

# Resolving Taxonomy Challenges and Information Architecture Conflicts

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Or, the Grand Unified Theory of Everything...

# Agenda

- Goals/Introduction
- The Problem
- Taxonomies, Semantics and Data Architecture
- Definitions: Taxonomy, Ontology, Thesaurus...
- Structural and Taxonomic Metadata
- Thesaurus Structures: Resolving Multiple Facets and Polyhierarchies
- Exercise
- Steps to Deriving a Taxonomy

# Goals

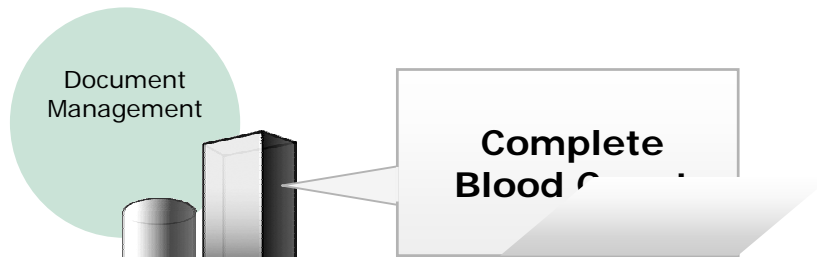
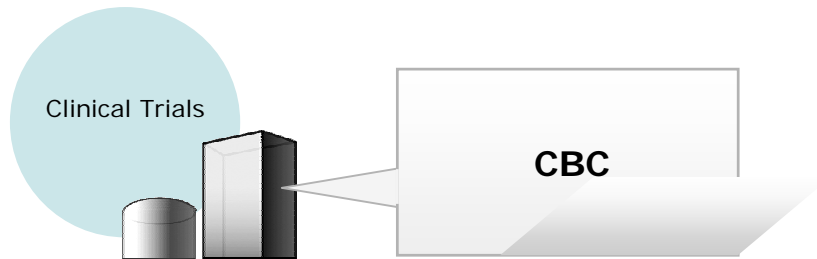
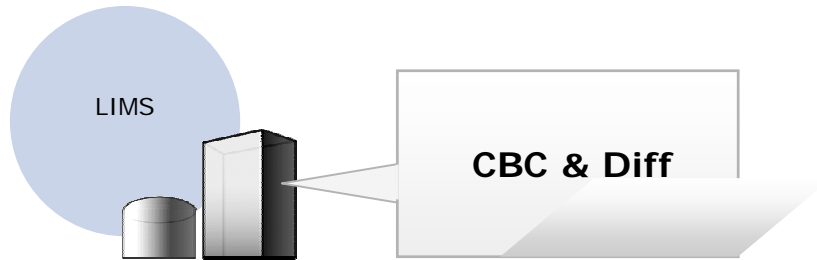
- Learn about foundation theory and challenges of taxonomy development and management
- Get practical steps to develop taxonomies and metadata standards
- Discover how to resolve issues of ambiguity through metadata facets
- Learn approaches to "semantic mapping" for relating multiple taxonomies

# The Problem

# Change is constant

- Snap shot versus movie
  - By the time you gather requirements, the target has shifted
- The nature of business is that things change faster than IT can support
  - Technologies, markets, competition, partners, customer needs, etc
- As business needs change, systems and tools grow up to solve specific problems without a view toward integration
  - “I have a problem and a budget, I can’t wait for IT to solve this. Just buy a server and install this software...”
- Integrated environments (portals, e workplace projects, enterprise content management, etc) require a common framework and flexible architecture
  - Vendors all claim to have the magic bullets to solve these problems. What is the solution to application proliferation? Another application....

# Same Term, Different Expressions...

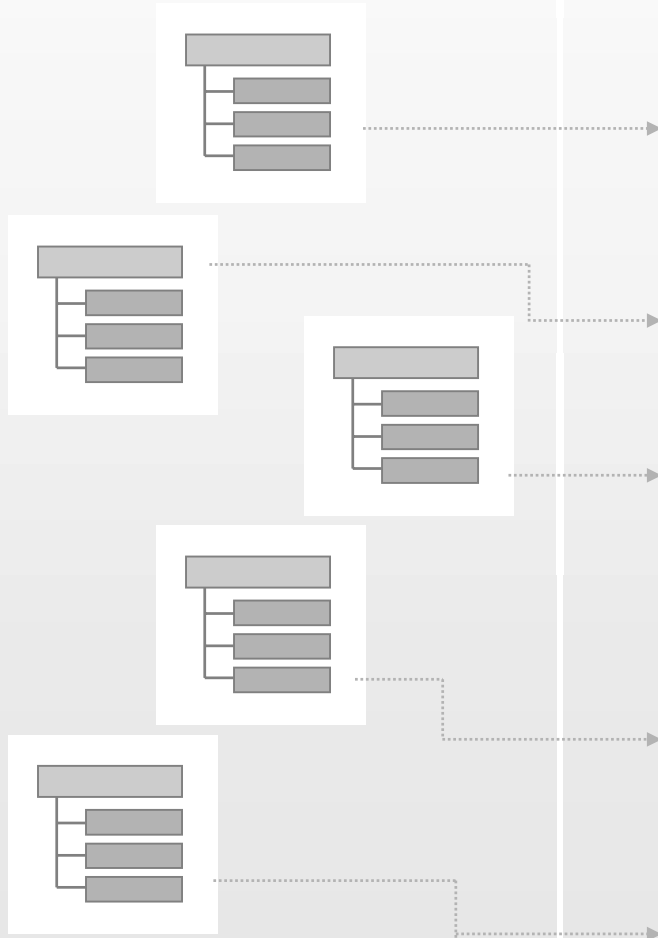


## Problems:

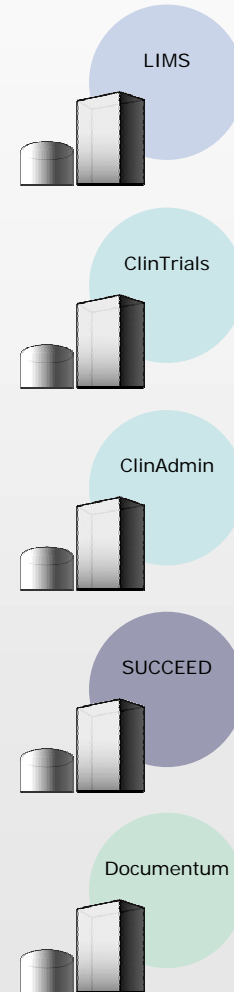
- Difficulty finding relevant information
- Federated search configuration is cumbersome
- Inability to view consolidated results
- Limited ability to control shared vocabularies
- Weak governance or demonstrated control
- Costly/cumbersome administrative overhead

# Typical Situation – Disconnected systems, inconsistent metadata

## Vocabularies: Disconnected



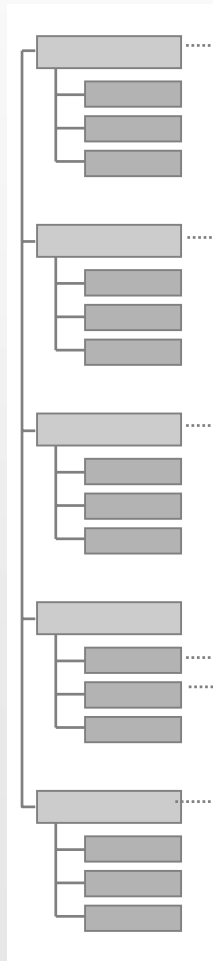
## Applications



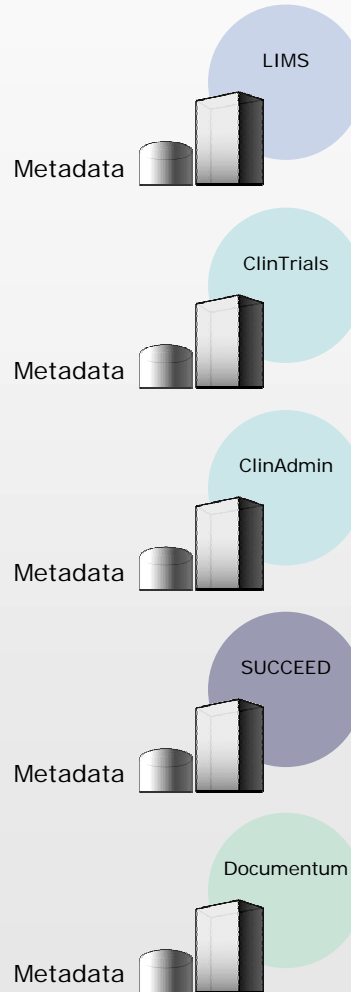
- Inconsistency, no standards
- Many integrations are point-to-point; brittle
- Lack of awareness of and reuse of shared metadata

# Goal is to unify semantic models

## Vocabularies: Unified



## Applications



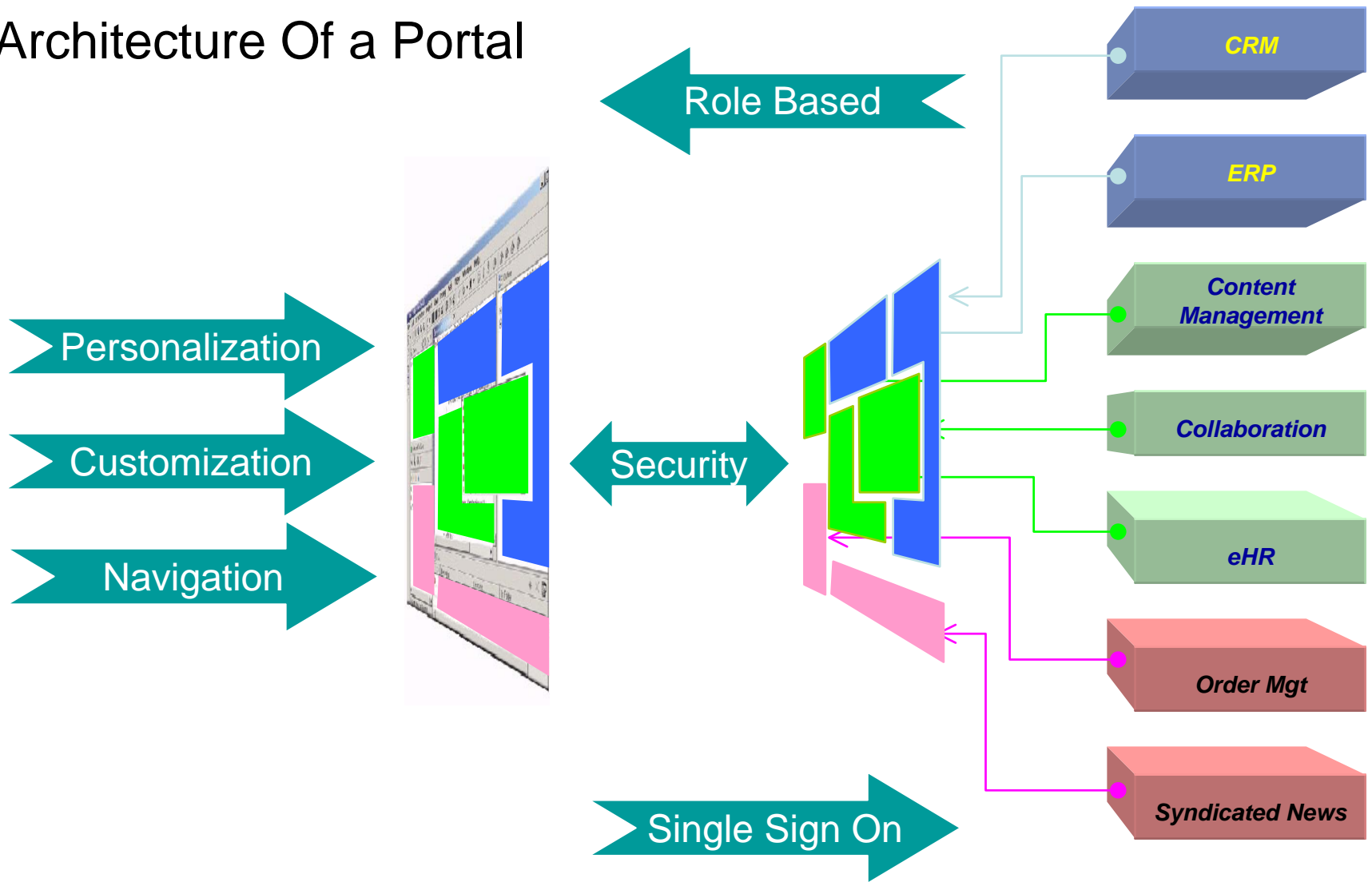
Mapping can still be complex, but terms and relationships can be centrally managed.

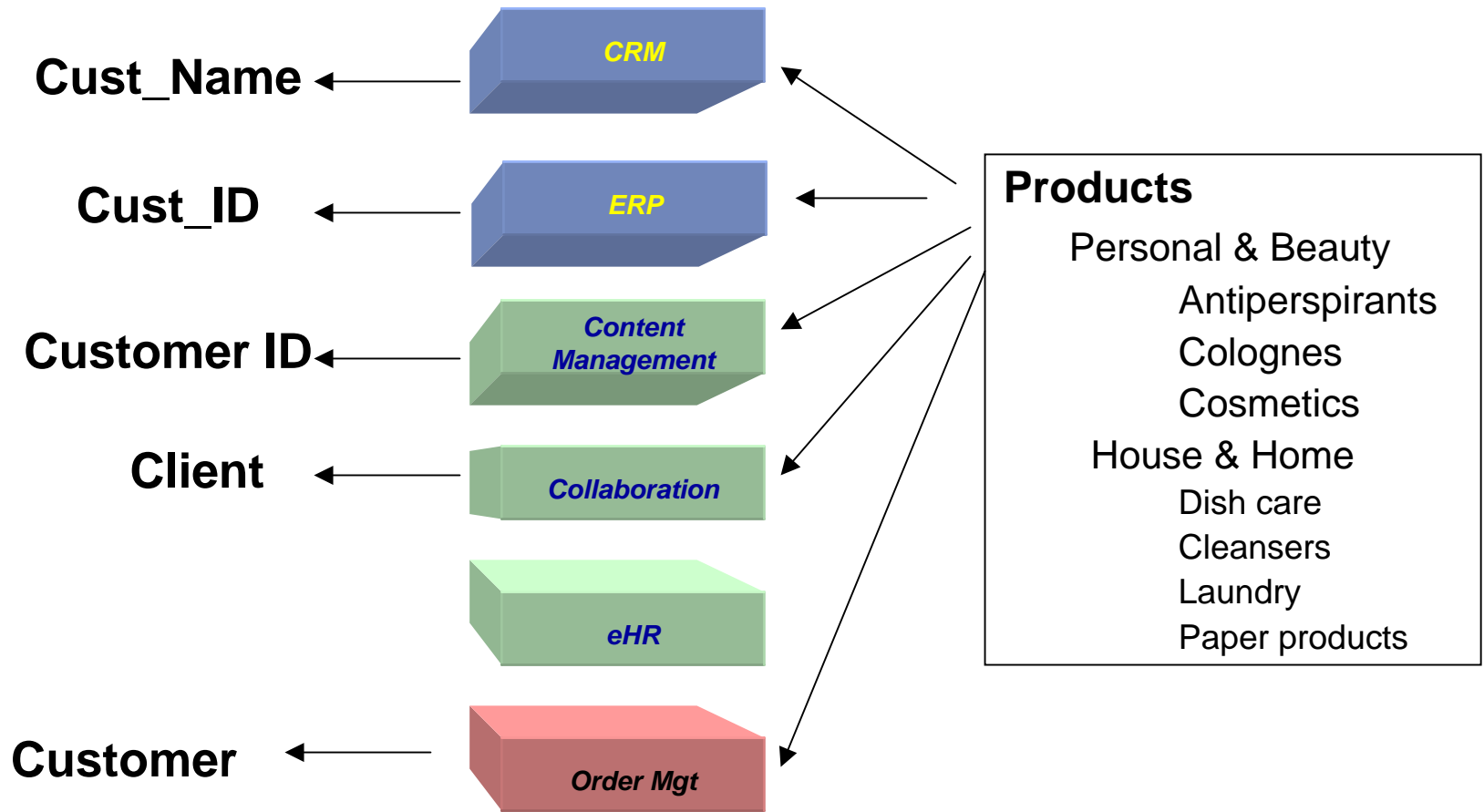
If hard-coded, can be difficult to manage.

Need to manage updates and models, and analyze impact

# Do portals or content management systems help?

# Architecture Of a Portal





**How does a portal handle this problem?**

# Taxonomies, Semantics and Data Architecture

## Taxo and IA

You cannot do information architecture going forward without understanding taxonomies.

For example, if you consider enterprise search to be a component of information architecture, it is difficult to engineer a robust enterprise search architecture without first considering faceted taxonomies (metadata), hierarchical taxonomies (classification schemes), and semantic networks/thesauri (network taxonomies).

Denise Bedford, Information Architect, The World Bank

## Taxonomy is an enabler...

- Every organization is struggling with integration...
- Portals, content management applications, customer relationship management systems, etc all strive to create views of information that are in the context of work processes

What is the key component to any of these initiatives?

**Having a common language in which to:**

- Describe
- Communicate
- Translate

**information between applications and  
between user audiences.**

## *Information* architecture versus *Semantic* architecture

- Information architecture describes the ways in which systems capture, manage, organize and present information
  - Metadata fields describe information about a document or piece of content.
    - Identifiers of various kinds: Name, account number, part id, price, etc
    - Conditions or status of the content: Workflow approval state, Date created, review date, etc
- Semantic architecture is about meaning and nuance
  - Terms can have multiple contexts and meanings.
  - People use different terms to describe the same thing

## Info Architecture

### A single concept can have different *Expressions*

Person we do business with

- Cust\_Name
- Cust\_ID
- Customer ID
- Customer
- Client

Person who writes a document

- Contributor
- Author
- Creator

What we buy or sell a product for:

- Price
- Cost

## Semantics

A single expression can represent different *Concepts*

Pitch

- the property of sound
- the throwing of a baseball
- a vendor's position (especially on the sidewalk)
- sales talk
- degree of deviation from a horizontal plane
- dark heavy viscid substance
- a high approach shot in golf
- a card game
- abrupt up-and-down motion
- the action of throwing something
- ...

Taxonomy deals with *semantic* relationships and influences various aspects of information architecture

- What does a taxonomy do for us?
- For some reason, business leaders have latched on to the term (terms like meta data, information architecture, etc have not gained the same traction in the business lexicon)
- So, people think taxos are important, but how are they applied? What is the utility?

## Taxonomy is a foundation...

- It is a system for classification
- It allows for a means to organize documents and web content
- Helps us fine tune search tools and mechanisms
- Creates a common language for sharing concepts
- Allows for a coherent approach to integrate information sources
- It is a common language for business processes

## Goals of a taxonomy

- Improve search results and applicability (both precision and recall)
- Allow for knowledge discovery
- Improve *usability* of applications as well as *learnability* of applications
- Reduce the cost of delivering services, developing products and conducting operations
- Improve operational efficiencies by allowing for reuse of information rather than recreation

# Applying a taxonomy to search

## We need a mechanism to improve search

- A **Taxonomy** can be used to
  - Define search terms and map those terms to specific locations of information (need to integrate with a search engine)
  - Apply terms to a document so that relevant and consistent search results are returned (need to integrate with a content management system)
- A **Thesaurus** can be used to define term synonyms and related terms in order to improve the recall of information.
  - We may define “proposal” and “statement of work” and “SOW” as meaning the same thing. If I enter SOW, I can pull back documents that are labeled with (or contain) the other terms. This is referred to as “term expansion”

# Applying a taxonomy to content or document management

## **We need to develop a framework for managing documents and or web content**

- A **Taxonomy** can be used to
  - Define content and document types (an example of a document type might be “White Paper”)
  - Define the fields that will describe attributes (an example might be to tag a document with “Industry”)
  - Define the actual values of certain fields and attributes (for example the list of values for the attribute “Industry” might include “Financial Services”, “Telecommunications”, etc.)

# Applying a taxonomy to navigation

## We need to improve navigation for our intranet

- A **Taxonomy** can be used to
  - Inform navigation (though it is not the same as navigation)
  - Define metadata and the information architecture of the site.

## Applying a taxonomy to a portal

**We need organizing principles to guide development of a portal**

- A **Taxonomy** can be used to
  - Organize a knowledge directory or document directory
  - Define metadata on the documents themselves
  - Organize portlets
  - Organize pages
  - Organize communities and audiences

## Apply a taxonomy to personalization

**We need to create mechanisms to provide information for specific users based on their needs and interests**

- A **Taxonomy** can be used to
  - Define user profiles
  - Define user interests
  - Define topics that will be mapped to interests

# Definitions: Taxonomy, Ontology, Thesaurus...

## Long Boring Definitions

- **Ontology** - A classification structure that takes into context a larger body of knowledge and meaning. An ontology about a domain of knowledge might contain multiple taxonomies of terms to describe various aspects of that knowledge and the relationships between those taxonomies.
- **Taxonomy** - The science dealing with classification and naming conventions for organisms, which has been extended to non-biological naming systems. The term is currently used to refer to a particular list (e.g. A topic taxonomy) used as a device for normalizing the vocabulary applied to indexing a body of content.
- **Thesaurus** - A controlled vocabulary list, dictionary, glossary or taxonomy that is enhanced with predefined relationships among terms (e.g. Broader, Narrower). In information science, a thesaurus also includes a relationship type that governs which of a group of synonymous terms is permitted as an index term. (e.g. auto use automobile; car use automobile)

Courtesy Lynda Moulton

## “Sound bite” definitions

- A **Taxonomy** is a list of terms that enable classification of information
  - Method used to organize Subject/Topic metadata
  - Typically expresses hierarchical relationships (parent/child)
  - Emphasizes context
- A **Thesaurus** is a specialized taxonomy
  - Equivalence relationships (synonyms)
  - Associative relationships (related terms – “see also”)
  - Preferred terms, variant terms
- An **Ontology** is a collection of taxonomies and thesauri
  - A body of knowledge is represented by multiple lists of categories
  - Categories of various types are conceptually related

## Common business language

- Enterprise Taxonomy is:
  - A dictionary of preferred terminology that can be created or adapted for any business environment
  - A structured hierarchy of relationships of terms and concepts to support the businesses information needs
  - A navigational aid for classifying content and finding business information
  - A common language for site architecture

## Definitions

- **Semantics** - The study of meaning as it pertains to terms in a language.

Builders of taxonomy, thesaurus or term lists must have semantic context to determine suitability of terms for the intended audience.

- **Dictionary** - Alphabetic list of words or short phrases with accompanying definitions, word derivations, and pronunciation
- **Glossary** - Dictionary of specialized terms in a limited field with specialized definitions.

Frequently industry glossaries can be used as sources for our taxonomy since this represents specialized knowledge of the field

Courtesy Lynda Moulton

## A finer level of detail...

- **Term** – the words that comprise a taxonomy
- **Keywords** – words that are typically uncontrolled and used to tag documents (though ideally we want these as a controlled list)
- **Metadata** - Data about data, or information about a document or piece of content

Terms and Keywords are applied to documents as metadata

- **Categorize** – The act of applying **metadata** to documents

Courtesy Lynda Moulton

## Definitions

- **Validation List** - A list of terms permitted in a particular field.
- **Controlled Vocabulary** - List of terms defined as permissible for a system or project.
  - Limited list of metadata elements
  - Controlled through process of change management and impact analysis

A validation list pulls from a controlled vocabulary.

For example, in a web form for a piece of content, a drop down will contain a validation list.

# Definitions

- **Classification Scheme** - A preordained structure of words or symbols used to organize information content
- **Index** - A list organized in a standardized sequential fashion

Types of indexes may include: back-of-the-book, telephone directory, computerized look-up tables (e.g. b-tree, file system), card catalog, meeting roster of attendees, customer list, to name a few.

An index is a classification scheme

A taxonomy is a classification scheme

But... a classification scheme is not necessarily a taxonomy...

# Structural and Taxonomic Metadata

# Metadata

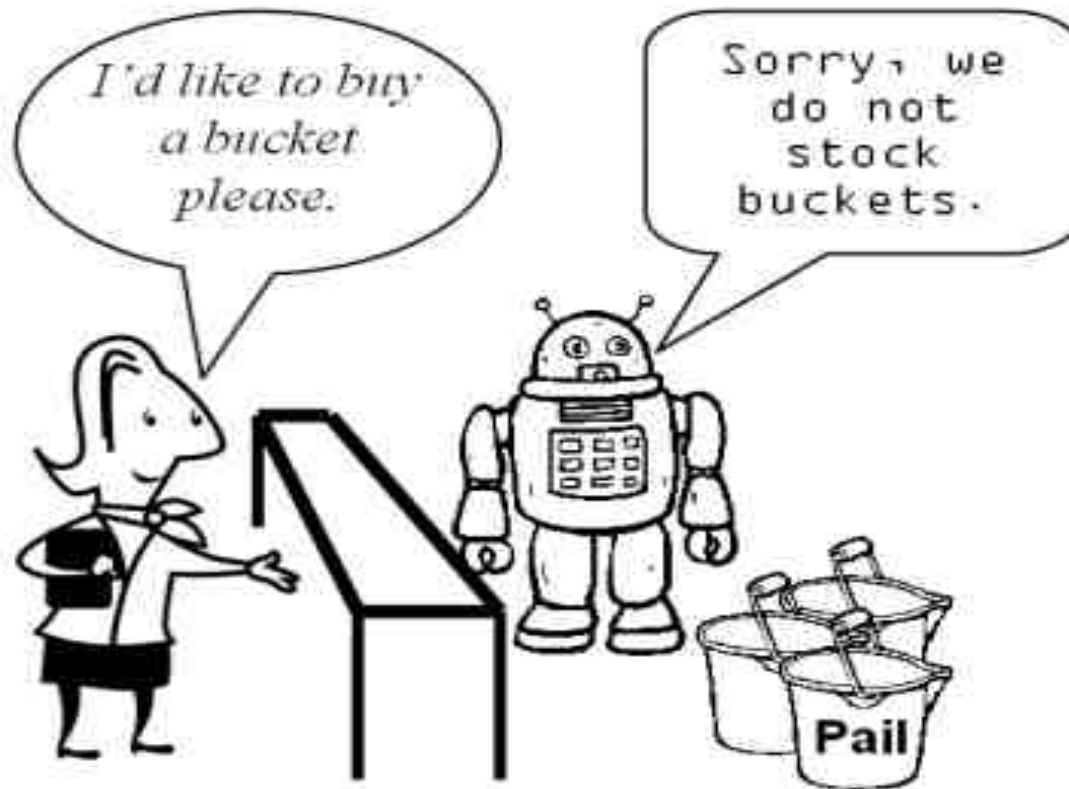
- Everything we know (or should know) about data, content, systems, company, environment, customers...
- Difficult to manage Metadata across IT and business systems.
- Information about information: Derives and describes perspective, application and function

## The Problem of metadata

- Metadata provides meaning and perspective
  - However, meaning is subjective, perspective is context sensitive
- Terms and categories require negotiation, agreement
- Terms have political significance
  - Tells the organization what is important
- IT uses Metadata differently than the Business uses metadata.
- Need resolution across structured and unstructured metadata

**“Our solution to the problem of knowledge management is to implement a really good search engine”** (Executive tasked with KM at a major financial institution.)

**What is wrong with this statement?**

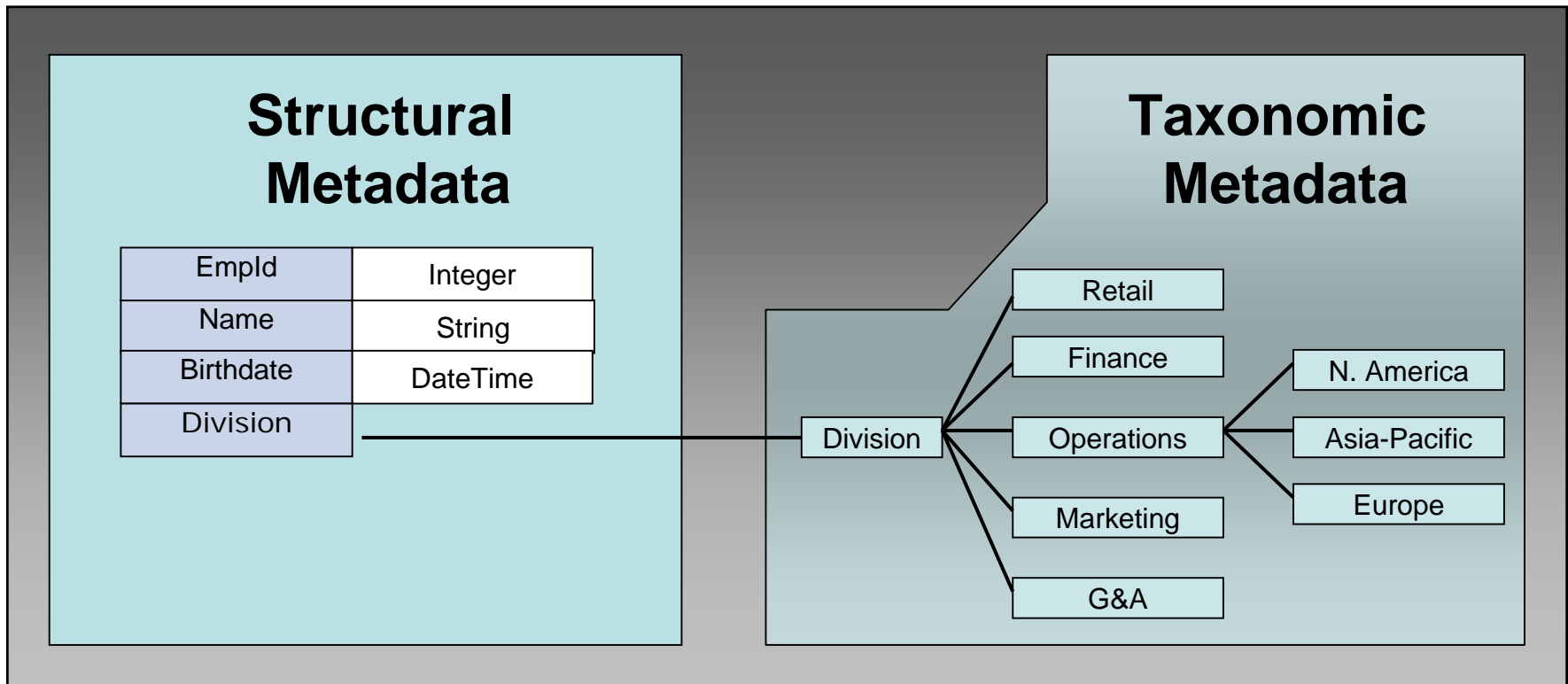


Courtesy K Curve – Marcia Morante

## Significance of managed terms

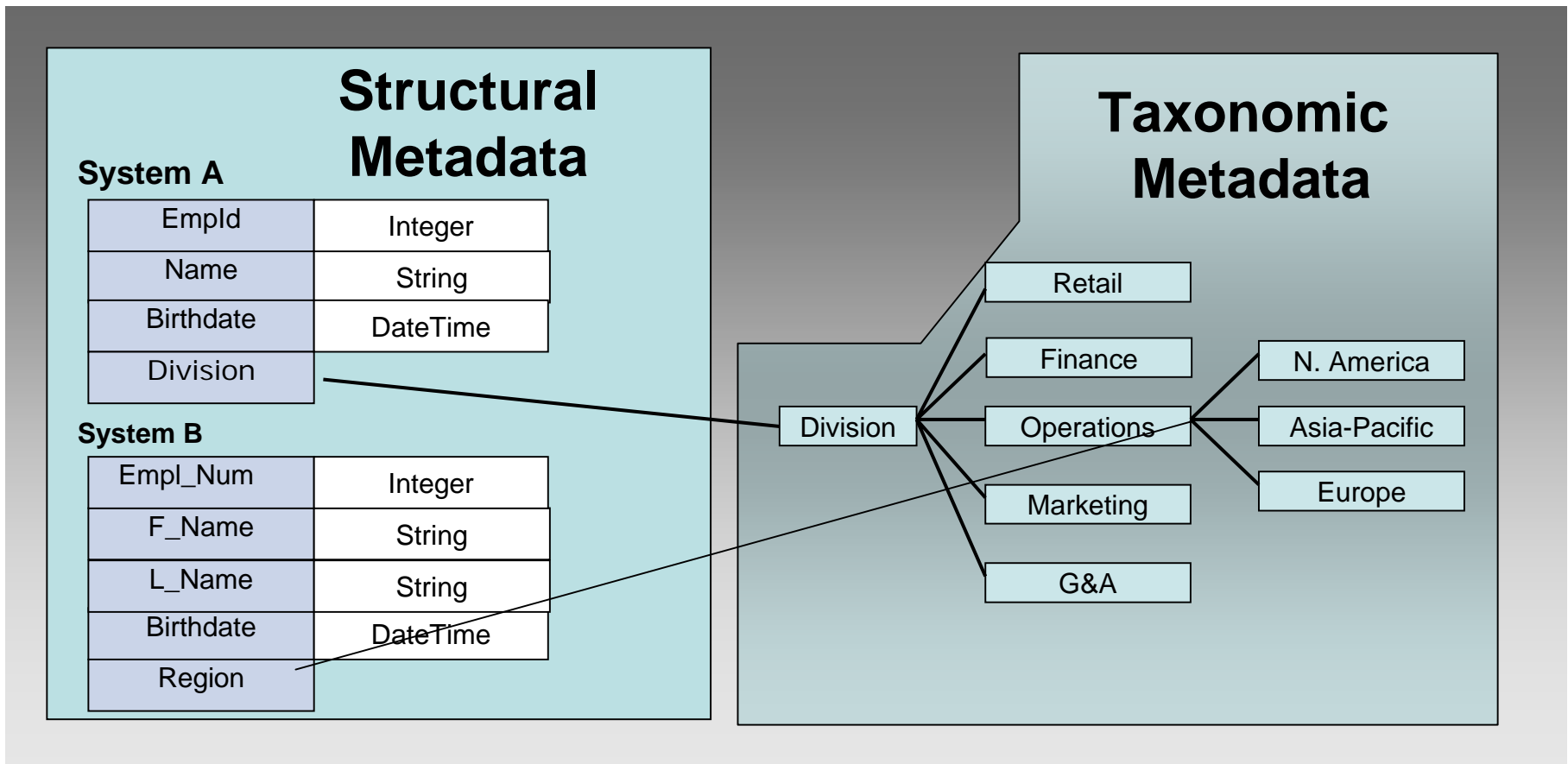
- Begins the process of sharing, self organizing
- Identifies ‘building blocks of knowledge’
- Need to be evolutionary, not dictated from above
- Specific to communities of practice
  - May have multiple taxonomies, faceted taxonomies, polyhierarchies
  - No such thing as the “galactic taxonomy” without complex and custom relation types

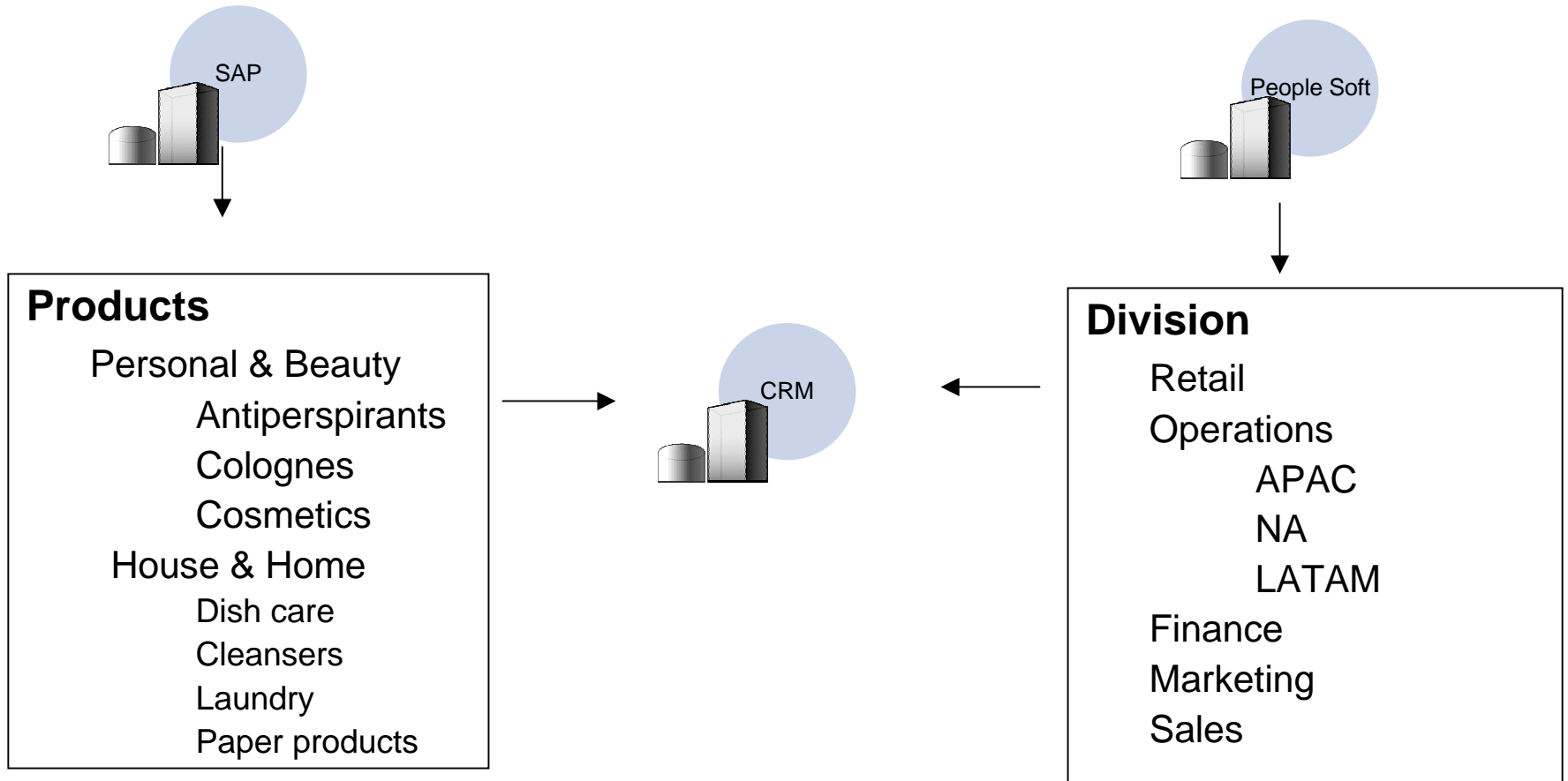
Need to address structural data elements, ie, integration of taxo terms with data structures



# Taxonomic metadata may feed different system

Changes need to be synchronized





**May have multiple “sources of the truth” for different nodes of taxonomy feeding systems and processes**

# Thesaurus Structures: Resolving Multiple Facets and Polyhierarchies

## Classification versus Taxonomy

TAX	TAX ITEMS	TAX PAYERS
<b>Assets</b>	<b>Assets</b>	<b>Individuals</b>
Individuals	Real Estate	Single
Corporations	Vehicles	Married
<b>Liabilities</b>	<b>Liabilities</b>	<b>Organizations</b>
Individuals	Loans	Corporations
Corporations	Debts	Associations

Example courtesy K Curve – Marcia Morante

# Types of Term Relationships

*Increasing complexity*



## Equivalence

Used in thesauri.

Also called  
“entry types” of terms.

Synonyms.

## Hierarchical

Purist definition of  
a taxonomy –  
terms have parent/child  
relationship.

## Associative

Things that are related  
conceptually.

Associative relation types  
are context and audience  
specific.

This is how we might  
relate multiple taxonomies.

## Equivalence Terms

- Common misspellings
- Other terms used
- Abbreviations
- Internal names

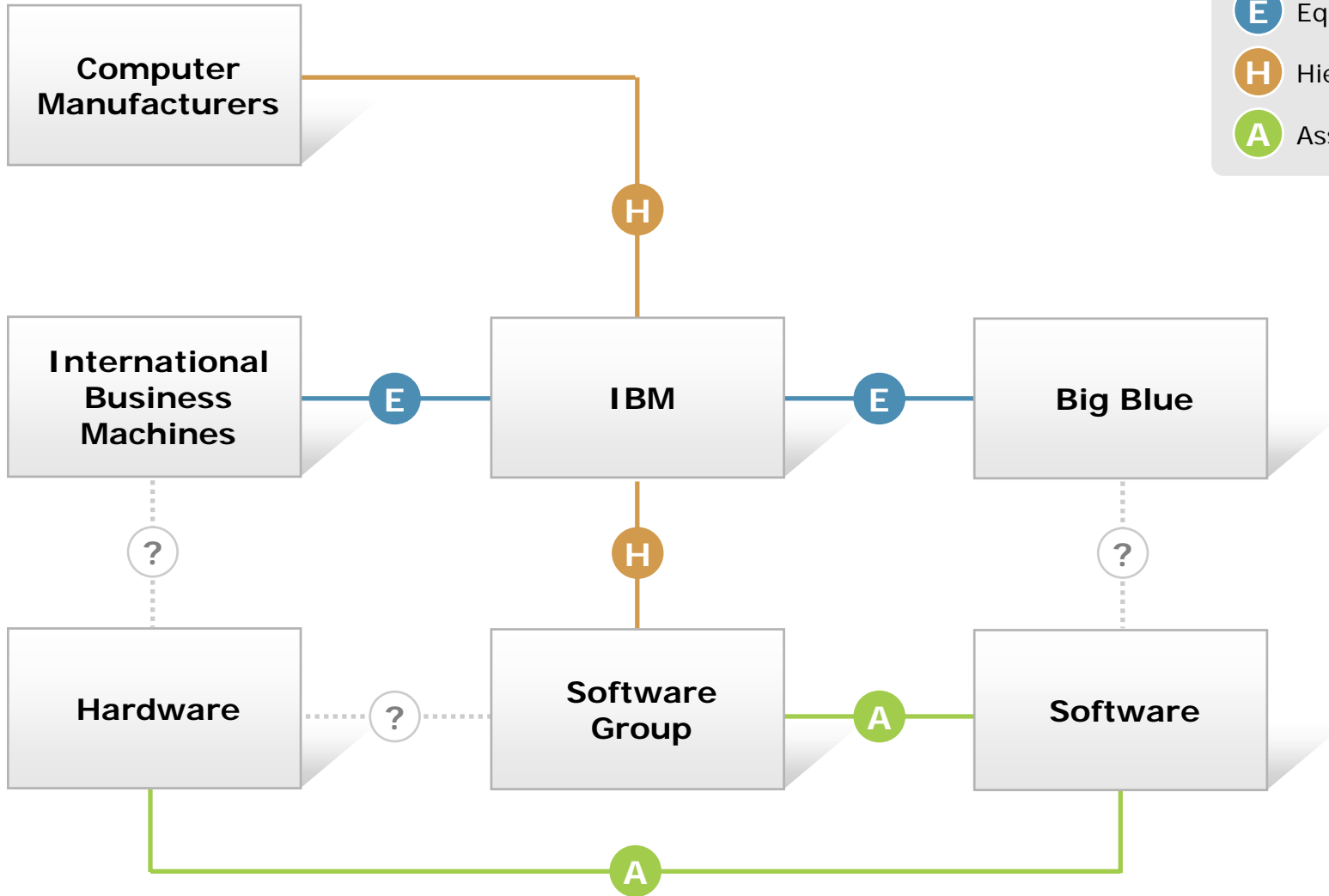
## Associative Terms

- See also
- Sounds like
- Language spoken
- Software runs on
- Related products
- Available in region

# Relationship Examples

Relationship Types

- E Equivalence
- H Hierarchical
- A Associative



## Thesaurus structure

<b>Relationship</b>	<b>Relationship Indicator</b>	<b>Abbreviation</b>
Equivalence (Synonymy)	<b>USE</b> <b>USED FOR</b>	None or U UF
Hierarchical	<b>BROADER TERM</b> <b>NARROWER TERM</b>	BT NT
Associative	<b>RELATED TERM</b>	RT

## Thesaurus structure

### IBM

SN (Scope Note) IBM includes acquired companies such as Lotus

UF (Used For) International Business Machines

BT (Broader Term) Computer Manufacturers

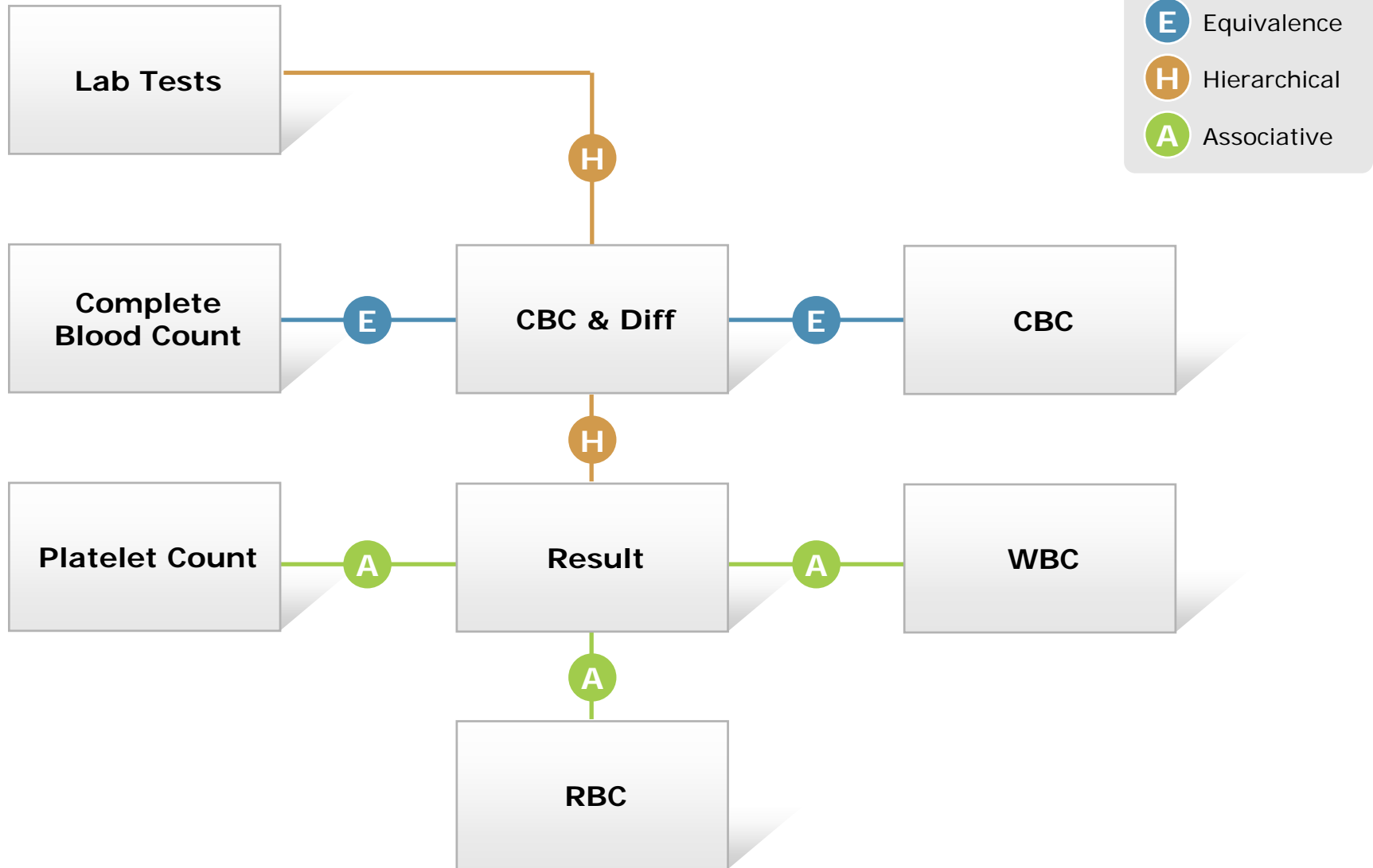
NT (Narrower Term) Software Group

RT (Related Term) Software

### International Business Machines

USE IBM

# Map LOINC View of Lab Tests Taxonomy

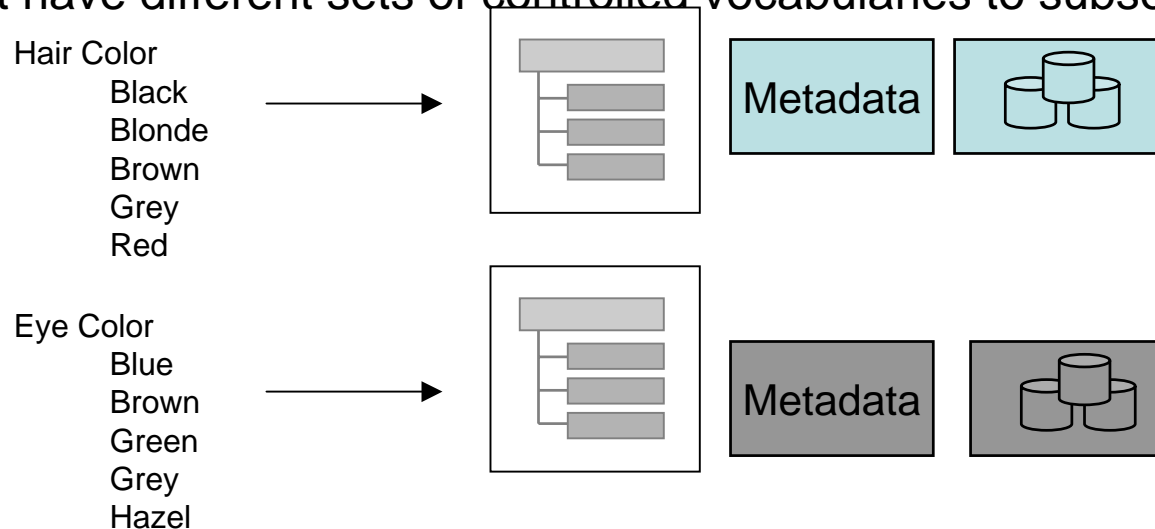


# Facets

- Facets define the context of a document
  - For example, Audience Type may be a facet for documents contained in a knowledge base
  - If a document is highly technical and we designate the audience type for that document as “Technical”, this will help users find what is appropriate for their needs
- Facets can also define the context of *terms*
  - If the same term is used from two different perspectives, a facet of the term can be defined so that the term can live in more than one hierarchy

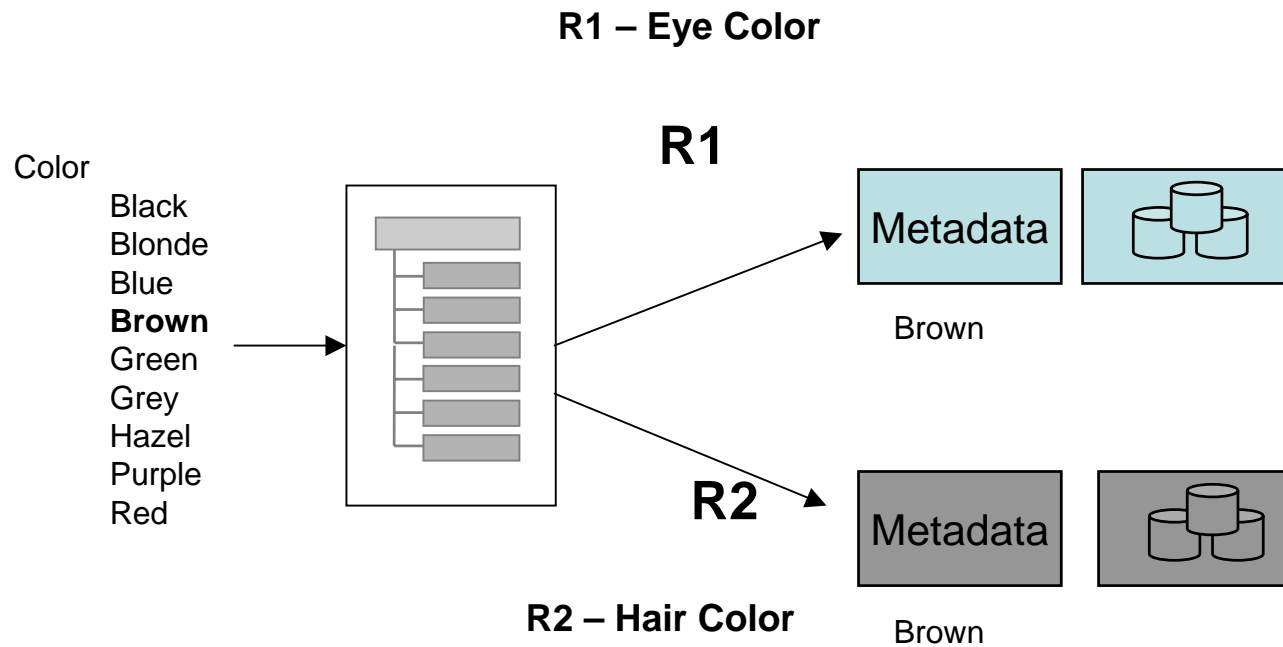
# Facets: Context for terms. Term may be used in different contexts, be part of multiple facets describing something

- Color has different contexts: Primary colors, hair color, eye color
- There is overlap between contexts, a term can be in more than one list
- Hair color and eye color are facets of the content class of drivers license
- We might have different sets of controlled vocabularies to subset contexts



# Meta data term - Color

- Or we can have one controlled vocabularies and subset based on relationship type



## Defining facets

- A term may exist in multiple hierarchies
- In each hierarchy, a term may have a different meaning to a specific audience
- We define the facet through additional metadata about the term itself
- The relationship of “brown” to color is “eye color” in one context, in another the relationship of “brown” to color is “hair color”
- Term contains different metadata (the facet of “brown” is hair color)
- Think of the facet as the name of the context.

## Map “Color” – Hair Color and Eye Color

- Color
  - Blonde
  - Blue
  - Brown
  - Green
  - Grey
  - Hazel
  - Purple
  - Red

TERM	CATEGORY	RELATIONSHIP
Blonde	Color	Hair colors
Blue	Color	Eye colors
Brown	Color	Hair colors
Brown	Color	Eye colors
Gray	Color	Hair colors
Green	Color	Eye colors
Hazel	Color	Eye colors
Purple	Color	Hierarchical
Red	Color	Hair colors

Give me terms from category color of relationship type Hair Color  
**Blonde, Brown, Gray, Red**

Give me terms from category color of relationship type Eye Color  
**Blue, Brown, Gray, Green, Hazel**

By understanding relationship (associative) types, we can manage a single list of terms and pull subsets depending on context

# P&G Example

- Vocabularies of:
  - Regions
  - Locations
  - Languages
  - Products
  - Global Brands
  - US Brands
- Regions are stable, but
  - Brands within regions change (divestitures, acquisitions, restructuring, new launches)
  - Not all brands are available in all regions
- Product categories may change, may be reorganized under different business units
- Languages are related to geographies

## Multiple lists, what are the relationships? How are these managed?

### Region

- North America
- Latin America
- Europe
- Middle East
- Africa
- Asia

### Location

- Arabian Peninsula
- Argentina
- Australia
- Austria
- Azerbaijan
- Bahrain
- Baltics
- Balkans
- Belarus
- Belgium
- Bosnia
- Brazil

### ISO Languages

- Acoli
- Adangme
- Afar
- Afrihili
- Afrikaans
- Afro-Asiatic
- Akan
- Akkadian
- Albanian
- Aleut
- Algonquian languages
- Altaic
- Amharic
- Apache languages
- Arabic
- Aramaic
- Arapaho
- Araucanian

Each facet can be a separate vocabulary...

The screenshot displays a web application interface for managing vocabularies. On the left, a panel titled 'MANAGE VOCABULARIES' contains a table with the following entries:

VOCABULARY
Brands
CIAGeography
Color
Countries
CreatorRole
Customers
Gender
GlobalBrands
ISOLanguages
Locations
Products
Regions
SeverityCode
UNGeography
USBrands

On the right, a panel titled 'VOCABULARY PROPERTIES' contains several sections:

- USED IN
- VOCABULARY PERMISSION
- CHANGE DESCRIPTION
- CONTRACT

Red arrows point from the 'CONTRACT' section to specific vocabularies in the 'MANAGE VOCABULARIES' table:

- Global Brands points to GlobalBrands
- Languages points to ISOLanguages
- Locations points to Locations
- Products points to Products
- Regions points to Regions
- US Brands points to USBrands

...or separate nodes in a hierarchy

The screenshot displays a software interface with a hierarchical tree on the left and a list of labels on the right. The tree is titled 'AllTerms' and contains several categories with sub-items. The labels on the right are: 'Global Brands', 'Languages', 'Locations', 'Products', 'Regions', and 'US Brands'. Red arrows point from each label to its corresponding node in the tree.

RELATED TERMS  ENTRY TERMS  REFRESH ON ADD

AllTerms

- [-] AllTerms
  - [-] Global Brands
    - Ace
    - Action 500
    - Adam
  - [+] Languages
  - [-] Locations
    - Arabian Peninsula
    - Argentina
    - Australia
    - Austria
  - [-] Products
    - [+] House & Home
    - [-] Personal & Beauty
      - Antipersirants
      - Colognes
      - Cosmetics
  - [-] Regions
    - Latin America
    - North America
  - [-] US Brands
    - A Touch of Sun
    - Always
    - Asacol

CHANGE DESCRIPTION ? +

CONTRACT ? +

Global Brands

Languages

Locations

Products

Regions

US Brands

## Global Brands

- Ace
- Action 500
- Adam
- Alfa
- Alldays
- Always
- Ammens
- Ariel
- Ascend
- Attento
- Aussie
- Ayudin
- Az
- Azurit

## US Brands

- A Touch of Sun
- Always
- Asacol
- Aussie
- Balsam Color
- Bounce
- Bounty
- Camay
- Cascade
- Charmin
- Cheer
- Clairol
- Cover Girl
- Crest

### Abbreviations?

### Common Misspellings?

### Synonymous terms?

### Related brands?

Balsam

Clairol

Pantene

Physique

# Global Product List

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## U.S. Product Information

Choose a Category   
Choose by Brand

### Get in Touch with Us

### Company

- Who We Are
  - Purpose, Values, and Principles
  - Global Operations
  - Employee Spotlight
  - Diversity
  - Our History
- Science Behind the Brands
- Our Commitment

### Company Help

#### Business Customers:

Make Selection

#### Professional Services:

Make Selection

#### Download a Report:

Make Selection

### Samples, Offers, and Sweepstakes

Brand	Description	Area Available
<b>Ace®</b>	High quality bleach offering superior whiteness and superior fabric safety	Europe, Middle East, Africa
<b>Action 500</b>		Asia
<b>Adam</b>		Europe, Middle East, Africa
<b>Alfa</b>		Europe, Middle East, Africa
<b>Alldays®</b>	Thin, lightweight panty-liners that provide protection from discharge, spotting and staining, and designed for everyday wear	North America, Europe, Middle East, Africa
<b>Always®</b>	Sanitary pads with excellent absorbency and protection	North America, Latin America, Europe, Middle East, Africa
<b>Ammens®</b>		Latin America
<b>Ariel</b>	Detergent with excellent cleaning performance, tough stain removal and superior whiteness	Latin America, Europe, Middle East, Africa
<b>Ascend</b>	Hair Care System to return the natural black to your hair	Middle East, Asia
<b>Attends</b>	Incontinence products that provide secure comfort	Europe, Middle East, Africa

## Map Relationships: Brand Available In

<u>Brand</u>	<u>Available In</u>
Ace	→ Europe, Middle East, Africa
Action 500	→ Asia
Always	→ North America, Latin America, Europe, Middle East, Africa

TERM	CATEGORY	RELATIONSHIP
Ace	Brand	Available in Europe
Ace	Brand	Available in Middle East
Ace	Brand	Available in Africa
Action 500	Brand	Available in Asia
Always	Brand	Available in North America
Always	Brand	Available in Latin America
Always	Brand	Available in Europe
Always	Brand	Available in Middle East
Always	Brand	Available in Africa

## Map Relationships: Brand Available In

TERM	CATEGORY	RELATIONSHIP
Ace	Brand	Available in Europe
Ace	Brand	Available in Middle East
Ace	Brand	Available in Africa
Action 500	Brand	Available in Asia
Always	Brand	Available in North America
Always	Brand	Available in Latin America
Always	Brand	Available in Europe
Always	Brand	Available in Middle East
Always	Brand	Available in Africa

Give me terms from category Brand of relationship type “Available in Europe”  
**Ace, Always**

Give me terms from category Brand of relationship type Available in Asia  
**Action 500**

## Map Relationships: Brand Available In

<u>Brand</u>	<u>Available In</u>
Ace	Europe, Middle East, Africa
Action 500	Asia
Always	North America, Latin America, Europe, Middle East, Africa

TERM	CATEGORY	RELATIONSHIP	NODE OF REGION TAXO
Ace	Brand	Available in	Europe
Ace	Brand	Available in	Middle East
Ace	Brand	Available in	Africa
Action 500	Brand	Available in	Asia
Always	Brand	Available in	North America
Always	Brand	Available in	Latin America
Always	Brand	Available in	Europe
Always	Brand	Available in	Middle East
Always	Brand	Available in	Africa

The screenshot displays a software interface with two main panels. The left panel, titled "MANAGE RELATIONSHIP TYPES", contains a tree view with the following items: "Relationship" (expanded), "Hierarchical", "Entry Term", and "Related Term". Below the tree view are "ADD" and "DELETE" buttons. The right panel, titled "RELATIONSHIP TYPE PROPERTIES", is currently empty. A red arrow originates from the text "Relation Types" and points to the "Entry Term" item in the left panel.

Relation Types

The screenshot displays two side-by-side windows from a software application. The left window, titled 'MANAGE RELATIONSHIP TYPES', features a search icon, a help icon, and a minus sign in its title bar. Below the title bar are 'ADD' and 'DELETE' buttons. The main area contains a tree view of relationship types:

- Relationship
  - Hierarchical
  - Entry Term
    - Alternate Form
      - Slang
      - AKA
      - Abbreviation
    - GeoName Entry Terms
      - Alias
      - Common Misspelling
      - Language Spoken In
    - Systems
  - Related Term
    - See Also
    - Sounds Like
    - Geo Related Terms
      - Eye Colors
      - Hair Colors
      - Available Products
      - Brands Available In Region

The right window, titled 'RELATIONSHIP TYPE PROPERTIES', has a search icon, a help icon, and a plus sign in its title bar. The main area is a large, empty gray space. The text 'Custom Associative Relation Types' is centered in this space. A red arrow originates from this text and points to the 'Available Products' item in the tree view of the left window.

The screenshot displays two side-by-side windows from a software application. The left window, titled "MANAGE RELATIONSHIP TYPES", contains a tree view of relationship types. The right window, titled "RELATIONSHIP TYPE PROPERTIES", is currently empty. A red arrow points from the text in the right window to the "Brands Available In NA" item in the left window's tree view.

**MANAGE RELATIONSHIP TYPES** [Search] [Help] [Refresh] [Close]

ADD DELETE

- [-] Relationship
  - [+] Hierarchical
  - [+] Entry Term
  - [-] Related Term
    - See Also
    - Sounds Like
  - [+] Geo Related Terms
    - Eye Colors
    - Hair Colors
    - Available Products
    - Brands Available In NA
    - Brands Available in LATAM
    - Brands Available in Europe
    - Brands Available in Africa
    - Brands Available in Middle East

**RELATIONSHIP TYPE PROPERTIES** [Search] [Help] [Close]

Expand

New Associative  
Relation Types of  
“Brands Available In...”

**SEARCH** ? + -

Enter Search

---

**RESULTS** ? +

---

**VOCABULARY TREE** ? + ? + -

RELATED TERMS  ENTRY TERMS  REFRESH ON ADD

Brands  Show All

- Brands
  - Ace
  - Ace
  - Ace
  - Action 500
  - Always
  - Always
  - Always
  - Always
  - Always

**VOCABULARY TERM PROPERTIES** ? + +

---

**INBOUND TERM RELATIONSHIPS** ? +

---

**OUTBOUND TERM RELATIONSHIPS** ? +

---

**TERM PERMISSION** ? +

---

**CHANGE DESCRIPTION** ? +

---

**CONTRACT** ? +

Vocabulary of Brands

MANAGE VOC VIEWS

ADD DELETE

VOC VIEW	VOCABULARY
Brands Available in Eu...	Brands

I want "Brands Available in Europe" View

From the "Brands" vocabulary

Select terms of relationship type "Brands Available in Europe"

VOC VIEW PROPERTIES

NAME	Brands Available in Europe	
DESCRIPTION		
VOCABULARY	Brands	
STATUS	Approved	
OTHER PROPERTIES		
FORMAT	Nested Format	
START TERM	[Root Term]	Reset
TERMRELTYPE	Brands Available in Europe	Reset
END TERMRELTYPE		Reset
DIRECTION	Search Down	
DISTINCT	<input type="checkbox"/>	
SKIP START TERM	<input type="checkbox"/>	
DEGREE		
LANGUAGE	[ All Languages ]	
VOC VIEW ID	AB9BDC0D-7259-4EAB-9BF1-5282EE7B134A	
CREATED	2004-11-04 20:05:10	
LAST MODIFIED	2004-11-04 20:05:10	
LAST IMPACTED	2004-11-04 20:05:10	
EXTENSION PROPERTY CONSTRAINTS		

MANAGE VOC VIEWS

VOC VIEW	VOCABULARY
Brands Available in Eu...	Brands

ADD DELETE

VOC VIEW PROPERTIES

VOC VIEW PREVIEW

- Brands\_Root ()
  - Ace ()
  - Always ()

Here are the terms I want

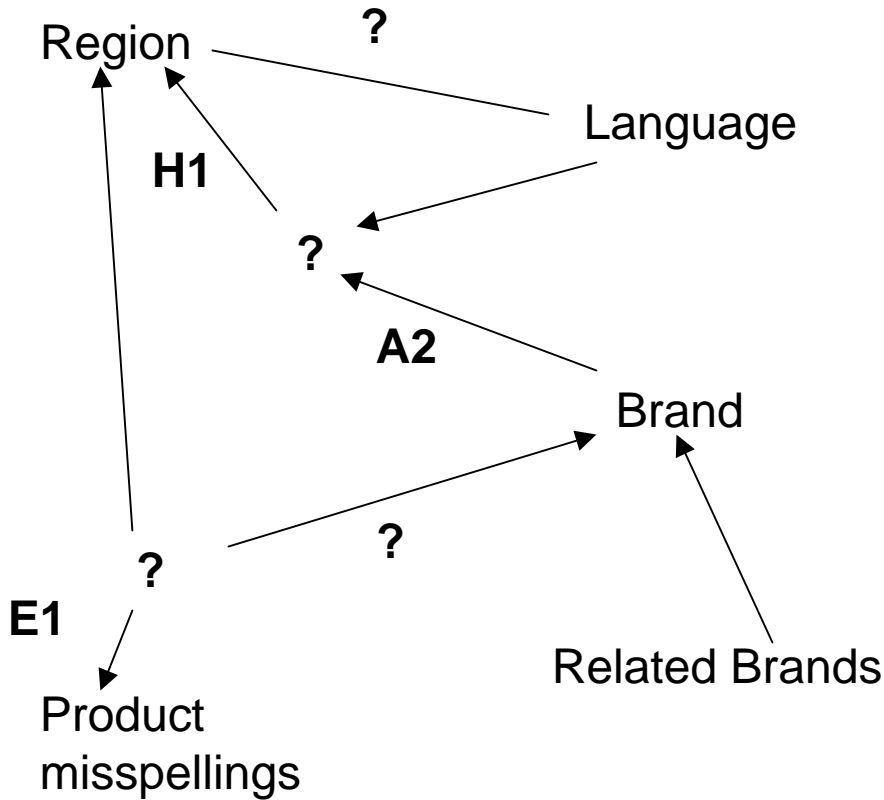
USED IN  
(none)

VOCABULARY VIEW PERMISSION

CHANGE DESCRIPTION

CONTRACT

# Map the Semantic Relationships



**Global Brands**

**Languages**

**Locations**

**Products**

**Regions**

**US Brands**

**H1 - Locations in Region**

**A1 -**

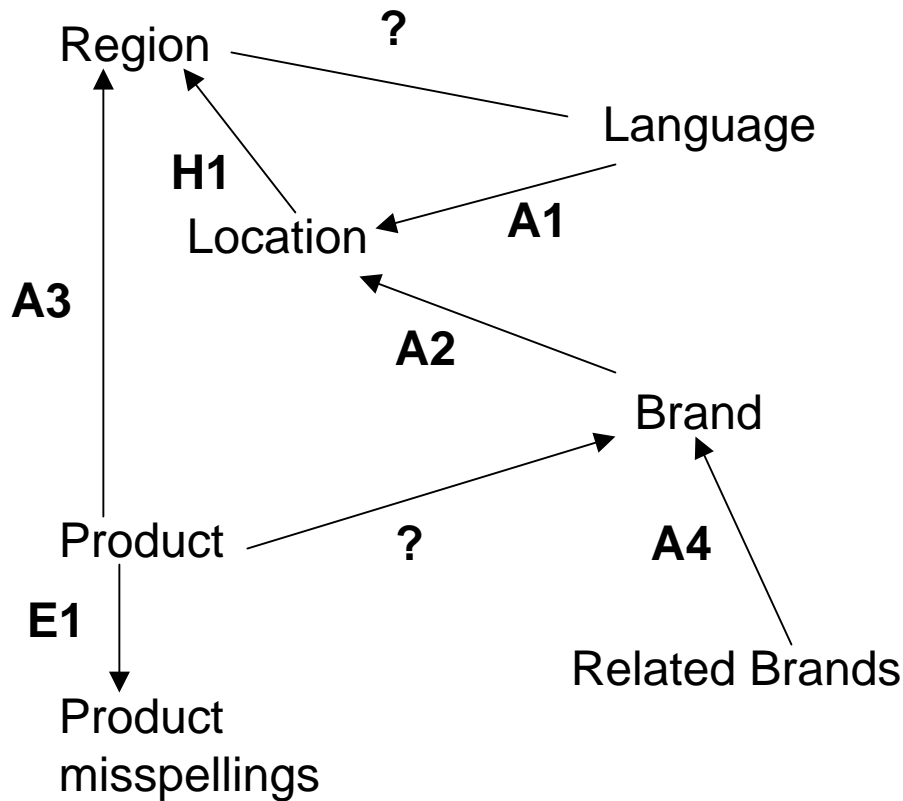
**- Brand sold in Location**

**A3-**

**A4- Related brand to brand**

**E1 -**

# Semantic Relationships



**Global Brands**

**Languages**

**Locations**

**Products**

**Regions**

**US Brands**

**H1 - Locations in Region**

**A1 – Language of Location**

**A2 – Brand sold in Location**

**A3- Product sold in Region**

**A4- Related brand to brand**

**E1 – Product to Product Misspellings**

# Map Compounds & Clinical Trial Information

## Need to Manage Vocabularies of:

**Clinical Trial Names**

**Trial IDs**

**Official Trial Names**

**Compounds**

**Trade Names**

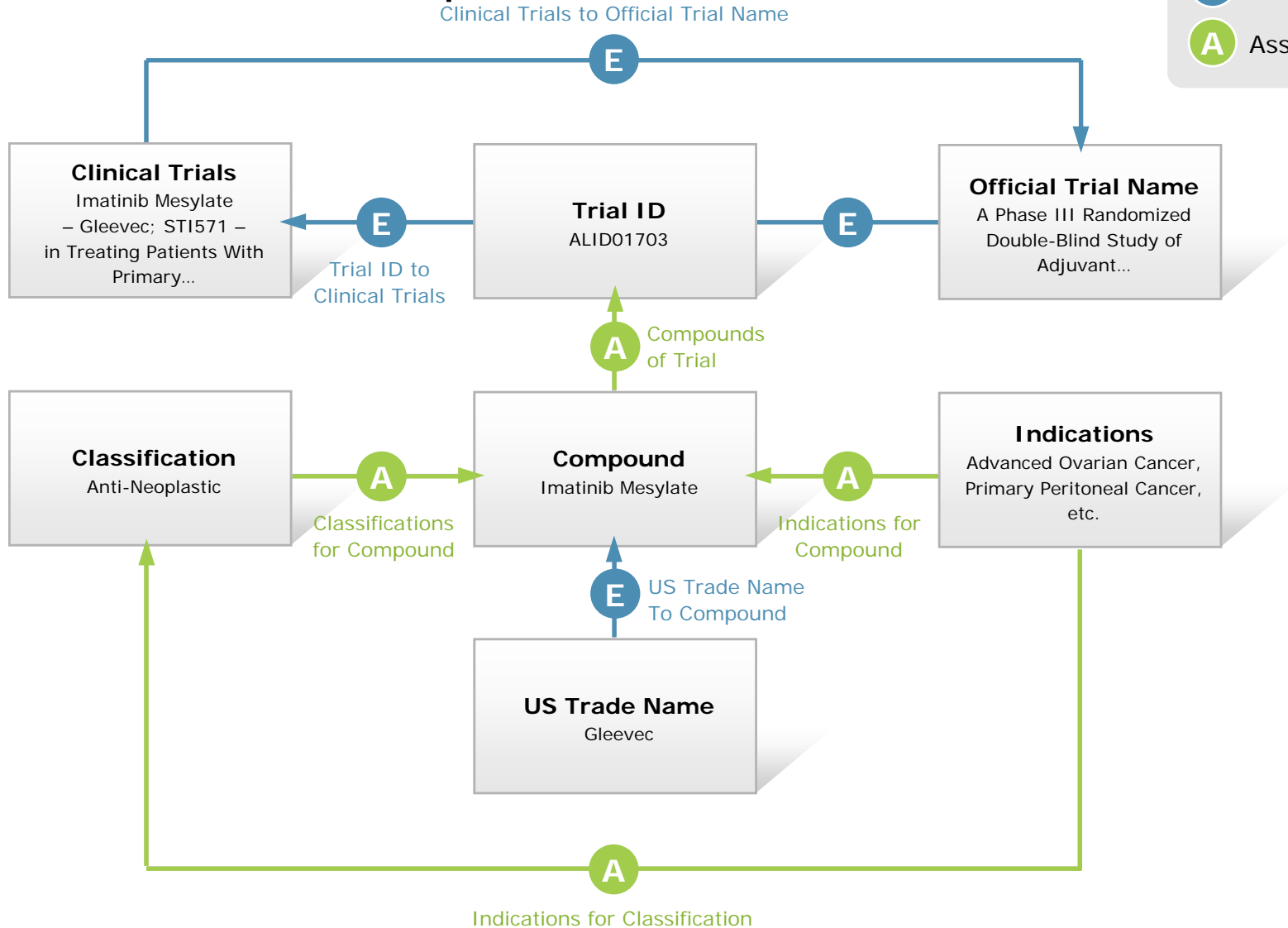
**Classifications**

**Indications**

# Semantic Relationships

Relationship Types

- E** Equivalence
- A** Associative



# 1 Vocabularies of Standard Terms

## Classifications

- Anti Neoplastic
- Anti Hypertensive
- Etc.

2

## Indications

- Advanced Ovarian Cancer
- Chronic Graft vs. Host Disease
- Chronic Phase Chronic...
- Etc.

3

## US Trade Names

- Diovan
- Gleevec
- Lamisil

MY WORKAREA <

CONTENT CLASSES

ELEMENTS

**VOCABULARIES** 1

VOCABULARY TERMS

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING 2

MANAGE VOCABULARIES

C6
Classification 1
Clinical_Trials
Country_Name
Country_Numeric_Code_Type
CountryAlpha2CodeType
CountryAlpha3CodeType
Currency_Code_Type
Dosage_Abrev
Dosage_CD
Dosage_Name
Gender_Code
Gender_Description
Indication 2
Name
Route_Code
Route_Description
Unit_Code
Unit_Description
US_Trade_Name 3

# ● Terms are Mapped in Registry

## US Trade Names Vocabulary

CONTACT    HELP    ABOUT

MY WORKAREA <

CONTENT CLASSES

ELEMENTS

VOCABULARIES

VOCABULARY TERMS

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING

SEARCH

RESULTS

VOCABULARY TREE

RELATED TERMS  ENTRY TER

US\_Trade\_Name

- [-] US\_Trade\_Name
  - + Diovan
  - + Gleevec
  - + Lamisil
  - + Lotrel
  - + Sandimmune

# Terms are Mapped in Registry

- 1 Trade Names  
... mapped to ...
  - 2 Indications
  - 3 Generic Names
  - 4 Trials
  - 5 Trial ID's
- Chemical Names
- Other Names

MY WORKAREA <

CONTENT CLASSES

ELEMENTS

VOCABULARIES

VOCABULARY TERMS

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING

SEARCH

RESULTS

VOCABULARY TREE

RELATED TERMS   ENTRY TER

US\_Trade\_Name

US\_Trade\_Name

+ Diovan

Gleevec

Advanced Ovarian Cancer

chronic phase chronic myeloid leukemia

Fallopian Tube Cancer

gastrointestinal stromal tumor

Glivec

Imatinib Mesylate

Imatinib Mesylate (Gleevec; STI571)

Primary Gastrointestinal Stromal Tumor Completely Removed by Surgery

Philadelphia chromosome positive chronic myeloid leukemia

Primary Peritoneal Cancer

STI571

# System Maps Custom Relationship Types

- 1 Trial ID of Clinical Trial
- 2 Indications for Classification
- 3 Indications for Compound

MY WORKAREA <

CONTENT CLASSES

ELEMENTS

VOCABULARIES

VOCABULARY TERMS

MANAGE RELATIONSHIP TYPES

- [-] Relationship
  - [+] Hierarchical
  - [+] Entry Term
  - [+] Related Term

Relation Types

ELEMENTS

VOCABULARIES

VOCABULARY TERMS

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING

- [-] Relationship
  - [+] Hierarchical
  - [-] Entry Term
    - 2Alpha
    - 3Alpha
    - PreferredEnglish
    - 3Number
    - Other trade name
    - Generic Name
    - Chem Index Name
    - Other Name
    - Official Trial Name
    - Trial ID
  - [-] Related Term
    - MoneyUsed
    - Ca BeUsed By
    - Indications for Classification
    - Indications for Compound

Custom Equivalence Relation Types

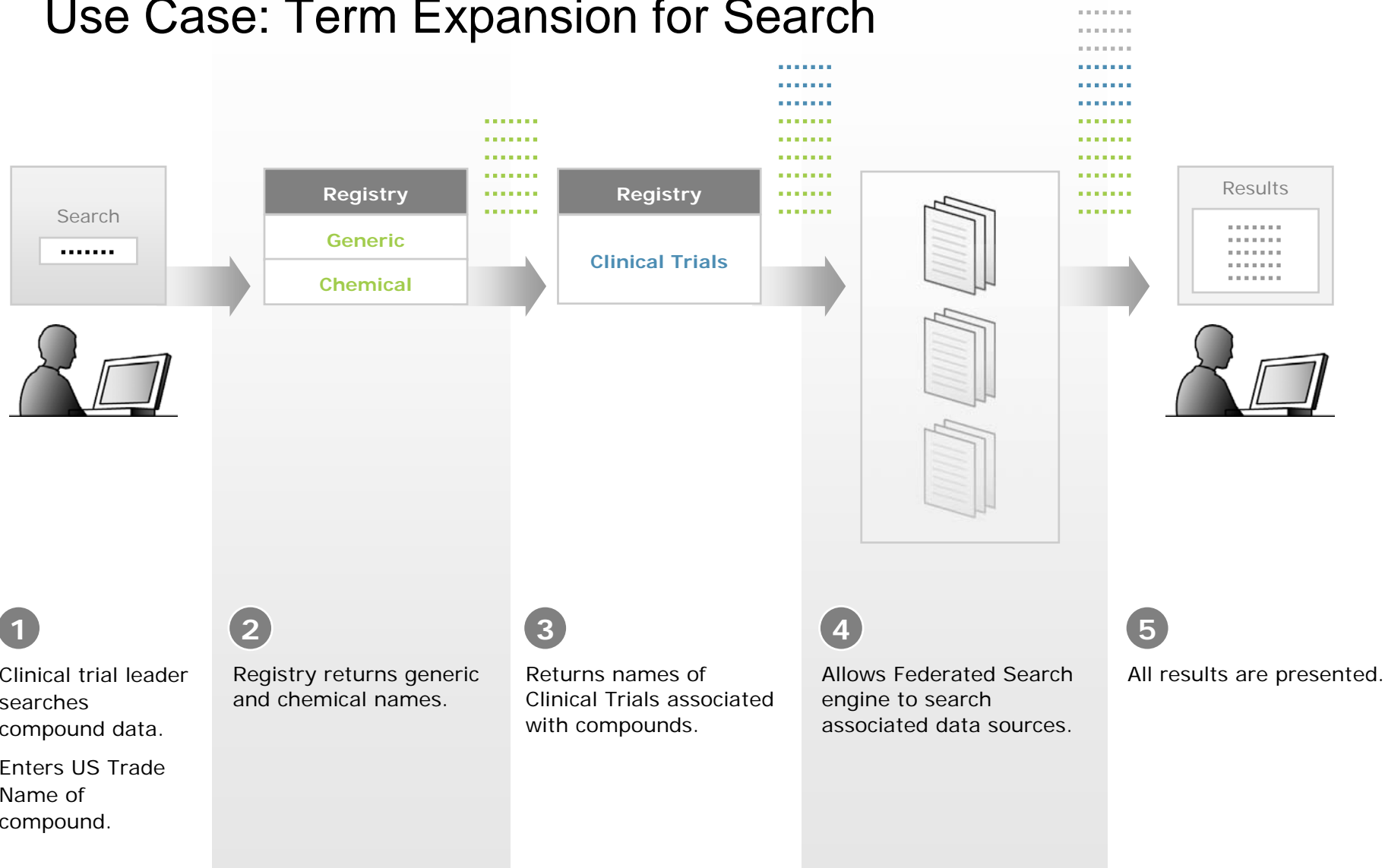
Custom Associative Relation Types

1

2

3

# Use Case: Term Expansion for Search



# Vocabulary View of Generic Names for Compound

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING

Country + Numeric	Country_Name
Chemical Names for Com...	US_Trade_Name
Generic Names for Comp...	US_Trade_Name
Indications for Compound	US_Trade_Name
Trials of Compound	US_Trade_Name

STATUS | Approved

OTHER PROPERTIES +

EXTENSION PROPERTY CONSTRAINTS +

SAVE EVAL IMPACT PREVIEW CURRENT ▾

VOC VIEW PREVIEW ? -

- [-] Compound\_Trade\_Name\_Root ()
  - [+] Sandimmune ()
  - [+] Gleevec ()
  - [-] Lotrel ()
    - Amlodipine Besylate and Benazepril Hydrochloride ()
  - [-] Diovan ()
    - Valsartan ()
  - [-] Lamisil ()
    - terbinafine ()

# Vocabulary View of Trials of Compound

VOC VIEWS

REL TYPES

USERS

CONTROL PANEL

RE-ENGINEERING

Country + Numeric	Country_Name
Chemical Names for Com...	US_Trade_Name
Generic Names for Comp...	US_Trade_Name
Indications for Compound	US_Trade_Name
<b>Trials of Compound</b>	<b>US_Trade_Name</b>

STATUS | Approved

OTHER PROPERTIES +

EXTENSION PROPERTY CONSTRAINTS +

SAVE EVAL IMPACT PREVIEW CURRENT ▾

VOC VIEW PREVIEW ? -

- [-] Compound\_Trade\_Name\_Root ()
  - [+] Sandimmune ()
  - [+] Gleevec ()
    - Imatinib Mesylate (Gleevec; STI571) in Treating Patients With
      - Primary Gastrointestinal Stromal Tumor That Has Been Completely Removed by Surgery ()
    - Lotrel ()
    - Diovan ()
    - Lamisil ()

## Exercise

- What are the systems and tools in your organization that need to share taxonomic metadata?
- What are the top level categories (vocabularies) that require resolution?
- Map the hierarchical, equivalent and associative relationships between vocabularies

# Taxonomy Derivation

## Deriving a taxonomy

- The purpose of a taxonomy is to help people find information
  - This is not done in a vacuum
- Answer the question: How will the terms be applied?
  - From a technical perspective - how will it actually be accomplished?
  - What is the process by which users will attach terms to content?
  - How will the system (content management, knowledge management, document management, portal, etc) use the terms?
- How will the terms be used to navigate or search on information?
- You may come up with a great set of terms but if your technology has no capability to apply the taxo, then little value will be gained

## Process steps

- Define the scope of the project
- Determine application framework
- Gather user behavior
- Survey content
- Perform knowledge audit
- Review existing term sources
- Characterize audiences
- Organize terms
- Create “straw man” and validate
- Create search and navigation scenarios
- Iterate

# Scope

- Define the scope of the project
  - What is the purpose?
  - Who is the primary audience?
  - How will the taxonomy will be applied?
  - What do users need?
  - What problems are you attempting to solve?

# Application framework

- What tools are available?
  - Search mechanisms, content management systems, portal framework, etc
- How do those tools utilize and apply metadata?
  - Document and content containers
  - Custom metadata applied to content
  - Thesaurus management
  - Term expansion
  - Mapped search (tuned search)
- How will metadata be passed from one system to another?
- How will updates to taxonomy terms be applied ?

## User behavior

- Gather both real and imagined
  - Real: Search logs, observation
  - Imagined: User interviews
- If search logs are available, determine what terms are used most frequently
- Survey and interview users
  - Create a structured interview guide, interview one on one
  - Use working sessions to dig more deeply and get to more meaningful answers

# Survey content

- Get examples of high value content
  - Ask users to produce examples of documents that they believe are critical
- Map sources of information
  - Map out existing web site or intranet
  - Review file shares
  - Document management systems
  - Hard drives
- Look for organizing principles
  - Do folder structures make sense? Can they be reused?
- Look for currency of content
  - Will this content need a new home? (Will it need to be migrated or archived?)
- Is content ownership defined?
  - Is it tagged with metadata?
  - Who will know how to tag the content? Who are the SME's?

## Perform Knowledge Audit

- What is the difference between content audit and knowledge audit?
  - Answer: context
- Content audit looks for information and places the information in context
  - For example: current, out of date, useful, to be migrated, organized, not organized, ownership, lifecycle, etc
- Knowledge audit looks at problems or tasks and puts information and resources (can include people resources) in the context of the problem
  - For example, a customer service rep looks to these resources to answer support questions.
- Call it what you will, need to look at both perspectives in order to be comprehensive and inclusive

## Existing term sources

- Also referred to as “subject authorities”
- Reference materials
- Industry standards
- Academic sources
- Regulatory agencies
- Subject matter experts
- Key issue: Build versus buy (I say build but leverage...)

## Characterize audiences

- Who are your audiences and what do they need? (This was part of scoping, but this is another level of detail and granularity)
- When your user comes to the site, what are they thinking?
- How do they approach their problem?
- Deconstruct their thinking process
- Understand their “line of thought”

## Organize terms

- Look for themes
  - What are the high level concepts?
- How are terms related?
  - Are they related by way of process, or by concept? If by process, you may be thinking about navigation. Be aware that you may shift back and forth between organizing conceptually and organizing according to task
- Define preferred terms and variant terms.
  - Get agreement on the terms that will be the “official” terms
  - (SOW versus Statement of Work versus Work Order, etc)

## Create “Straw man” / validate

- A straw man is an example that is meant to be criticized
- There is no “correct” first pass, allow people to provide feedback and be critical
- Labeling the first iteration a “straw man” means there is no pride of ownership – this is simply something to use as a reference point
- Review the terms with users
  - Do the terms make sense? Are they useful? Are they descriptive? Are they complete? Are they precise?
- Take example content (the “high value” stuff you asked users for in the content survey) and place it into the “buckets” of the taxo.
  - Does everything have an appropriate place? What is missing?

## Search and Navigation Scenarios

- Use a modified card sorting exercise to build example navigation
  - Allow users to organize terms according to their concept of how they might use information
- Ask at each node:
  - How might you want to access this information?
  - If there were 100 documents in this location, what would that look like?
  - How would you distinguish one document from another?
- What are the handles for accessing a piece of information?
  - For example, consider a presentation: how would you look for this? What are the possible subjects? Would you want to find it according to author? According to event? Or date? Or solution? Industry? Customer? Etc...

## Process for Import and Integration

- Bound the ontology – Dev, Research, Sales and Marketing, Manufacturing, etc.
- Determine high level meta data
- Map business processes
- Determine supported systems
- Derive user scenarios
- Determine vocabulary sources
- Measure fit between industry vocabularies and internal requirements
- Create semantic maps
- Create semantic structures
- Create Import models
- Perform import
- Review taxonomies for integrity
- Define security model
- Build workflow contracts
- Build integration flow
- Enroll system owners for review
- Propose changes and updates
- Synchronize changes according to integration flow
- Iterate through the process
- Create governance model

# Mapping user scenarios

## Sales Process Life Cycle

### Lead Generation

- Campaigns
- Talk Tracks

### Interest Generation

- Scope Sheets
- Generate Interest Decks
- Case Studies
- Market Trends/Statistics
- Example Deliverables

### Scoping

- Example Proposals
- Practice Specific Proposals
- Fee Estimate Worksheet

## Consulting Process Life Cycle

### Create Demand

- Campaigns
- Solution Decks
- Solution Kit
- Opportunity Plan

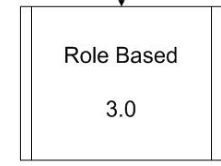
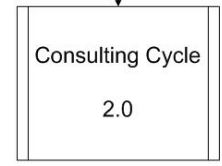
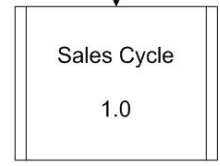
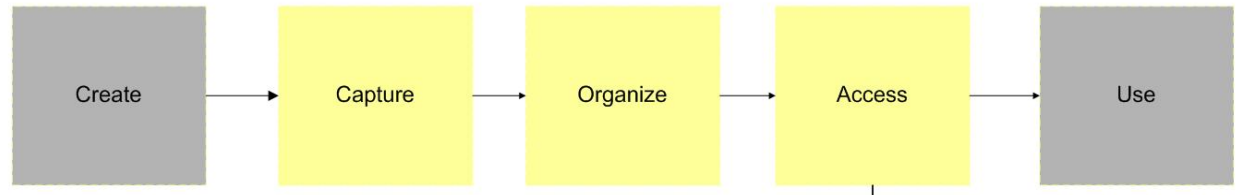
### Scope Project

- Opportunity plan
- Fee Sheet
- Previous Proposals
- Consultant Skills
- Client References

### Prepare Proposal

- Consultant Biographies
- Proposal Best Practices
- Fee Estimate Worksheets
- Project Plan

Out of scope process



### Process Steps

CYCLE STAGE/  
KNOWLEDGE OBJECTS

**Lead Generation**

- Campaigns
- Talk Tracks

**Interest Generation**

- Scope Sheets
- Generate Interest Decks
- Case Studies
- Market Trends/Statistics
- Example Deliverables

**Scoping**

- Example Proposals
- Practice Specific Proposals
- Fee Estimate Worksheets

**Create Demand**

- Campaigns
- Solution Decks
- Solution Kit
- Opportunity Plan

**Scope Project**

- Opportunity plan
- Fee Sheet
- Previous Proposals
- Consultant Skills
- Client References

**Prepare Proposal**

- Consultant Biographies
- Proposal Best Practices
- Fee Estimate Worksheets
- Project Plan

- Close Deal
- Track record/ similar engagements
- Deal Review Board

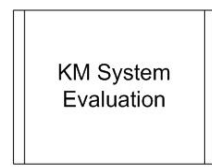
- Deliver Project
- Methodologies
- Best Practices
- Interview Tools
- Data Collection Tools
- Workshop Presentations
- Workbooks

- Content Owners
- Metadata search
- Folder specific

- Knowledge Administrators
- Document Lifecycle
- Workflow state

- Practice Managers
- Strategy
- Policies and Procedures
- Solution /offering development

OTHER PROCESSES



### Taxonomic Terms

# Content Audit

	A	B	C	D	E	F	G	H	I	J	K
1				<b>Products</b>							
2											
3	Overview										
4	Progress Quick Reference Guide										
5	Introduction to OpenEdge Positioning										
6	Pricing, Policy, Configurations & Contracts										
7		Contracts and Licence Agreements									
8			Product Contracts and Agreements								
9				<b>End User Product Licence Agreements for</b>							
10				OpenEdge Version 10							
11				Progress Version 9.1c&d							
12				Fathom for Management Standard Edition							
13				SonicXQ Version 1.0							
14				SonicMQ Version 4.0							
15				SonicMQ Version 3.5							
16				SonicMQ Bridgers V3.0							
17				<b>ISV</b>							
18				Joint Marketing and Finders Fee Agreement							
19				Application Partner(AP) Agreement							
20				<b>ASPen</b>							
21				Service Provider License Agreement							
22				Service Provider License Agreement Worksheet							
23				Service Provider License Agreement FAQ							
24				<b>Evaluation</b>							
25				Core Product Evaluation License							
26				SonicMQ Evaluation License							
27			Service Contracts and Agreements								
28				<b>Professional Services</b>							
29				Master Professional Services Agreement - ISV							
30				Master Professional Services Agreement - Direct Customers							
31				Sonic Software Master Professional Services Agreement							

97	Industry Vision
98	Transformation Improves Operational Efficiency and Bottom Line Results
99	Understanding and Utilizing Technology Hype
100	IT and Financial Concepts 2003
101	Expect the Software Market to Grow Faster in 2004
102	Competing in the Next Wave of Globalization
103	Integration in Real-Time Business: Real Opportunity Knocks for Businesses of All Sizes
104	The Integration Imperative: An MSI Technology Broadcast
105	Executive Viewpoint: Mid Market Mania: Why Progress and Our Application Partners Win
106	Return of the Application Developer
107	The Drive to Service Orientation
108	Progress OpenEdge and WebServices FAQ
109	R & D Forum Presentations
110	<b>Products Roadmap</b>
111	Business Intelligence Statement of Direction
112	Progress Fathom Statement of Direction
113	OpenEdge Service-Oriented Architecture Statement of Direction
114	Competitive Info
115	Summary of a Sell Side analysts' current ratings for PRGS
116	Competitive Pricing & Policies
117	Product's Competitive Landscape: Who are the Players?
118	Competitive Financial Results
119	Progress vs Microsoft, Oracle and IBM
120	SMB Market Summary
121	<b>Oracle</b>
122	Oracle Benchmark: 1 Million Transactions Per Minute
123	Oracle Standard Edition One
124	<b>Competition Watch</b>
125	Oracle Pricing Posted to Website
126	Low Adoption of Oracle Application Suite
127	Databases
 <a href="#">Web Site Products</a> / <a href="#">Web Site Services</a> / <a href="#">Preliminary Taxo</a> / <a href="#">Sample Navigation</a> / <a href="#">Work ar</a>	

# Terms from user working session

	A	B	C	D	E	F	G	H	I
1									
2	Categories from Sales Session								
3									
4	PRODUCTS								
5		Benchmarks							
6		Sonic (intranet site content)							
7		Database							
8		OpenEdge							
9		Price List							
10		White Paper							
11		Brochures/Datasheets Collateral White Papers							
12		PSDN							
13	SALES TOOLS								
14		Sales Process Tools							
15		Industry Solutions Map							
16		Analyst							
17		Collateral							
18		References/Customers							
19		Business Value + ROI							
20		Positioning							
21		Education							
22		Corporate Overview							
23		Customers							
24		Sales Forum (consolidated hot site)							
25		Press Releases							
26		Quick Reference Guide							
27		Presentations							
28		Competition / Competitive Info							
29	SOLUTIONS								
30		Business Trends							
31		Business Continuity							

# Terms from user working session

	A	B	C	D	E	F	G	H	I
29	SOLUTIONS								
30		Business Trends							
31		Business Continuity							
32		Case Studies							
33		Industry Information							
34		Management							
35		Reporting							
36		Education							
37		Integration							
38		Business or Technology Focus							
39	SERVICES/OFFERINGS								
40		Service Pricing							
41		Offerings/Bundles							
42		Customers							
43		Consulting							
44		Pricing							
45		PR Analyst Report as it relates							
46		Training Programs							
47		Wins/References							
48		Integration (Product, Service, Education Full Story)							
49		DB Tuning							
50		Reference Architecture							
51		Education							
52		Solutions							
53		Business Continuity (all in one product/service education)							
54		Service Contracts and Agreements							
55	CUSTOMER SUPPORT								
56		Tech Support							
57		Pricing							
58		Contracts and License Agreements							
59		Contract + Policy Guide							

# Preliminary Taxo

A	B	C	D	E	F	G	H	I
<b>Competitors</b>		<b>Doc Types</b>		<b>Event</b>		<b>Partner Tier</b>		
	BEA		Analyst Reports		Exchange		Elite	
	Fiorano		Assessment		Application Partner Kick Off		Premier	
	IBM		Benchmarks		Progress Developers World		Preferred	
	Intersystems		Best Practice		Summit		Member	
	Microsoft		Brochures					
	Oracle		Campaign	<b>Industry</b>		<b>Solution</b>		
	Others		Case studies		Government		Business Continuity	
	SAP		Competition		Financial Services		Business Intelligence	
	Softwired		Configuration Guide		Healthcare		Business Trends	
	Spiritsoft		Contracts		Manufacturing		Deployment	
	Sun		Customer References		Real Estate		Development	
	Sybase		Data sheet		Retail		Integration	
	Talarian		Event		Telecommunications		Management	
	Tibco		FAQ		Transportation and Distribution		Professional Services	
	All		Guides		Travel		Reporting	
			License Agreements		Utilities			
<b>Countries</b>			Migration			<b>Topic</b>		
	Australia		Presentations	<b>Marketing</b>			.NET	
	Austria		Press Releases		Campaigns		Architecture	
	Belgium		Price Lists		Direct Mail		Collaboration	
	Canada		Product Availability		Events / Webinars		Compliance	
	Czech Republic		Quick Reference Guide		Events Calendar		Distributed Applications	
	Denmark		Selling cards		Market reports		Industry Standards	
	EMEA		Silver Bullet		Market Summary		JAVA	
	Finland		White papers		Seminars		Messaging	
	France				Strategic plans		Reference architecture	
	Germany				Telemarketing		RFID	
	Hong Kong				Templates		ROI	
	Ireland						Security	
	Italy						Services Oriented Architecture	

## Metadata – “Document Type”

- Analyst Reports
- Assessment
- Benchmarks
- Best Practice
- Brochures
- Campaign
- Case studies
- Competition
- Configuration Guide
- Contracts
- Customer References
- Data sheet
- Event
- FAQ

## Metadata – ‘Product’

- OpenEdge Studio
- WebSpeed Workshop
- 4GL Development System
- Translation Manager
- Roundtable
- Visual translator
- OpenEdge RDBMS Enterprise Edition,
- OpenEdge RDBMS Personal Edition
- OpenEdge RDBMS Workgroup Edition

## Metadata – “Solution”

- Business Continuity
- Business Intelligence
- Business Trends
- Deployment
- Development
- Integration
- Management
- Professional Services
- Reporting

## Metadata – “Topic”

- .NET
- Architecture
- Collaboration
- Compliance
- Distributed Applications
- Industry Standards
- JAVA
- Messaging
- Reference architecture
- RFID
- ROI
- Security
- Services Oriented Architecture
- SOBA
- Trends
- Web Services
- XML

## Metadata – “Industry”

- Government
- Financial Services
- Healthcare
- Manufacturing
- Real Estate
- Retail
- Telecommunications
- Transportation and Distribution
- Travel
- Utilities

# Navigation – Sales Node

## Sales Tools

Analyst Reports

...

...

...

Case Studies

...

Competition

...

Customer References

FAQ's

Pricing & Licensing

White Papers

Presentations

# Navigation – Sales Node

## Sales Tools

Analyst Reports

...

...

...

Case Studies

...

Competition

...

Customer References

FAQ's

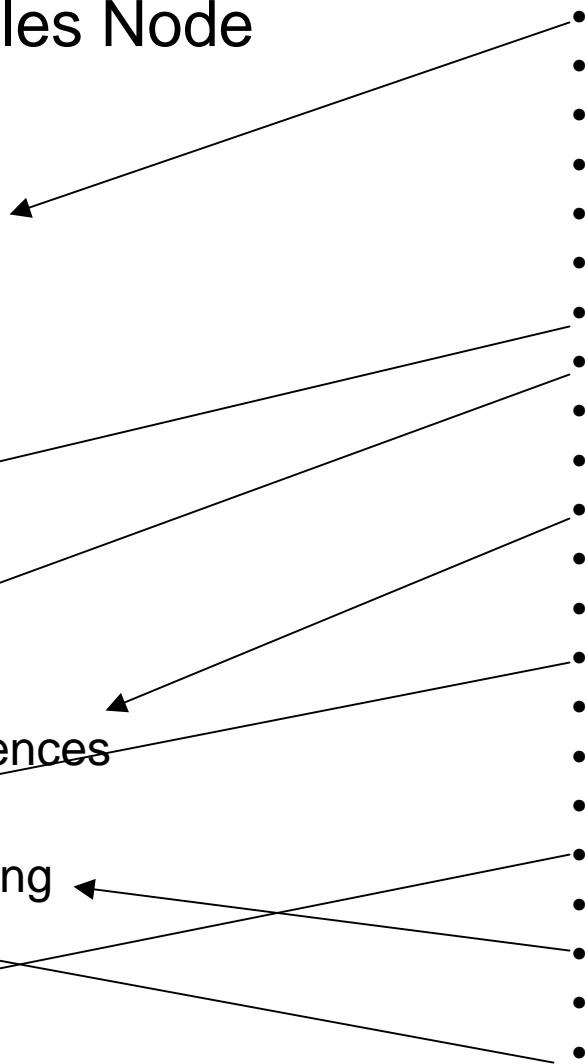
Pricing & Licensing

White Papers

Presentations

## Doc Types

- Analyst Reports
- Assessment
- Benchmarks
- Best Practice
- Brochures
- Campaign
- Case studies
- Competition
- Configuration Guide
- Contracts
- Customer References
- Data sheet
- Event
- FAQ
- Guides
- License Agreements
- Migration
- Presentations
- Press Releases
- Price Lists
- Quick Reference Guide
- White papers



# Navigation – Sales Node

## Sales Tools

- Analyst Reports

  - By Title

  - By Product

  - By Topic

## Case Studies

- By Customer

- By Product

- By Solution

- By Industry

- By Region

## Customer References

- FAQ's

- Pricing & Licensing

- White Papers

- Presentations

# Navigation – Sales Node

## Sales Tools

### Analyst Reports

By Title

By Topic

By Product

#### Topic

- .NET
- Architecture
- Collaboration
- Compliance
- Distributed Applications
- Industry Standards
- JAVA
- Messaging
- ...

### Case Studies

By Customer

By Product

By Solution

By Industry

By Region

#### Product

- Web Speed Workshop
- 4GL Development System
- Translation Manager
- Roundtable
- ...

#### Solution

- Business Continuity
- Business Intelligence
- Business Trends
- Deployment
- Development
- Integration
- ...

#### Industry

- Government
- Financial Services
- Healthcare
- Manufacturing
- Real Estate
- Retail
- Telecommunications
- Transportation and Distribution
- ...

### Customer References

### FAQ's

### Pricing & Licensing

### White Papers

### Presentations

#### Region

- North America
- EMEA
- Latin America
- Asia Pac
- Worldwide ...

# Taxonomic metadata resolved with navigation

**Top level nodes of taxo**

**Taxo term values**

227									
228	Analyst Reports								
229	By Title	Doc Type	Solution	Topic	Brand	Product			
230	By Product								
231	By Topic	Analyst Report	Compliance	Business Continuity	OpenEdge10	OpenEdge Studio			
232									
233									
234	Case Studies	Doc Type	Customer	Industry	Region	Solution	Brand	Prod	
235	By Customer								
236	By Product	Case Study	Iron Mountain	Services	EMEA	Integration	OpenEdge10	Open	
237	By Solution								
238	By Industry								
239	By Region								
240									
241	Customer References	Doc Type	Customer	Industry	Brand	Product	Solution		
242	By Industry								
243	By Product	Customer Referenc	Iron Mountain	Manufacturing	OpenEdge10	OpenEdge Studio	Compliance		
244	By Solution								
245	By Region								
246									
247	FAQ's	Doc Type	Event	Brand	Product	Service	Solution		
248	By Product								
249	By Event	FAQ	Exchange	OpenEdge10	OpenEdge Studio	Application Innovation	Compliance		
250	By Service								

## Deriving a taxonomy

- Define the problem or process
- Get examples of useful metrics
- Get examples of useful content
- Review folder structures on shared drives
- Ask users to describe how they solve problems, where they go for answers *at each step of the process*
- Look at their hard drives
- Try to determine “line of thought”
- Goal is to determine how users think about information *in the context of work tasks*

# Common Mistakes

- Confusing taxonomy with navigation – Taxonomy can guide navigation but is not the same as navigation
- Getting bogged down in minutia – Build a larger understanding and then add layers of granularity
- Getting overly complex - Simpler is better
- Asking users to fill in excessive metadata - Make the punishment fit the crime
- Taking an organizational perspective – Users (in most cases) don't care about your org structure
- Not considering all of the content lifecycle – Taxonomy terms are useful in content creation, management *and* search/navigation

# Governance and Change Management

# ET Change Management Process

- Schedule is compiled / distributed showing when Change Requests are due (and when they will be implemented)
  - Taxonomy Change Requests (and issues / requirements) are posted and submitted to the ET teamroom - using the required format
- Submitted requests are reviewed by the ET Governance Council
  - Taxonomy experts, user experience experts, and tool experts comment on feasibility / advisability
  - Retrofit impact and impact on key applications are considered
- Governance Council members review requests and comment / vote (via ET teamroom)
  - Scheme changes are implemented periodically (according to schedule / frequency TBD - anticipated monthly)
- Implementation = Big Bang approach across all applications
  - Individual applications notify their application users
  - Large distribution list is informed of scheme changes and updated version