## Business Analytics Forum

See The Future Of Decision Making

**November 3 – 5, 2010** Gold Coast Convention and Exhibition Centre Queensland, Australia

## Information Governance and Business Glossary

Vincent McBurney Focus Strategies and NCVER



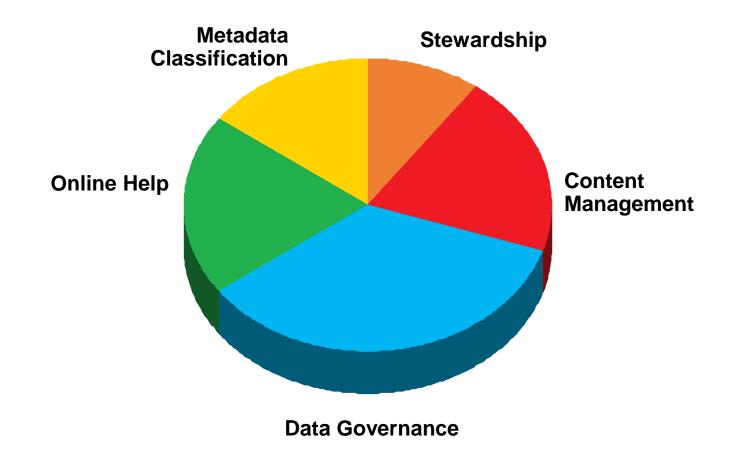
#### Welcome

# INFORMATION GOVERNANCE WITH BUSINESS GLOSSARY

Data governance is a set of processes that ensures that important data assets are formally managed throughout the enterprise.

Data Governance stops your project from going badly horribly wrong

#### What is Business Glossary?

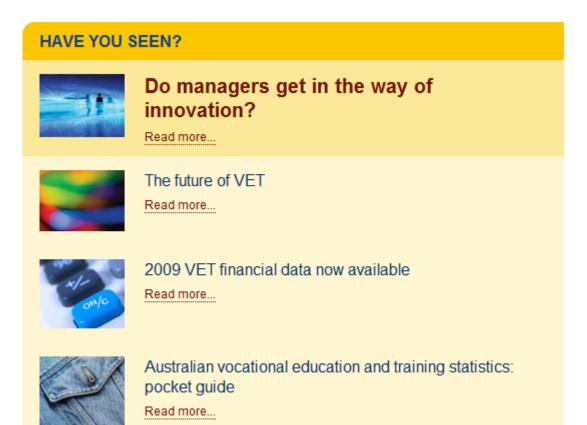


## **Focus and NCVER**



National Centre for Vocational Education Research

- Data Collection validation and data quality governance.
- Data Warehouse for analytics and reporting.





#### **Data Governance Pain Points**



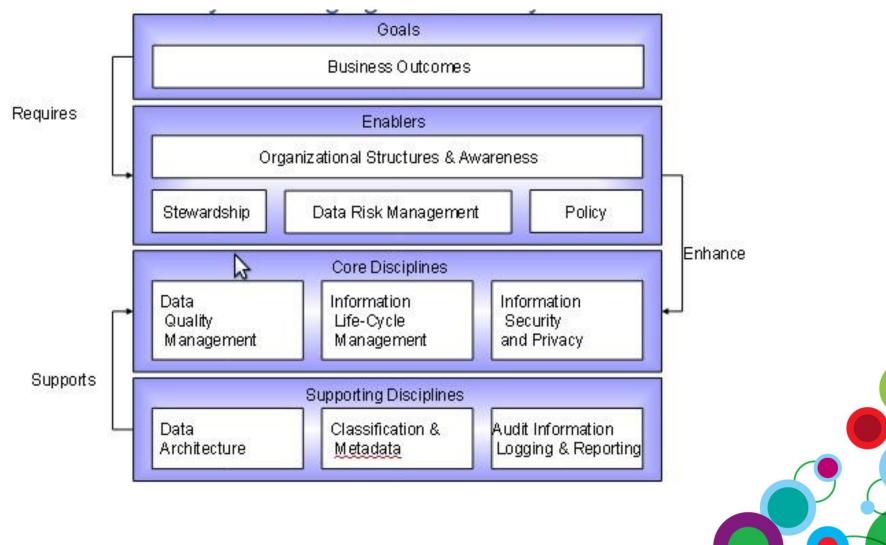
- 1) Why are our Projects always late?
- 2) Why do we deliver something that isn't what the business wanted?
- 3) Why does it take so long for someone new on the project to get up to speed?
  - You've got to know the rules.
  - People have been here for years and just know how it works.
  - I don't have long enough to teach them, it's faster to do it myself.
- 4) Why is it so complex?
  - We didn't know it was going to be this hard.
  - We don't know why they did it this way.





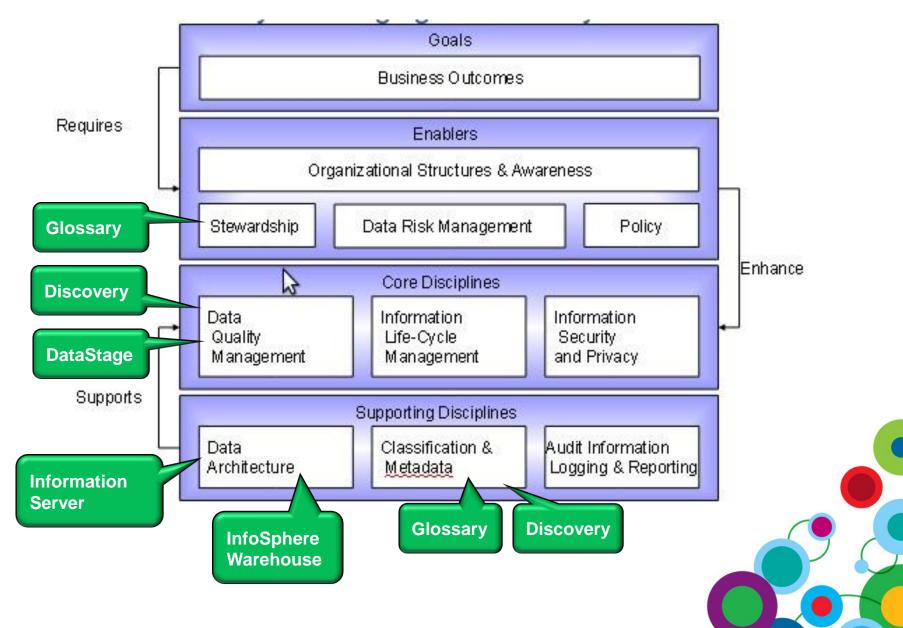
## **IBM Information Governance Maturity Model**

The elements of effective data governance





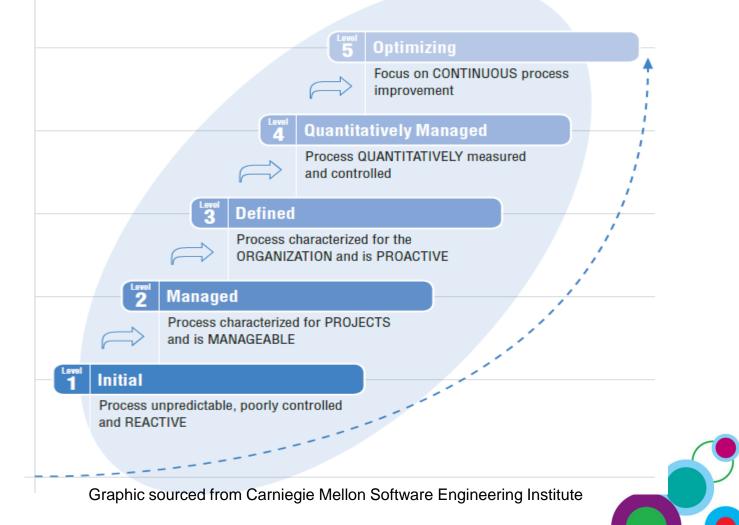
#### **IBM Governance Software Acquisition Since 2004**





## **Capability Maturity Model Integration (CMMI)**

 Based on the Capability Maturity Model (CMM) and applied to each category of data governance.



#### What Maturity do you need?



• Draft recommendations from the last IBM Governance Council meeting

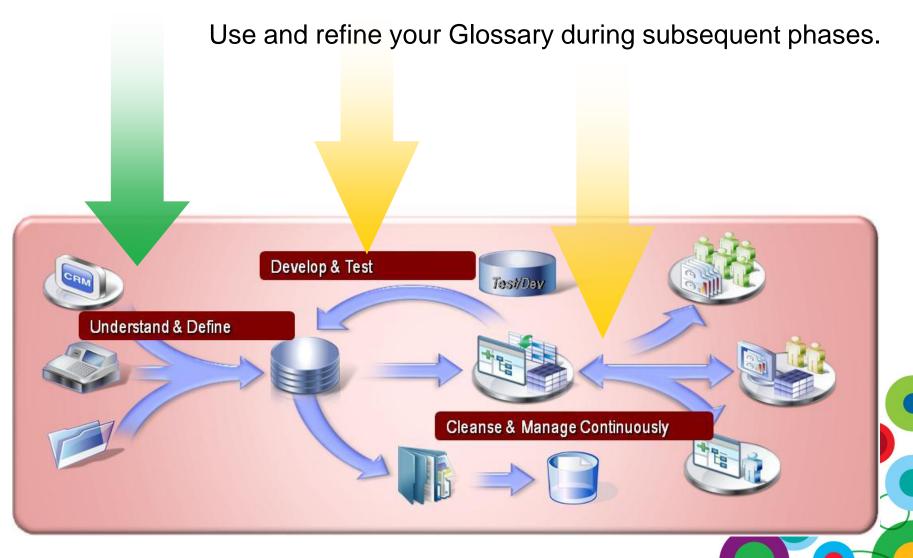
Improve Quality of Reporting a	nd Analytics	to Promote O	rganizational	Effectivenes	is	
	Initial	Repeatable	Defined	Managed	Optimizing	
Org Structures and Awareness			Х			
Stewardship			Х			
Policy		X				
Data Risk Mgmt and Compliance	Х					
Info Security and Privacy	Х					
Data Architecture			Х			
Data Quality Mgmt				Х		
Classification and Metadata			Х			
ILM	Х					
Audit Information Logging and Reporting			Х			

Transform Data into Valued Bu	siness Infor	mation to Make	Smarter, Fa	ster Decision	<u>Ş</u>
	Initial	Repeatable	Defined	Managed	Optimizing
Org Structures and Awareness	Х				
Stewardship		X			
Policy	Х				
Data Risk Mgmt and Compliance		X			
Info Security and Privacy		X			
Data Architecture			Х		
Data Quality Mgmt			Х		
Classification and Metadata			Х		
ILM		X			
Audit Information Logging and Reporting	Х				

## **Glossary in a Project**



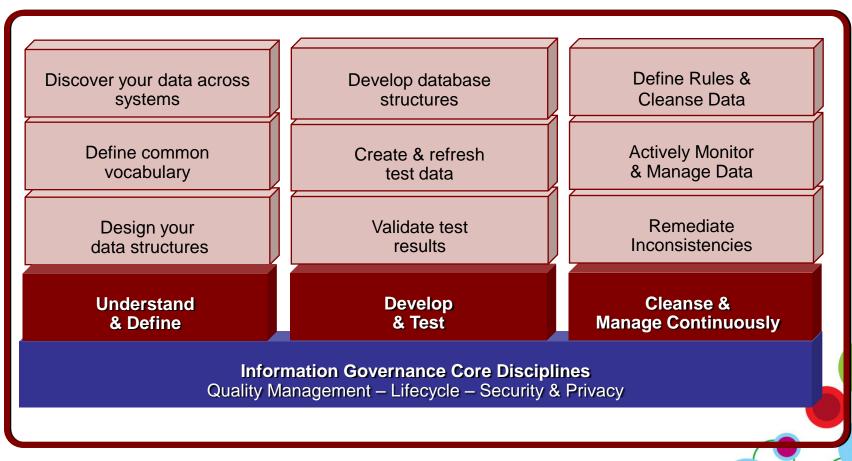
#### Create your Glossary during the Understand and Define stage.





#### **Understand and Define**

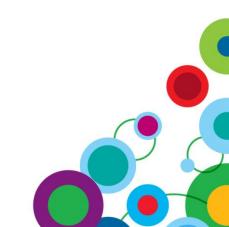
Data Discovery and Glossary accelerate the first phase and lower the cost, risk and duration of subsequent phases.







- Why does a simple enhancement request take so long?
- Why are our estimates always wrong?
- Why does everyone take so long to do things?



#### **The Victim Statements – the Business**



We spend all this money on IT and what do we get for it? They just spent so long on meetings and documentation and didn't build anything!

When we got to UAT Testing there were bugs and it had to be fixed over and over again. We could have built this faster ourselves

#### **Initial Suspect – Internal IT**



It would help if the business knew what they wanted. We had limited resources and had to keep existing systems running.

We brought in consultants and they took a long time on deliverables. These guys earn 10 times what I do!

#### **Obvious Suspect – the Consultants**



We had some unexpected change requests and scope creep. Requirements and rules kept changing right up through

testing.

No one told us there were three different definitions for client status. You thought that was bad, wait until you see phase 2.

#### **Obvious Scapegoat – the New Guy**



I didn't do a proper handover as the guy I replaced was always out

to lunch.

I don't even know who was managing the project. I don't know where the application documentation is.

Turned out the Functional Spec I was using was out of date by two years.

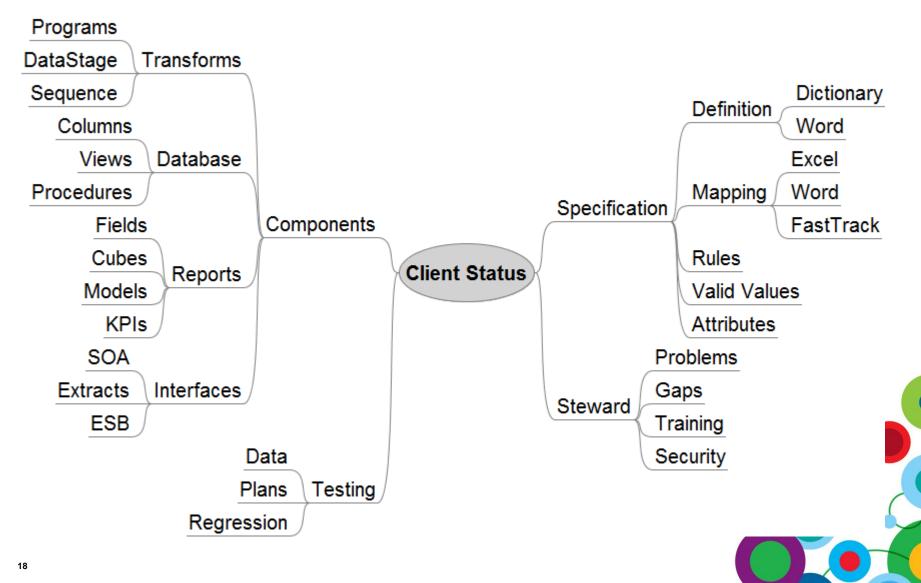
There are three different definitions for client status? Wait, which client status are we talking about?

I need to update my resume.



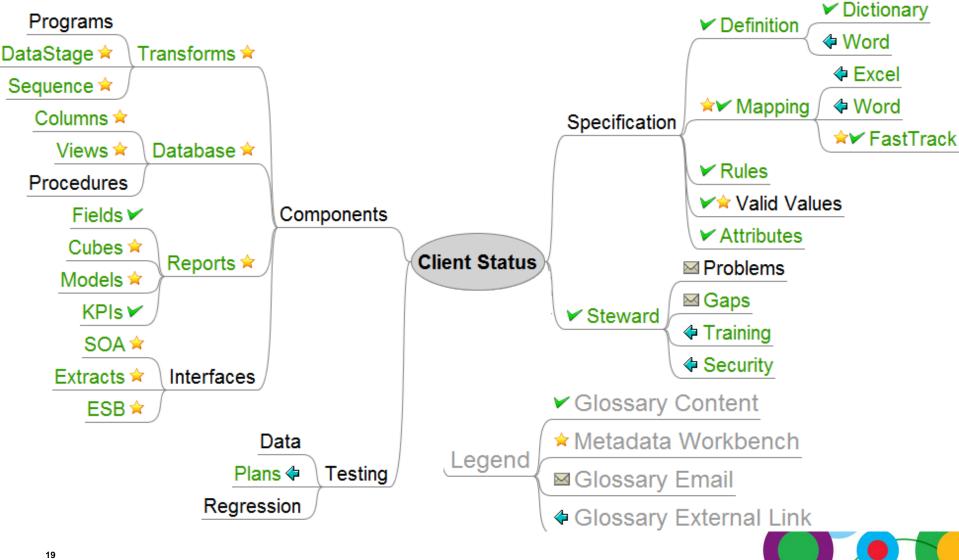
## **The Coroners Report**

• The team did not have the information and the context for the change.



## The Information Server Approach

Metadata Workbench and Business Glossary provide context



**OCUS** 

strategies

solutions

Ö

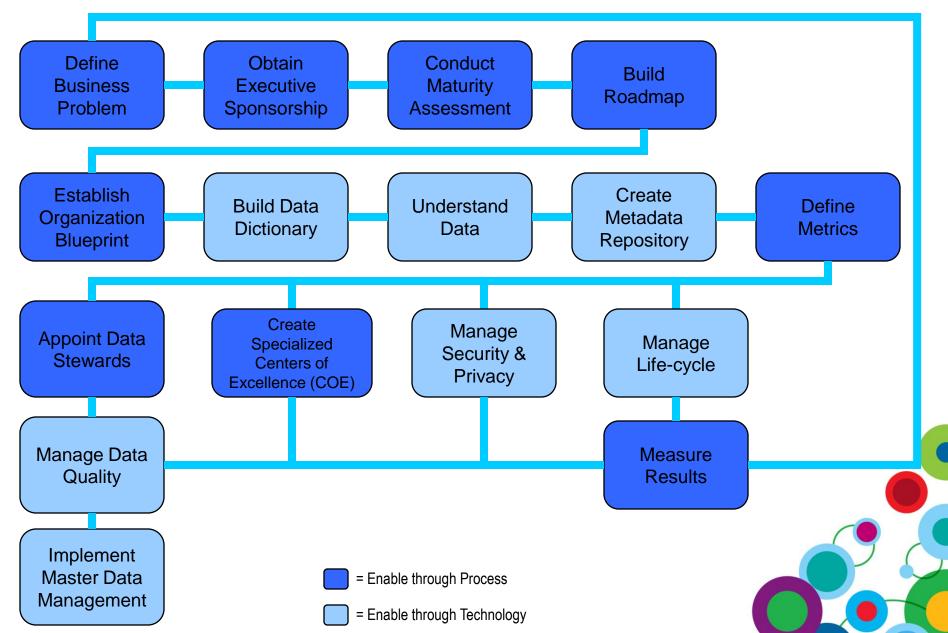




• The steps to a successful Business Glossary.



#### **Define Business Glossary in the Unified Process**



focus

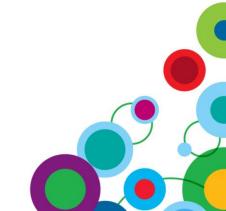
strategies solutions Ö

### **Defining the Scope and Structure**



#### Work out what terms are included and how they are organised.

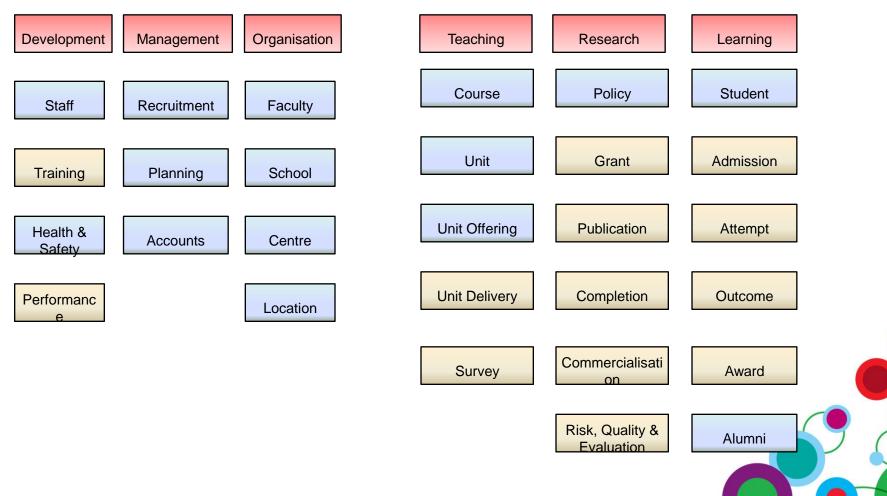
- Choose your Taxonomy can be different across subject areas.
  - Flat Taxonomy
    - Try to keep less than 30 categories for scrolling/scanning
    - Only about 25 terms fit on a standard Glossary browser page
  - Hierarchical Taxonomy
    - Wide and Shallow is less work to navigate
    - Do not branch for a single category
    - Sufficient content in each category to warrant existence
  - Network Taxonomy
    - Define once and use multiple times
    - Terms can reference each other
    - Categories can *hold* or *reference* a term





#### **Identify Subject Areas**

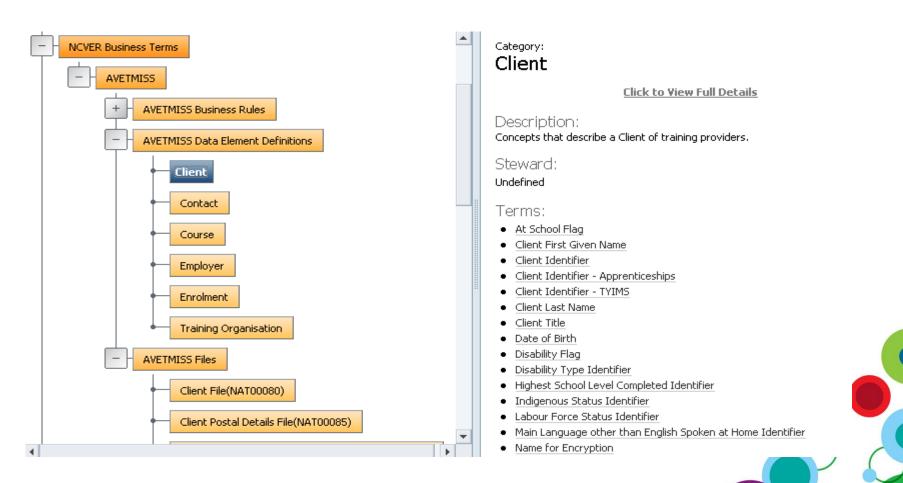
 If you are using a Business Glossary to support a Data Warehouse then start with the high level conceptual data model.



#### **Start with a Formal Vocabulary**



- Focus helped create a Glossary for a Data Collection at NCVER.
- Clearly defined Data Dictionary with elements and rules.



## **Define your Steward Structure and Policies**



#### Are Terms and Categories owned by People or Groups?

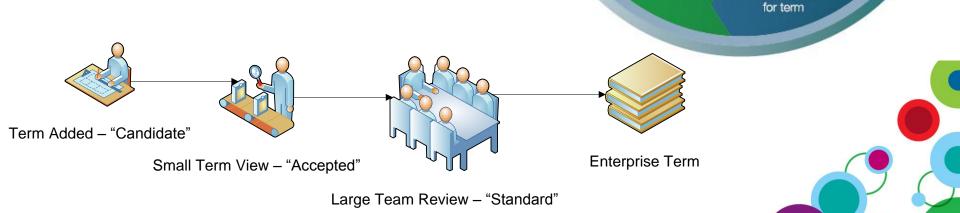
- In Business Glossary stewardship refers to the person who maintains the content and answers questions.
  - Terms can only be *owned by* a single person or group and passed between people easily.
  - Terms can be *related to* multiple people but it can be painful to maintain.
  - Glossary users can quickly and easily find the term owner.
- Business Glossary introduces a simple stewardship structure.
  - Business Rules stewardship is in Information Analyzer.
  - Data Exception stewardship is in Exception Manager.

### **Define the Lifecycle of Terms**

- Work out the Data Stewardship Policies
  - How to use the Term status
  - Identify review groups
  - Collaborate via email
  - Track changes over time
  - Report to track progress of reviews



Quality control



Maintain term

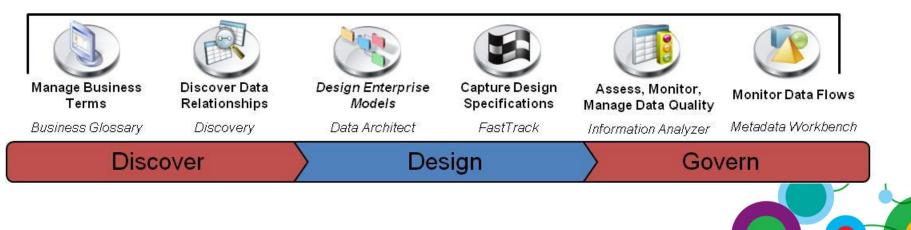
Publish term

new term



## **Tell Everyone where it fits**

- Business Glossary content needs to become part of the Software Development Lifecycle.
- The more Information Server products used the better the chances to maintain good quality Business Glossary information.
  - Discovery helps classify physical data.
  - FastTrack helps map physical columns to Glossary terms.
  - Metadata Workbench can be a faster way to associate IT assets to terms.





#### Get a Fast Start with Imports

- The Quality of Business Glossary imports has a major impact on the success of the implementation.
  - We use Excel to CSV import first for content.
  - We use Excel to XML import for relationships.
  - We use Excel to XML import for External Website links.
  - We use extra Excel to XML imports to add custom attributes.
- CSV imports can only handle terms and attributes but not relationships.
- XML imports can handle everything including relationships between term and assets.
- Excel is a good way to grab over a large chunk of content that would be too slow to data enter straight into Glossary.



## Excel for Glossary XML



- We can collect Synonyms, Related Item links, additional Custom Attributes, External links etc in normal Excel tables.
- Paste or link the data into our Excel to XML import sheet.
- Create an XML text file for import into Glossary.

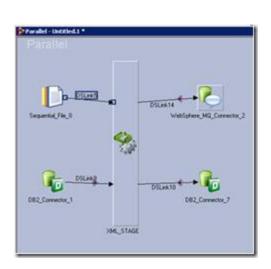
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#### **New Import Method – DataStage 8.5**



- Import, store and browse the Glossary XSD schema file.
- Read lists of glossary terms and convert them to Glossary XML.
- Filter out bad data before it breaks the glossary import remove rich text and funny characters.



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#### **Basic Glossary Entry**

Using Glossary just for Definitions





#### **Synonyms and Related Terms**

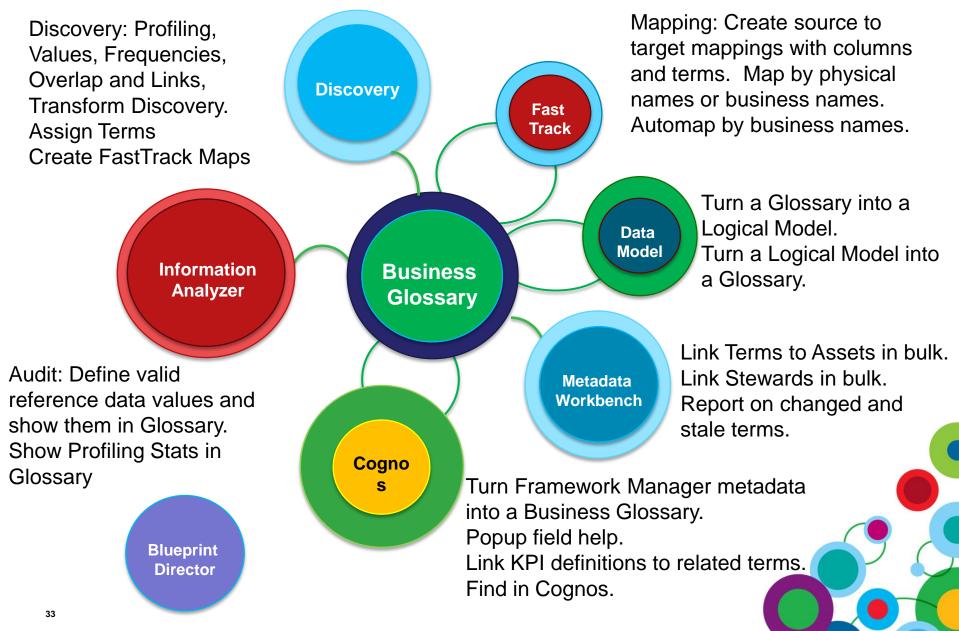


- Synonyms track different names for the term across the Enterprise.
- Related Terms are used to define validation business rules.

✓ General Information
Synonyms —
1. <u>403 - Student given name - First</u> ( 🚔 University » 🚔 DEEWR » 🚔 Commonwealth Assisted Students )
Related Terms —
1. Client First Given Name(NAT00085) Rule1 ( 🚔 NCVER Business Terms » 🚔 AVETMISS » 🚔 AVETMISS Business Rules » 🚔 Client Postal Details File Validation(NAT 00085) » 🚔 Client Details(NAT00085) )
2. <u>Client First Given Name(NAT00085) Rule2</u> ( 🚔 <u>NCVER Business Terms</u> » 🚔 <u>AVETMISS</u> » 🚔 <u>AVETMISS Business Rules</u> » 🚔 <u>Client Postal Details File Validation(NAT</u> 00085) » 🚔 <u>Client Details(NAT00085)</u> )
3. <u>Client First Given Name(NAT00085) Rule3</u> ( 🚔 <u>NCVER Business Terms</u> » 🚔 <u>AVETMISS</u> » 🚔 <u>AVETMISS Business Rules</u> » 🚔 <u>Client Postal Details File Validation(NAT</u> 00085) » 🚔 <u>Client Details(NAT00085)</u> )
Usage — Client First Given Name is used for addressing correspondence.
Classification — VALUE : DESCRIPTION - CLIENT FIRST GIVEN NAME text : Client's preferred first name
Guidelines —Not applicable
Related Terms —Not applicable
Rules — Client First Given Name must not be the client family name even if it is their first name.
Created By —isadmin
Created On — 2010-10-07 15:04:59
Modified By —isadmin
Modified On —2010-10-08 13:29:20

## **Unified Metadata Approach**







#### **Assigned Assets**

- External Assets Given Name is linked to external HTTP links such as documents in Sharepoint or Intranet Pages.
- Metadata Assets Given Name has been explicitly linked to a FIRST\_NAME column in the Warehouse.

	Assigned Assets								
A linked Word Document	1. Data Privacy Policy <b>TYPE:</b> MS Word Do This describes the privacy requirements for		r: Compliance L	.OCATION: Sharepoint					
	2. 🚦 <u>FIRST_NAME</u> ( 冒 <u>bankconnect</u> » 🧊	BANKDEMO » 🔀	🛔 <u>bank</u> » 🎫 M	ASTER )					
Linked DB Columns	3. III <u>Name</u> (III <u>Input</u> ) 4. III <u>Name</u> (III <u>StandardizedData</u> )								
	Notes								
	✓ History								
	Select a property to add to the table			Collapse Rows					
	Date	Edited By	Comment	Guidelines					
Change History	2010-10-08 11:06:54	isadmin		Not applicable					
Change History	2010-10-07 15:04:59	isadmin		Not applicable					
	2010-10-07 15:04:59	isadmin	Created						





#### **Custom Search and Browse**

• Using the Glossary API to write our own Author search and browse

ROO			Sp	ori	n	g
CATEGORY	✓ Find by Term					
Create new Category List all Categorys	Name:					
r <b>ERM</b> Create new Term List all Terms	FIND					
	✓ List all Terms					
2	Name	Short Description	Context			
Simpler Author Menu	5 Year age groups	Five year age groups.	Department of Health > Collection > Victorian Admitted Episode Dataset (VAED) > Data Elements	<b>æ</b>	2	×
thor	Aboriginal or Torres Strait Islander Origin but No	Aboriginal or Torres Strait Islander origin, but the Country of Birth is not a code specific to Australia (1100 – 1102, 1199).	Department of Health > Collection > Victorian Emergency Minimum Dataset (VEMD) > Edits	<b>4b</b>	2	>
ir Au	ACAS Status	The type of involvement of the Aged Care Assessment Service (ACAS) in patient separation.	Department of Health > Collection > Victorian Admitted Episode Dataset (VAED) > Data Elements	<b>#</b>	2	>
nple	Accommodation Type (a)	(a) The accommodation type or types occupied by the patient during their admission, including changes to this item during the episode.	Department of Health > Collection > Victorian Admitted Episode Dataset (VAED) > Data Elements	<b>4B</b>	2	>
Sir	Accommodation Type on Separation (b)	(b) The accommodation type occupied by the patient on their last (counted) patient day.	Department of Health > Collection > Victorian Admitted Episode Dataset (VAED) > Data Elements	æ	2	>
	Account Class (a)	(a) The agency/individual chargeable for this episode, and associated sub categories, for this episode of care, including changes to this item during the episode.		æ	2	>
	Account Class on Separation (b)	(b) The agency/individual chargeable for this episode, and associated sub categories, on the last (counted) patient day.		<b>Æ</b>	2	>

#### **Custom Browse and Data Entry Forms**

36



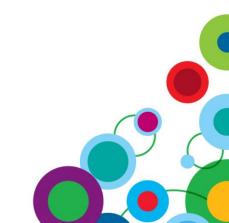
• Using the Glossary API to write our own authoring forms

CATEGORY	✓ Create new Cate	gory							
Create new Category List all Categorys	Name:								
TERM Create new Term	Parent Category:							•	
List all Terms	Short Description	n:							
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• Final comments from the prosecution and the defence.



#### **Steven Adler supporting Data Governance**

Director of IBM Data Governance Solutions at IBM.

I meet a lot of people who ask me about the Data Governance products or roadmaps organizations should buy. The best products you can buy are the ones that tell you what you don't already know. To govern effectively, you need to know what's going on in the context to when it is happening, what it means, and how it relates to other things.



#### **Steven Adler opposing Data Governance**

#### Former drummer for Guns N' Roses.

"We never did anything the sane, sensible way. We never went by the rules and never conformed to an accepted path to success. The way we came up with our songs, insisted on total artistic freedom, the way we practiced and played — no one did it like we did."







#### **Vincent McBurney - Judicial Verdict**

Never been to a Guns N' Roses concert.

Strike a balance. Data Governance via Business Glossary is not about coming down hard on people but about providing information in context that is accurate, complete, insightful and timely.

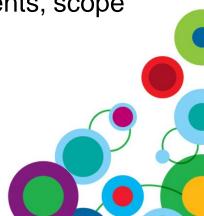


#### **Getting Started with Data Governance**



#### Six things everyone can do today:

- 1. Define your desired outcomes from Data Governance
- 2. Be clear about the problems you are solving
- 3. Define a realistic organisational structure for your environment
- 4. Focus on a DG pilot program that can deliver outcomes with business benefits
- 5. Take advantage of best practices and models from organisations like the Data Governance Council and MIKE 2.0
- 6. Be real with organisational challenges, funding requirements, scope and duration of deliverables





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