

Making a Business Case for *Taxonomy*

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Agenda

- Talking About Organization, Description and Access: the Jargon
- What are the Reasons for a Taxonomy?
- Business Targets
- What is Involved in Developing a Taxonomy
- Taxonomy and Search
- What are the Metrics?



Talking about Organization, Description and Access: The Jargon

- Categorization
- Classification
- Content
- Controlled Vocabulary
- Index
- Metadata
- Ontology
- Thesaurus
- Taxonomy



Categorization

Process of grouping content into Multiple topics, organization names, or other facets

Classification

A structured and reasoned system of organizing materials according to their Single strongest attribute



Content

The informational matter in a collection of materials

Controlled Vocabulary

Authorized list of terms used to categorize a body of content. Multiple lists covering different facets may be used for a body of content



Index

A finding device. A set of information that directs the user to specific content in a Search.

Metadata

Information that contributes to structured indices that point to content



Ontology

Structural specification for expressing complex relationships among concepts

e.g. Bill of materials, Process flow diagram, Periodic table



Organization Ontology



Taxonomy

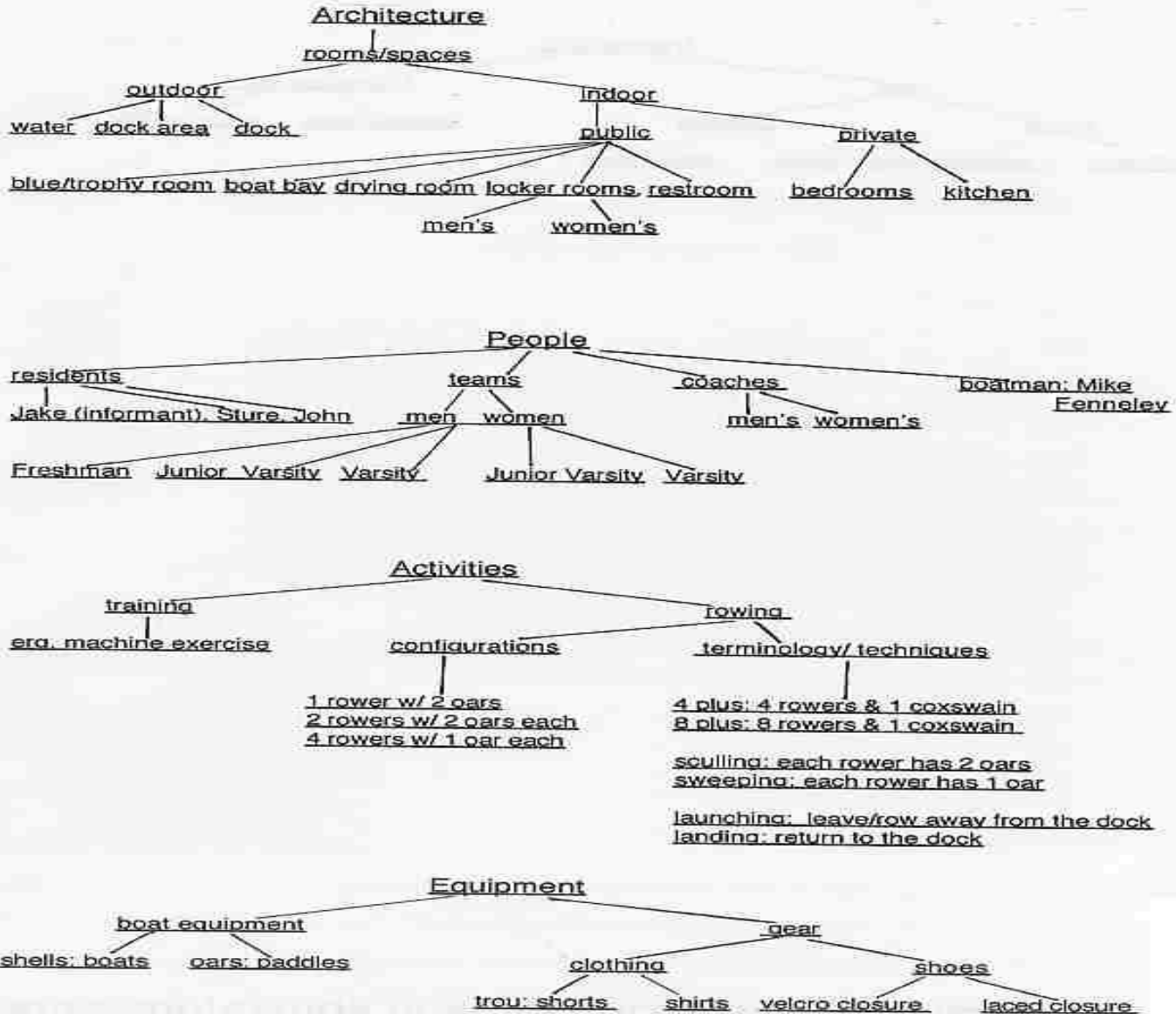
*Hierarchy of terms for categorizing one content facet - **visual** and navigable*

Thesaurus

Hierarchically structured controlled vocabulary. Deeper relationships and more cross-references than taxonomy. Does not have to assume graphic layout.



Taxonomy of Jake Wetzel's cultural knowledge of the behavior setting:



Thesaurus Rex - ☺

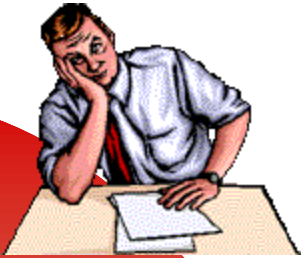
<http://msowww.anu.edu.au/library/thesaurus/trexlarge.gif>



What are the Reasons for Taxonomy?

- Improve Navigation in e-commerce, research, company records and reports, etc.
- Assist with Decision Support by getting to critical information faster
- Quick Response to Customer Problems in support
- Improving Productivity by providing uniform structure
- Facilitating Collaboration by standarizing language
- Creating a Bridge to Structured Content for the user
- Building Blocks for ontologies that can be leveraged in semantic search





Business Targets?

- E-Government Act of 2002 (SEC. 207. Accessibility, Usability, And Preservation Of Government Information... to upgrade and standardize agency Web sites.)
- E-Commerce, Product Catalogs Thomas Register Category Search
[<http://www.thomasnet.com/home.html?INCP=1>]
- Organization structures
- Expertise locators
- Project management
- Program management
- Client and case management
- Records management
- Proposal tracking



Bad Business Model

- Taxonomy terms that link to nothing
- No obvious pathway to desired content - poor navigation
- Inappropriate terminology for the audience
- Out of date terminology or content - dynamic updates are critical



What is Involved in Developing Taxonomy?

Textual map to information content that helps us visualize topical relationships when we search for content

- Identify content domain
- Identify how we want to categorize
- **Develop the list(s)**
- Design the visual construct and link the content to the taxonomy



Identify the Content Domain

- Focus on content that would not otherwise be easily accessible but can return great value if it can be found quickly
- Start small and with content that can be categorized easily
- Scale, scale, scale



Identify Categorization Method

- Major Categories
- Subcategories
- Depth and breadth
- Consider: How much content do you have for each category?



Automation & Electronics

1. Accelerators
2. Access Control Systems
3. Automation Equipment
4. Automation Systems
5. Bar Coding
6. Chambers & Enclosures
7. Cleanroom Equipment
8. Computer Components
 - # Backplanes (129 companies)
 - # Chassis: CPCI (2 companies)
 - # Chassis: Custom (15 companies)
 - # Chassis: Electronic Equipment (323 companies)



Develop the List

- Existing lists - commercial, societies, publishers
- Industry glossaries
- Internal guides - organization charts, department web sites, product catalogs, examining the content
- \$\$ Experts \$\$



Design the Visual Construct and Link the Content to the Taxonomy

- Layout and navigation are critical to the usefulness of the taxonomy
- Look at lots and lots of examples on the Web
- Get diverse target audience feedback about web search designs they find easy to navigate
- Copy the best features



Relationship of taxonomy and search

- *Taxonomy* is a type of controlled vocabulary
- When searchable *content is categorized* a type of taxonomy (term list, thesaurus or ontology) is employed as the organizing entity
- *Searching by categories* uses a map of a searchable index often showing relationships among terms
- Final goal: *Orient and simplify searching* for those who don't know where to begin (regardless of the business reasons)



Thoughts for Developers and Designers of Knowledge Bases

- There are numerous ways to organize content - **context for audience is imperative**
- Technology tools can help automate the indexing and search process but **human beings need to design** or validate the systems of organizing information
- Taxonomies are organic and **must evolve** within the context of use
- Automated **tools for building and maintaining complex relationships** are in their infancy



Metrics

- Anecdotal needs and fulfillment results must be sought
- Cost is primarily human
- Efficiency is in the eyes of the beholder
- How you can leverage Human Resources is a discussion worth having



Business Tip

- Go for small, *low hanging fruit* first
- Involve others by selling them the potential and stick with it until you have a result
- Learn from what happens and look for any benefits that are repeatable



Thank you for Listening



Questions?

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