

Improving Data Governance in Higher Education

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Please find below a description of the planning resource that our instructors have prepared for you as a takeaway from the “Improving Data Governance in Higher Education” webcast.

Pre-Webcast Resource

1. [Data Governance Planning Workbook](#) – Pages 2-10

This workbook is intended to help you and your team better prepare for or further refine a data governance structure and strategy for your own institution. Use this to take stock of your current data governance situation, map out your information ecosystem, identify and organize key stakeholders, pinpoint strategic needs, and establish a common language and vocabulary around data governance terms.

DATA GOVERNANCE PLANNING WORKBOOK

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Section 1: Situation Assessment

Before starting other work, reflect on these criteria to gauge your current level of accomplishment with data governance.

Topic	Self-assessment		
We understand the concept of Data Stewardship	----- ----- Low	----- ----- Medium	----- ----- High
We have embraced the concept of Data Stewardship	----- ----- Low	----- ----- Medium	----- ----- High
We have identified Data Stewards in critical areas	----- ----- Low	----- ----- Medium	----- ----- High
We have identified Data Stewards in auxiliary areas	----- ----- Low	----- ----- Medium	----- ----- High
Data Stewards know and embrace their general responsibilities	----- ----- Low	----- ----- Medium	----- ----- High
Data Stewards in critical areas coordinate their activities	----- ----- Low	----- ----- Medium	----- ----- High
Data Stewardship has a clear champion at our institution	----- ----- Low	----- ----- Medium	----- ----- High
We understand the concepts of Data Governance	----- ----- Low	----- ----- Medium	----- ----- High
We embrace the principles of Data Governance	----- ----- Low	----- ----- Medium	----- ----- High
We have implemented policies, procedures, and structures that support Data Governance	----- ----- Low	----- ----- Medium	----- ----- High
We have identified an individual who is responsible for coordinating/leading Data Governance	----- ----- Low	----- ----- Medium	----- ----- High
We have established metrics and monitoring to assess the accomplishments of our Data Governance efforts	----- ----- Low	----- ----- Medium	----- ----- High

Section 2: Information Systems Ecosystem

Use this chart to identify the critical information systems that serve and support your institution's daily operations.

<u>Purpose</u>	<u>Our system</u>	<u>System Owner</u>	<u>Data exchanges with</u> (list auxiliary systems that send or receive data with this system)
Enterprise Systems			
Accounting & Finance			
Campus Directory			
Human Resources Info Sys			
Identity Management			
Learning Management System			
Payroll			
Student Information System			
Auxiliary & Function-Specific Systems			
Academic Advising			
Admissions			
Alumni			
Building Access			
Community Service			
Degree Audit			
Dining			
Donors			
Email			
Financial Aid			
Housing			
Parking			
Sponsored Awards/Grants			
Student Health			
Study Abroad			

Section 3: Data Stewards, Data Trustees, and Key Stakeholders

Use this chart to identify your Data Stewards, Data Trustees, and other key stakeholders in your information governance efforts. Be certain you have first defined the roles of Data Trustee and Data Steward; for other Key Stakeholders, including a note for why they are included may be helpful. Notice how closely this aligns to your information system ecosystem. As applicable for your institution, add other Functional Areas and move listings between Enterprise and Auxiliary/Specialized groupings.

Enterprise Functions			
<u>Functional Area</u>	<u>Data Trustee</u>	<u>Data Steward</u>	<u>Other Key Stakeholders</u>
Accounting & Finance			
Campus Directory			
Human Resources Info Sys			
Identity Management			
Learning Management System			
Payroll			
Student Information System			

Auxiliary & Specialized Functions			
<u>Functional Area</u>	<u>Data Trustee</u>	<u>Data Steward</u>	<u>Other Key Stakeholders</u>
Academic Advising			
Admissions			
Alumni			
Building Access			
Community Service			
Degree Audit			
Dining			
Donors			

Auxiliary & Specialized Functions

<u>Functional Area</u>	<u>Data Trustee</u>	<u>Data Steward</u>	<u>Other Key Stakeholders</u>
Email			
Financial Aid			
Housing			
Parking			
Sponsored Awards/Grants			
Student Health			
Study Abroad			

Section 4: Strategic Needs & Questions

Change – including maturing into a data governance organization – can be driven by an organization’s strategic needs. Ask yourself and your institutional leadership:

- Where are we going? What is our plan to get there?
- What are the things we must be able to do, which we cannot do today?
- What competitive advantages are we seeking?
- How does our data/information ecosystem relate to these strategic needs?

Identify one strategic need or strategic question your institution currently faces, and respond to the following prompts. Your answers to these prompts will help you comprehend and address the need for data governance that aligns to your strategic needs.

Note: analyzing one strategic need will not tell you all you need to know about data governance, but it can help you chart a path to a quick win and provide a spring board to further buy-in and progress.

<u>Consideration</u>	<u>Response</u>
Strategic Need (describe in detail)	
Who is the driver of this need?	
What is the priority level?	
Who is responsible for responding to the need? (leader/coordinator)	
Who will need to be involved ?	
Are resources available?	(hint: consider human resources, funding, systems, etc.)
What is the timeline /deadline?	
How is data involved in this need?	
Do we collect the necessary data?	
How will we measure progress ?	
<i>If we already collect the data,</i>	
.... in what information system?	
... who is the system owner?	
... is there a data dictionary?	
... is the data of acceptable quality for use?	
... do we have Data Steward approval to use the data?	
<i>If we <u>don't</u> already collect the data,</i>	
... which office should be responsible?	
... how should we structure the data?	
... who will analyze and interpret the data?	

Section 5: Tools for Data Governance

Use the RACI Matrix to help organize communication for each topic or terminology that needs definition. Start by identifying who is accountable for the work. Poll all other stakeholders and ask them to state their desired involvement level.

- **Responsible** – Will own and maintain the definition going forward. Is responsible for reaching agreement on term definitions with any other consulting functional areas.
- **Accountable** – Is accountable for ensuring that the work is completed and helps mediate any disputes. It is helpful if this is a neutral party.
- **Consulted** – Provides direct input into how a term should be defined.
- **Informed** – No Input into the term definition. Is only informed of the result only once a consensus is reached.

TRADITIONAL RACI MATRIX

	Functional Areas			
	Campus Data Steward	HR	Provost	Registrar
Data Steward / (Key Stakeholder)	Jane	Sally	Brain	Chris
TERM OR TOPIC				
Student	A	I	C	R
Faculty Appointment	A	C	R	I
Academic Year	A	I (James)	C	R

ALTERNATE RACI MATRIX

Who	Topic or Term	Responsible	Accountable	Consulted	Informed

Section 6: Template for Term Definition

Use this template as a starting point when defining a Data Term or Data Definition for your organization.

- Hint: before sending out a definition for review, take some time to draft it as best you can. It's easier for a committee to edit an existing definition than to start with a blank sheet of paper.

TERM DEFINITION TEMPLATE / EXAMPLE

<i>Term Name</i>	Place of Origin
<i>Definition</i>	The permanent address of an individual at the time of admission confirmation (for students), application (for staff) or hire (for faculty) to the University.
<i>Synonyms and Abbreviations</i>	None
<i>Source System</i>	Banner
<i>Technical Meta-data</i>	Include queries and data lineage information here
<i>Possible Values</i>	<ul style="list-style-type: none"> • For individuals with permanent residence in the United States, the place of origin is a valid US Postal address. • For individuals with permanent residence outside the United States, the place of origin is a country name
<i>Data Steward</i>	Campus Data Steward
<i>Data Sensitivity Classification</i>	Highly Sensitive (SSN, Credit Card, HIPPA, ...), Sensitive (GPA, Salaries, Race/Ethnicity, ...), Internal (Job Title, Name, Major, ...), Public
<i>Conditional Sensitivity</i>	This data is subject to fine-grain access constraints. For example, a dean should only see this information for students, faculty, and staff under her scope of control.
<i>Role based Access</i>	Student Analyst Role, Staff Analyst Role, Faculty Analyst Role
<i>Data Availability</i>	Staff – 2001 to Today Faculty – 2010 to Today Student – 1982 to Today
<i>Notes</i>	<ul style="list-style-type: none"> • Each active student is assigned a place of origin for each academic term. If an active student has a new confirmed admission for that academic term (e.g. an undergraduate dual enrolls in the MBA program), the place of origin is based upon the student's home address as of the beginning of that academic term. Otherwise, the place of origin remains the same as the previous academic term. • Each faculty and staff member is assigned a new place of origin at each point where they have a break in continuous employment.
<i>Revision History</i>	Draft created 12/5/2012 Updated 1/22/2013 to change the place of origin assignment process for students

Section 7: Recommended Resources

Below is a short list of publications, sites, and other resources that can assist with your comprehension and implementation of Data Governance. Many resources require or involve membership or other cost. Note that endorsements are not implied, nor are exclusions or omissions intentional.

ARTICLES

The Compelling Case for Data Governance, 2015, EDUCAUSE Center for Analysis and Research, ECAR-DATA Working Group paper, located at <http://www.educause.edu/library/resources/compelling-case-data-governance>

Data Owners: Establishing Stewardship Models, (forthcoming December 2015), EDUCAUSE Center for Analysis and Research, ECAR-DATA Working Group paper

The Chief Data Officer in Higher Education, EDUCAUSE Review, June 2015, Michael C. Kelly. Available at <http://er.educause.edu/articles/2015/6/the-chief-data-officer-in-higher-education>

Speaking the Same Language: Building a data governance program for institutional impact, EDUCAUSE Review, vol. 48, no. 6 (November/December 2013), Mike Chapple.

Developing a Data Governance System, October 22, 2010, Education Advisory Board. (Custom research brief, University Business Executives Roundtable).

Developing an Institution-Wide Data Management Policy, September 2012, Education Advisory Board. (Custom research brief, Community College Leadership Forum).

A Common Currency: Achieving Excellence in Data Governance and Adoption of Analytics, 2015, EAB/The Advisory Board Company, IT Forum. Note: a companion toolkit is available.

Developing and Supporting Analytics Initiatives: Insight and Benchmarks for BI in Higher Education, 2015, EAB/The Advisory Board Company, IT Forum.

PRESENTATIONS

Chief Data Officer: Champion of Data Governance and Analytics, Michael C. Kelly and Jason Fishbain, April 2015, conference session, EDUCAUSE Connect, San Antonio. Available at <https://www.educause.edu/events/educause-connect-san-antonio/2015/chief-data-officer-champion-data-governance-and-analytics>

HIGHER EDUCATION DATA GOVERNANCE SITES

Data Governance at UNLV, <http://ir.unlv.edu/DGCouncil/index.html>

Data Governance Center at The George Washington University, <https://it.gwu.edu/data-governance-center>.

Note: under 'Data Governance Resources' material available on data definitions best practices and data governance terms and definitions.

PROFESSIONAL DEVELOPMENT ORGANIZATIONS

Data Governance Professionals Organization, <http://www.dgpo.org/>

Dataversity, Data Education for Business & IT Professionals, <http://www.dataversity.net/>

Higher Education Data Warehousing Forum, <http://hedw.org/>