

Introducing Data Governance Good Practices

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Agenda

- ❑ Introductions
- ❑ Data Governance Best Practices
- ❑ Communicating the Value of Data Governance
- ❑ Building a Case for a Broader Data Governance Initiative



Introductions



About Gwen Thomas



Gwen
Thomas

- ❑ President, The Data Governance Institute
- ❑ Publisher, www.SOX-online.com, The Vendor-Neutral Sarbanes-Oxley site
- ❑ Author, *Alpha Males and Data Disasters: The Case for Data Governance*
- ❑ Designer of compliance-based Data Governance programs for several large companies



The Focus of Some Data Governance Programs I've Designed/Implemented

- ❑ **Sallie Mae - student loans** (supporting Data Quality, focus on improvement of key Master Data)
- ❑ **Wachovia Bank*** (supporting Data Quality of BASEL II DW, enterprise processes, enterprise decision-making)
- ❑ **NDCHealth / Wolters Kluwer**** (supporting Data Quality, HIPPA, contractual requirements for Access Management, enterprise decision-making involving outsourcers, aligning DQ, eSec, Compliance)
- ❑ **Coors Brewing**** (ensuring high quality Master Data while supporting clear roles and responsibilities and controls, formalize Governance and Stewardship, and support Sarbanes-Oxley compliance as they realign data and processes to use SAP, COBIT)
- ❑ **Walt Disney World**** (addressing legacy data integration and sourcing issues, standards, customer data, and product data)

* IBM was the prime contractor

** CIBER was the prime contractor



Who Are You?

- ❑ Where did you come from?
- ❑ What is your company doing about Data Governance? Data Stewardship?
- ❑ What do you need today?



Key Practices for Data Governance



Data Governance Best Practice #1: Have a Vision of the Future

- ☺ Our organization can realize value from its data.
- ☺ We can use it to be competitive, to make our customers happy, to distinguish ourselves from the pack. We have confidence in our data.
- ☺ Our data is safe. We maintain compliance with laws, regulations, standards, and requirements.
- ☺ We exchange unambiguous information easily with our partners, our suppliers, and our customers.
- ☺ Those of us within the organization who work with data know what to do, and when, and how. We're not afraid of the impact of our actions.

It doesn't cost anything to dream!



Data Governance Best Practice #2:

Learn What Your Organization is Afraid of – Why Would They Need Governance?

- Organizations are often worried they may experience pain:
 - A Data Disaster
 - Inefficiencies
 - Decisions made on bad – or incomplete – information
 - Inabilities to achieve or maintain compliance
 - Mind-numbing complexity
 - Inabilities to achieve data integration
 - One silo's efforts (or one system's data processes) creating problems for others

It doesn't cost anything to find out your organization's high-level drivers and pain points



Why Would an Organization Need Data Governance? Understanding Pains and Gains

- ❑ Everything a company does should tie to one of three universal executive drivers
 1. Increase revenue and value
 2. Manage cost and complexity
 3. Ensure survival through attention to risk and vulnerabilities: compliance, security, privacy, etc.
- ❑ Data Governance efforts **MUST** tie back to these drivers.

**It doesn't cost MUCH to think about your data this way...
just the price of a few aspirin....**





Data Governance Best Practice #3: Governance Should Support Risk and Compliance

Do you think that compliance requirements and operational needs are



Do you think you don't have any compliance requirements?

- ❑ What about compliance to INTERNAL standards, policies, guidelines?
- ❑ What about compliance with contract and SLAs?
- ❑ What about compliance with data definitions?

If you think of all your goals
for your data as compliance,
you can convert this complexity to



Box of Red Delicious Apples... \$27.95 on Froogle.com



Background to Data and Risk:

A Risk-Based Approach to Data Governance, The Post-Compliance Paradigm Shift

- ❑ In the “ancient” days of preparing for Y2K and then throwing applications on the web, we were told to **Just Do It!**
- ❑ Now, we have a **Post-Compliance Paradigm Shift** to a risk-based view of data.
- ❑ Today a job isn’t done until we
 - **Do the work**
 - **Control it**
 - **Document it**
 - **Prove compliance**

They must all be done, because
Compliance is Not Optional!

Working with data includes managing risk!



Cost of a Paradigm Shift...

$\frac{1}{2}$ the price of a single paradigm times the distance shifted plus 2 dollars



Background to Data and Risk:

This Resulted in a Second Paradigm Shift

- ❑ Before, data-related efforts and IT-related efforts were based on **Best Practices** (**what you SHOULD do**). 
- ❑ Now, they are often based on **Risk** (**what's too risky to NOT do**). 
- ❑ This concept was already familiar to many areas of corporate operations. For some, it's a new approach.
- ❑ Some IT departments only started making this move with the enforcement of Sarbanes-Oxley risk-based controls.
- ❑ For everyone, it means new levels of information gathering and storage. And complexity.
(Hence, the need for governance...)

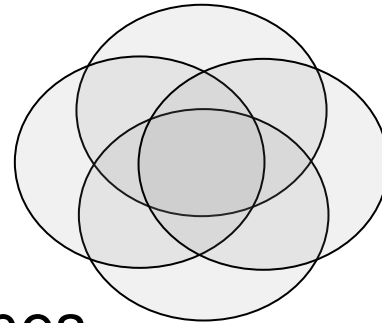
Cost of Sarbanes-Oxley compliance in 2006... 6 Billion Dollars... Really!



Background to Data and Risk:

The Result of the Paradigm Shift

- ❑ We now have a convergence of concerns:
 - Governance
 - Risk Management
 - Compliance
 - eSecurity
 - Data Quality
- ❑ Yes, they are separate disciplines, but they must work to common goals.
- ❑ They must align efforts to avoid cancelling out each others' work.
- ❑ Data Governance can serve as organizational glue.

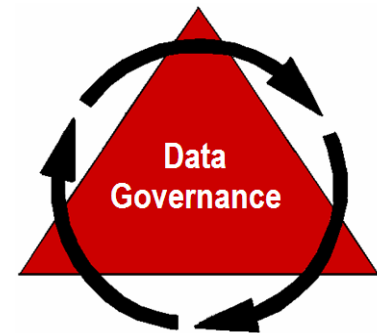


Pack of 3 Glue Sticks... \$1.99 at Target



Data Governance Best Practice #4: Be Clear About Your Mission

- The DGI Framework says Data Governance has three missions:
 - 1) Proactively define/align **rules**
 - 2) Provide ongoing, boundary-spanning **protection and services** to data stakeholders.
 - 3) Reactively **resolve issues** arising from non-compliance with rules



Mission to Mars DVD... \$13.99 on Amazon.com



Data Governance Best Practice #5: Choose Your Initial Focus Area

Exec Driver

Governance Goal

❖ Increase revenue
and/or capabilities

- Defining data and metadata
- Improving quality of data
(often Master Data)

❖ Manage cost
and complexity

- Addressing data integration issues
- Reducing data redundancy
- Reducing organizational and/or systems
complexity
- Enabling SOA or other technologies and
architectures

❖ Ensure survival
through attention to
risk and vulnerabilities

- Supporting privacy, access control efforts
- Meeting regulatory / contractual
compliance and controls requirements
- Formalizing internal checks-and-balances
- Avoiding data disasters **Priceless...**



Data Governance Best Practice #6:

Choose a Definition of Data Governance in Your Context

Data Governance refers to the organizational bodies, rules, decision rights, and accountabilities of people and information systems as they perform information-related processes.

Data Governance Sets the Rules of Engagement for Management.

Data Governance is How We “Decide How to Decide”

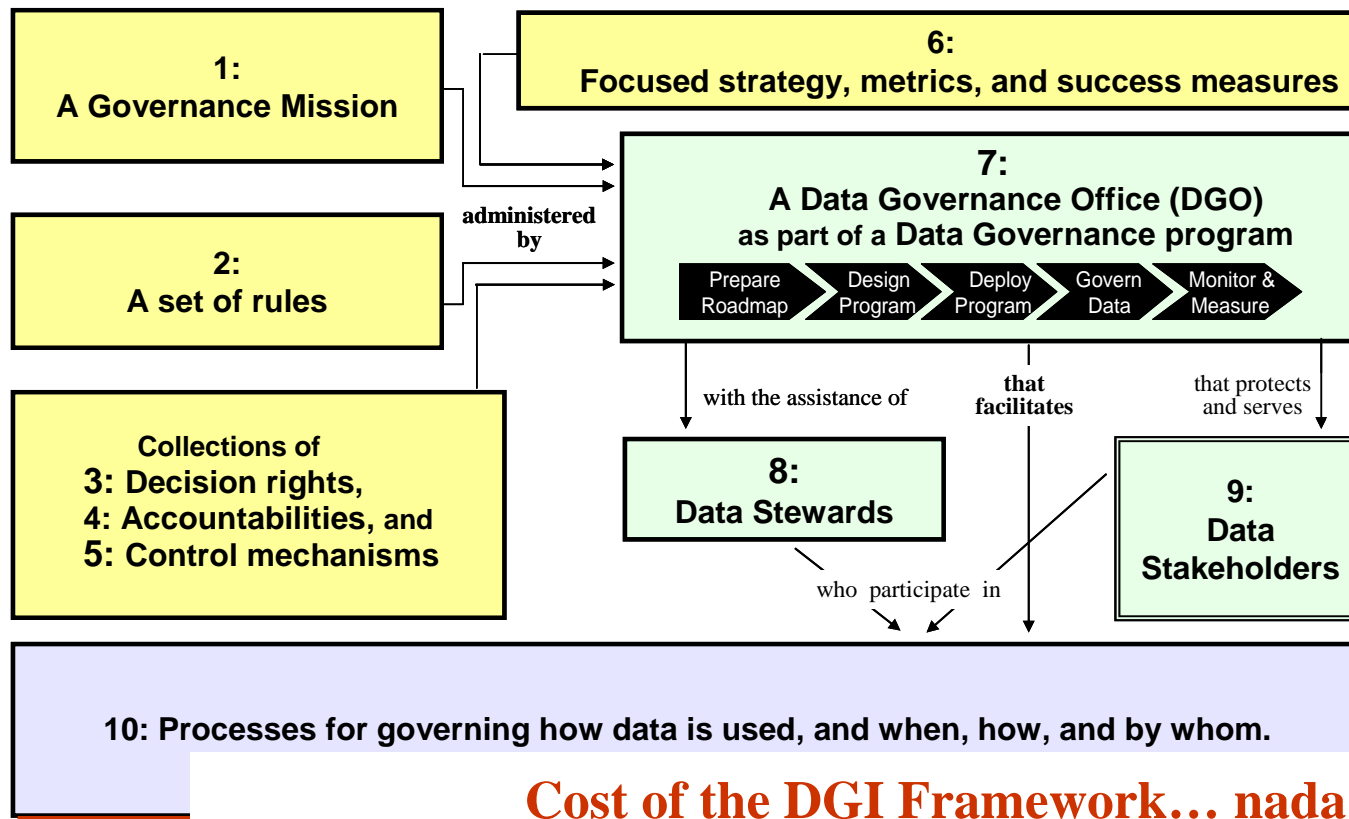
**“Management is the decisions you make.
Governance is the structure for making them.”
- CIO Magazine September 2002**

The Klingon Dictionary, used ... \$15.48 on eBay



Data Governance Best Practice #7: Use a Framework to Organize How Your People Think and Communicate About Data Governance

The DGI Data Governance Framework from The Data Governance Institute



Cost of the DGI Framework... nada – zip – zero.



Detail: Ten Components of Data Governance

from the Data Governance Institute Framework

1. Mission
2. Set of Rules (Policies, standards, data definitions, compliance requirements, and business rules)
3. Collection of Decision Rights
4. Collection of Accountabilities
5. Collection of Control Mechanisms
6. Governance Metrics and Success Measures

All of these are administered by

7. A Data Governance Office, working with
8. Data Stewards, while protecting and serving
9. Data Stakeholders, who participate in
10. Data Governance Processes

This is the same information shown on the chart on the previous page.



Data Governance Best Practice #8:

Consider the Steps of Developing a Data Governance Program – Independent of Funding



- ❑ It's true that every program is unique, according to the organization's culture, environment, and focus – and how formal you want to be.
- ❑ It's true that unfunded programs are more formal than funded programs.
- ❑ **BUT... you can follow a structured, repeatable, transparent process** for designing your program.
- ❑ Questions asked and answered during Steps 1-3 will determine what Governance looks like in Steps 4-7.
- ❑ What if your program will always be informal and unfunded? You'll still follow this program lifecycle!

Advantage of informality... you can experiment freely



Data Governance Best Practice #9:

Pick Governance Processes to Try First

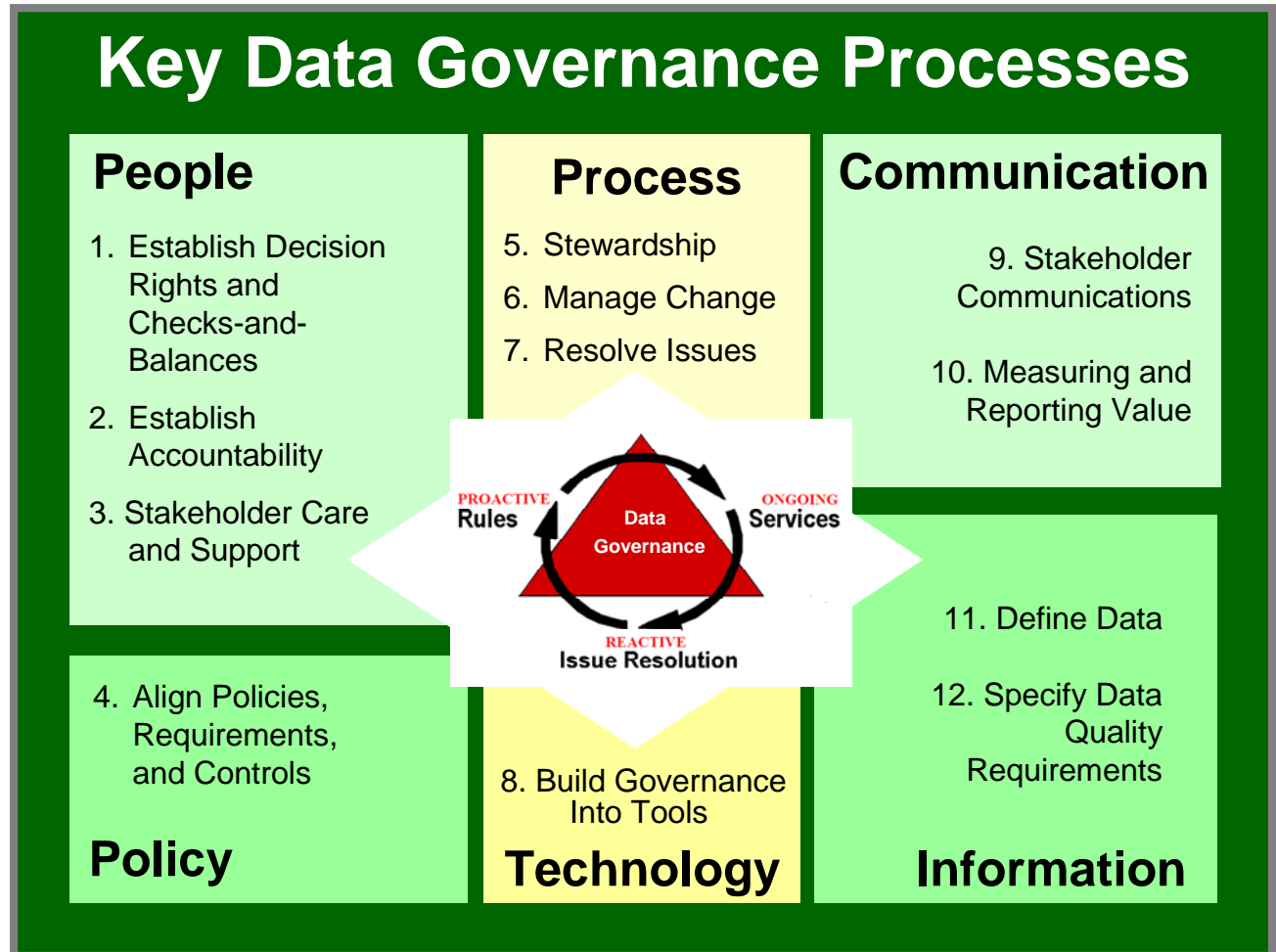
A framework organizes thoughts.

A METHODOLOGY organizes actions.

How important is it for you to have tested processes?

You might want to start with an established methodology.

If you don't have a budget, then consider "rolling your own" to develop your own processes.



Zig Zag rolling papers... 5 packs for \$2.39



Combine Establishing Decision Rights With “Governed” Issue Analysis/Resolution

What makes the process “governed” ?

1. You formally identify data stakeholders
2. You appoint a Data Governance role to protect the needs of data stakeholders
3. The facilitator of the process formally acknowledges natural, inherent conflicts between stakeholders and introduces checks-and-balances between Business, IT, and Compliance
4. The facilitator works with participants to “decide how to decide” on goals, approaches, and success factors
5. You introduce a mechanism to use collected rules, definitions, standards, etc.
6. The facilitator commits to performing Stakeholder Care – communicating status to Data Stakeholders, managing records of the process
7. The group decides how to monitor and measure progress

It doesn't cost anything to collect and use information about Data Stakeholders



Communicating the Value of Data Governance

Improving corporate transparency,
accountability, and compliance

TEMPLATES FOR COMMUNICATING THE VALUE OF DATA GOVERNANCE REPORTING ON A GOVERNANCE-LED EFFORT

- ❑ Did you employ formal or informal Data Governance in a data-related effort?
- ❑ Did the effort go well?
- ❑ Did it have an effect on one (or more) of the 3 universal executive drivers?
- ❑ Can you honestly say that the contribution of Data Governance processes helped?
- ❑ Here are some sample templates for describing the benefits you realized.

*Note: Be careful of politics and stakeholder needs.
If you appear to be “grabbing glory” or taking credit
from someone else, it could backfire!*

TEMPLATE FOR COMMUNICATING THE VALUE OF DATA GOVERNANCE

REPORTING ROI ON A GOVERNANCE-LED EFFORT

Example: Data Project to Cleanse Email Addresses and Permissions

The ROI of Data Governance

- ❑ Our Marketing group estimates that we save \$22/year per customer if we can convert from print to electronic communications.
- ❑ The organization is constantly trying to get the best email addresses and permissions. An ongoing challenge is pulling data from multiple systems, and understanding which information is best.
- ❑ Previous efforts did not employ boundary-spanning Data Governance.
- ❑ This effort did include Data Governance, including identification of Data Stakeholders, alignment of standards, and facilitated issue resolution.
- ❑ After the effort, our Marketing Data Quality team was able to obtain good email addresses & permissions for nine thousand customers.
- ❑ The result: \$22 times 9K = projected \$198,000 savings per year. And the benefits will grow, since we can apply our learnings to ongoing efforts. The cost: 60 hours from Data Governance staff, and 55 hours from SMEs.

← *Note: This is hypothetical.
Don't use this statistic – get your own!*

Example: Data Project to Cleanse Email Addresses and Permissions

Because of This Effort Our Organization Now

- ❑ Can take steps to realize more revenue, because the data now supports
 - Better customer segmentation
 - Understanding who our best customers are
- ❑ Because the data helps us understand our most valued customers, we can now take action to retain those customers
- ❑ Because we've improved our customer email information, we should experience more efficient and effective spending
 - Ability to convert paper to electronic communications
 - Avoid the cost associated with sending inappropriate marketing offers
- ❑ Because we have better understanding of our permissions data, our company is better equipped to maintain compliance with Privacy requirements

Example: Data Project to Cleanse Email Addresses and Permissions

Because of This Effort Our People Have Experienced

- ❑ An increase in management capabilities
 - Managers and directors will be better positioned to plan projects and processes that use this data – without causing problems for other groups.
- ❑ An increase in knowledge of our enterprise data
 - Participants have learned how data flows through our systems and processes – and the impact their decisions have on downstream users.
- ❑ An increase in knowledge of our enterprise systems
 - Participants have learned how data works in different applications – and what this means for how and when and where they should pull information they need, and which data is the most valuable to them.
- ❑ An increase in ability to maintain compliance
 - Participants have learned how the data being examined is used for financial projections and to meet compliance / customer privacy requirements – and what this means for how upstream users must produce and protect the information.

TEMPLATE FOR COMMUNICATING THE VALUE OF DATA GOVERNANCE

HOW DATA GOVERNANCE MADE THE DIFFERENCE

Example: Data Project to Cleanse Email Addresses and Permissions

Data Governance Made The Difference Because

- ❑ We used a process that ensured that no key stakeholders were left out of decision-making
- ❑ The process helped participants “decide how to decide”
- ❑ Our process balanced the needs of the enterprise against the needs of individual groups
- ❑ Participants learned about the requirements and constraints of other data stakeholders
- ❑ We were able to use the results to update our enterprise standards and rules, and participants could update their internal processes
- ❑ Participants now know what to do in the future to check whether their projects could have a negative impact on downstream users of the data they touch.



Building a Case for a Broader Data Governance Initiative



What You Might Say About Your Data Governance Efforts

- ❑ By articulating needs for your stakeholders, you're providing an invaluable service
- ❑ By aligning needs and rules, you're achieving efficiencies and effectiveness
- ❑ By bringing together stakeholders, you're helping achieve cohesiveness
- ❑ By performing Governance processes, you're supplementing silo Management with boundary-spanning activities
- ❑ By managing boundary-spanning communications and information collection/storage, you're removing a burden from stakeholders while providing transparency, consistency, and auditability.



What Else Matters in Your Culture?

- ❑ Better confidence in data?
- ❑ Reducing organizational friction?
- ❑ Reducing compliance or security risk?
- ❑ Reducing the risk of not meeting operational goals?
- ❑ Reducing the risk of making decisions based on bad data?

ROI?

What if Data-Related Cost or Risk is Hard to Quantify?



Strategy #1: Piggy-back on known costs or risks

Example of the value chain:

State the high-level value

- The cost of a data breach averages \$140 per record (see earlier slide for attribution)

State the data-related problem

- Table XYZ in our ABC system contains 10 thousand records of highly sensitive customer information
- This system is lacking a key control

State the data-related solution and its cost/benefit

- We're prepared to put this control in place
- The potential cost of NOT having those control is 1.4 million dollars
- The cost of the key control is only 40 thousand dollars

Reinforce the benefit of addressing the data-related concern

- Once we have this key control, we can apply it to many other places where our data is vulnerable

What if Data-Related Cost or Risk is Hard to Quantify?



Strategy #2: Piggy-back on accepted high-level initiatives

Example of the value chain:

State the high-level value

- One of the company's highest priorities is to have a better understanding of its customers. Achieving this understanding is key to meeting sales projections (map this statement to something concrete from Sr. Management)

State the data-related problem

- We have uncovered XX number of customer-related data fields that are ambiguous or even misleading

State the data-related solution and its cost/benefit

- The Data Governance Team is ready to facilitate a boundary-spanning effort to bring clarity to this data, once and for all
- If we don't do this work, it will be hard to know how confident we should be about the customer information used in the XYZ warehouse (or in XYZ sales projection reports, etc.)
- If we do this work, we think we can agree on unambiguous data definitions for these fields if we have about 40 hours time from each of the following key Subject Matter Experts.

Reinforce the benefit of addressing the data-related concern

- Once we have addressed this data-related issue, we'll be able to make better decisions about how this data should be designed and used in future SOA projects



Strategy #3: Piggy-back on funded projects

Example of the value chain:

State the high-level value

- The company has embraced the move to SOA as a means of managing cost and complexity. Many management and financial projections are based on the success of developing SOA services.

State the data-related problem

- We have uncovered a set of customer-related ambiguous data fields that – if not addressed – could result in SOA services that pull from the wrong (or ambiguous) data

State the data-related solution and its cost/benefit

- The Data Governance Team is ready to facilitate a boundary-spanning effort to bring clarity to this data, once and for all
- This analysis work is not planned or funded, but it is on the critical path for SOA success. We believe we can give the SOA program what it needs, assuming we have about 40 hours time from each of the following key Subject Matter Experts.

Reinforce the benefit of addressing the data-related concern

- Once we have addressed this data-related issue, SOA will have what it needs, and we'll also have brought clarity to data that is used by many departments, including Sales, Customer Support, Finance, Business Intelligence, and others.



What if Data-Related Cost or Risk is Hard to Quantify?

Strategy #4: FUD (Fear, Uncertainty, Doubt)

You may be able to use the power of these statistics to gain attention.

From Feb. 2005 – through Nov. 2006:

- ❑ About **100 million** private data records have been
 - Lost, Stolen, Hacked
 - Freely given away to criminals, or
 - Accidentally displayed to the public
- ❑ And that's just the ones we know about, disclosed by U.S. organizations and listed by the Privacy Rights Clearinghouse.
- ❑ List of incidents: www.DataGovernance.com

**Several
new data
breaches
per
week!**



FUD:

Costs And Risks From Data Disasters

- **Total costs** to recover from a data breach **averaged \$14 million per company or \$140 per lost customer record**
- **Direct costs** for incremental, out-of-pocket, unbudgeted spending **averaged \$5 million per company or \$50 per lost customer record** for outside legal counsel, mail notification letters, calls to individual customers, increased call center costs, and discounted product offers
- **Indirect costs** for lost employee productivity averaged **\$1.5 million per company or \$15 per customer record**
- **Opportunity costs** covering loss of existing customers and increased difficulty in recruiting new customers averaged **\$7.5 million per company or \$75 per lost customer record**. Overall customer loss averaged 2.6% of all customers and ranged as high as 11%.

From The Ponemon Institute's benchmark study, November, 2005

http://www.pgp.com/downloads/sourcecode/ponemon_research_direct.html

Also consider increased risk. Demonstration of lack of controls may trigger Sarbanes-Oxley auditors to increase scrutiny/testing/cost of controls over financial data

Wrapping Up



What else would you like to talk about?

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