Data
Steward
Meeting
July 16, 2019

Agenda

• Data Governance Update
• AIDA – Authoritative Institutional Data Assets Update
• Collibra Update
• Domain Trustee / Steward / Custodian Review
DATA GOVERNANCE UPDATE

Authoritative Institutional Data Assets

Project Overview
Data Stewards Quarterly Meeting - July 16, 2019
Authoritative Institutional Data Assets (AIDA) will provide and maintain an authoritative, governed, trusted, shared, and reusable set of data, including master and reference data assets.

Data governance [is] the specification of decision rights and an accountability framework to ensure appropriate behavior in the valuation, creation, storage, access, use, archiving and deletion of authoritative data assets.

Note: The project formerly known as Master Data Management (MDM) has been renamed to Authoritative Institutional Data Assets (AIDA).

Today’s data silos make it difficult to consistently answer questions

- Who engages in study away?
- How many students?
- What types of students are admitted?
- What is the graduation rate?
- What is the time to degree?
- What is the level of housing occupancy?
- What is the participation in varsity athletics?
- What is the participation in intramural sports?
- What is the utilization of health services?
- What clubs are available?
- What are the career placement outcomes?
- How many internships?
- How diverse is the student body?
- What is the participation in club sports?
- How many students in varsity athletics?
- What is the participation in club sports?
Challenges Prompting AIDA

Why is this person's name different? Shouldn't it be the same across these systems?

Where can I find preferred name? Why do I have to go to another system?!

Where's the documentation?

Who can answer my question?

Which source do I use? Should I use the system or the file?

Is that count a headcount or a position count?

How long until the data is available?!

NYU Analytics Platform Conceptual Architecture (High Level)

1. File/Source to Stage Compare
   - Check sources
     - Identify source
       - Prepare for integration
     - Run checks
       - Compare files across sources
     - Identify transformations and mapping
     - Fix issues
       - Transform to new file
       - Compare transformed file to original file
       - Create process for verification

2. Reconciliation: Stage to DW
   - Resolve issues: increase target resolution
     - Identify metadata changes
     - Transform data
     - Reconcile data with target tables and information system
     - Create reporting link in the database

3. Charts & BI Reports: Compare
   - Create comparison table
   - Generate report

4. Trace and reconciliation from reports to the source

On-premise / SaaS/Cloud

NYU Sources
- Workday
- Registry
- OrgSync
- SIS
- UDA
- Simplicity

Data acquisition/ ingestion

Landing & Staging

Control Metadata

Data Vault

Data Lake

Distribution / analytics

Snowflake

Data Science/ advanced analytics
How will AIDA enhance the NYU Ecosystem?

- Simplify the design where possible
- Metadata driven code generation (ETL / ELT, testing)
- Rerun / reload without losing change history
- Maintain loosely coupled connection with sources
- Run statistics, status messages in audit tables

- Archive data feeds: point-in-time changes for reloads
- Load everything (load raw data; filtered consumption)
- Implement data filters (hard business rules)
- Vary presentation for consumption (soft business rules)
- Monitor and report on quality (profiling & score cards)

NYU’s Data Governance Framework

NYU’s Data Governance Framework was developed with Gartner.
Multi-year Plan

Phase 5 - Enable Digital Application Development
Use AIDA to support future digital application development & mobile strategies.

Phase 4 - Advanced Analytics
Enable advanced analytics to support major business use cases such as fundraising, space optimization, etc.

Phase 3 - Space & Location Hub
Add Space Data to Support Space Optimization Initiatives and identify additional domains.

Phase 2 - People & Reference Data Hub
Add the People / Identity & Reference Data Hub to support the Identity Project & University Programs.

Phase 1 - Foundation
Establish the technical, planning, organizational, and governance foundation needed to support a successful implementation.

Student Data Architecture

- Admissions
- Finance
- Enrollment
- Teaching & Learning
- Academic Affairs
- Student Life
- Global Services
- Space / Location
- Alumni Relations

- Registration
- Financial Aid
- Course Enrollment
- Study Away
- Housing
- International
- Organizations
- Foundations
- Gifts
- Pledges
- Engagement
- Transformative Program
- Mentorship
- Career - Internship

- Learning Analytics
- Classroom Assessment
- Research (Library)
- Faculty Appointments
- Advisors
- Research
- Recruiting
- Calculation/Citation
- International Students
- Orientation
- International Student Services
- International Faculty and Research Scholar Services
- Facilities
- Usage
- Events
- Classroom
- Technology
- Global Services
- Diversity and Inclusion
- Global Services
- Housing
- Involvement
- Leadership
- Athletics
- Career - Internships
- Health and Wellness
- International
- Student Services
- Mentorship
- Career - Internship
- Organizations
- Foundations
- Gifts
- Pledges
- Engagement
- Transformative Program
- Mentorship
- Career - Internship

Notes:
1. Research may include faculty and student research
2. Authoritative Institutional Data Assets

AIDA Foundation

Space Hub

People / Identity & Reference Data Hub

Advanced Analytics

iX

NYU

7/25/2019
Student Life Cycle

1.1 Potential Applicant
1.2 Applicant
1.3 Admitted
1.4 Matriculated
1.5 Enrolled
1.6 Alumni

Student Inquiry
- Application
- Plan Selection
- Admissions Decision
- Financial Aid Decision

Admissions Decision
- Student Acceptance or Denial
- Tuition Deposit or Waiver
- Final Records Submitted

Register for Courses
- Apply for Housing/Dining

Sign up for Student Activities (Athletics, Club, Service, Leadership)

Utilize Student Resources (Health, Wellness, Career)
- Complete Coursework
- Add Academic Enrichment (Study Away, Research)
- Graduate/Earn Credential*

WORK IN PROGRESS

Student Life Business Function-to-Application Mapping

1.1 Potential Applicant
1.2 Applicant
1.3 Admitted
1.4 Matriculated
1.5 Enrolled
1.6 Alumni

Slate

Advance

FAFSA

SIS / Albert

StarRez

NYU Engage (OrgSync)

Symplicity
Establish technical and organizational foundation
- Data Governance Target State Framework accepted (Fall 2018)
- EDM’s Data Governance Support team established (October 2018)
- Data Governance Executive Steering Committee initial meeting (March 2019)
- Enrollment Management Office of Data Governance recruiting

Survey and evaluate vendor’s technical solutions; recommend
- Master Data Management (MDM) RFP & POCs completed (April 2019); recommendation to defer purchase
- Invest in Data Governance tool; Collibra procurement in progress (cloud-based)

AIDA Student Hub development, focused on Student Life, is in progress with some school stakeholders
- Partners include Student Affairs, Enrollment Management, Stern, and Tandon
AIDA Space Hub development starting
- Steering committee and stewards list being developed

Next Steps
- Continue developing data custodian school partnerships (e.g., Steinhardt, NYU Abu Dhabi)
- Expand to other domains (e.g., space & location; organizational reference data)

University Development
- Because of NYU’s diversity and complexity, a single CRM system is impossible. However, agreement around standard platforms, data governance and policies is possible
- NYU is in the midst of updating its donor and alumni management system, among NYU’s important CRM systems
- In addition to upgrading the system, NYU has the opportunity to simplify and improve the management of constituent data across the University

Space
- By linking master data and hierarchy information, NYU can gain a more complete picture of how it uses its space and gain valuation insight for University space management
- NYU has the opportunity to completely understand space usage through master data, AI, and a 360-degree perspective
- This will help the University optimize the use of classrooms, office, and buildings, and help avoid high capital costs of building new infrastructure
(Central Business) Data Stewards are typically operational managers in a functional area with day-to-day responsibilities for managing business processes and establishing the business rules for the transaction systems. School (Business) Stewards advise Data Stewards on school-based data and issues. Schools designate their representative School Stewards to support the University’s Data Governance activities as needed.

Data Stewards regularly collaborate with School Stewards.

Central
- Engage Functional Unit
- Collect Requirements
- Consult on Requirements
  - Collaborate on Future State
  - Develop Future State
  - Provide Functional Support

School

Let’s talk.
Appendix
After a student has accepted admission and become term activated in SIS/Albert, users can report on the metrics above per term on a daily basis versus the same time last year.
Student Life Example

1.1 Potential Applicant
1.2 Applicant
1.3 Admitted
1.4 Matriculated
1.5 Enrolled
1.6 Alumni

Demographic
Organization
Event
Group/Club
Student
Enrollment
Community
Faculty

Student Life

Application Rate
Admit Rate
Accept Rate
Retention Rate
Graduation Rate

Deny Rate
Decline Rate
Defcr Rate
Drop Rate

Course Enrollment

Demographic
Academic Program
Date
Course
Enrollment Status
Faculty

Collibra: Update

Last updated: 7/3/2019
Accomplishments

- **Data Governance Target State Framework** accepted (Fall 2018)
  - Office of Data Governance established within Office of Institutional Research and Data Integrity
  - Office of Data Governance Support established within Enterprise Data Management

- Master Data Management (MDM)
  - MDM RFP & POC completed April 2019; recommend to defer purchase

- Invest in Data Governance tool
  - NYU has procured Collibra for data governance (June 2019)
    - NYU Langone uses Collibra; learning from their experience
    - Cloud deployment model

Short Term

- Develop a Collibra cloud deployment plan (in progress)
  - Consult with NYU Langone on their deployment plan and experience

- Build out initial use-cases
  - Link definitions utilized in Senior Leadership Information Portal (SLIP)
  - Align with related project work
    - Data Dictionary and Catalog
      - Authoritative Institutional Data Assets (AIDA)
        - Student Life
          - Clubs and Organizations (OrgSync) - in progress
          - Wasserman Career Center - in progress
        - Enrollment Management - in progress
        - Space Data - developing
        - Reference Data - developing
    - Data Quality Management
      - Implement quality feedback loop with focus on Identity and UDW+ cases
For more information contact

Adrian Kulpa
adrian.kulpa@nyu.edu

or

Huey-Chih Lee
(Project Manager)
hl3481@nyu.edu

Data Governance Role Assignments

Data Governance Executive Steering Committee

Robert Cashon Senior Vice President, Development and Alumni Relations
Sabrina Ellin Vice President, Human Resources
M. J. Kooli-Finn Senior Vice President, Enrollment Management (ex-officio)
Lori Peters Vice President and Chief Information Officer (Co-Chair)
Stephanie Franke Senior Vice President for Finance and Budget and Chief Financial Officer
Cybele Rivers Deputy Provost

Ex Officio Members of Data Governance Executive Steering Committee

Adrian Kulpa Senior Director, Data Governance Support Services and Master Data Management
Eduardo Melina Interim, Director, Office of Data Governance and Assistant Vice President, Institutional Research and Data Integrity
### Data Governance Role Assignments

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Domain Trustee</th>
<th>Data Steward</th>
<th>Data Custodian</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Projects and Facilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Projects (FM)</td>
<td>S. Huang</td>
<td>Capital Projects (FM)</td>
<td>Walter Lecanto</td>
</tr>
<tr>
<td>Capital Projects (CM)</td>
<td>K. L. Lucci</td>
<td>Academic and Admin Projects</td>
<td>Vincent Flowers</td>
</tr>
<tr>
<td>Capital Projects (IP)</td>
<td>K. L. Lucci</td>
<td>Global Projects</td>
<td>Andrew Reynolds</td>
</tr>
<tr>
<td>Capital Projects (CMI)</td>
<td>K. L. Lucci</td>
<td>NYU 203</td>
<td>Amanda Lee</td>
</tr>
<tr>
<td>Finance and Technology (Campus Cash)</td>
<td>A. Tang</td>
<td>Client Services Center</td>
<td>Brian Mackie</td>
</tr>
<tr>
<td>Science</td>
<td>L. Chang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td>R. Roache</td>
<td>Compliance</td>
<td>Robert Roache (Thirdparty)</td>
</tr>
<tr>
<td>Student</td>
<td>M. C. Kimbark</td>
<td>Registrar</td>
<td>Beth Kmieglutz</td>
</tr>
<tr>
<td>Enrollment Management</td>
<td>S. J. Kimbark</td>
<td>Student Success</td>
<td>Beth Kmieglutz</td>
</tr>
<tr>
<td>Data Governance</td>
<td>E. Malona</td>
<td>Data Glossary</td>
<td>Fred Cohen</td>
</tr>
<tr>
<td>University Insurance</td>
<td>University Insurance</td>
<td>Runway Reporting</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Finance Operations</td>
<td>University Financial</td>
<td>Investments</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>University</td>
<td>University Financial</td>
<td>Investments</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Procurement Systems</td>
<td>University Treasury Systems</td>
<td>Procurement Systems</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>University Treasury Systems</td>
<td>J. Wilcox</td>
<td>Procurement Systems</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>B. Davidovich</td>
<td>Benefits Management</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Global Programs</td>
<td>P. Lambo</td>
<td>Global Programs</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Human Resources</td>
<td>S. Ellis</td>
<td>Human Resources</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Identity</td>
<td>T. Taylor</td>
<td>Identity</td>
<td>John Bonomo</td>
</tr>
<tr>
<td>Identity</td>
<td>S. Smith</td>
<td>Identity</td>
<td>John Bonomo</td>
</tr>
</tbody>
</table>

as of 15 July 2019  Page 2 of 6
### Data Governance Role Assignments

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Domain Trustee Individual</th>
<th>Area</th>
<th>Data Steward Individual</th>
<th>Data Custodian Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>Len Peters</td>
<td>NYU IT</td>
<td>Kitty Bridges</td>
<td>Vincent Hou</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identity Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Angela Chen</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IT Service Usage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kitty Bridges</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Networking and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Telephony Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rich Mikesh</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Email Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hareem Barks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Michael Meddick</td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td>Rody Austin</td>
<td>Integrated Library</td>
<td>Aveda Ross</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>System (NYU)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>David Perry</td>
<td></td>
</tr>
<tr>
<td>Public Safety</td>
<td>Marjorie Lynch</td>
<td>Public Safety</td>
<td>John Mehtman</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adam Kolesky</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>Gail Nadeau</td>
<td>Budget</td>
<td>Scott Harlow</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Raj Lui</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Andy Devo</td>
<td></td>
</tr>
<tr>
<td>Campus Services</td>
<td>Owen Moore</td>
<td>Housing</td>
<td>Mike Region</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jason Tawara</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dining</td>
<td>Mike Region</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jason Tawara</td>
<td></td>
</tr>
</tbody>
</table>

### Data Governance Role Assignments

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Domain Trustee Individual</th>
<th>Area</th>
<th>Data Steward Individual</th>
<th>Data Custodian Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Affairs</td>
<td>Marc Weis</td>
<td>Admissions</td>
<td>Chris Blaklow</td>
<td>Eddie Lemosilly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Athletics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Center for Student Affairs, Leadership, and Service</td>
<td>Adam Wing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community Standards</td>
<td>Craig Jolly</td>
<td>Adam Fiehmann</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Office of Residential Life and Housing Services</td>
<td>Tom Elliott</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Health Center</td>
<td>Carlo Guskis</td>
<td>Mike Barnes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Resource Center</td>
<td>Duane Vogelkang</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>studentcenterforCareerDevelopment</td>
<td>GarysankaranJronicsFulley</td>
<td></td>
</tr>
<tr>
<td>University Development</td>
<td>Scott Jenkins</td>
<td>Development and Alumni Relations</td>
<td>Lisa Murphy</td>
<td></td>
</tr>
<tr>
<td>and Alumni Relations</td>
<td>Mohammed Dasser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*as of 15 July 2019*
Next Meetings

• Monday, October 7, 2019: 2:00 – 3:30pm
• Monday, January 6, 2020: 2:00 – 3:30pm
• Thursday, April 16, 2020: 10:00 – 11:30am
• Wednesday, July 15, 2020: 2:00 – 3:30pm

Thank You!