Internet Librarian 2007 – Track B: Enterprise Trends
Developing a Taxonomy
Kathryn Breininger and Mary Whittaker
Librarians at The Boeing Company, Seattle, Washington
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Taxonomy Development Process

1. Determine taxonomy requirements

Questions to answer:

What is the problem the user is trying to solve?
What content needs to be organized?
How will the taxonomy be used?
What is the scope and purpose of the taxonomy?

Possible tasks:

- ☐ Determine the sponsor and the stakeholders.
- ☐ Assign a team leader. Recruit team members if necessary.
- ☐ Determine the target audience.
- ☐ Determine the users' information needs. Interview users about their information needs/uses/problems.
- ☐ Define scope and purpose of the taxonomy.
- ☐ Determine objectives to be accomplished.
- ☐ Determine if funding (budget) is available for the taxonomy.
- ☐ Find out what technology the user plans on using (if any) and what constraints the technology might have on the taxonomy.
- ☐ Develop a communication plan to keep stakeholders informed.
- ☐ Create the schedule.

Possible outputs:

- ☐ Business case document.
- ☐ Scope statement.
- ☐ Description of the expectations for the project.
- ☐ Project plan with tasks and schedule.
- ☐ Description of the technology that will be used.
- ☐ Buy-in from sponsors and stakeholders.
- ☐ List of interview questions.
- ☐ Transcript of the interviews.
- ☐ Summary of the users' information needs.

2. Identify concepts

Part A: Discover where and what the content is

Questions to answer:

What content will the taxonomy be used to organize?
Where is the existing content located?
How is the content structured?
Who is responsible for the content?
What is the value of the content?

Possible tasks:

- ☐ Determine what collections of content will be included.
- ☐ Search for and analyze content for candidate terms.
- ☐ Determine the volume of the content to be included.
- ☐ Examine how the content is structured.
- ☐ Learn who has responsibility for maintaining the content.
- ☐ Determine what content is of “high value” to users.

Possible outputs:

- ☐ Description of the content and where it is located.
- ☐ Description of how the content is currently arranged.
- ☐ Description of who is responsible for the content and who has permission to access the content.
- ☐ Description of the value of the content to the organization.

Part B. Perform a content inventory

Questions to answer:

What subjects/topics are covered by the content?
What format is the content in?
What types of content are there?
What are the metadata (if any) for the content?

Possible tasks:

- ☐ Determine the content format. (Example: Word, Excel, etc.)
- ☐ Determine the content types. (Example: E-mail, memos, drawings, etc.)
- ☐ Determine the broad subject areas covered by the content.
- ☐ Determine how “deep” the subject coverage is.
- ☐ Determine if there is a need for facets.
- ☐ Identify any existing taxonomies or word lists.
- ☐ Learn from existing internal and external sources (organization structure, web pages, file categories).
- ☐ Extract candidate terms for the taxonomy.

Possible outputs:
- ☐ A rough list of candidate terms for the taxonomy.
- ☐ A list of the types of terms needed. (Example: format, subject, type, etc.)

Part C. Conduct user interviews

Questions to answer:

What concepts and information do users search/browse for most often?
How do users search for information?

Possible tasks:
- ☐ Interview users about concepts they frequently search.
- ☐ Interview users about their search techniques and preferences.
- ☐ Observe users during search processes.
- ☐ Compile a profile of a typical user.
- ☐ Analyze search logs, if available.

Possible outputs:
- ☐ Description of a typical user.
- ☐ Description of how the typical user searches/browses.
- ☐ List of concepts the typical user searches.
- ☐ Analysis of search logs.

3. Develop draft taxonomy

Primary goal:

Development of a draft taxonomy ready for review.

Possible tasks:
- ☐ Establish guidelines and standards for format of terms and construction of relationships.
- ☐ Examine existing controlled vocabularies to determine if they could be used as is or modified to meet the user's needs.
- ☐ Develop upper levels of the taxonomy structure.
- ☐ Use candidate terms and other resources to build depth into the taxonomy. (Other resources can include existing thesauri, dictionaries, handbooks, file directory structures, web site categories, etc.)
- ☐ Reconcile language and terminology issues.
- ☐ Develop hierarchical relationships between terms.
- ☐ Develop cross-references between synonyms.
- ☐ Develop scope notes to define the terms.
- ☐ Build enough depth into the taxonomy so that the overall structure can be validated.

Possible outputs:

- ☐ A draft taxonomy ready for review.
- ☐ Guidelines and standards for constructing terms and relationships. (Example: ANSI Z39.19, local guidelines)

4. Review with users and SMEs

Questions to answer:

Does the structure make sense to the users?
Are the major concepts included in the taxonomy?
Does the taxonomy go too deep in any place?
Are the users and subject matter experts able to validate the taxonomy?

Possible tasks:

- ☐ Ask the users and subject matter experts to examine the draft taxonomy and suggest changes.
- ☐ Discuss and determine appropriateness of requested changes.
- ☐ Perform usability studies of the taxonomy.

Possible outputs:

- ☐ List of user comments and suggested changes.
- ☐ Record of suggested changes to the taxonomy, including any decisions about and reasons for changes to the overall taxonomy design.
- ☐ Results of the usability studies.

5. Refine taxonomy

Primary goal:

Refined draft taxonomy.

Possible tasks:

- ☐ Review user and subject matter expert feedback.
- ☐ Incorporate agreed-to changes.
- ☐ Incorporate changes based on analysis of results of the usability study.
- ☐ Continue to build depth into the taxonomy. How deep the taxonomy should be is dependent on user feedback and whether the taxonomy nodes retrieve any content.
- ☐ Solicit input from users and subject matter experts during this process.
- ☐ Document all changes and decisions regarding the taxonomy.
- ☐ Establish evaluation and testing criteria for the taxonomy.

Possible outputs:

- ☐ Refined taxonomy.
- ☐ Documented history of changes and decisions.
- ☐ Evaluation and testing criteria for the taxonomy.

[Continue to refine the taxonomy based on user feedback through repeated review and refine cycles.]

6. Apply taxonomy to content

Primary goal:

Taxonomy implemented in users' environment to organize content and/or navigate through and to content.

Possible tasks:

- ☐ Deliver the taxonomy to the user.
- ☐ Provide guidelines for using the taxonomy.
- ☐ Provide guidelines on how to select appropriate terms for tagging content.
- ☐ Provide advice on implementing the taxonomy in the users applications.
- ☐ Provide advice on implementing the taxonomy for navigation of web sites.
- ☐ Implement the taxonomy in web site or applications as appropriate.
- ☐ Tag existing content with terms from the taxonomy.

Possible outputs:

- ☐ Summary of implementation advice provided to user.
- ☐ Guidelines for using the taxonomy to tag content.
- ☐ Taxonomy is implemented and utilized by the users.

7. Manage and maintain taxonomy

Questions to answer:

Are the users satisfied with the taxonomy?
Is the taxonomy current?
How is the taxonomy governed?
How will the taxonomy be maintained?
Who will maintain the taxonomy?
How are changes implemented?

Possible tasks:

- ☐ Determine if the taxonomy meets the users' business needs and expectations.
- ☐ Develop user feedback process.
- ☐ Collect user feedback on the taxonomy implementation.
- ☐ Determine how well the taxonomy retrieves content.
- ☐ Apply qualitative and quantitative tests to the taxonomy.

- ☐ Review the criteria for evaluating and testing the taxonomy. Compare the actual functionality of the taxonomy against the criteria.
- ☐ Review content for new concepts.
- ☐ Create a change control process, including capturing decisions regarding major changes to the taxonomy structure.
- ☐ Establish governance processes.
- ☐ Determine who maintains the taxonomy.
- ☐ Develop a taxonomy maintenance plan.
- ☐ Review processes with users and finalize.
- ☐ Review maintenance plan with users and finalize.
- ☐ Review governance processes with stakeholders and sponsor and finalize.

Possible outputs:

- ☐ User feedback processes.
- ☐ Collection of user comments.
- ☐ Results of evaluation and testing of the taxonomy.
- ☐ Governance processes.
- ☐ Taxonomy maintenance plan.
- ☐ Change control processes.

Possible completed deliverables:

1. A notebook documenting the taxonomy development activities.
2. The description, purpose and scope of the taxonomy.
3. The production taxonomy.
4. Guidelines and standards for constructing terms and relationships.
5. History of changes and decisions.
6. Evaluation and testing criteria for the taxonomy.
7. Taxonomy implementation processes.
8. Guidelines for taxonomy use and application.
9. User feedback processes.
10. Collection of user comments.
11. Results of evaluation and testing of the taxonomy.
12. Governance processes.
13. Taxonomy maintenance plan.
14. Change control processes.