APS
Virtual Summit

Establishing Sustainable Data Governance

What it Is, Why it Matters, and How to Get it Right

EAB

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Widening Gap Between Data and Insight

Campuses Struggling to Capitalize on Data Explosion

Mounting Pressure For Campuses to Be Data-Driven…

Flattening Revenues **+** *Rising Costs of Education* → *Growing Pressure to Prove Value*

…But Investments in Analytics Aren't Always Paying Off

Options Exploding

>300

vendors in the higher education technology landscape, as of 2018

Urgency Rising

57%

of higher ed CIOs ranked analytics as a **top priority** for their institution in 2018

Payoff Lacking

19%

of higher ed CIOs consider their investments in data analytics as "very effective"

Current Focus Is Often on Unit-Level Needs Over Enterprise Decision-Making

Data Definitions

- Varying definitions specific to each unit
- Data definitions for internal eyes only
- Staff only involved with data in their unit

Data Collection

- Data used for single unit purposes and value
- Place-holder data used for convenience of unit
- Data quality assumed and unverified by institution

Data Systems

- Static system structure aligned to business unit
- Inconsistencies among system implementation
- Siloed suboptimal shadow systems

✖ Multiple different definitions of "student" between departments

✖ Data definitions not publicly accessible or hidden unintentionally

✖ Workarounds use open fields to record advisor names

✖ Low adoption of central data and reporting tools leading to data denial

✖ Excel spreadsheets stored on local analyst desktops

✖ Data errors only corrected in frozen data, not in source system

25-100%

Estimated BI Time Spent on Ad Hoc Requests

3-6 week backlog for typical unit-level requests

3,500 hours spent on ad hoc reporting over 12 months at one research university

$10K per ad hoc report request (fully loaded cost)

Outside Higher Education

The infamous Equifax data breach resulted in the **information exposure of almost 146 million Americans**. It was attributed to one employee failing to implement a software update that would have prevented the breach.

Did you know? 4 of the 5 top causes of data breaches can be attributed to human error.

Inside Higher Education

A senior administrator at the University of Chicago Law School **accidentally sent a mass email to 297 students** accepted into the Fall 2019 Master of Laws program, with the **personal information of every applicant** attached to the email.

**Data Entry Error Causes University to Obtain Top U.S. News & World Report Ranking... for 'Most Debt'**

A Florida Gulf Coast University employee's error caused the university to submit an average student debt of $56,208 per student – over $30,000 off the actual figure and discovered too late to update print publications.
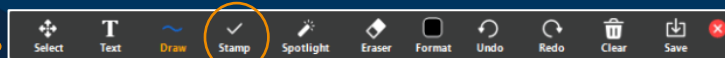
Without standard polices in place to verify the quality and accuracy of data, interpretation errors are common

How to Use the Annotate Feature in Zoom

Step 1: View Options, then Annotate.
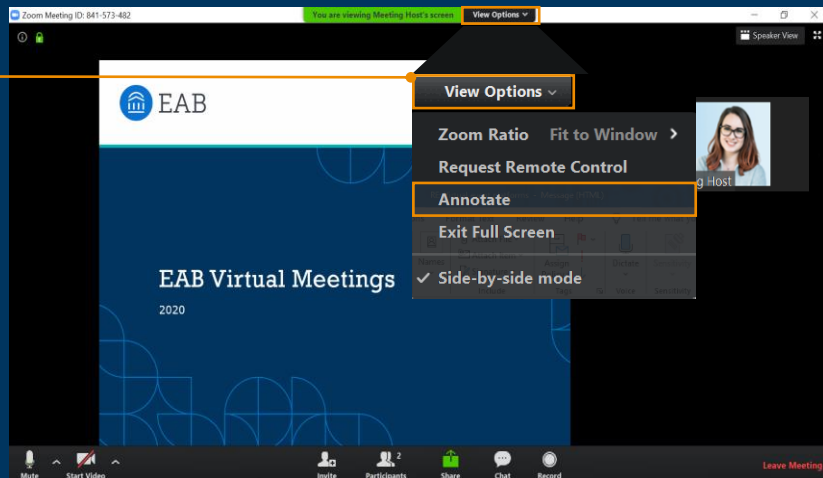
Step 2: Panel with different options for annotation. Please select Stamp.

Quick Poll: Does Siloed Data Management Affect Your Institutions?

In the appropriate spaces below, use the Annotate feature to place a stamp in the rows indicating how siloed data management affects your institution

Siloed Data Management Affects My Institution by…	Place Your Stamp in This Column If the Descriptor Applies!
Decreasing Productivity	
Increasing Risk	
Decreasing Value	
NA—My institution has moved beyond siloed data management!	

Prevalent Issues Surfaced During APS Implementations

Data Quality Challenge	Definition
Found Among Almost All Partners	
Inconsistent Faculty Percent Responsibility	Faculty share of a co-taught course reflects actual percent responsibility for classes taught and equals 100%, and percent of classes assigned is separately tracked.
Applies to Most Partners	
Inconsistent or Inaccurate Course Type Assignments	All sections taught are tied to consistent definitions that reflect teaching style of that section. Course types are often set at default options (i.e., lecture).
Enrollment Caps Set to 'Zero' or Inaccurate	All sections are set to a number greater than zero. Faculty often use zero caps as a shortcut to approve students, which hinders seat utilization and workload analyses.
Cross-listed Courses Not Connected	When a course is cross-listed and composes multiple sections from departments, the institution designates those sections clearly. Cross-listed courses are often not linked in any data field and must be manually connected for analysis.
Credit Distribution Among Multi-Instruction Types	Each college and department uses the same set of credit distribution practices that aligns with consistent course types or indicates coursework requirements. Inconsistent practices are often employed, such as allotting 3 SCH for a lecture and 1 SCH for a lab in one department and 2 SCH in another department.
Inaccurate or Missing Tenure and Rank Codes	Tenure/rank uniquely group faculty and instructional staff into meaningful categories describing their relationship with the institution. This information is often not tracked, outdated, or simply inaccurate.
All Employees Not Accounted For	All employees at the institution are centrally tracked in the HR employee and payroll files. Some staff (e.g. graduate assistants and teaching assistants) are often never entered into HR files, preventing analysis of teaching roles and workloads.

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1   The Problem: More Data, Less Insight

2   The Solution: Data Governance

3   Data Governance in Practice

What is Data Governance?
A (non) Technical Definition

" Data Governance is an enterprise capability that supports effective data management.

It includes:

- Defining ownership rights and responsibilities;
- Determining data's meaning, storage, accessibility, usage and security;
- Enforcing institutional standards and policies regarding data.

Four Enabling Capabilities to Drive Continuous Improvement Cycle

1 Setting Strategy

Campus leaders determine areas of focus for data governance work

2 Standardizing Data

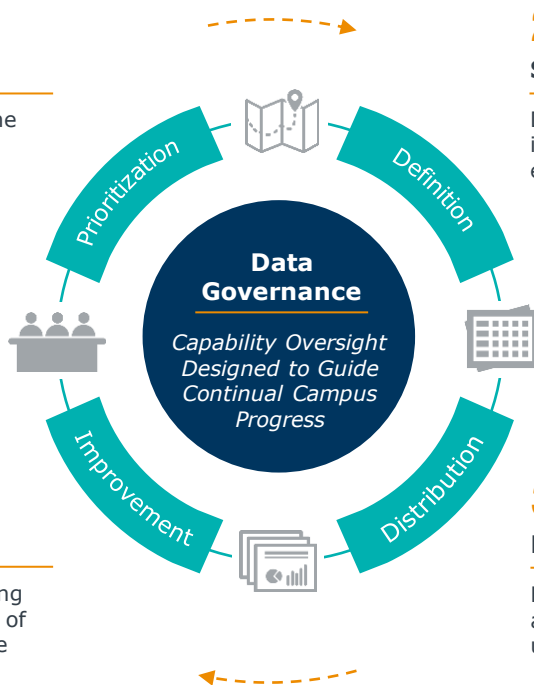Data governance workflows identify and define enterprise data objects

Data Governance

Capability Oversight Designed to Guide Continual Campus Progress

Prioritization

Definition

Improvement

Distribution

4 Improving Quality

Usage issues and emerging needs provide new areas of focus for data governance

3 Enabling User Access

Enterprise data and metadata are made available to end users for decision making

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3   Data Governance in Practice
1. Identify Your Priority Capabilities
2. Score Your Maturity in Those Areas
3. Share Lessons Learned, Battles Won and Lost, Etc.

Definition Strategy	Common Data Dictionary	Data Consumption	Data Access Controls	Data Quality Assurance
Our institution defines data terms in clusters, with a strategic focus, and in pursuit of higher objectives for the institution.	Institutional data-of-record is clearly identified, and definitions are readily accessible from a common or centralized location.	Analytical resources are structured so that campus members are guided to the most useful resources associated with their roles and responsibilities.	Our institution has a standardized method for segmenting confidential data from public data.	We actively monitor for anomalous data in enterprise systems and take steps to identify and remediate the underlying causes.
We have a data definition decisioning framework that includes the right people at the right time, enables opt outs, and allows for the agile creation of shared definitions.	Our data dictionary is accessible and understandable by all campus stakeholders, including all metadata associated with represented terms.	End users' needs and usage patterns are monitored and incorporated in planning to determine future investments.	Our institution grants data access on a principled, (semi-) automated basis.	We hold units accountable for data quality by designating unit-level stewards and monitoring compliance with university-wide standards for data cleanliness.

Votes in This Row

Definition Strategy	Our institution defines data terms in clusters, with a strategic focus, and in pursuit of higher objectives for the institution.	We have a data definition decisioning framework that includes the right people at the right time, enables opt outs, and provides an agile mechanism for creating shared data definitions.

These Statements Describe my Institution's Current State:	Place Your ONE Stamp in This Column
1 Not at all	
2 Poorly	
3 Somewhat	
4 Fairly Well	
5 Well	

Common Data Dictionary

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Understanding Our Data Governance Strengths and Priorities

Data Access Controls	Our institution has a standardized method for segmenting confidential data from public data.	Our institution grants data access on a principled, (semi-)automated basis.

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Understanding Our Data Governance Strengths and Priorities

Data Quality Assurance	We actively monitor for anomalous data in enterprise systems and take steps to identify and remediate the underlying causes.	We hold units accountable for data quality by designating unit-level stewards and monitoring compliance with university-wide standards for data cleanliness.

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Data Consumption

Analytical resources are structured so that campus members are guided to the most useful resources associated with their roles and responsibilities.

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Institutional Strategy	Data-Driven Culture	Data Committee Structure	Organizational Continuity	Implementation Framework
The institution has a formal data plan which articulates the steps to be taken to better leverage data and which names those responsible for executing those steps.	Campus members recognize that data is an institutional asset and as such is not owned by individuals or departments. Rather, data is owned by the institution.	We distinguish between strategic and operational data issues and match the seniority and expertise of people to the data governance activities we task them with.	A designated individual(s) oversees data governance and management, working in tandem with unit-level data stewards.	Data stewards are appointed and known within all operational units, and have clear policies outlining their roles and responsibilities.
Campus leaders recognize data governance as an enterprise-level capability, requiring shared governance across the institution.	Leaders promote a culture of data informed decision-making, pressing campus to base resource decisions and choices on fact, not intuition.	The roles and responsibilities of each committee and its members are clearly defined, recorded, and revisited regularly.	We have an established and clearly documented process for onboarding new members of the data governance group at the leadership and implementation levels.	Our data domains are clearly mapped, providing full coverage of enterprise information across different functional areas and silos.

Votes in This Row

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Organizational Continuity	A designated individual(s) oversees data governance and management, working in tandem with unit-level data stewards.	We have an established and clearly documented process for onboarding new members of the data governance group at the leadership and implementation levels.

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Implementation Framework

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What's Next for Your Institution?

Questions to Take Back to Campus

- Where are the largest **discrepancies in people's perceptions** of data governance maturity? How can you create better alignment?

- How thorough is our **understanding of the processes as they exist today**? How different are they across groups/units?

- What should the institution **be focusing on in the immediate term**? Are there already strategic areas of focus that your campus should be delivering on?

- What are your **next steps** to embed new thinking into the way that work gets done?

- How can we continue to **leverage EAB's work** as we redesign governance?

- Who is **accountable** for ensuring that next steps take place?

Get in Touch!

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