Due to the dynamic nature of human language, taxonomies need to grow and change over time in order to remain relevant to their users. Building your organization’s taxonomy maintenance protocol with the core components of governance in mind will help ensure the success of your taxonomy initiative in the long term. The core components of governance are:

1. **Organizational structure**: Who is responsible and has the power to make changes
2. **Processes and procedures**: How things get done
3. **Standards, measures & practices**: What is considered good
4. **Tools and solutions**: What helps get the job done

This document will address the steps you need to take in order to maintain your taxonomy and its applications. Such systematic and intentional management of your taxonomy investment is vital to your organization’s goals.

The pertinent steps are organized across two domains:

1. Stage of development (pre-, mid-, and post-taxonomy implementation)
2. Role (executive, taxonomy team)

You should be able to find the information salient to your position based upon the stage of your taxonomy development and your role at the organization.
Stage 1: Planning

Ensure the long-lasting success of your taxonomy project by structuring the project with governance in mind. Start thinking about the development of applicable checklists within your organization as early as possible.

The following steps are commonly completed at the start of a taxonomy development cycle and serve a double-duty: by getting you thinking about the organizational structure of the taxonomy initiative you will also find yourself considering the standards by which you will measure and ensure success.

**Governance Checklist for preparation phase of taxonomy initiative:**

- Identify stakeholders
- Work with stakeholders to create a proposal that addresses the following points:
  - Statement of purpose (30 words)
  - Current problem that will be addressed by the taxonomy
  - Baseline metrics for the current situation
  - Ways the taxonomy should address this problem
  - Metrics of success (for ROI) aka ‘how the baseline metrics will be improved’
  - Communication plan (who needs to know what and when)
  - RACI analysis for taxonomy development (see below)
- Stakeholders sign-off on final proposal

**RACI analysis for planning phase of taxonomy initiative:**

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<tr>
<th>Domain</th>
<th>Task</th>
<th>Stakeholder 1</th>
<th>Stakeholder 2</th>
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R = Responsible (for work)
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I= Informed (told after the fact)
NA= Not currently applicable to our project
Stage 2: Taxonomy development

As the taxonomy and its applications are developed, take the opportunity to codify the processes and rules used for future reference. Now is the easiest time to formalize the governance components that will ensure the long-term health of the project.

Governance checklist for the development phase of your taxonomy initiative:

**Organizational structure**
- Complete RACI model for the development phase
- Update the list of current stakeholders created during project proposal phase
- Update signature page with new stakeholders

**Processes and procedures**
- Determine the way your organization will update terms in the taxonomy (see Appendix 1 for details)

**Standards, measures & practices**
- Record the rules used to make the taxonomy model (see Appendix 2 for suggested rules)
- Document the sources of the controlled vocabularies and why they were selected
- Choose the techniques you will use for quality assurance (see Appendix 3 for suggestions)
- Develop a training program

**Tools and solutions**
- Identify governance tools already used by the organization that could be used for taxonomy governance. For example, web forms, workflow software, and bug-tracking tools can be co-opted for this purpose.
### Stage 2: Taxonomy development (cont’d.)

#### RACI analysis for development phase of taxonomy initiative:

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<th>Domain</th>
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*NA = Not currently applicable to our project*
Stage 3: Maintenance

Congratulations, you have launched your taxonomy and its applications. Now it is time to make sure this investment pays off well into the future with routine maintenance.

Governance Checklist for maintenance phase of taxonomy initiative:

Organizational structure
- Create and then update the RACI analysis for the maintenance phase
- Update the list of current stakeholders created during project proposal phase
- Update signature page with all new stakeholders

Processes and procedures
- Assess the term update process: how can this process become automated?

Standards, measures & practices
- Document the sources of the controlled vocabularies and why they were selected
- Continue to collect quality assurance, feedback and performance metrics for each component of the initiative:
  1. taxonomy
  2. taxonomy tools
  3. tags (the application of the taxonomy to content)
  4. tagging tools (if different than the taxonomy tools)
- Maintain the training materials
- Taxonomy model rules:
  - Who maintains these rules?
  - How are they changed?
  - How are changes tracked over time?

Tools and solutions
- Look for new tools and software
### RACI Analysis for maintenance phase of taxonomy initiative

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<th>Domain</th>
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For More Information or Questions, Please Contact:

Mike Doane
Principal Consultant
mike.doane@termmanagement.onmicrosoft.com
206-683-8857
Appendix I: Term update process

A policy/workflow should be created for your organization that outlines the steps that must be taken in order to make changes to taxonomy terms. The policy should address the following points:

1. Term Suggestion/Submission:
   a. How do users request changes? (new terms, deletions, edits)
   b. How do users know their request was received?
   c. How do users know the status of their request?

2. Team Review/Vote:
   a. How does taxonomy team determine if change should be made?
   b. What do they need to check to make sure it will be accepted by all consumers of the taxonomy?
   c. How will the change affect related terms?
   d. Are there term relationships that will be broken or affected?
   e. How much with the change cost?
   f. Where will the record of the assessment be stored so it can be referred to later? (for example, can be used for training auto-classifiers)
   g. How does the team vote on the change?
   h. How is the vote recorded?

3. Taxonomy Update
   a. How is the change made within the system?
   b. How are deprecated terms handled?
   c. Who does QA on any changes?
   d. How are merged terms handled?
   e. Did the update cause any orphaned terms to be created?
   f. Is there a spellcheck system in place to validate new terms?
   g. Do the new terms conform to industry standards where applicable?
   h. Does a proposed term already exist in any current taxonomy?
   i. Does a new term warrant being part of a polyhierarchy?
   j. Do new terms need to be in a non-English language?

4. User Update
   a. How are users informed of changes/additions?
   b. Is there a process for handling comments from users?
   c. Can a user vote for an edit or change?
Here is an example of a term update process:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Term Suggestion</td>
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<td>2</td>
<td>Term Submission</td>
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<tr>
<td>3</td>
<td>Team Review</td>
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<td>4</td>
<td>Team Vote</td>
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<td>5</td>
<td>Taxonomy Update</td>
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<td>6</td>
<td>User Update</td>
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The following are detailed explanations of the steps for the taxonomy change process.

**Step 1: Term Suggestion** – As the taxonomy and metadata are used by more people across the project (and other areas of the company), there will be users who will have suggestions for new terms. However, terms cannot be simply added to the taxonomy, since there may be conflicting terms elsewhere in the taxonomy, or the meaning of the term may be unclear or defined differently between users and groups. An initial step for a user proposing “candidate” terms, can be an emailed suggestion to the Taxonomist for entry into the tracking system. Once the
Taxonomist has entered the term into the queue, the user should be notified when the next taxonomy review meeting will take place.

- **Roles**
  - End User
  - Taxonomist

**Step 2: Term Submission** – If the user can submit the suggested term directly into the tracking system, then that should be the first step for review. The Taxonomist should keep track of how many terms are in the queue, and if there are more than 15-20, then a meeting should be called for the taxonomy review team. This is optional, and the team should expect a lot of term suggestions when the submission system is first put into place.

- **Roles**
  - End User
  - Taxonomist

**Step 3: Team Review** – The taxonomy review team should meet once a month for the first few months of the new system, as there will probably be a lot of new term submissions as users get used to adding terms to documents and content, and will want to add their own terms. All submitted terms should be sent to the taxonomy team for review. The team should create a prioritized list of terms to review. For example, if a term appears more than once in the requests, that should be a higher priority than a term that appears once. Each of the team members should use their expertise to evaluate each term to determine if it’s the right term to use, any alternative terms that could be used (synonyms, related terms), and if the user who suggested it has the correct expertise to propose the term. The PM, CM, SA and Taxonomist should all weigh in on how adding or changing the term will affect not only the taxonomy, but how users will apply the term, how often it may be applied, does it require additional terms to make it relevant, etc. The Change Manager should determine how and when the term should be added, based on other requirements. The Site Analyst should determine how the term is going to be added or changed within the SharePoint environment, and what impact the change will have not only on the system, but also how users are going to apply the new tag. In addition, the Site Analyst and Taxonomist should determine if the new term should be retroactively applied to other documents or pages, and determine how to apply the tags.

- **Roles**
  - Project Manager
  - Change Manager
  - Site Analyst
  - Taxonomist

**Step 4: Team Vote** – The taxonomy review team should vote on each term to determine if it should be added or if a term should be edited to meet user(s) request. Each team member should get one vote. The voting is done to let each review team member voice an opinion about the change. In practice, a conflict about whether or not to include a term can be mitigated by using the ANSI/NISO Z39.19-2005 Guidelines for the Construction, Format and Management of Monolingual Controlled Vocabularies document as guidance.

- **Roles**
  - Project Manager
  - Change Manager
  - Site Analyst
Step 5: Taxonomy Update – Once the term is approved, it should be added to the taxonomy as soon as possible. The Taxonomist should add the term into the existing taxonomy. The Site Analyst should, in conjunction with the Taxonomist, add the term(s) to the relevant SharePoint site column, determine if adding the term has a negative impact on the user experience of adding a tag. If the term is not approved, it should be added to a separate worksheet within the taxonomy spreadsheet so that it can be reviewed at the next taxonomy team meeting. Terms that are rejected one time can become relevant later, so it’s important to keep a log of all decisions.

- Roles
  - Site Analyst
  - Taxonomist

Step 6: User Update – Once the term is approved, or rejected, the user who submitted the term should be notified of the decision. Since there might be multiple emails to send out to the user, an email template should be created that addresses acceptance or rejection of a term. In addition, a general email notification of the new term(s), their meaning, how they’re used and if there is going to be an overall update of existing documents with the new term should also be sent out. The outcome and decision of the voting for each term should be recorded in a taxonomy governance document for future reference.

- Roles
  - End User
  - Site Analyst
  - Taxonomist
Appendix 2: Taxonomy model rules
1. Version release frequency (annual batch update, daily edits etc...): how often?
2. Content types included
3. Depth of taxonomy: set limits on depth and fan-out?
4. Editorial rules such as:
   - Sources of Terms
   - Abbreviations
   - Ampersands
   - Capitalization
   - Continuations (More... or Other...)
   - Duplicate Terms
   - Hierarchy and Polyhierarchy
   - Languages and Character Sets
   - Length Limits
   - “Other” – Allowed or Forbidden?
   - Plural vs. Singular Forms
   - Relation Types and Limits
   - Scope Notes
   - Serial Comma
   - Spaces
   - Synonyms and Acronyms
   - Term Order (Alphabetic or ...)
   - Term Label Order (Direct vs. Inverted)
   - Prioritization of rules (in case of a conflicts)
Appendix 3: Techniques for ensuring quality and measuring taxonomy success

1. Examine Query log / Click trails:
   - Top queries
   - Queries with no results
   - Queries with no click-through
   - Most requested documents
   - Query trend analysis
2. Server log analysis
3. Usability testing
4. Card sorts (check that the taxonomy matches user classification)
5. Contextual inquiry
6. User satisfaction survey
7. Tagging samples to check content ‘fit’ within taxonomy
8. Walk-through sample pages with subject matter expert