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

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Current State: AOE's Historic Data/Tech Landscape

- Point to Point
- Brittle
- Reliance on Data Program Staff
- Labor Intensive

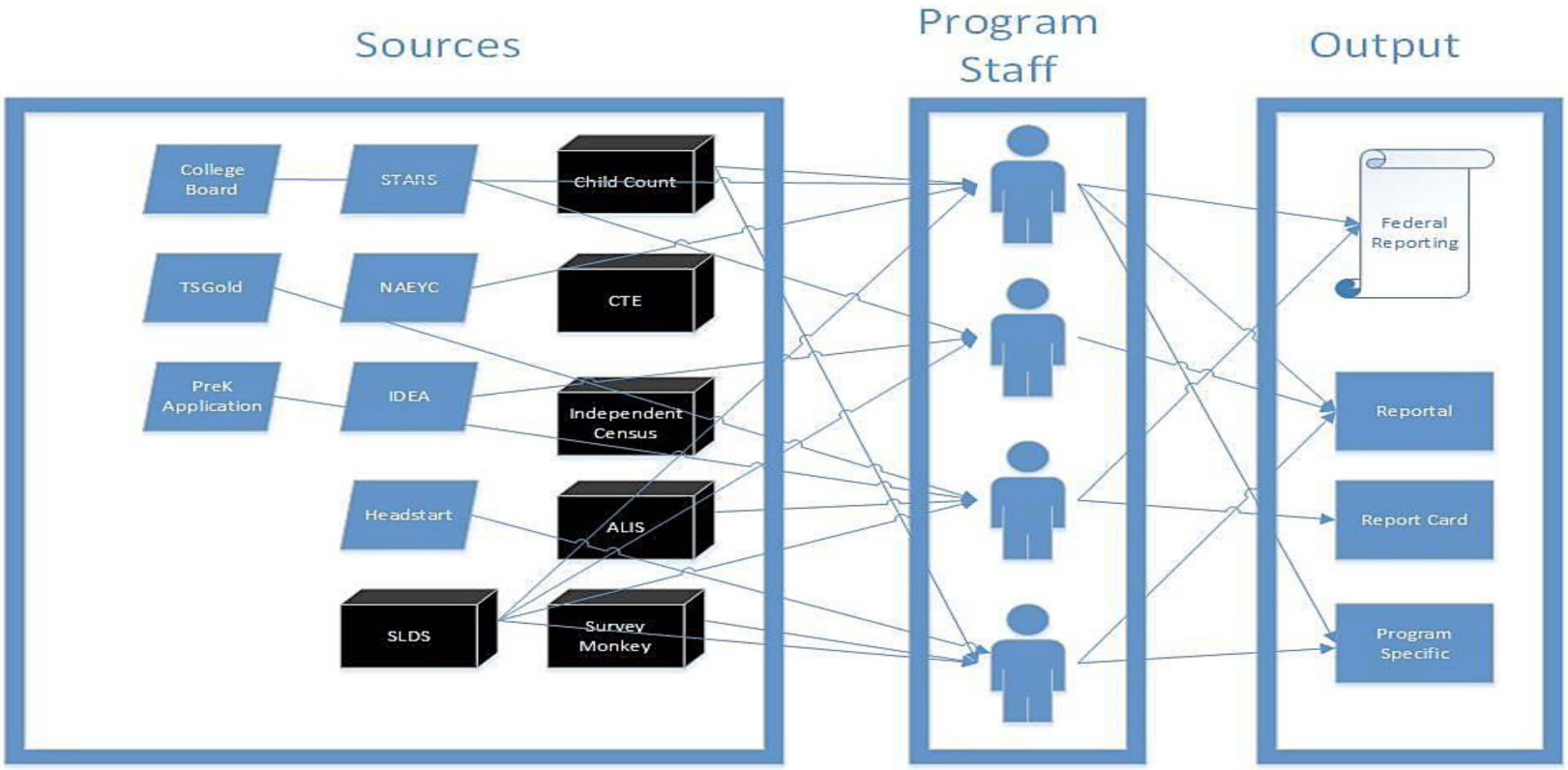

Figure: Diagram of an overly complex process that moves between too many data sources to various data program staff and outputs.

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Future State: Enterprise Infrastructure

- Data Centric
- Resilient to Change
- Support Continuous Improvement
- Free up Resources for value-added work

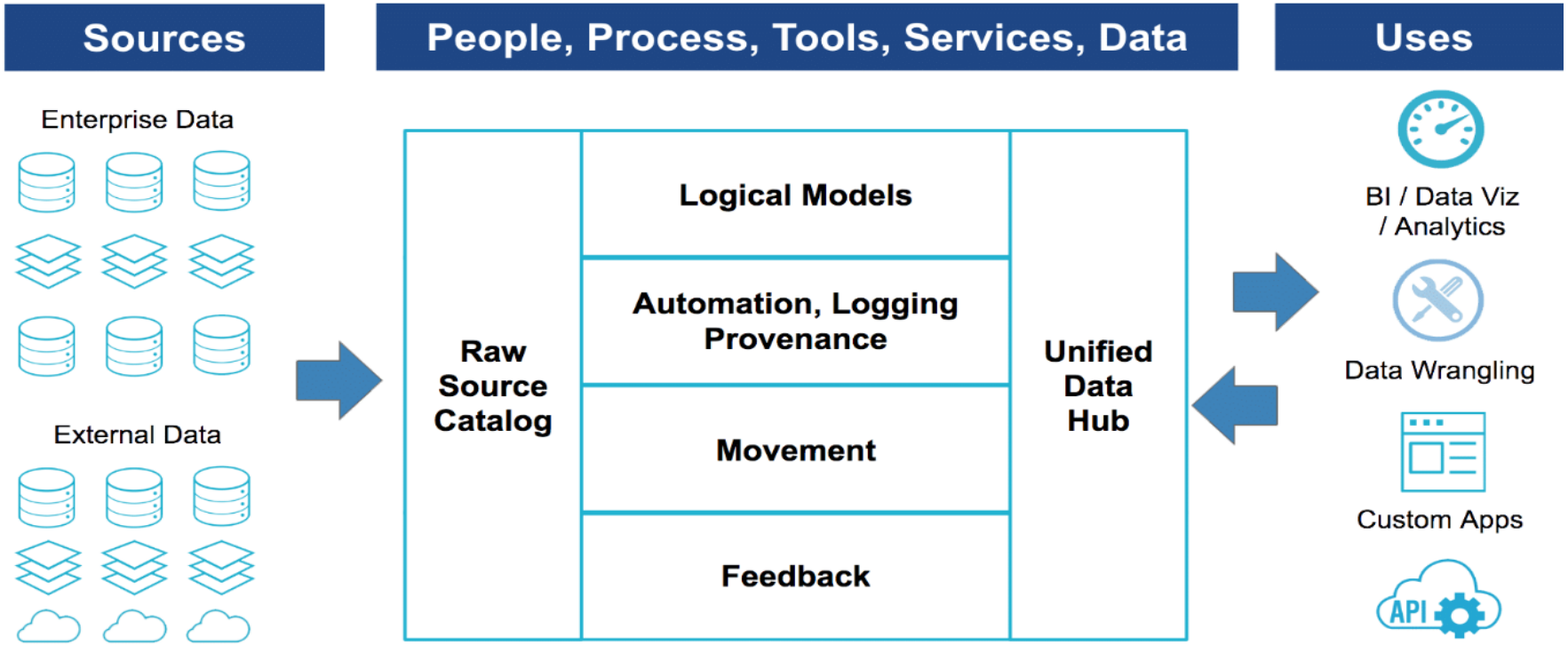

Figure: Logical model showing linear processes between data sources, people, processes, tools, services, and data, and then uses as an end result. [Image Credit: The Eckerson Group]

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Resource constraints

$cant budget

Struggling morale

Aging infrastructure

Overallocated staff

Technical debt burden

Deferred maintenance

Fear of change

But how to get there?

Image: IT Crowd
Watch the clip

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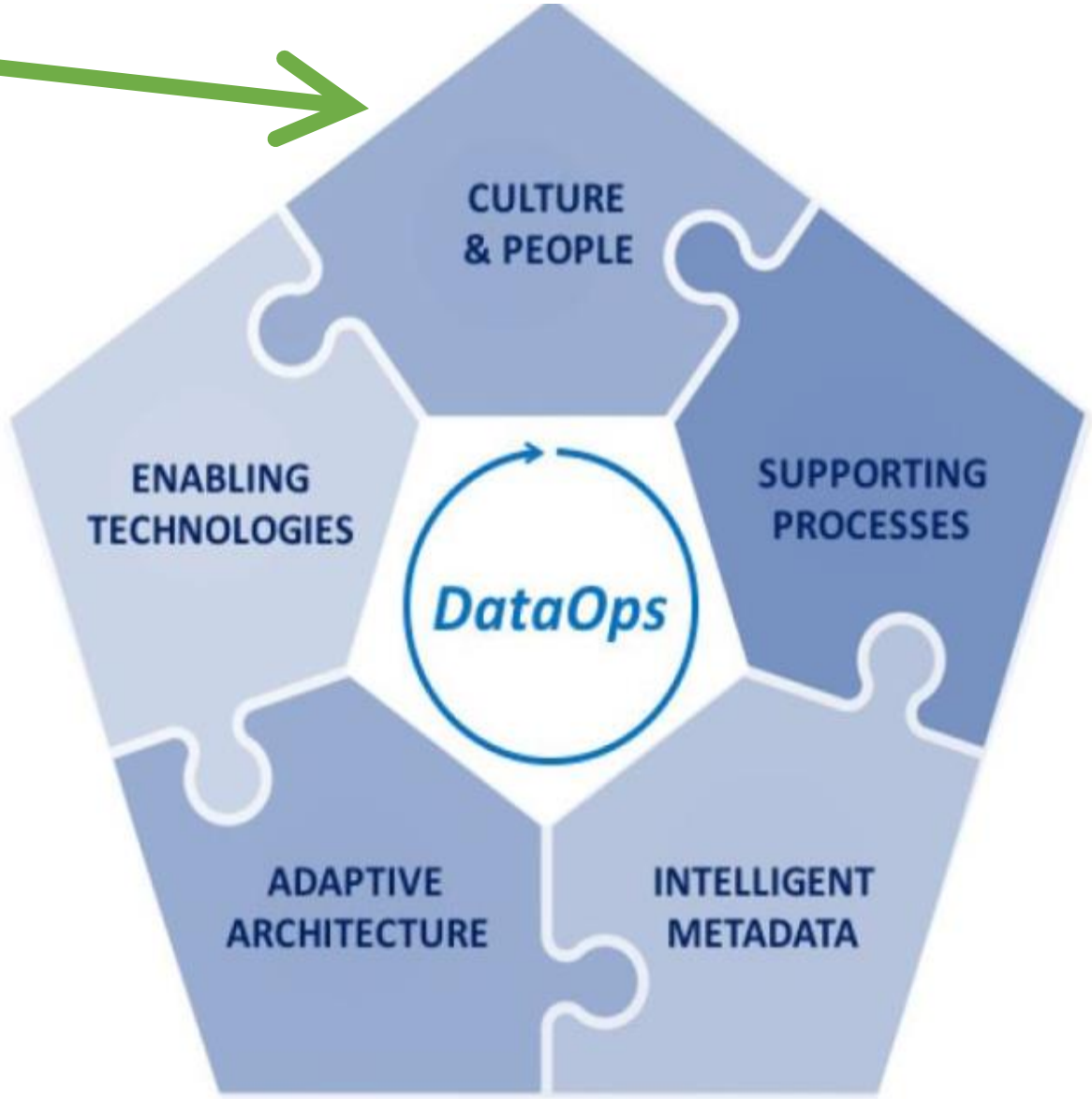
Start here

Emphasis is on:

- Communication
- Collaboration
- Integration
- Automation
- Measurement, and
- Cooperation between data scientists



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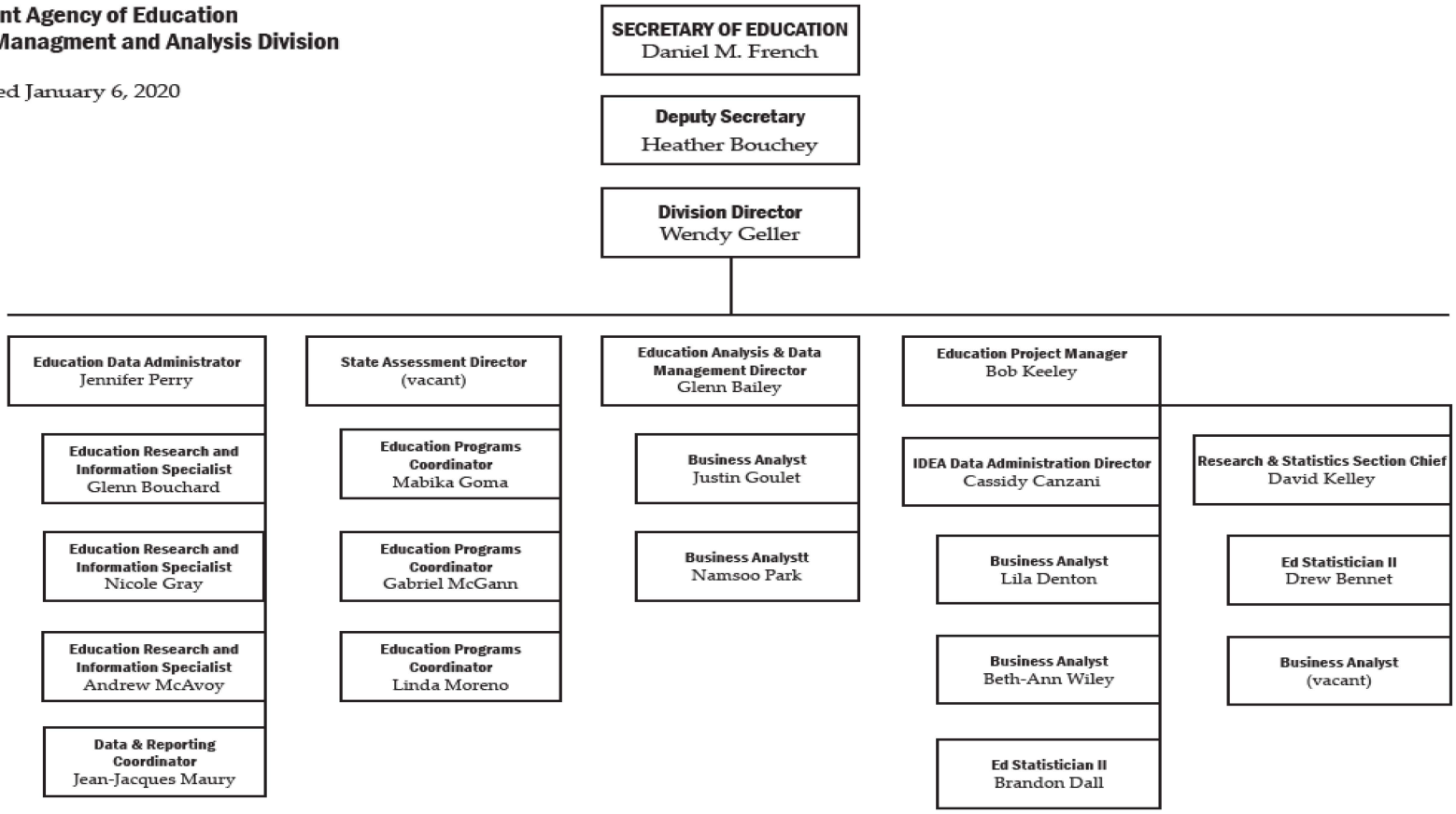
From 4 Teams to 1 Work Family

Vermont Agency of Education
Data Managment and Analysis Division

updated January 6, 2020



Data Management and Administration | Assessment | Assessment Data | Data Analysis and Reporting

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Partner with Extended (ADS) Work Family

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

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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.

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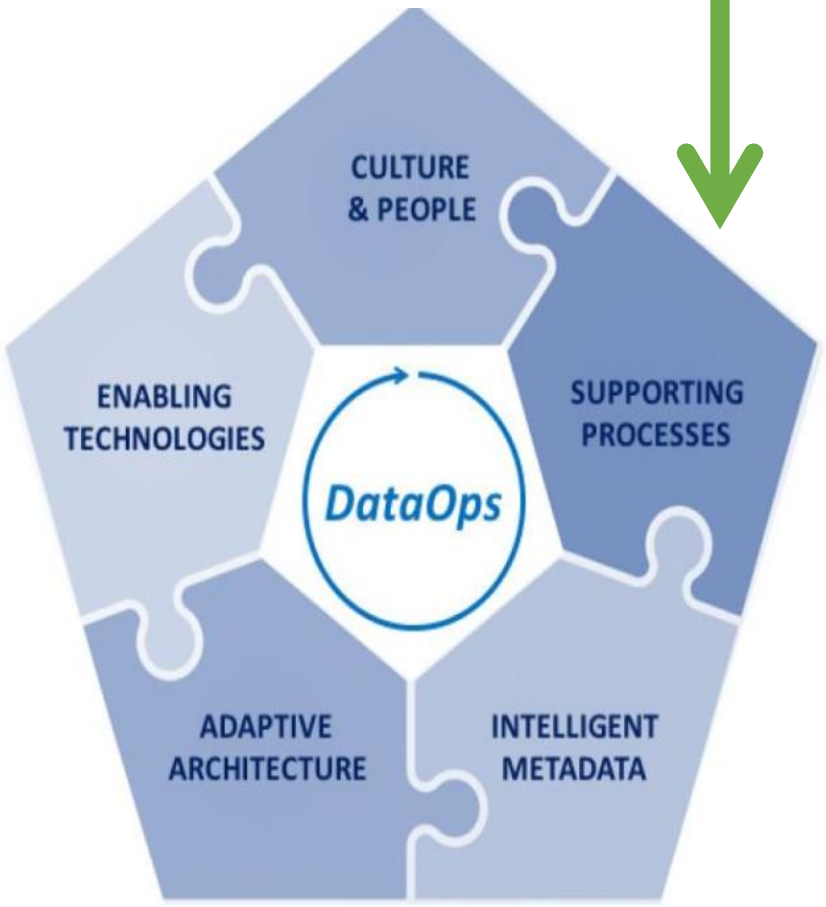
Now go here



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

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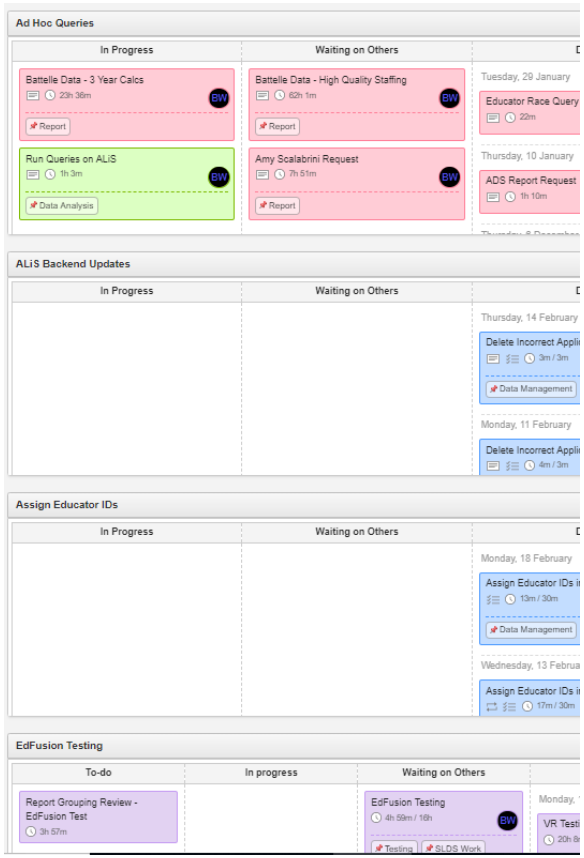
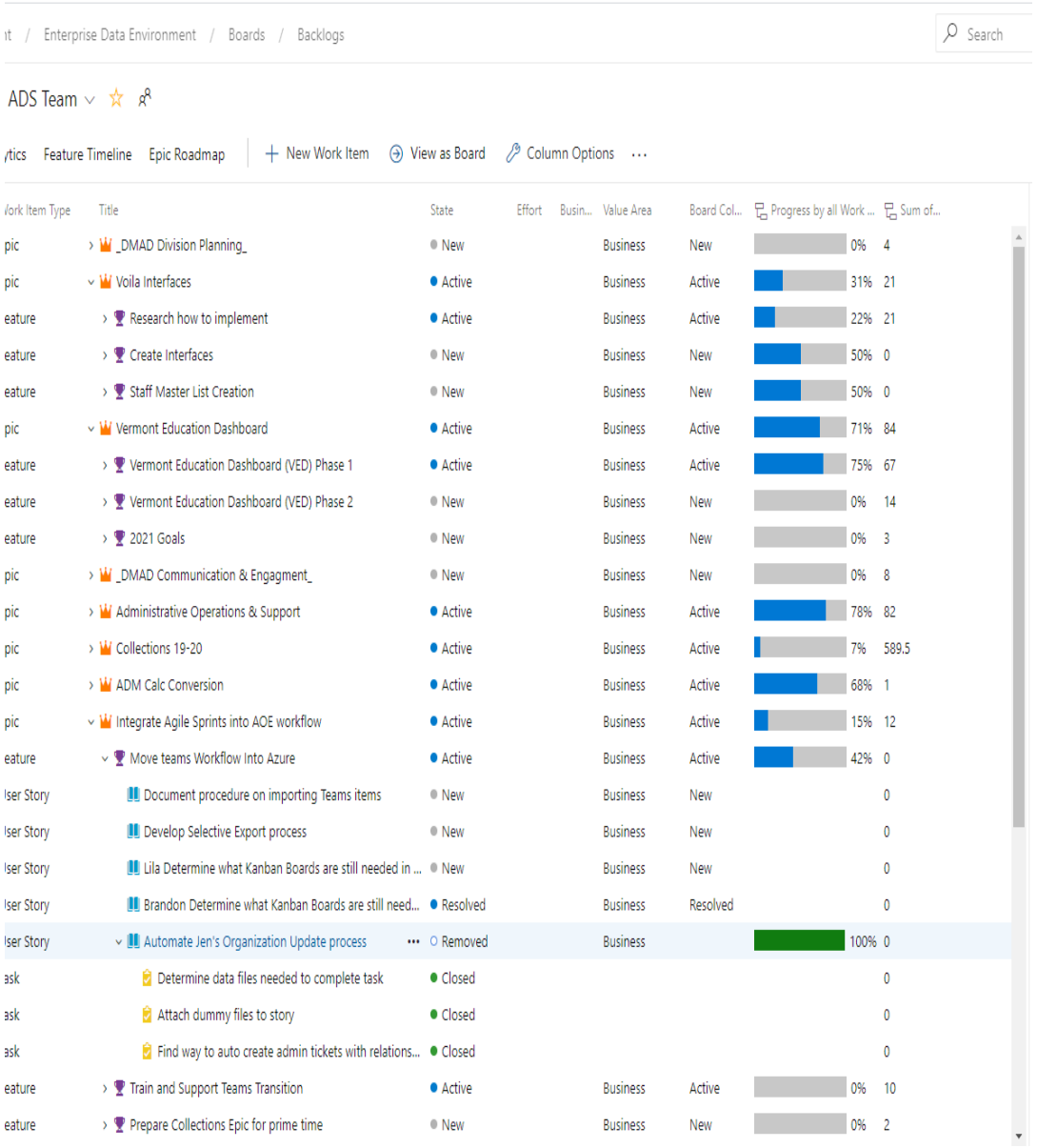


Started with Kanban, Graduated to Azure DevOps *Together*



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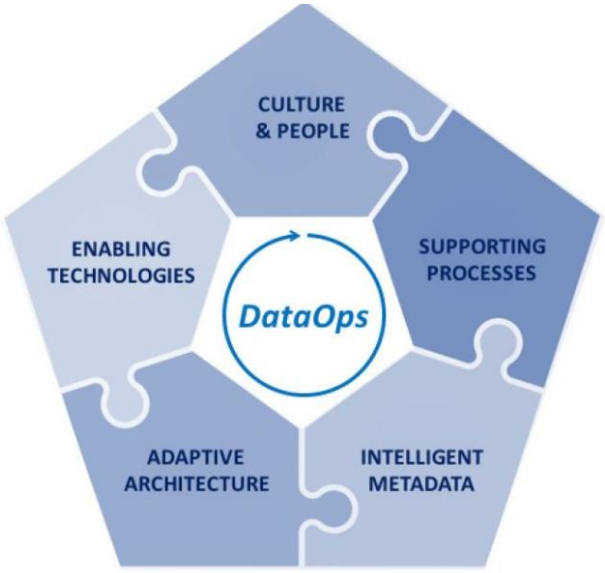
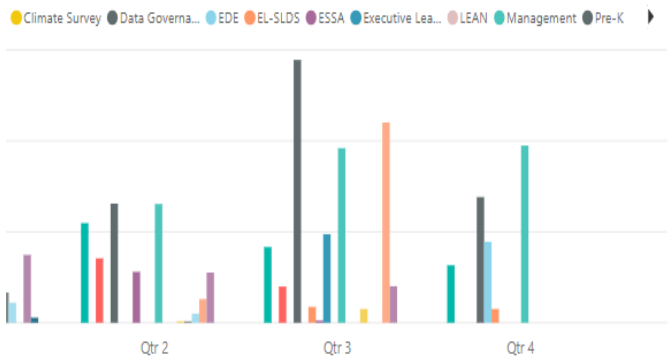
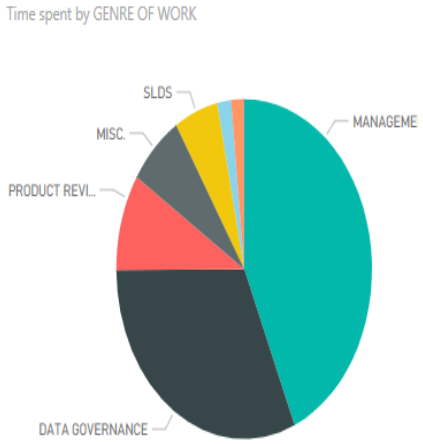
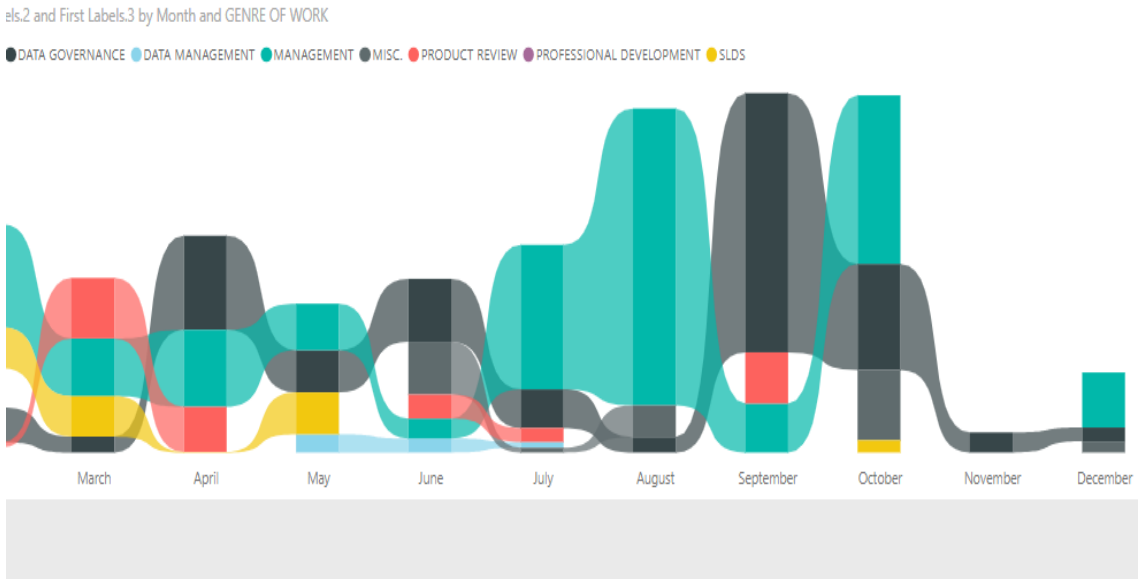






Then go here



So we can:

- Measure Our Work
- Report Out
- Drive Process Improvement

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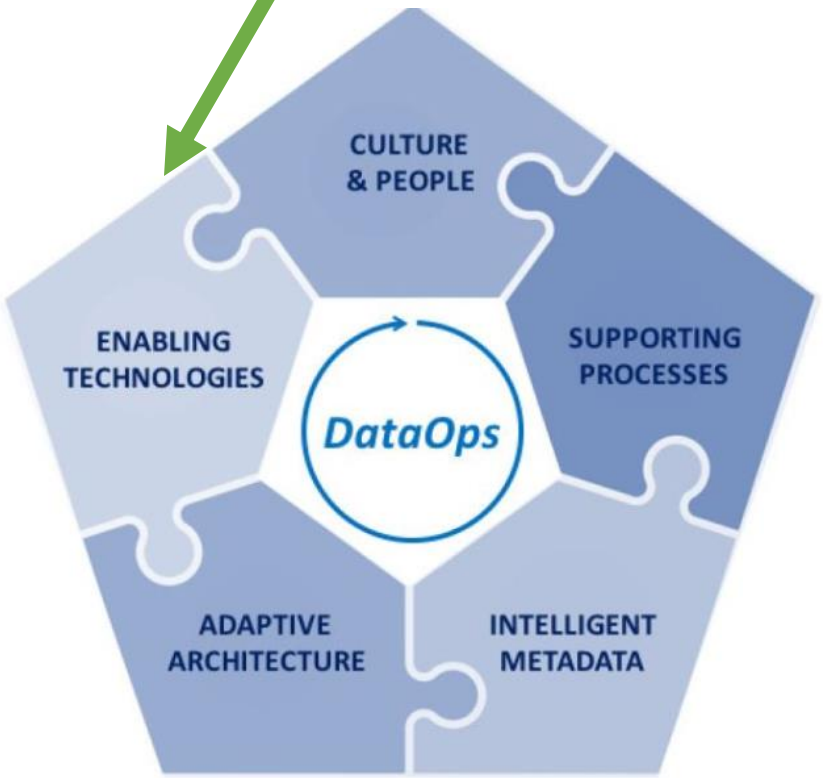
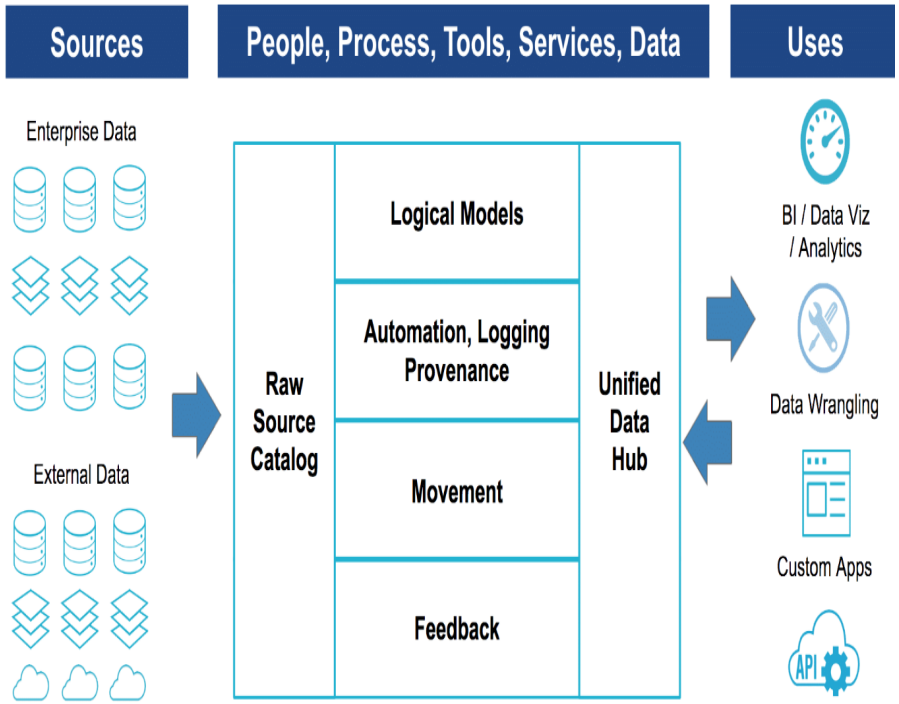
This culture and practice positions us to go here…which leads to here





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Questions?
Conversation?

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