

# Enter If You Dare: Data Governance Can Give You a Scare

October 2023

## Agenda

- Opening
  - Introductions
  - Background
- Discussion
  - What is Data Governance?
  - How we got started
  - Ghostly Slow going at first
  - Knocking on doors and breaking down barriers
  - Q&A

#### Introductions: About Me



#### Becky Frieden

Senior Director, Enterprise Applications and Decision Support Systems

- Adjunct Faculty, MS Business Analytics
- As a senior member of the IT leadership team, I focus primarily on the management and accessibility of enterprise data to enhance the decision-making power of university officials
- Prior to NYIT, I was the Director of Administrative Services at Clark University

#### **Introductions: About NYIT**

Among lowest net tuitions among private schools in New York State. 98% of our undergraduate student receive some form of financial aid.



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**28%** of our students are firstgeneration (first in their family or first in this country).

In Fall 2021, NYIT enrolled its largest incoming freshman class in 12 years.

# 11:1

student-tofaculty ratio.



#### **Introductions: About NYIT**

94%

of our students are employed or continuing their education within 6 months of graduation.

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Most diverse student body in the U.S. (24/7 as reported in USA Today). 3,700 undergraduate students

2,500 graduate students

1,770 medical students ~90

degrees and programs including three doctorate degrees (DO, DPT, DOT) and three Ph.D.s.

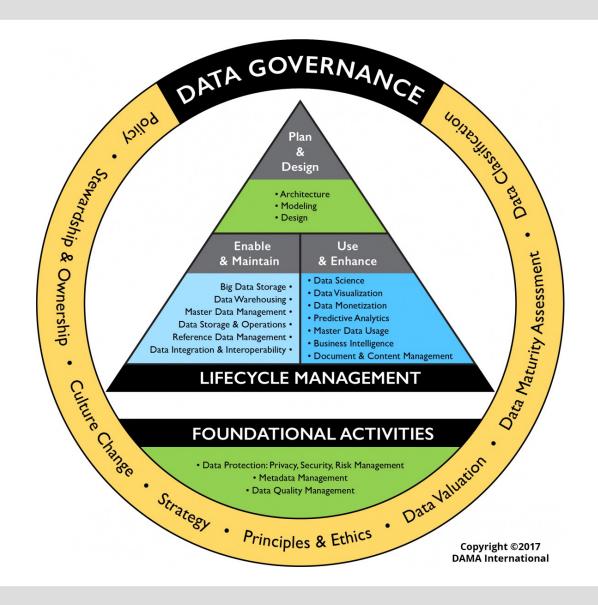


NYIT ranks in the top 2% of U.S. institutions in ROI for lowincome students and #3 for ROI among all U.S. private nonprofit bachelor's degree institutions with at least the median share of Pell Grant recipients.

#### **Background: NYIT's Analytics Goals**

The Enterprise Data Management Plan consisted of four pillars:

Commit to a rigorous data governance program. Build improved competency in data management and data analytics across the organization. Establish a contemporary and robust technical infrastructure for analytics and business intelligence. Leverage analytics, technology, and process innovations to advance institutional strategies and decision making, increase operational effectiveness, reduce costs and support continuous quality improvement. What Is Data Governance: An apparition or something real?



#### What Is Data Governance: The scary truth

What do you consider Data Governance?



What it is not – it is not a project. It is an established, intentional culture and way of thinking.  $\overline{\mathbf{N}}$ 

Data Governance Journey.



Data Governance is the people dimension of Data Management.

DAMA Definition: "Data Governance (DG) is defined as the exercise of authority and control (planning, monitoring, and enforcement) over the management of data assets."

### What Is Data Governance: At the beginning of the night...

How could we make data governance relevant to key stakeholders and something everyone could get excited about?

#### Top Down and Bottom Up

 Who participates in which structure



#### **Developing a Charter**

- Policies, Procedures, and Standards
- Data Quality and Consistency
- Privacy, Security, Compliance, and Risk Management
- Architecture, Integrations, Storage
- Communication, Collaboration, and Training

#### What Is Data Governance: Ideal future state

The goal is to get people to act on what the data reveals. But first, they have to trust the data.



Visualize and Improve.



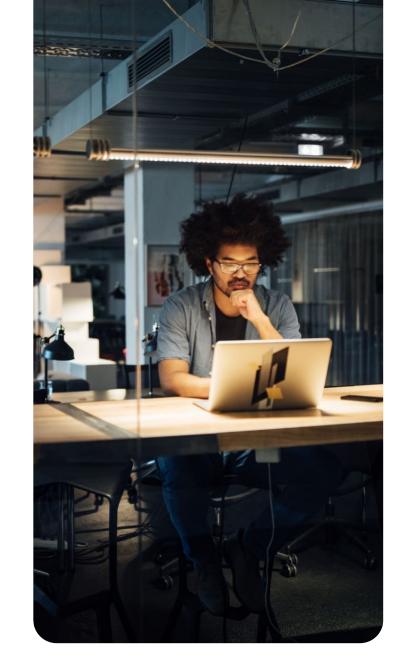
Provides "Big Picture" View & Trends.



Requires the Aggregation of Multiple Sources of Data.

## Ghostly Slow Going at First...

- Data Governance isn't considered "fun" or "innovative" so it's really hard to get people behind it.
  - They couldn't relate to where it impacted them.
- As we made changes and grew in maturity in various applications, integrations, and reporting, working in silos was no longer viable.
- Cycle time and transparency changed the way the org thought about data – the president could see the result of their work in a matter of hours (good or bad).
- While we had a form of data stewardship, processes hadn't been formalized and it was a struggle to bring structure to our processes.



#### Knocking on Doors and Breaking Down Barriers: Level Set



👻 📌 Resources
🖹 START HERE: Accessing LinkedIn Learning Videos 🍓
Module 1: Introduction to Data Fluency
Repare: Module Overview
P Module 1 Overview
💡 Learn: Module Materials
Module 1 Materials: Enterprise Data Management
B Module 1 Materials: Being a Good Digital Citizen - Data and Privacy
Data Personality Quiz
P Module 1 Materials: Data Personality Quiz
X Module 1 Feedback Survey
Module 2: Analytics at New York Tech
<ul> <li>Module 3: Leveraging Data at New York Tech</li> </ul>
E Prepare: Module Overview
Module 3 Overview
O Learn: Module Materials
Module 3 Materials: Data Informed Decision Making
P Module 3 Materials: Analyze and Evaluate
Module 3 Materials: Data Storytelling

#### Data Fluency & Analytics Courses

<b>DISTURDED DE LA CONTRETACIÓN DE</b>	MODULE MATERIALS         Data Informed Decision Making         Links on data. Informed Decision Making         Tars and we we of data is critical to decision-making and understand what skills are needed to leverage data.
	Intro to Data Informed Decision Making Part I (1653) Introduction to Data-Informed Decision Making Decision Making Decis

Module 2 Materials: Analytics at New York Tech Module 3 Materials: Data Informed Decision Making

#### Knocking on Doors and Breaking Down Barriers: Use Your Tools

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K Back Tools	9						
TOOLS							
Data Dictionary	C						
Google Suite	C						
LinkedIn Learning	C						
Mandatory Annual Training For Faculty and Staff	þ						
Microsoft 365 Includes Teams, OneDrive, and OneNote	1						
University Applications Many applications require VPN, Citrix or on- campus devices.	þ						
Zoom	Q						
* Please note, some applications are not available on mobile.							
Home Messages Search Favorites	000 000 Menu						

Data Dictionary	Data D	lictionary				+ 4	dd New I	
	Show	50 ¢ entries Filter By	Category	~		Search:		
Data Categories	ID† 1	Field Name	Data Type 1	Data Format	Field Size	Description 1	Exam	
<ul> <li>Data Types</li> <li>Data Stewards</li> </ul>	1	Academic Year	Date/Time	MM/DD/YYYY	20	09/01/YYYY to 08/31/YYYY		
	2	Degree Seeking	Text		20	Any student who is pursuing a degree granting progclick for more		
	3	Degree Year	Date/Time	MM/DD/YYYY	20	07/01/YYYY to 06/30/YYYY		
	4	Fiscal Year	Date/Time	MM/DD/YYYY	20	07/01/YYYY to 06/30/YYYY		
	5	First Generation	Text		20	If they have a FAFSA on file for the year, then FAclick for more		
	6	Full Time Student	Text		20	Full Time Students are classified as: Undergrad Fclick for more		

#### Knocking on Doors and Breaking Down Barriers: Transparency and Buy-in



Figure out the processes where you either produce or use high-value data (admissions, registration, location management).



Design your governance to prioritize supporting increased worth for those high-value data.  $\left( \frac{1}{2} \right)$ 

Decentralize the work of governance to the people who actually produce and/or use the data so that there is greater ownership, engagement, speed, and impact – go to the Gemba.

#### Knocking on Doors and Breaking Down Barriers: Practice Master Data Management

- Transactional Master Data
  - Data as part of a transaction such as an enrolled student
- Reference Master Data
  - Lookup or Domain Data
    - Taxonomies/Hierarchy
    - Domain Values
      - Standards (ISO)
      - Industry Standards (NCES)
      - Internal Standards
    - Linked to Master List of Data

#### De-Duping System of Record/Source of Truth/Golden Record

	Domain			Source					Master			
D	Description	Name	Domain	Desc	Master Code	Domain ID	ID	Code	Description	Effective Begin	Effective End	Parent
1	100 Race	Slate	1	LOO White	1	1	00	1 R5	White/Caucasian	1/1/20	21 null	null
2	200 Gender	Slate	1	100 Hispanic or Latino	2	1	00	2 E 1	Hispanic or Latino	1/1/20	21 null	null
3	300 Campus	Slate	1	100 Black or African American	3	1	00	3 R3	Black or African American	1/1/20	21 null	null
		Slate	1	LOO Asian	4	1	00	4 R2	Asian	1/1/20	21 null	null
		Slate	:	100 American Indian or Alaska Native	5	1	00	5 R1	American Indian or Alaska Native	1/1/20	21 null	null
		Slate	:	Native Hawaiian or Other Pacific 100 Islander	6	1	00	6 R4	Native Hawaiian or Other Pacific Islander	1/1/20	21 null	null
		Slate	:	100 Other	7	1	00	7 R9	Other Race	1/1/20	21 null	null
		Target X	:	100 White/Caucasian	1	1	00	8 RZ	Unknown/Not Provided	1/1/20	21 null	null
		Target X	1	LOO Hispanic	2	1	00	9 EY	Decline to state	1/1/20	21 null	null
		Target X	:	100 Black	3							
		Target X	:	100 Asian	4							
		Target X	:	100 American Indian	5							
		Target X	1	100 Native Hawaiian	6							
		Target X	1	100 Other	7							
		People Soft	1	100 White/Caucasian	1							
		People Soft	1	LOO Hispanic	2							
		People Soft	1	100 African American	3							
		People Soft	1	LOO Asian	4							
		People Soft	1	100 American Indian	5							
		People Soft	1	100 Native Hawaiian	6							
		People Soft	:	100 Other	7							

Lessons Learned		
Go to the Gemba.	Use a tangible catalyst to make it relevant (HelioCampus).	Use your tools.
Just-in-Time Data Governance (sometimes just an email thread is a way to get "quick wins").	Make it timely - devote a few minutes to "data in the news" at the start of each meeting.	Partner - it takes a village so partner with IR and other departments that manage data.

#### Other Horror Stories From the Field: What your colleagues say about Data Governance

"Data governance is often the job of root cause analysis. Rarely do you have a 'data problem.' Most often, you have a 'data entry problem.'"

> Jeremy Anderson Baypath University

"Data Governance is a team sport. It requires everyone involved in the data lifecycle, even if it's just an awareness of your personal responsibility to interpret and protect data."

> Cathy Lloyd Independent Data Consultant and formerly of UW Madison

"DG has a topdown side of it where policies are created and enforced, yet it should also have a bottom-up side where we support the people implementing these policies."

Prof. Dr. Bas van Gils Antwerp Management School "In the journey of data-driven decisions, think of IT as the engine, business teams as the drivers, and DG as the invaluable manuals, instructions, and maps guiding us to our destination of informed choices. And when you have a data issue not everything is a mechanical fix; sometimes it's about the driver's knowledge of how to leverage new features of the car, and following the rules with guidance of data governance as their trusted companion on the road to informed decisions."

> Edlira Stefani Bentley University

#### What's Next



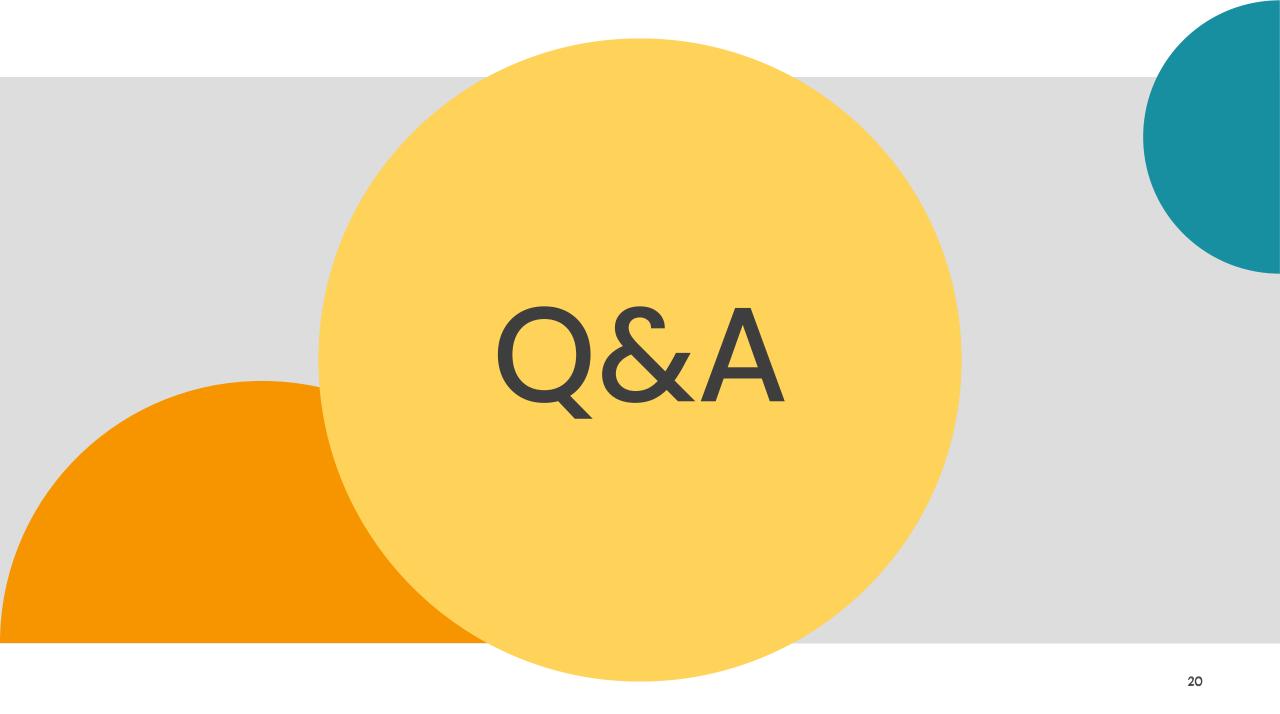
Analysis Agenda: how can we look at our students from the Admit to Retain lens?



Academic Performance Management



Develop a systematic methodology for leveraging the platform



# Thank you

