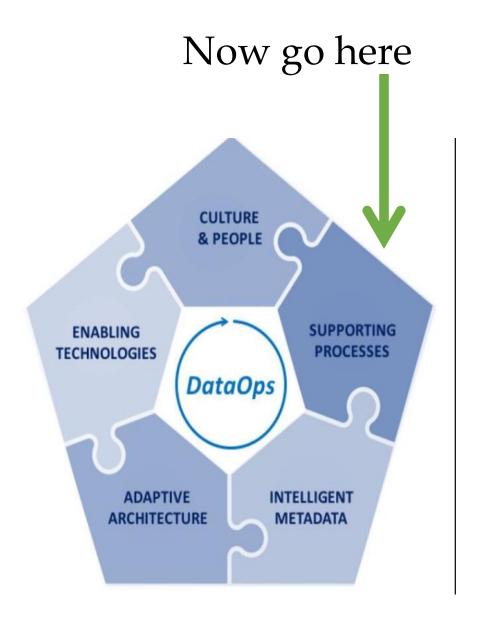
- Define roles and responsibilities
- Document governance and processes
- Collaborate to problem solve together



3-5 Year Breakthrough Objectives

- 1. Modernize, standardize, and fully leverage collection, management, storage, and data analysis platforms, tools, and methodologies.
- 2. Move a from reactive culture to proactive culture.
- 3. Effectively coordinate to execute cross-functional workflows.
- 4. Strengthen security and privacy frameworks while reducing burden of supporting secure and sound data handling.
- 5. Empower AOE and stakeholders with data to support an evidence and result-based approach to decision making.





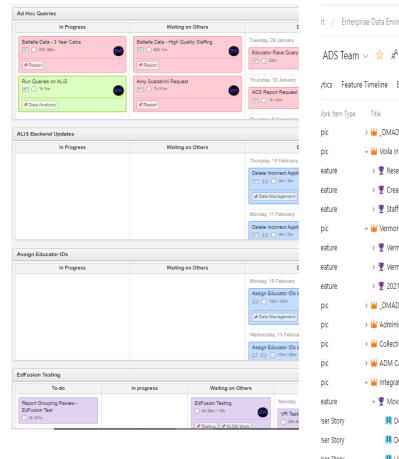
DataOps are Lean

Step 1: Create Standard Operating Procedures Step 2: Visualize Our Work Together

This helps us:

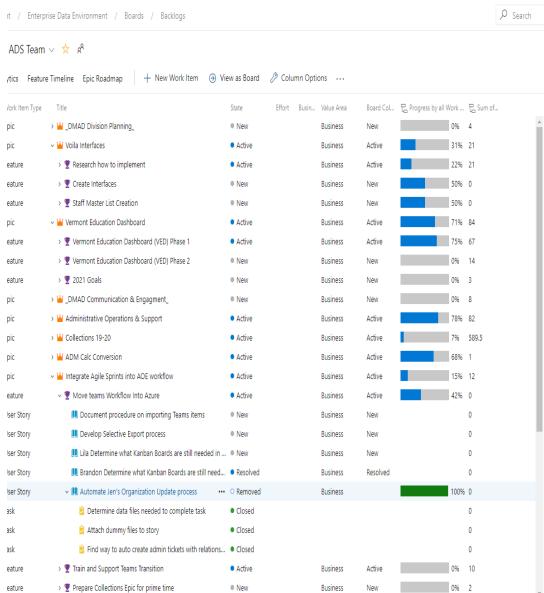
- Identify the work
- Define the work in standard ways
- Define who does each part of the work
- Visualize the work
- Visualize the process of doing the work
- Identify waste in the process
- Address the waste in the process
 - Clarity to adjust the process
- Find better ways to perform the work
- REPEAT



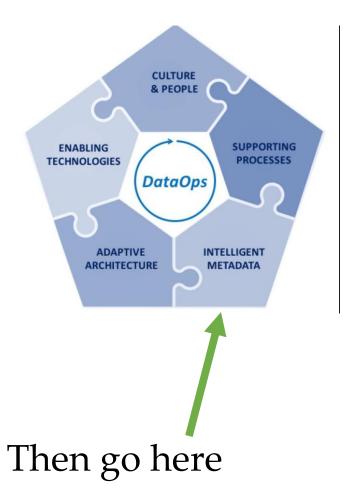


Started with Kanban, Graduated to Azure DevOps

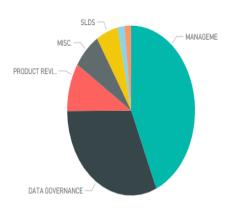
Together







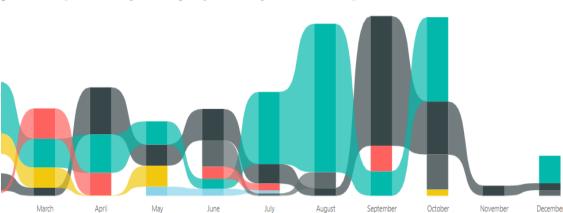




Time spent by GENRE OF WORK

els.2 and First Labels.3 by Month and GENRE OF WORK

• DATA GOVERNANCE • DATA MANAGEMENT • MANAGEMENT • MISC. • PRODUCT REVIEW • PROFESSIONAL DEVELOPMENT • SLDS

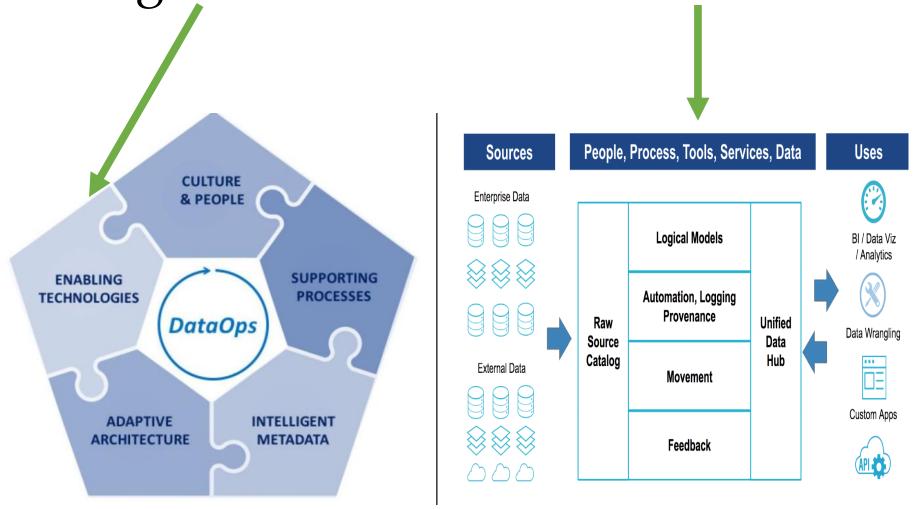


So we can:

- Measure Our Work
- Report Out
- Drive Process Improvement



This culture and practice positions us to go here...which leads to here





Questions? Conversation?

