

Data Governance – The Missing Link for Data Quality Success

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Course Description

Data governance has been getting a lot of attention lately- so has data stewardship. But what is data governance? What is data stewardship? And what do they have to do with data quality? Data quality is often seen as a one-time project - "fix the data and we are done." Even if there is awareness that data quality requires attention on-going, the lack of formal accountability for the data is a critical component that causes many data quality programs to dwindle over time or fail completely.

Data governance is the missing link that provides the structure and process for managing and making decisions about a company's data. It ensures the appropriate people representing business processes, data, and technology are involved in the decisions that affect them. Implementing data governance and stewardship is important for the success of any data quality initiative.

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Speaker Bio

Danette McGilvray is President and Principal of Granite Falls Consulting, Inc., a firm specializing in data quality management to support key business processes around customer satisfaction, decision support, supply chain management, and operational excellence. Projects include enterprise data integration programs, data warehousing strategies and best practices for large-scale ERP data migrations for Fortune 500 organizations.

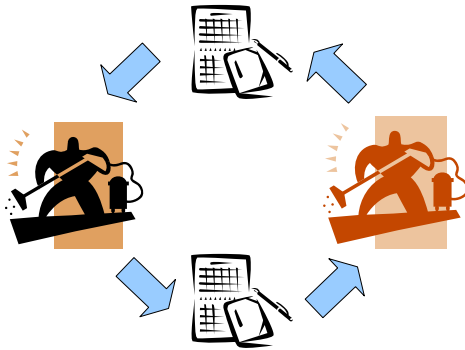
An accomplished program and project manager and facilitator, she has worked with people in all levels of the organization and from all functional areas, giving her a perspective of the political challenges of information management based on real-life experience.

Danette is an invited speaker at conferences throughout the US and Europe, where she trains other industry experts in enterprise information management and data stewardship. She is a member of DMReview.com's Ask the Expert panel, which allows business intelligence and data warehousing professionals to ask questions of industry leaders. She has been profiled in PC Week and HP Measure Magazine and was an invited delegate to the People's Republic of China to discuss roles and opportunities for women in the computer field.

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Sound Familiar?



- Continuing periodic clean-ups with no attention to prevention, e.g. of master data
- Distrust and low use of data warehouse
- No on-going responsibility for quality after a project goes into production, e.g. after Enterprise Resource Planning (ERP) go-live

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What is Missing?

- **Lack of formal accountability for the data.** This is a critical component that causes many information-intensive business initiatives to dwindle over time or fail completely.
- An **environment** where there is the **appropriate level of structure** that provides rules of engagement, formalized accountability, recognized decision rights, appropriate representation, venues for interaction, communication and escalation paths.
- **Data governance and stewardship.** These are missing links that provide the structure and process for managing and making decisions about the data required to run the business and support these initiatives.

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Definitions or What do you mean by governance and stewardship?

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Data Governance

“Data Governance refers to the structure and processes for formally managing information as a resource. Data Governance ensures the appropriate people representing business processes, data, and technology are involved in the decisions that affect them.”

Danette McGilvray

Data governance supplies the structure, roles, responsibilities, and processes that provide **venues for interaction** and **communication paths** to:

- Gather appropriate input
- Make decisions
- Identify and resolve issues
- Escalate issues when necessary
- Implement changes
- Communicate actions

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Data Stewardship

“Data stewardship is an approach to data governance that formalizes accountability for managing information resources in behalf of others and for the best interests of the organization.”

Danette McGilvray

Stewardship vs. Ownership

Steward

Someone who manages something in behalf of someone else.



Own

1. *Emphasizes possessive*: a grammatical word emphasizing that somebody or something belongs to a particular person or thing and not to somebody or something else

2. *Take responsibility for*: to acknowledge full personal responsibility for something

Source: Encarta Dictionary: English (North America)

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Stewardship vs. Ownership

- I promote governance and the idea of stewardship when it relates to data and information.
- I do not promote the use of the word “ownership” when it comes to data and information. Why? Too often people act as if they “own” the data as in the first definition (“a grammatical word emphasizing that somebody or something belongs to a particular person or thing and not to somebody or something else”) which is counterproductive to the well-being of the organization.
- I do promote the use of the word “ownership” when it comes to business processes. Why? Because it is usually used as in the second definition (to acknowledge full personal responsibility for something.) and those with the authority do “own” the business processes in that sense.
- But even though the business may “own” a process, anyone who touches the data in the course of carrying out that process is a “steward” of the data. That is, they have to manage it to meet not just their own immediate needs, but manage it in behalf of others in the company who also use that data or information.

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Other Definitions? Other Words?

Synonyms for Steward:

- **Trustee** (somebody who is given the legal authority to manage money or property on behalf of somebody else; a member of a group of people responsible for managing the financial affairs of an institution or organization)
- **Custodian** (somebody responsible for holding or looking after something valuable on behalf of a company or another person; somebody who wants to protect and uphold something seen as valuable)
- **Caretaker** (somebody who holds an office temporarily, especially when it has unexpectedly been vacated; somebody who looks after a property)
- **Warden** (an official who makes sure that regulations are enforced)
- **Guardian** (a person who watches over or protects somebody or something, or an organization with a protecting role, somebody who is legally appointed to look after the affairs of another)
- **Czar** (an official or a person in a position of authority)
- **Regent** (any of various officers of a university, especially a member of the governing board)

Source: Encarta Dictionary: English (North America)

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Getting Started or How do I begin?

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Recognize The Challenge



- Each household brings their own ways of living, preferences, attitudes. A different level of cooperation and coordination is required to live together (productively/peacefully) in the same house.
- The problem is that our applications and business needs for information are integrated, but our behavior has not changed to work effectively in this world.

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State the Motivation – Business Case

- Regulatory and Legal Requirements
 - The National Data Privacy Law
 - Federal Credit Laws
 - Federal Privacy and Information Security Laws (e.g. HIPAA)
 - State Laws
 - California Security Breach Notification Law
 - Sarbanes-Oxley Act of 2002
 - Data Quality Act
 - Patriot Act
 - Corporate Information Security Accountability Act of 2003
 - Etc.
- Business Benefits
 - Reliable management reporting
 - Support compliance requirements
 - Support business initiatives – data warehouse, Master Data Management (MDM), Enterprise Resource Planning (ERP)
 - Etc.

Source: The Data Governance Institute: <http://www.datagovernance.com>

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Business Impact of No Governance



The Situation: New product release. Ship date and corporate goal to meet. Product is ready to go and customers are waiting. Friday at the end of the quarter.

Part of the preparation for the product release was creating the material master. The appropriate people put information into the material master, but there was not enough oversight or rules around what the master data should look like.

The Problem:



Could not deliver product



Could not generate a pick-pack-ship



Could not generate a sales order



Could not release material



Because master data was incorrect

The Impact: Warehouse and truck waiting for paperwork. Had to find the people needed to review the data and find the mistake. Then had to find the people who could make the data changes. Then had to create all the transactions again. Almost missed the goal. Did make it at the cost of several people doing hours of rework.



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Business Impact of No Governance

Collect and share *specific* examples of why *your* business needs data governance

One ERP (Enterprise Resource Planning) team made a change to the product line data element in the product hierarchy. They did not know this data was used by downstream applications outside of ERP. An item data standards council discovered the error and an enterprise standard was established. The entire product hierarchy had to be deleted and reloaded. If the issue had not been identified and resolved, the company's sales force would not be correctly compensated.

"Lack of the enterprise data standards process in the item subject area has cost us at least 30 person days of just 'category' rework."

ERP
Demand
Planning

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Determine Your Scope

The scope of your project/program/initiative (within or across):

Organizational Units	Business Processes	Data Subject Areas	Applications and Other Technology

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Determine What You Can Do

- **Individual Contributor**
 - See a need for data governance operationally or in a project
 - Build awareness for the need for data governance
 - Participate in and support data governance
 - In your work, take a stewardship attitude - be aware that you are managing information resources in behalf of others and for the best interests of the organization, not just your functional area
- **Manager or Project Manager**
 - See need to institute as part of a project or in your team
 - Add data governance to your project/team deliverables
 - Ensure there is data governance in place once the project team dissolves
- **Data Governance Program Manager**
 - Responsible for instituting data governance on a wide scale
 - Leverage ideas when developing and implementing program

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Evaluate Your Situation

Current Situation

- Few people know about data governance - yet
- Data governance has support from my manager and/or my immediate colleagues and/or project team
- Data governance is known and supported within an organizational unit (business unit, division, product line, team, program, project, etc.)
- Data governance is supported across multiple organizational units
- Data governance is known and supported across the company

What I Need

- I don't know - yet
- I need support from my manager and/or my immediate colleagues
- I need support within an organizational unit
- I need support across multiple organizational units
- I need support across the company

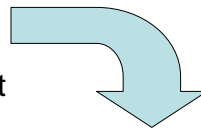
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Develop Your Roadmap

Where company is / you are today

- Just starting to think about data governance
- Planning data governance (not implemented)
- Ready to implement
- Implemented for less than 1 year
- Implemented for more than 1 year.



Where the company needs and/or you need to be



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Determine Issues and Questions that DG Resolves

- Define processes and people for creating and changing data names and definitions
- Monitor and manage data quality for a given data subject area
- Identify, own, and facilitate resolution of enterprise-level data issues. E.g.
 - System of Record
 - Integration
 - Reporting
 - Security/Privacy
- Understand current state of data across the enterprise
 - Inventory of data resources
 - Who creates, maintains, and uses the data
 - Technology: Repositories, Interfaces, Data entry/maintenance processes/groups
- Track/coordinate roadmap for planned modifications
 - Roadmap (application changes, interfaces, upgrades, obsolescence, reports)
 - New boundary applications
- Etc.

A Fortune 500 Technology Company

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Agree on Roles and Responsibilities

The data steward is a strategic role with responsibility for a data subject area across business processes and applications.

The data steward should be a subject matter expert.

The data steward is at the data name and definition level.

Don't call any of this data governance or data stewardship!

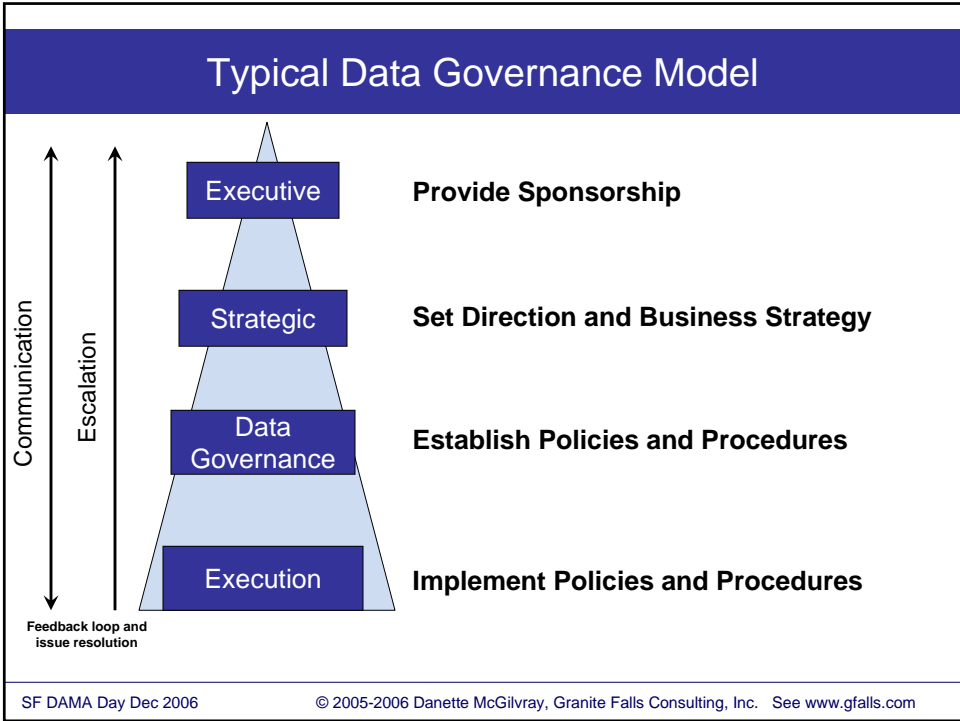
The data steward is at the application level.

The data steward's role is to fix data.

In answer to the question "What is a data steward's role?" Comments from the audience and panel members in a data governance session at the CDI-MDM Summit 2006, March 2006, San Francisco.

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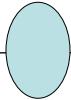
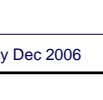


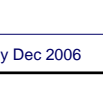
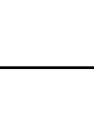

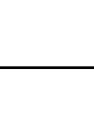

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Sample Responsibilities	Possible Roles	
Executive - Provide Sponsorship		Executive
<ul style="list-style-type: none"> Provide funding and resources Support data governance program 	Executive Sponsor(s) Executive Management	Strategic
Strategic - Set Direction and Business Strategy		Data Governance
<ul style="list-style-type: none"> Sets direction for business requirements and support data and technology requirements 	<ul style="list-style-type: none"> Enterprise Information Stewards Enterprise Business Process Owners Appropriate Technology Representation 	Execution
Data Governance Program - Establish Policies and Procedures		
<ul style="list-style-type: none"> Program establishes policies, procedures, and standards for data subject areas, business processes, and supporting technology Facilitates governance interactions and management of governance process 	<ul style="list-style-type: none"> Data Governance Manager Data Governance Council Data Stewards Business Process Owners Other supporting roles required to manage the governance process 	
Execution - Implement and Execute Policies and Procedures		
<ul style="list-style-type: none"> Projects that design and implement data policies and procedures into specific business processes and applications Day-to-day execution of data policies and procedures into business processes and applications 	<ul style="list-style-type: none"> Data Stewards Project teams that implement data policies into business processes and applications Anyone impacting the information in the course of their day-to-day business processes 	

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Ensure Appropriate Representation

		Area of Knowledge or Point of View		
		Business Processes	Data	Technology
Level/Scope of Responsibility	Executive			
	Strategic			
	Data Governance			
	Execution			

Ensure the appropriate people representing business processes, data, and technology are involved in the decisions that affect them.

Learnings and Best Practices or What pitfalls should I avoid?

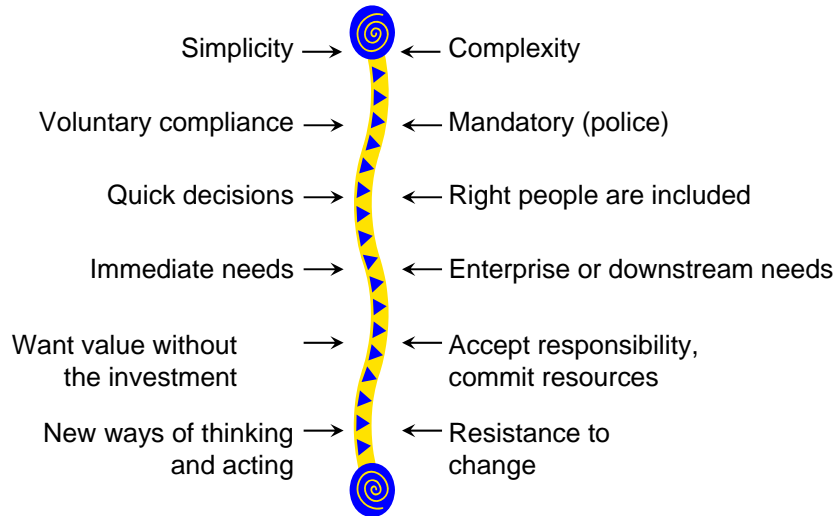
Identifying participants (1)

- Who has the knowledge? Who has the authority?
 - By position/title (assigned responsibility)
 - By influence and visibility
 - You will be most effective if you have both. If you don't (yet) have the position/title, you can do a lot with influence.
- Look for logical representation. For example, a data steward for customer data would logically come from sales or marketing, not manufacturing. However, also look for those who have the ability to represent all data usages – not just those within their business area.
- Find those who are already filling the data governance responsibilities as part of their current job:
 - “Defacto stewards” – you recognize them, not assign them. Data stewards are “discovered” not hired. (Bob Seiner)
 - “Incognito stewards” (Cheri Mallory)

Identifying participants (2)

- “This is a great job for our new college hire.” NO. Do NOT start with someone junior as the leader. You need someone who is experienced in the areas they represent and knowledgeable about your company.
- Part time data stewards with another role in business gain more respect and take away less resources from the business. However, making time for governance responsibilities is often difficult.
- Ensure you have their manager's support and governance activities are a written, established, recognized part of how their time is spent.
- Understand business processes and associated data requirements.
- Understand technological constraints and implications.
- Ability to communicate and influence.
- Someone who “gets” data.

Recognize and balance natural tensions



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People issues

- Staff changes – stewardship and governance not always acknowledged roles. When a steward changes positions, often the new people are not aware that governance and stewardship may be part of their responsibility.
- Data stewards (higher level) abdicate their responsibilities to those in the operational areas with detailed knowledge, but don't have the authority to make the decisions.
- What is the motivation for those participating in governance?
 - What will they give to participate?
 - What will they get from participating?
 - Do participants have support from their managers?
 - Is their work with governance acknowledged and rewarded by their managers as an important part of the job they do?
 - In addition to the responsibility given, do they have the authority to represent their areas and make decisions?

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Increase your skills

- Sales and Marketing
- Communication
- Presentation
- Facilitation
- Negotiation
- Networking
- Management of Change
(people and organizational impacts)
- Dealing with “Politics”



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Do's and Don'ts

- You don't have to have the CEO's support to get started or to be successful
 - You DO have to have the appropriate level of management support
- You don't have to have all the answers
 - You DO need to do your homework, know your company, and be open to many options
- You don't need to do everything all at once
 - You DO need to have a plan of action and get started

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Key Phrases

Data Governance Includes:

- Formalized accountability Bob Seiner
- Appropriate representation Danette McGilvray
- Venues for interaction Danette McGilvray
- Communication and escalation paths Danette McGilvray
- Decision rights Gwen Thomas
- Rules of engagement Gwen Thomas

Approach

- **Investigate** – current data governance and related activities
- **Leverage** – current effective processes such as change control
- **Align** – data governance with business activities
- **Design** – new processes where needed

To Summarize

Data governance and stewardship is all about

- Coordination and cooperation
- Breaking down people silos so we can break down information silos (Len Silverston)

- Determine your next steps
- Have fun!
- Enjoy the journey!



A Few Resources

- Bloem, Jaap, and Menno van Doorn, and Piyush Mittal. *Making IT Governance Work in a Sarbanes-Oxley World*. 2006. John Wiley & Sons.
- Brunson, Duffie. "Data Quality and Data Governance: the Basics" <http://www.b-eye-network.com/view/630>
- Mallory, Cheri. *The Genesis of Data Quality, the Emergent Data Steward*. White paper available from www.businessobjects.com.
- McGilvray, Danette. *Data Governance: A Necessity in an Integrated Information World, Part 1*. DM Review. December 2006, pgs. 24-26. (Part 2 will be in January 2006 DM Review.)
- Seiner, Robert K. *Stewardship in 3-D: "de facto", "discipline" & "database."* The Data Administration Newsletter (www.tdan.com). 04 Jan 2003.
- Thomas, Gwen. *Alpha Males and Data Disasters: The Case for Data Governance*. 2006. Brass Cannon Press.
- Weill, Peter and Jeanne W. Ross. *IT Governance: How Top Performers Manage IT Decision Rights for Superior Results*. 2004. Harvard Business School Press.

Search for data governance and stewardship articles from the following websites:

- Business Intelligence Network. b-eye-network.com.
- DM Review. www.dmreview.com.
- The Data Administration Newsletter (TDAN). www.tdan.com.
- The Data Governance Institute. www.datagovernance.com/

Feel free to contact me if you have comments
or questions: danette@gfalls.com

THANK YOU!

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