- April 25, 2012

INFORMATION Integration & GOVERNANCE Executive briefing
Trusted Information for Smarter Business Decisions

Smarter software for a smarter planet

Information Agenda

Information Management

Agenda

- **Welcome & Introduction** : Mike Slater BUE IBM Information Management

- **Implementing Big Data Governance** : An Emerging Imperative, Sunil Soares, IBM Director Information Governance

- **Data Governance at Chartis Insurance :** Kevin D'Silva

- **Smarter Data Provisioning** : Karen Hartshorne-Evans

Coffee

- **Group Single Customer View** : Using Master Data Management Technology; Tim McKeon, Head of Life Services and Nicola Williams, Business Lead, NFU Mutual

- **Using Big Data in Smarter Decision-Making** : Lauren Walker, Sales Leader, Big Data Solutions, IBM

- **Q&A** Panel Session

Lunch and Networking

Information Governance

Sunil Soares

Director - Information Governance

Data Stewardship at Social Services Agency

Questions from Legislature

- How many children under 15 also have children utilizing our services?

- How many people over 100 years of age receive benefits?

- How many indigenous people receive income support payments?

Data Profiling by Business Intelligence department

- Several one-year old children also had children

- Number of people over 100 years of age exceeded the number of people from the national census

- The percentage of indigenous people receiving income support payments was significantly lower than the average population

Outcomes

- Focus on Date of Birth and Race as critical data elements

- People creating the mess (front office) were not the people consuming the mess (Business Intelligence)

What is Information Governance?

Information governance is the formulation of policy to optimize, secure, and leverage information as an enterprise asset by aligning the objectives of multiple functions.

IBM

THE IBM DATA GOVERNANCE UNIFIED PROCESS

Driving Business Value with IBM Software and Best Practices

Sunil Soares

"...essential reading for anyone putting together a data governance initiative..."

ANDY HAYLER, CEO, THE INFORMATION DIFFERENCE

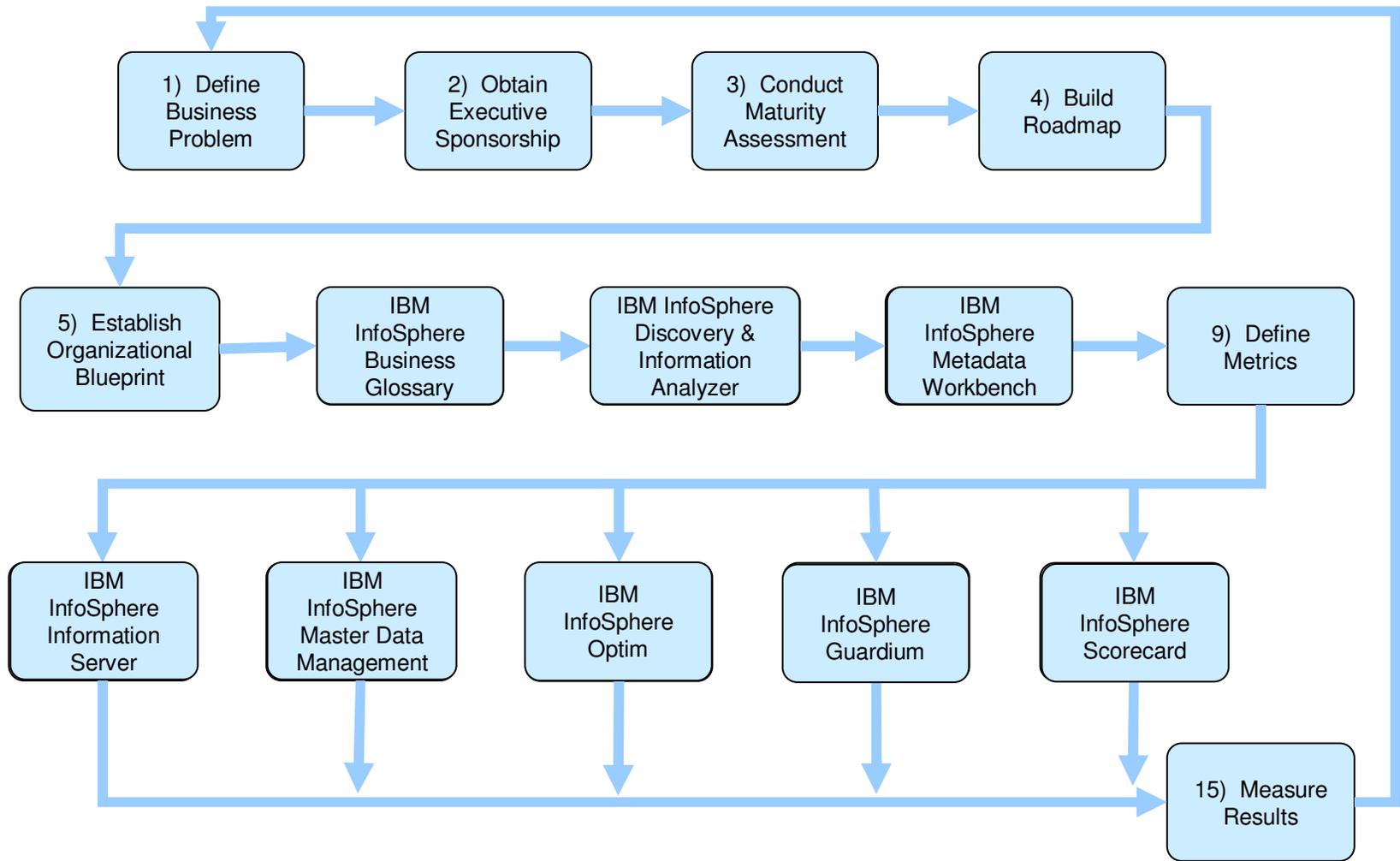Selling **Information Governance** to the Business

Best Practices by Industry and Job Function

SUNIL SOARES

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IBM

Good governance requires process and accountability
IBM Information Governance Unified Process

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1) Define          2) Obtain          3) Conduct         4) Build
   Business           Executive          Maturity           Roadmap
   Problem            Sponsorship        Assessment

5) Establish       IBM                IBM InfoSphere     IBM                9) Define
   Organizational     InfoSphere         Discovery &        InfoSphere         Metrics
   Blueprint          Business           Information         Metadata
                      Glossary           Analyzer           Workbench

IBM                IBM                IBM                IBM                IBM
InfoSphere         InfoSphere         InfoSphere         InfoSphere         InfoSphere
Information        Master Data        Optim              Guardium           Scorecard
Server             Management

                                                                           15) Measure
                                                                               Results
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Selling Information
Governance by Industry

Retail Banking – Information Governance around Date of Birth InfoSphere MDM, Information Analyzer, Quality Stage

A. Number of customers in the retail bank	10,000,000
B. Estimated percentage of customer records with inaccurate dates of birth	5%
C. Estimate number of retail banking customers with inaccurate dates of birth (AxB)	500,000
D. Annual percentage of customers who call the bank with a request to buy another product	10%
E. Average dropout rate associated with customers who have to visit a branch to correct inaccurate dates of birth before the bank can sell them an additional product	50%
F. Estimated number of annual cross-sell opportunities that are lost because of dropouts from inaccurate dates of birth (CxDxE)	25,000
G. Average value of product that is cross-sold to existing customers	$20,000
H. Average operating margin on products that are cross-sold to existing customers	0.5%
I. Potential increase in annual operating margin by improving the quality of dates of birth for existing retail banking customers (FxGxH)	$2,500,000

RACI Matrix

- **Responsible**
  - Those who do the work to achieve the task

- **Accountable**
  - Approver
  - The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one from whom *Responsible* is delegated the work

- **Consulted**
  - Those whose opinions are sought, typically subject matter experts and with whom there is two-way communication.

- **Informed**
  - Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication.
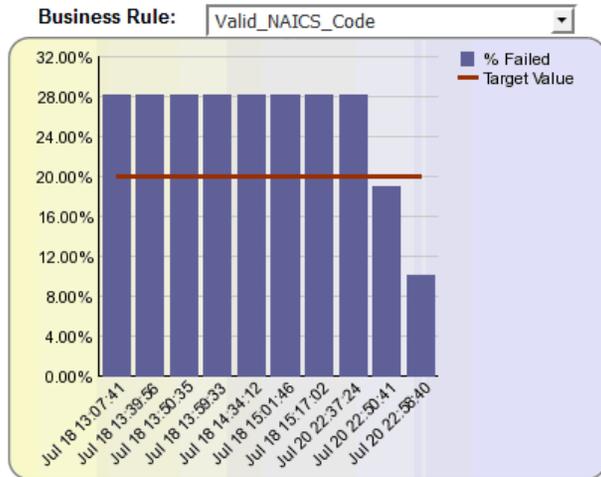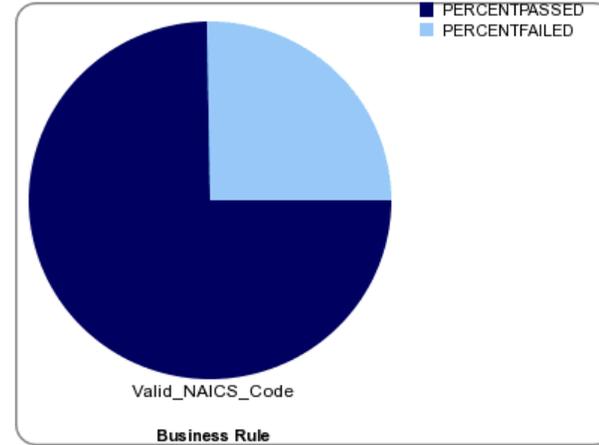
Retail Customer Information Governance RACI Matrix

Category	Attribute	Responsible	Accountable	Consulted	Informed
Duplicates		CIM	CIM		DGO
Identity	Name	Operations	CIM		DGO
	Type (person, org.)	Operations	CIM		DGO
	National ID	Operations[1]	CIM	Compliance[3]	DGO
	Date of Birth	Operations[2]	CIM	Compliance[3] Marketing, Internet	DGO
	Customer Unique ID	CIM	CIM	Marketing, Products, Compliance	DGO
Demographics	Gender	Operations	CIM	Marketing, Internet	DGO
	Income, net worth, etc. for segmentation		Marketing		DGO
	Student Flag	Marketing	CIM	Finance	DGO
	Clustering	CIM	Marketing	Products	DGO
Relationships	Party relationships		CIM	Credit Risk, Marketing	DGO
	Relationship Owner (only for high value customers)	CIM	Customer Service	Marketing	DGO
	Power of Attorney		CIM	Credit Risk, Legal	DGO
Contacts	Email address		CIM	Marketing	DGO
	Preferred mode of contact		CIM	Marketing, Customer Service	DGO
	Phone number		CIM	Marketing, Customer Service, Debt Collections	DGO
	Mailing address		CIM	Marketing, Customer Service, Debt Collections	DGO
	Do not contact		CIM[4]		DGO

1. Operations needs to validate the National ID.
2. Operations needs to validate the Date of Birth with customer's record
3. Compliance needs to validate customer identity to comply with Know Your Customer (KYC) regulations.
4. Customer Information Management (CIM) has a function that is dedicated to customer privacy.

IBM's InfoSphere Governance Dashboard Offering

Business Rule	# of Runs	Avg Num of Records	Avg % Passed	Avg % Failed
Email_Validated_30Days	10	11,338	26.63%	73.37%
Matt01	4	13,998	76.80%	23.20%
Null_Emails	17	10,787	89.83%	10.17%
Null_FirstName	16	10,836	100.00%	0.00%
Null_MiddleName	16	10,836	0.18%	99.82%
Null_Telephone	16	10,836	89.93%	10.07%
test	3	13,998	76.80%	23.20%
Testing	1	13,997	70.60%	29.40%
Valid_NAICS_Code	10	10,538	74.62%	25.38%
Valid_SIC_Code	12	11,115	78.10%	21.90%

Pie chart — PERCENTPASSED / PERCENTFAILED — Valid_NAICS_Code — Business Rule

Business Rule: Valid_NAICS_Code — % Failed / Target Value

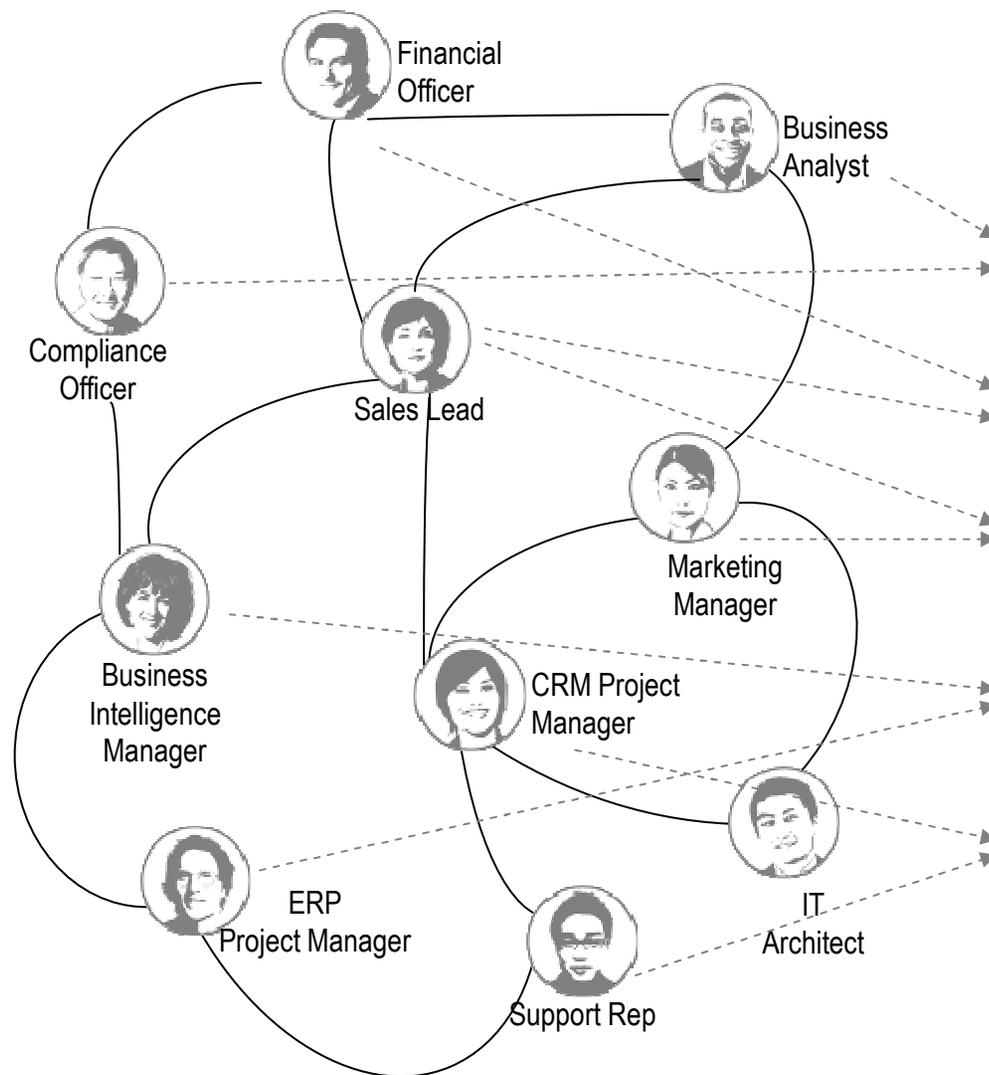| EXECUTABLERULENAME	STARTTIME	Num of Records	Num Failed	Num Passed	Target Value	% Failed	% Passed
Valid_NAICS_Code	Jul 20, 2011 10:58:40 PM	13,762	1,376	12,386	20.00%	10.00%	90.00%
Valid_NAICS_Code	Jul 20, 2011 10:50:41 PM	11,041	2,098	8,943	20.00%	19.00%	81.00%
Valid_NAICS_Code	Jul 20, 2011 10:37:24 PM	10,581	2,968	7,613	20.00%	28.05%	71.95%
Valid_NAICS_Code	Jul 18, 2011 3:17:02 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 3:01:46 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 2:34:12 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 1:59:33 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 1:50:35 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 1:39:56 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%
Valid_NAICS_Code	Jul 18, 2011 1:07:41 PM	10,000	2,810	7,190	20.00%	28.10%	71.90%

Insurance – Information Governance around Single View of Agent
InfoSphere MDM, Information Analyzer, Quality Stage

A.	Improvement in the combined operating ratio based on growing the more profitable agents and performance managing the weaker ones	3%-5%
B.	Increase in annual profitability for every one percentage point increase in the combined operating ratio	$100 million
C.	Potential increase in annual profitability based on providing a single view of the agent (AxB)	$300-500 million

Insurance – Information Governance around Single View of Customer
InfoSphere MDM, Information Analyzer, Quality Stage

A. Number of customers	10,000,000
B. Average number of products per customer prior to single view initiative	1.2
C. Average number of products per customer after single view initiative	1.4
D. Increase in annual profits in year three based on the increase in the number of products per customer	$8,000,000
E. Annual savings in year three by consolidating separate, quarterly payments for multiple products to the same customer	$250,000
F. Annual call center savings in year three by reducing call handling times by providing the ability to view all customer information through a single portal	$400,000
G. 10 percent reduction in IT maintenance budget in year three of $20,000,000 due to avoidance of updates to multiple, redundant applications	$2,000,000
H. Total business benefits in year three (D+E+F+G)	$10,650,000

InfoSphere Business Glossary

For example, define

"Member"

Financial Officer

Business Analyst

Compliance Officer

Sales Lead

Marketing Manager

Business Intelligence Manager

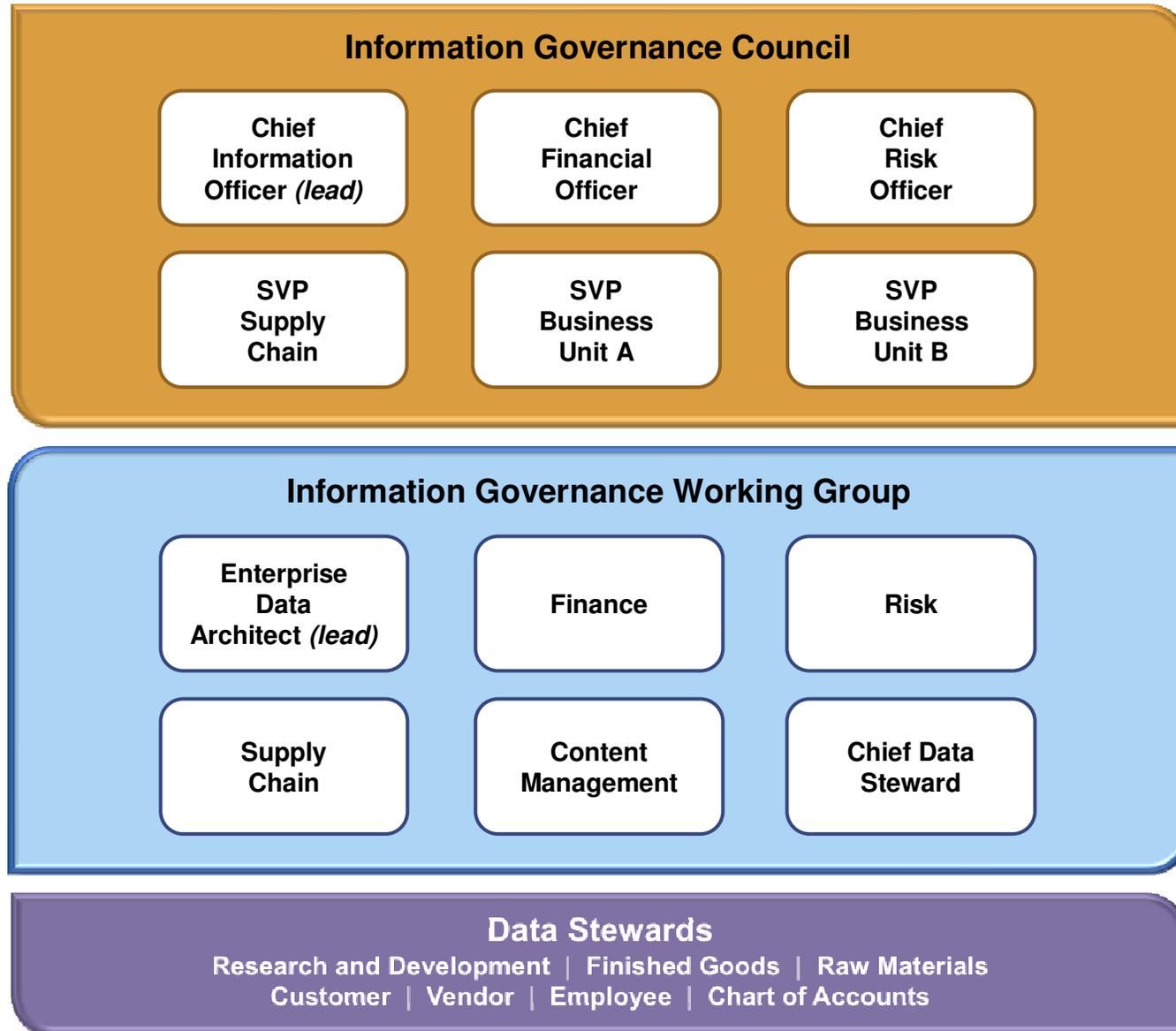CRM Project Manager

ERP Project Manager

IT Architect

Support Rep

- **Information governance needs to establish a common definition for the term "member"**
- **Actuarial might only want to include customers with current coverage**
- **Marketing might want to include prospects and leads within the definition of member**

Manufacturing – Information Governance around Ship-to Address at a Medical Device Manufacturer

A. Number of ship-to addresses in the customer master database	100,000
B. Estimated percentage of inaccurate customer ship-to addresses	5%
C. Estimated number of inaccurate ship-to customer addresses (AxB)	5,000
D. Average delay in weeks where the product is not installed at the customer site due to inaccurate ship-to addresses	2
D. Average sales of aftermarket consumables per customer per week	$100
E. Total potential increase in aftermarket consumables based on improved ship-to customer addresses	$1,000,000

Information Governance Organization at a Manufacturer

Information Governance Council

Chief Information Officer *(lead)*	Chief Financial Officer	Chief Risk Officer
SVP Supply Chain	SVP Business Unit A	SVP Business Unit B

Information Governance Working Group

Enterprise Data Architect *(lead)*	Finance	Risk
Supply Chain	Content Management	Chief Data Steward

Data Stewards

Research and Development | Finished Goods | Raw Materials
Customer | Vendor | Employee | Chart of Accounts

Retail – Information Governance around Product Information Management at a Mid-Size Retailer
InfoSphere MDM

A. Number of stores	200
B. Annual revenues	$500,000,000
C. Number of items	20,000
D. Average number of attributes per item	60
E. Number of new products per year	2,000
F. Average cycle time in weeks to introduce new products	10
G. Reduction in cycle time to introduce new products	75%
H. Lost sales due to out-of-stock, shelf tag or scanning errors, or incorrect product information	5%
I. Number of FTEs devoted to manual PIM	10
J. Reduction in FTEs due to PIM automation and governance	50%
K. Percentage of returns related to incorrect product information	2%

State and Local Government – Information Governance around Application Retirement
InfoSphere Optim

A. Number of applications to be retired	10
B. Number of technical staff assigned to maintaining each application including developers, DBAs, and managers	5
C. Annual cost per employee	$60,000
D. Total employee cost for applications to be retired (AxBxC)	$3,000,000
E. Annual cost of hardware and storage per application	$50,000
F. Total hardware and storage costs for applications to be retired (AxE)	$500,000
G. Total annual cost savings from application retirement (D+F)	$3,500,000

Telecommunications – Information Governance around Network Data
InfoSphere MDM, Business Glossary

A. Annual spend on network equipment	$100,000,000
B. Estimated percentage of network inventory and topology that is incorrectly reflected in the master data management system being used for capacity planning purposes	30%
C. Percentage of annual network equipment budget to build capacity that is actually not required due to incorrect master data	10%
D. Potential annual spend on network equipment that may be freed up for more productive uses (AxC)	$10,000,000

Utilities – Information Governance around Enterprise Asset Management
InfoSphere Information Analyzer, Business Glossary, Metadata

A. Improvement in labor utilization based on: • Efficient crew scheduling driven by better geospatial data for assets such as utility poles • Better understanding of the skills of the workforce • Improved data about the condition of assets	10-20%
B. Improvement in asset utilization based on consistent naming conventions across the enterprise	3-5%
C. Reduction in purchases of new equipment based on the elimination of duplicative procurement due to consistent naming conventions (e.g., an electric pole is referred to by the same name across the enterprise)	3-5%
D. Reduction in parts inventory due to consistent naming conventions	20-30%
E. Reduction in parts inventory carrying costs due to consistent naming conventions	5-10%
F. Reduction in materials costs due to consistent naming conventions	5-10%

Selling Information Governance by Job Function

2/3

Marketing - Information Governance around Catalogs and Telemarketing (MDM, Data quality)

A. Total number of customers in the marketing list	950,000
B. Number of individual party matches	40,000
C. Additional duplicate individuals who are double-counted as part of a household	50,000
D. Total number of duplicate matches	90,000
E. Number of annual marketing mailings per customer	2
F. Cost per mailing	$3.25
G. Total avoidable cost of duplicate mailings (DxExF)	$585,000
H. Outbound telemarketing calls per customer per year	4
I. Cost per outbound telemarketing call	$1.50
J. Total avoidable cost of outbound telemarketing calls (DxHxI)	$540,000
K. Total avoidable cost of duplicate matches (G+J)	$1,125,000
L. Cost to implement data quality tools	$500,000
M. Annual Cost of full-time customer data steward	$200,000
N. Total cost of data quality solution (L+M)	$700,000
O. Payback period	7.5 months

Finance and Procurement – Information Governance over Vendor Payment Terms (MDM, Data Quality)

A.	Number of large vendors with multiple contracts containing inconsistent payment terms (e.g., Net 30 and Net 60)	20
B.	Average number of contracts with each vendor	10
C.	Percentage of contracts with each vendor that contain terms that are less favorable than another contract with the same vendor	20%
D.	Total number of vendor contracts that present an opportunity to negotiate more favorable terms (AxBxC)	40
E.	Increase in float from vendor payables by negotiating more favorable payment terms based on improved visibility to all the contracts with the same vendor (e.g., Net 30 to Net 60)	100%
F.	Average vendor payables float per contract	$100,000
G.	Additional vendor payables float generated by negotiating more favorable payment terms (DxExF)	$4,000,000
H.	Cost of capital	3%
I.	Savings in cost of capital by increasing vendor payables float (GxH)	$120,000

Information Security – Hard Dollar Business Benefits from a Database Monitoring Solution
InfoSphere Guardium

A. Number of DBA and analyst FTEs involved in manual database monitoring	7
B. Annualized cost per FTE	$80,000
C. Annual personnel cost for manual database monitoring (AxB)	$560,000
D. Percentage reduction in personnel cost associated with database monitoring solution	40%
E. Annual personnel cost savings associated with database monitoring solution (CxD)	$224,000
F. Reduction in CPU costs because database logging is offloaded to the database monitoring appliance	$50,000
G. Reduction in storage costs because of the reduction in database logging	$40,000
H. Total hard-dollar savings in year one from the database monitoring solution (E+F+G)	$314,000

InfoSphere Optim Test Data Management

A. Size of production database in gigabytes	5,000
B. Number of production environments	1
C. Number of test environments with cloned copies of production data	8
D. Annual cost of storage per gigabyte	$50
E. Total annual cost of storage {Ax(B+C)xD}	$2,250,000
F. Percentage of production data to be cloned to each test environment	20%
G. Size of each test data environment in gigabytes (AxF)	1,000
H. Annual storage in gigabytes after right-sizing the test data environments {A+(CxG)}	13,000
I. Future State Cost of Storage (HxD)	$650,000
J. Potential Storage Cost Savings (E-I)	$1,600,000
K. Number of hours saved on refreshing the test environment per year (4 hours per refresh x 12 refreshes per year x C)	384
L. Total number of testers impacted by refresh cycles	90
M. Potential productivity impact on testing team (KxL)	34,560
N. Cost per hour of a tester	$50
O. Total impact on testing productivity (MxN)	$1,728,000
P. Annual business benefits from test data management solution (J+O)	$3,328,000
Q. Business benefits over three years from test data management solution (Px3)	$9,984,000

InfoSphere Metadata Business Benefits

|	
A. Number of new applications per year	100
B. Number of hours by business analysts per application per year	200
C. Number of hours by data modelers per application per year	200
D. Average hourly cost of a business analyst	$40
E. Average hourly cost of a data modeler	$25
F. Total application development cost for analysts and data modelers {(AxBxD)+(AxCxE)}	$1,300,000
G. Number of developer hours spent on data discovery per application	100
H. Average hourly cost of a developer	$30
I. Total annual cost of data discovery (AxGxH)	$300,000
J. Conservative savings from efficiency improvements based on a metadata platform	25%

InfoSphere Metadata Business Benefits (Cont'd.)

|	
K. IT savings from a metadata platform in year 1 (F+I)xH	$400,000

L. Number of users of business reports
  - Risk   1,000
  - Marketing   1,000
  - Finance   3,000
	5,000

M. Total number of working hours per year	2,000
N. Percentage of time spent on reviewing reports	5%
O. Percentage of report-viewing time that can be saved based on access to common data definitions and data lineage	3%
P. Cost per hour of business users	$50
Q. Business savings from a metadata platform in year 1 (LxMxNxOxP)	$750,000
R. Total financial benefits to IT and the business from a metadata platform in year 1 (K+Q)	$1,150,000

Next steps ....

1. Read the book:
http://tinyurl.com/3ffurl8
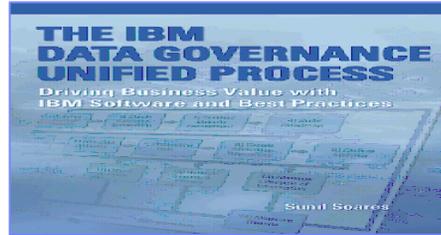
2. Executive briefing on relevant topics:
Take a deeper dive into specific Information Governance solution areas delivered by SMEs
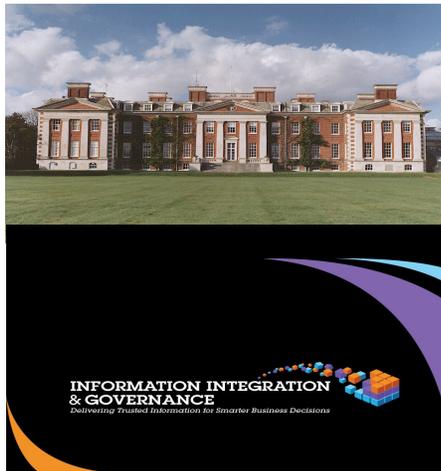
3. Information Governance Workshop:
90 minute briefing by senior consultant

4. Proof of Technology:
Guided hands-on labs for specific solution areas

5. Information Agenda Roadmap Workshop:
Maturity assessment, roadmap and business case