Data Steward Meeting

June 2, 2015

NYU Institutional Research And Data Integrity
Today we’re going to:

Have a demonstration of the Business Glossary

Share information gathered during the recent visits with the Data Domain Trustees

Have a guest speaker from NYU IT who will present “The Big Picture” – in addition to requesting the Business Glossary, you also asked for a better understanding of University data systems
Agenda

• Business Glossary
• Meetings With Data Domain Trustees
• The Big Picture: NYU IT ECOMS
At our first meeting last August, we had asked about data problems you are experiencing, and we asked for what would help you. The top answer was a Business Glossary. The Data Trustees heard that, and as a result we have partnered with NYU IT and the DSG to develop a Business Glossary.

Last meeting we showed you a prototype. Today, we can share the Alpha (or maybe Beta) version. NYU IT has worked diligently to have this ready for today’s meeting. The effort has been approached as a true partnership.

[Live demonstration]
Agenda

• Business Glossary
• **Meetings with Data Domain Trustees**
• The Big Picture: NYU IT ECOMS
Meetings with Data Domain Trustees

- Most of the meetings have taken place
- Will provide a write up for our next meeting
- Some quick observations:
  - Financial systems seem to have cleaner data
  - Stand-alone systems seem to have cleaner data
  - When data affects an office, they make an effort to clean it up

The concept of “cleanliness” is relative, and note that I am not saying there are no problems in these examples, BUT...
- financial systems have always been audited, and have had to be cleaner
- when one office both enters and uses data, it tends to be cleaner – they make sure of it
- if there is an impact – for example space data impacts cost allocations in budgets – the data is cleaner

The goal is to have all data as clean as possible. Of course we will never reach 100%, but the goal is to improve data quality.

More to come on this in the future.
Today is your lucky day – not only have you received one thing you’ve asked for, the Business Glossary, but we’re about to deliver a second: If you think back to the items identified last August, about halfway down the list was an item to enhance your knowledge about our data systems, what information is available from them, and how that information is captured. The next presentation will do exactly that.

I am very pleased to tell you that this afternoon we are going to give you an idea of the Big Picture. But because it is a “big picture” it is an overview – focusing mostly on the systems maintained by NYU IT, but incorporating some other systems as well. This overview will provide insight into some of the University’s core enterprise systems and how they interact with other systems. It may also help identify areas where you feel this group would benefit from taking a deeper dive as we go forward.

In order to do this, I reached out to my colleagues at NYU IT, and they put one of their top people on it – someone I’ve worked with over the years (not saying how many) on numerous, varied projects. Someone I can truly call a colleague, and who has a good understanding of NYU IT’s administrative data systems. Someone who has been honored by the University by receiving the Distinguished Administrator Award. It is my pleasure, to introduce Chris Agnelli from the Enterprise Computing and Support Services area of NYU IT to give you an idea of how the pieces all fit together and how keeping data accurate in each functional business area has impacts across the University.
Today we’re going to have an overview of the major application areas, core system data interfaces, and how data flows between them.
Major Application Areas
There are four major application areas within ECOMS.
• Financial Systems
• Student Information Systems
• Human Resources (HR)/Business Process Applications (BPA)
• Enterprise Data Warehousing & Support Services
These are the applications managed by the Financial Systems area within ECOMS.

- fame
- Advance
- Hyperion Planning
- Hyperion Strategic Finance (HSF)
- Data Relationship Management (DRM)
- AP Workflow
- Tuition Remission

*Did you know?*

- fame can process 49 currencies, 13 are currently used.
- In the last 12 months, 236,674 payments (checks) were produced from fame, in a total of 10 currencies.
These are the applications managed by the Student Information Systems area within ECOMS.
Data interfaces (integrations) include both those both internal and external to the University.
These are the applications managed by the Human Resources (HR) / Business Process Applications (BPA) area within ECOMS. Data interfaces (integrations) include both those both internal and external to the University.
These are the applications managed by the Enterprise Data Warehousing & Support Services area within ECOMS.

- University Data Warehouses (UDW, UDW+)
- Interactive Reporting (Brio)
- Lenel
- One Card
- NYU Traveler

**Did you know?**

- UDW+ financial data has an availability of 99% as a result of an intricately coordinated, multiple refresh schedule enabled by the infrastructure put in place for Higher Availability.
- UDW+ uses geospatial reporting which allows data concentrations to be displayed on a U.S. map by demographics such as zip code and state.
We’ll now share some sample application interfaces for fame, SIS and PeopleSync (Workday).
This is a sample of the interfaces with fame and is not exhaustive. The systems in italics are not managed by NYU IT. ECOMS core applications are denoted by the darker shading.
This is a sample of the interfaces with SIS and is not exhaustive. The systems in italics are not managed by NYU IT. ECOMS core applications are denoted by the darker shading.
This is a sample of the interfaces with PeopleSync (Workday) and is not exhaustive. The systems in italics are not managed by NYU IT. ECOMS core applications are denoted by the darker shading.
If we take the information presented on the three previous slides and put them all together, this is what it looks like!
Remember, this is a sample of the interfaces and is not exhaustive.
ECOMS core applications are denoted by the darker shading.
Not all of the applications shown are managed by NYU IT.
• No application is ‘an island unto itself’ when it comes to data

• Factors that make this so technically challenging:
  • Growing demand for data
  • Global expansion
  • Increasing number of applications and their interdependencies
  • Ever changing technologies

• Technical skill and a tremendous amount of coordination between ECOMS and Business Partners keeps this running smoothly
We’d like to present some sample “data journeys” which highlight the interdependency of offices for data.
How might data about a student flow in various systems?

- Student data is loaded from SIS into PeopleSync, which enables the students to be assigned to positions in the PeopleSync system.

- When a position is assigned to a student, the student’s NYU ID is validated against data in the Registry, and fame supplies the chartfield account information to be used for the position.

- Once there is payroll data for the student, it is loaded to fame.

- Student data is also loaded into OrgSync (a Student Affairs data system). Funding information about the clubs and organizations in OrgSync that this student belongs to is loaded in fame.

- Student data is also loaded into the UDW, which is then used as the source for student data in Advance, the University’s fund raising system.

- Information relating to gifts this student makes to NYU, stored in Advance, is loaded in fame.

(Systems in italics are not managed by NYU IT.)
Here's another example of how NYU's data systems are interconnected:

- Aleph is the Library’s system of record. Student data and employee data are loaded to Aleph to enable individuals to borrow materials.
- When an individual enters Bobst Library, they swipe their ID card, which is validated through the Lenel system.
- The individual chooses materials to borrow. Both the materials and the borrower’s ID are scanned, and the transaction is recorded in Aleph.
- The individual comes back to the library and swipes in. When the materials are returned, they are scanned into Aleph to mark them as returned, and are noted as being overdue with a fine. The fine is paid, and recorded in Aleph. Financial transactions are sent to fame, recording the income.

(Systems in italics are not managed by NYU IT.)
Data Challenges
Student System
- Student has Study Agreement indicating in Buenos Aires.
- All of student’s courses are located in Washington Square.
- Where is the student?

Accounts Payable
- Multiple entries for one vendor, with same address.
- One of the entries gets updated with a new payment address.
- If the entry with the outdated address is used the vendor may not receive the payment, and future services may be withheld from the University.
Vendor File
- New vendor added, with data including e-mail address, telephone number, etc. Incorrect contact information entered.
- Insurance/Risk Management can’t reach vendor for insurance certificate.
- Procurement can’t reach vendor for formal quote.
- Needed goods or services may be delayed.

Reporting
- Post-Docs coded inconsistently in legacy HRIS.
- Post-Docs are being entered in consistent manner in PeopleSync.
- Prior counts were inaccurate; current counts are correct.
- Cannot track trend of number of Post-Docs.
• With so many people entering data into source systems, and so many interfaces, there are lots of places for data errors to creep in

• Due to the interconnected and interdependent nature of information systems, data errors can quickly be proliferated

• Being diligent about data accuracy benefits all of NYU, not just our own area

• ‘If you see something, say something’ – erroneous data should be reported and corrected in the source system
Q&A
Questions?
Thank You!