



IBM Data Governance Council

The Six Questions every Organization should ask about Data Governance

Steven B. Adler

IBM Data Governance Solutions

adler1@us.ibm.com

<http://www.ibm.com/itsolutions/datagovernance>

What Data?

- **Data:**
 - Structured
 - Unstructured
 - Metadata
 - Video, Audio, Multi-Media
 - Print, Email, and Archived
 - Software Code
 - Patents, IP
 - Protocols, Message Streams
- **These are all digital assets**

Why Governance?

- **Governance:**
 - Corporate governance is about controlling human self-interest to benefit the common good:
 - Increased Revenue
 - Lower Costs
 - Reduced Risk
- **IT has become the engine for business innovation and growth and it must be governed to demonstrate contribution to the business bottom-line.**
- **To govern IT effectively, the value of Data must be assessed, Risk calculated, outcomes measured and constantly re-evaluated.**

Without Data Governance...

- **People make mistakes...**
- **Those mistakes more commonly result in losses than hackers...**
- **Those losses effect every aspect of IT and business**
- **But data is still an abstract concept and governance needs technology to be improved...**

Corporate Sloppiness Is the Real Culprit for Data Loss, Not Vilified Hackers

By Lisa Vaas
3/28/2007 1:25:00 PM

Expect to see the 2 billionth personal record compromised by year's end, according to recent research from the University of Washington. But don't blame it on rogue hackers; sorry to say, it's your own fault, Corporate America.

Researchers at the university in Seattle estimate that electronic records—those containing Social Security or credit card numbers, academic grades or medical history—are bleeding out of North American organizations at the rate of 6 million a month so far in 2007—up some 200,000 a month from last year.

Excluding the exceptional 2003 incident that involved 1.6 billion records stolen from information aggregator Acxiom, hackers have been responsible for only about 550—31 percent—of confirmed breaches between 1980 and 2006.

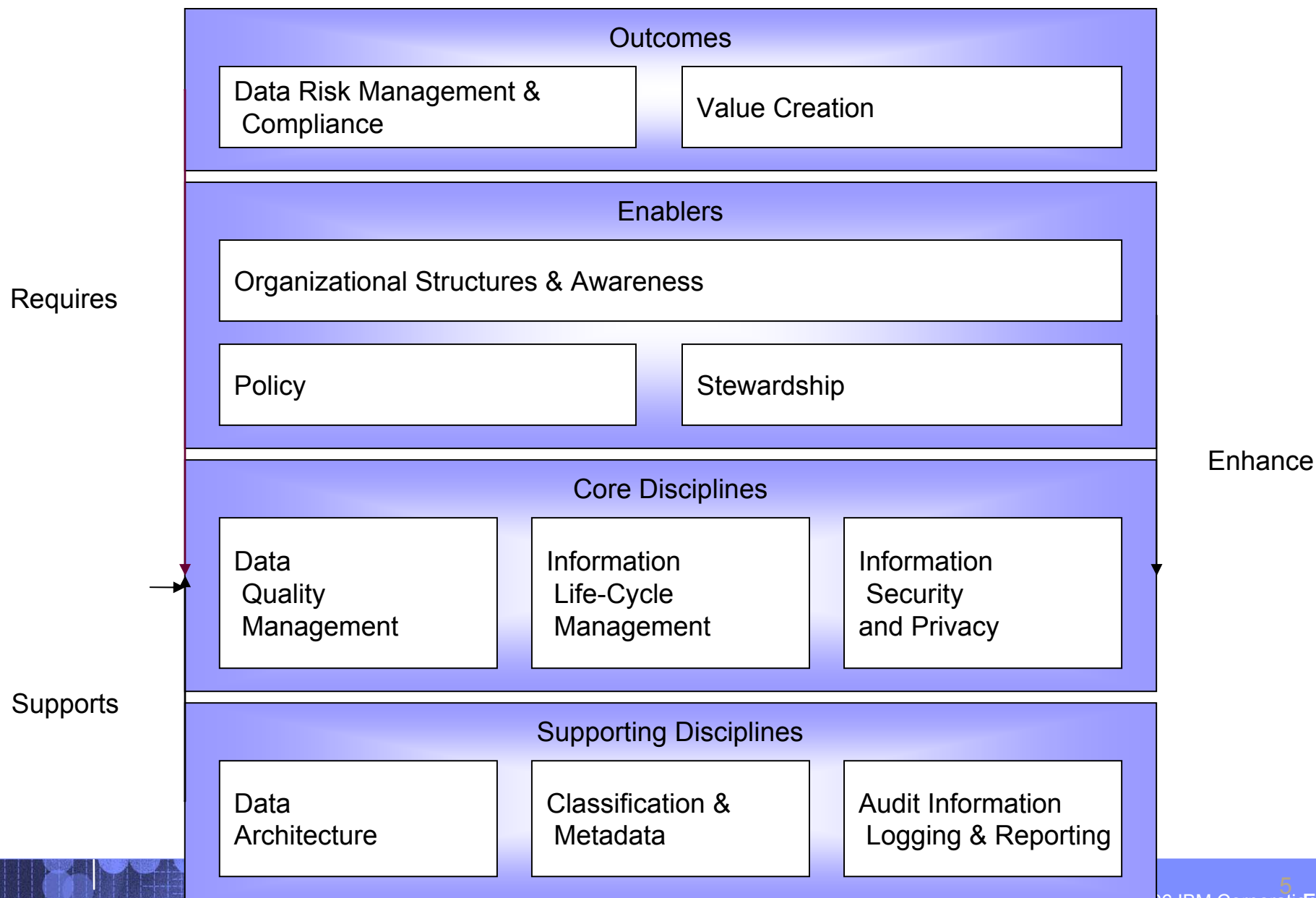
The majority, 60 percent, of incidents of compromised records were attributed to organizational mismanagement. That includes missing or stolen hardware, administrative errors, insider abuse or theft or accidental posting of sensitive information online. The balance of 9 percent of breaches were due to unspecified circumstances. Even with Acxiom removed from the picture, the commercial sector still accounts for about 252 million individual compromised records, four times that of the next-highest contributor, the government.



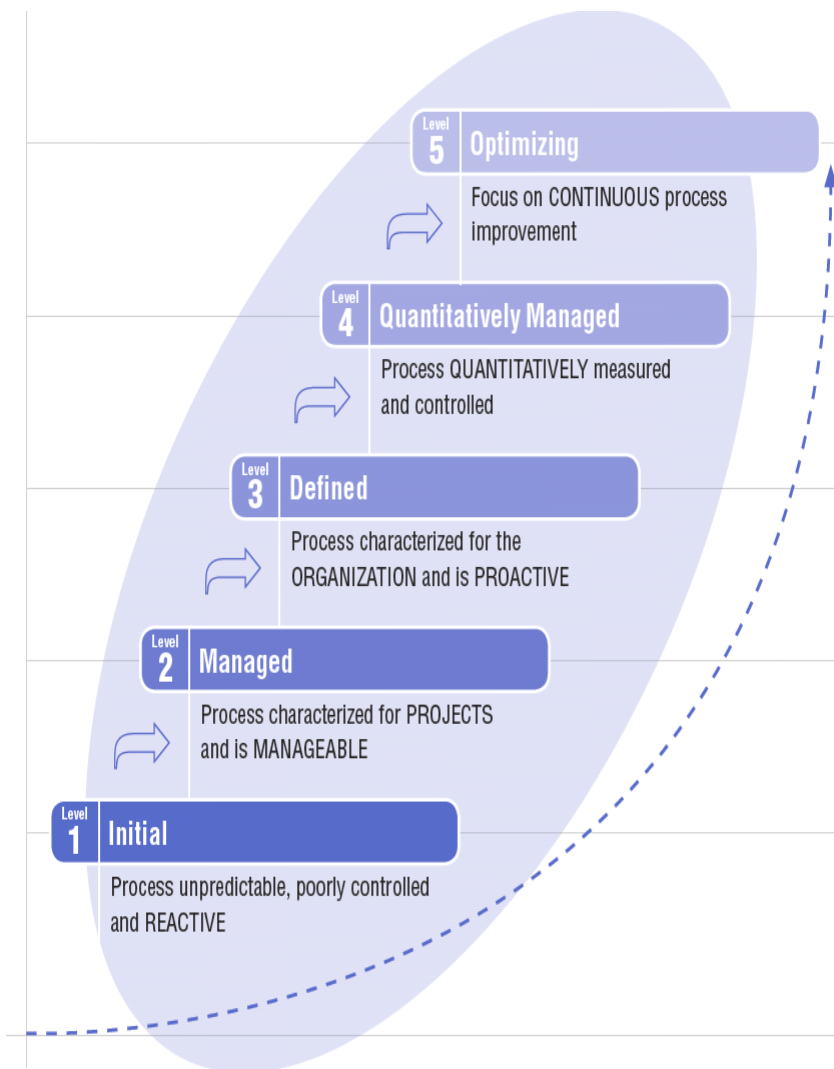
The IBM Data Governance Council was formed in 2004 to explore enterprise challenges and develop solutions

Customers	Business Partners	Academia	
Abbott	Huntington Bank	AirMagnet	NCSU
ABN Amro	IBM CIO Office	Application Security	Nova Southeastern
Alltel	Key Bank	Axentis	Bucerius Law School
American Express	MasterCard	Continuity Software	
Bank of America	Merrill Lynch	Guardium	
Bank of Montreal	Monaris	Intellinx	
Bank of Tokyo/Mitsubishi	Novartis	Lumigent	
Bell Canada	Nordea Bank	OpenPages	
BITS	Northwestern Mutual	Organizational Policy Inst.	
Cadence Design	Principal Financial	Paisley	
Citigroup	Regions Financial Corp.	RiskWatch	
City of New York, FISA	TIAA-CREF	SecNap	
Danske Bank	TeliaSonera	Semantic Arts	
Deutsche Bank	VP Securities Services	SPS Security	
Discover Financial	Washington Mutual	Tizor	
Equifax	Wachovia	Valid Technologies	
Fannie Mae	The World Bank	Varonis	
Freddie Mac		Zantaz	

Elements of effective Data Governance



Data Governance Council Maturity Model

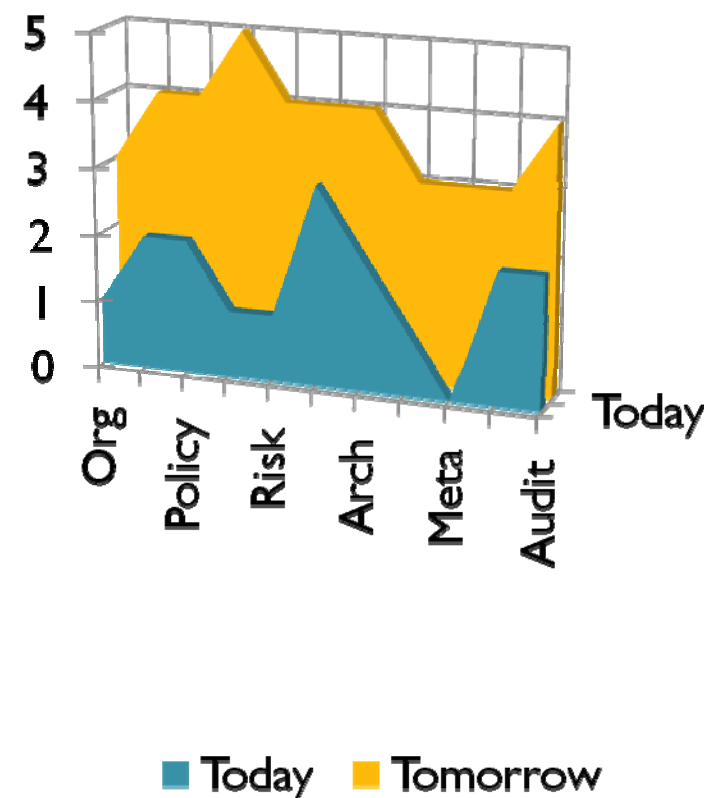


Category	Description
1 Organizational Structures & Awareness	Describes the level of mutual responsibility between business and IT, and recognition of the fiduciary responsibility to govern data at different levels of management.
2 Stewardship	Stewardship is a quality control discipline designed to ensure custodial care of data for asset enhancement, risk mitigation, and organizational control.
3 Policy	Policy is the written articulation of desired organizational behavior.
4 Value Creation	The process by which data assets are qualified and quantified to enable the business to maximize the value created by data assets.
5 Data Risk Management & Compliance	The methodology by which risks are identified, qualified, quantified, avoided, accepted, mitigated, or transferred out.
6 Information Security & Privacy	Describes the policies, practices and controls used by an organization to mitigate risk and protect data assets.
7 Data Architecture	The architectural design of structured and unstructured data systems and applications that enable data availability and distribution to appropriate users.
8 Data Quality Management	Methods to measure, improve, and certify the quality and integrity of production, test, and archival data.
9 Classification & Metadata	The methods and tools used to create common semantic definitions for business and IT terms, data models, types, and repositories. Metadata that bridge human and computer understanding.
10 Information Lifecycle Management	Management A systemic policy-based approach to information collection, use, retention, and deletion.
11 Audit Information, Logging & Reporting	The organizational processes for monitoring and measuring the data value, risks, and efficacy of governance.

After the assessment, you need to benchmark where you are and where you want to go

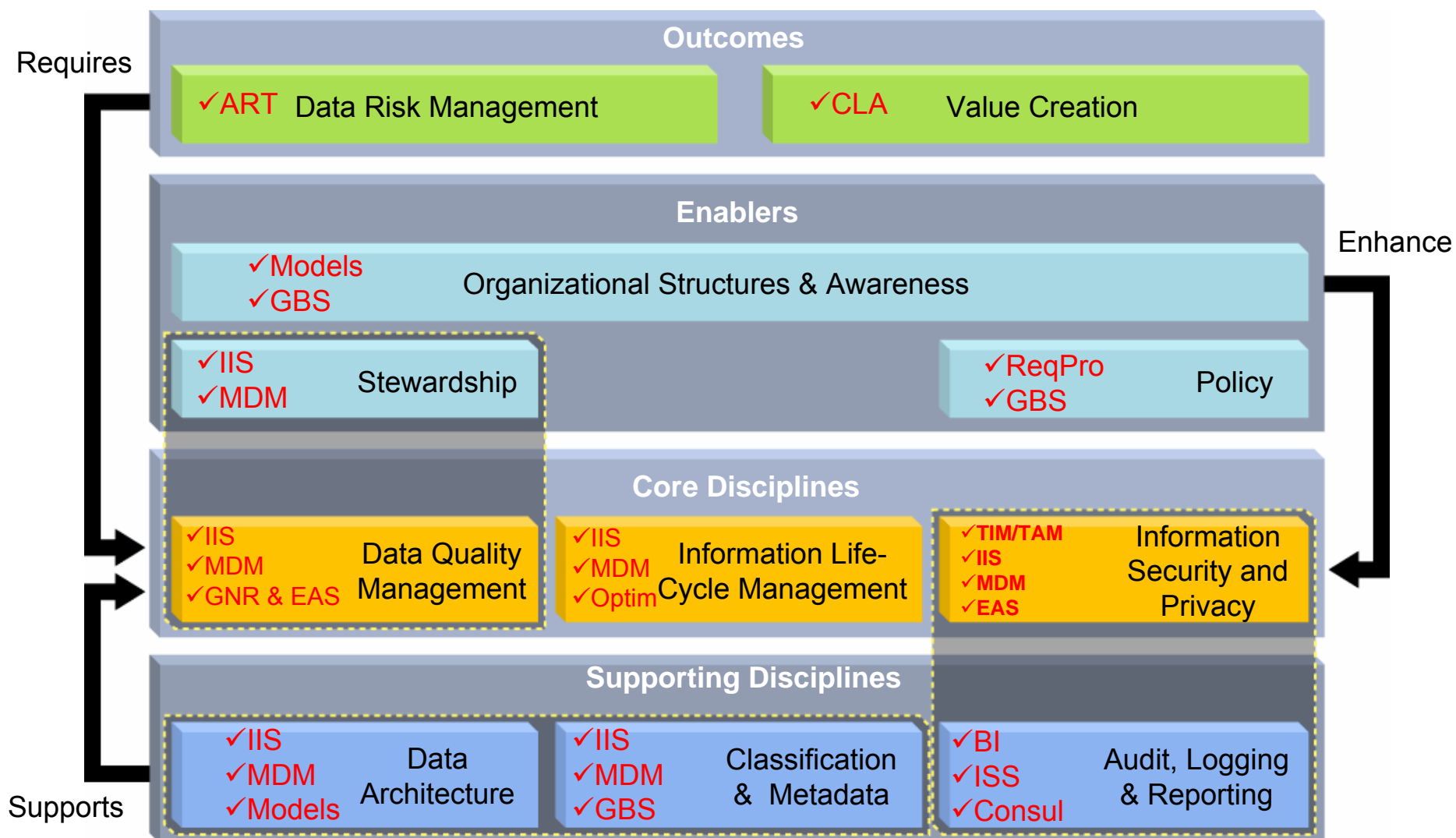
Maturity Levels	
0	Incomplete
1	Elements of practice in the category may be present but are localized in individual departments and are for the most part performed on an ad hoc basis.
2	Elements of practice are for the most part defined at an enterprise level but implementation is not complete
3	Elements of practice are defined and implemented at an enterprise level but no formal processes are established to ensure continuous improvement
4	Elements of practice are defined and implemented across the enterprise and repeatable processes and metrics are used to monitor and track progress to ensure continuous improvement.
5	Elements of practice are implemented, monitored and used proactively across the enterprise to reduce risk, continuously improve data governance practices and to gain a competitive advantage in the market place.

Category	Maturity Stage						
1 Organizational Awareness	0	1	2	3	4	5	
2 Stewardship	0	1	2	3	4	5	
3 Policy	0	1	2	3	4	5	
4 Value Creation	0	1	2	3	4	5	
5 Risk Calculation	0	1	2	3	4	5	
6 Security / Privacy / Compliance	0	1	2	3	4	5	
7 Data Architecture	0	1	2	3	4	5	
8 Data Quality	0	1	2	3	4	5	
9 Data Classification / Metadata	0	1	2	3	4	5	
10 Information Lifecycle Management	0	1	2	3	4	5	
11 Audit & Reporting	0	1	2	3	4	5	





IBM Technology and Solutions enhance your Data Governance



Data Governance Balanced Scorecard

Element	Current Maturity	Desired Maturity	KPIs	Outcome
Organization	•Traditional Structure (2)	•community based self-governance (4)	•# new ideas implemented	•78% employee satisfaction rate
Stewardship	•Data Stewards only (2)	•Stewardship in every discipline (3)	•# stewardship communities	•125% more stewards
Policy	•Ad-hoc policy management (1)	•Structured policy management (3)		•45% increase in reg. compliance
Data Quality	•Spreadsheet-based DQ program (1)	•Process oriented DG program (4)	•Data utility index •Price of data	•24% reduction in fraud
Architecture	•Stovepipes of data (1)	•Federated and integrated (4)	•Data availability index •Data supply ratio	•Lower data management costs
Metadata	•No metadata management (0)	•End-to-end metadata management (4)	•Business glossary •Metadata elements	•12% reduction in policy failure
Security	•Enterprise Access Control	•Context-based entitlements	•# Incidents	• 98% Customer satisfaction
Risk	•Faith-based Risk Management (1)	•Fact-based Risk Forecasting (4)	• \$ Capital Reserve • # Losses	•12% net underwriting profit
Value	•Command Economy •Labor Theory (1)	•Demand Economy •Utility Theory (5)	•Efficiency of IT service pricing	•8% Net IT operating profit
ILM	•Enterprise Backup (2)	•Policy-based backup (3)	•Retention/deletion ratio	•23 Terabytes saved
Audit	•Quarterly Audits (1)	•Automated self-assessments (5)	•# Failures reported •# audits passed	•24% reduction in IT project failure



IBM Data Governance Council

Questions

