

Taxonomy Design for SharePoint

IntraTeam Event Copenhagen



4 March 2020

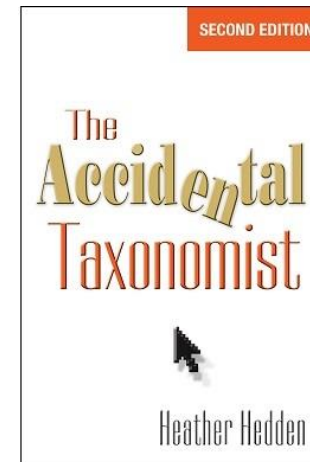
Presented by

Heather Hedden

Taxonomy Consultant, Hedden Information Management

About Heather Hedden

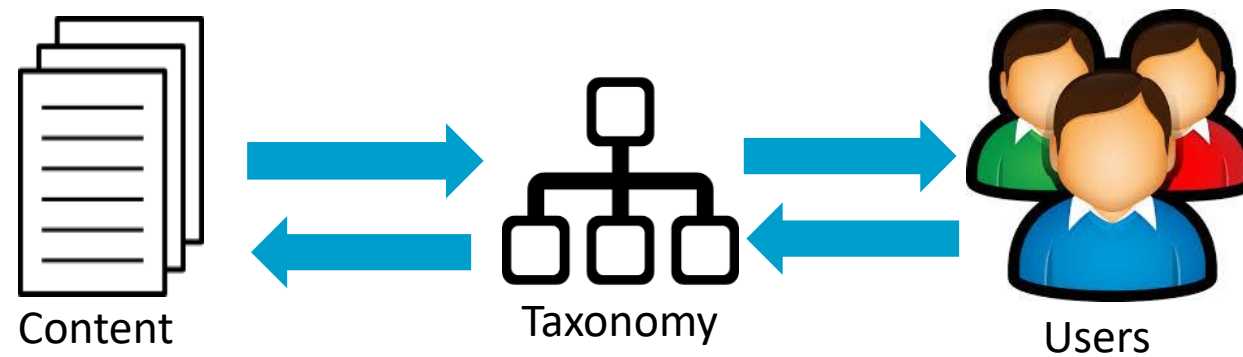
- Taxonomy consultant
 - Independent, through Hedden Information Management
 - Previously as an employed and contract consultant
- Former staff taxonomist
 - At various companies: Gale/Cengage Learning, Viziant, First Wind
- Instructor of online and onsite taxonomy courses
 - Independently through Hedden Information Management
 - Previously at Simmons University – School of Library & Information Science
- Author of *The Accidental Taxonomist* (2010, 2016, Information Today, Inc.)



Introduction to Taxonomies

What is a taxonomy?

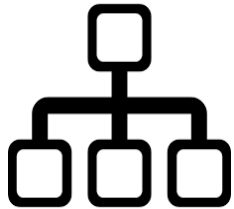
- Managed set of terms used to tag/index/categorize pages or content to make them easier to be found and retrieved
 - supporting better findability than search alone
- The taxonomy is an intermediary that links the user to the desired content.
- The taxonomy should suit the content and the users.



Introduction to Taxonomies

What is a taxonomy?

1. A hierarchy of terms/topics/categories arranged with narrower topics/subcategories displayed under their broader/parent categories.



- To guide users to find the desired topic (and its linked content of pages or documents)

2. A controlled vocabulary of metadata tags/labels to apply to pages, posts, or documents, so that they can be more precisely and comprehensively retrieved (than by search algorithms alone on keywords in text).



- Implemented as search suggestion terms, search refinement filters, or related topics and searches

Introduction to Taxonomies

What is a taxonomy?

Controlled and organized

- A kind of controlled vocabulary based on unambiguous concepts, not just words
- Terms are arranged in a structure of hierarchies or facets/filters to organize the terms.

Introduction to Taxonomies

Office DEPOT OfficeMax

Products ^ Services v Deals v Search

Free next-day ship

Office Supplies >

- Furniture >
- Cleaning >
- Breakroom >
- Paper >
- School Supplies >
- Technology >
- Ink & Toner >
- Tax Return Solutions
- Cold & Flu

Pens, Pencils & Markers

- Pens
- Markers & Highlighters
- Pencils
- Correction Fluid & Tape

Basic Supplies

- Staplers & Staples
- Paper & Binder Clips
- Scissors
- Paper Punches & Cutters

Mailing & Shipping

- Envelopes
- Shipping & Moving Boxes
- Mailers
- Packing Tape
- Packing Materials

Filing & Folders

- File Folders
- Hanging File Folders
- Expanding File Folders
- Classification Folders

Binders & Accessories

- Binders
- Dividers & Tabs
- Report Covers & Portfolios
- Sheet Protectors

Labels & Label Makers

- Standard Labels
- Label Maker Tapes
- Address Labels
- Label Makers
- Name Badges & Holders

Desk Accessories

- Desk Organizers
- Desk Trays
- File Organizers
- Drawer Organizers

Calendars & Planners

- Calendars
- Planners
- Organizers

More Ways to Shop

- Tax Return Solutions
- Post-It & Sticky Notes
- Tape & Adhesives
- Storage Boxes & Bins
- Presentation Boards

Big A Fre fu

www.officedepot.com

World Bank Open Data

Free and open access to global development data

- Population, male
- Population, total
- Population, female
- Rural population
- Urban population
- Population, male (% of total population)
- Population, female (% of total population)
- Population in largest city

World Bank

<https://data.worldbank.org>

Introduction to Taxonomies

Facets

Department

- Research
- Sales
- Finance
- Marketing
- Exec Office
- SHOW MORE

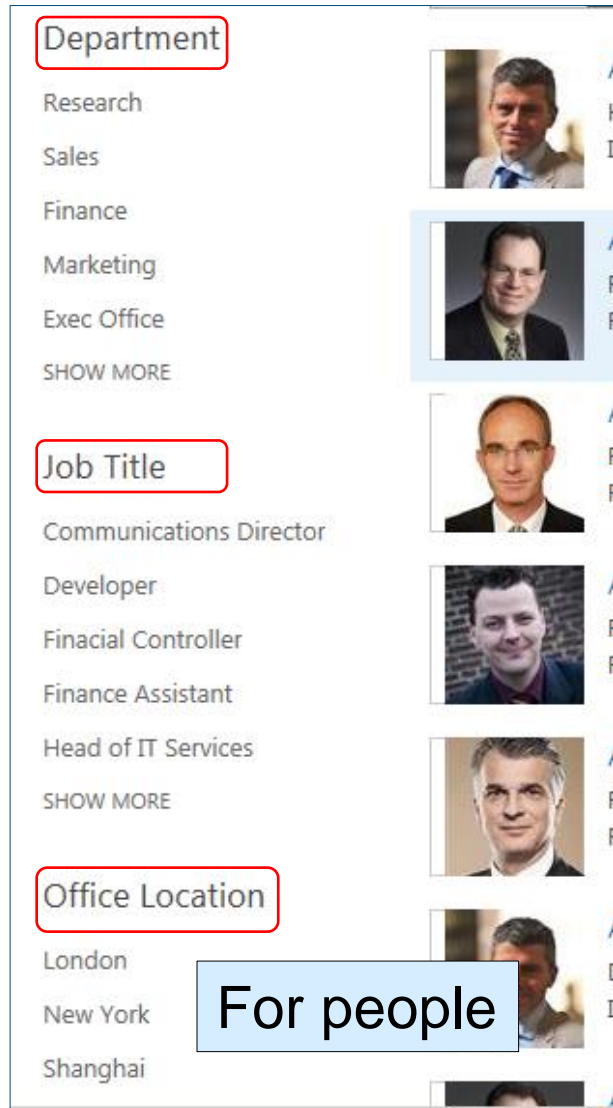
Job Title

- Communications Director
- Developer
- Financial Controller
- Finance Assistant
- Head of IT Services
- SHOW MORE

Office Location

- London
- New York
- Shanghai

For people



File Type

- Word

Document Type

- Feature Overview
- Technical Specifications

Item Type

- Project Document

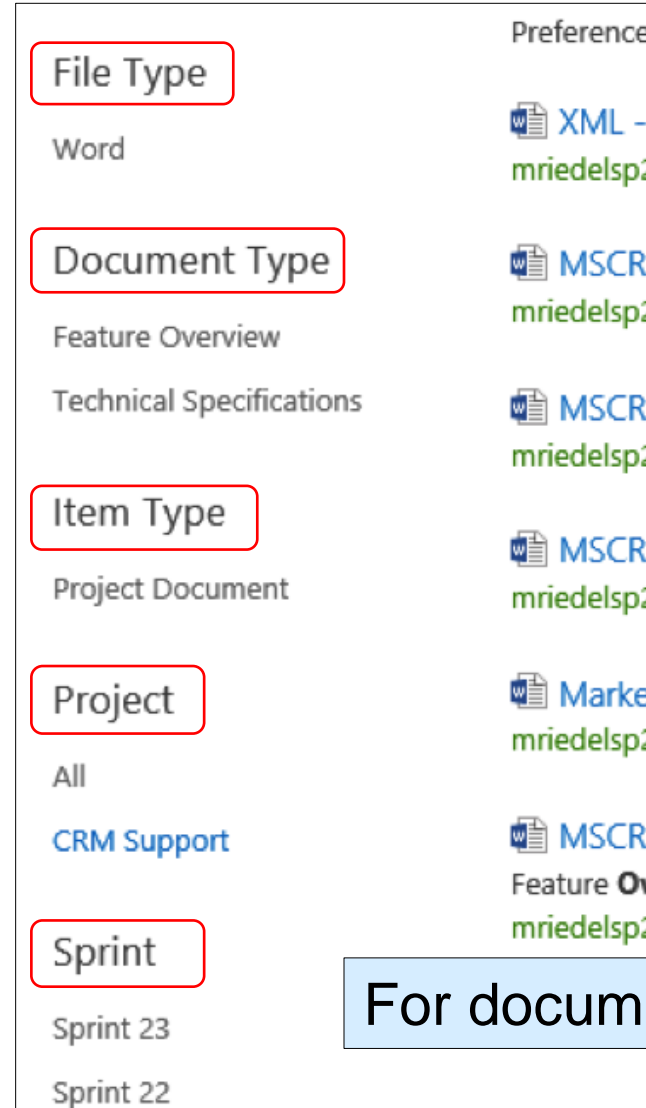
Project

- All
- CRM Support

Sprint

- Sprint 23
- Sprint 22

For documents



Result type

- Word

Author

- User1
- System Account
- AATISH AGARWAL
- SHOW MORE

Modified date



All

Community

- Technical
- Recreational
- Other Value
- Apply | Clear

Language

- English
- German



Content Manager

- Content Manager (7)
- Content Manager (9)
- Content Manager (1)
- Content Manager (1)
- Other Value
- Apply | Clear

Distribution Channel

- TechNet Library (7)
- OfficeOnlineVNext (2)
- MSDN Code Gallery (1)
- MSDN Library (1)
- MSN Video (1)
- Other Value
- Apply | Clear

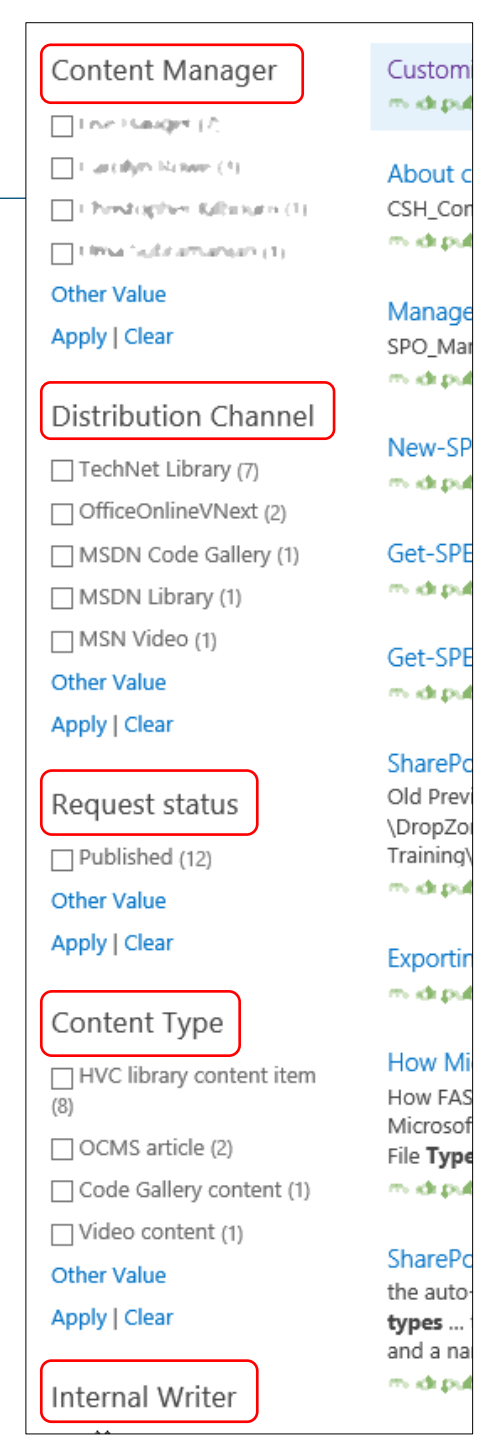
Request status

- Published (12)
- Other Value
- Apply | Clear

Content Type

- HVC library content item (8)
- OCMS article (2)
- Code Gallery content (1)
- Video content (1)
- Other Value
- Apply | Clear

Internal Writer



Introduction to Taxonomies

Potential uses of taxonomies or controlled vocabularies

- Topic/category browsing
- Search (matching search strings to concepts)
- Discovery (related concept links or contents sharing the same concepts)
- Filtering results
- Sorting results
- Content management workflow (rights, audience, retention, etc.)
- Consistent metadata for identification, comparison, analysis
- Consistent tagging/indexing

Introduction to Taxonomies

Benefits of taxonomies over search alone

- Indexing and retrieval based on concepts, not just words/phrases improves search results in both precision (accuracy) and recall (comprehensiveness)
- Taxonomy terms allow limiting/filtering large search results by topic
- Display of other taxonomy terms tagged to the same results set provides additional topics and content for the user to explore
- Taxonomies support the indexing of nontext content (images, video, audio).
- Multilingual taxonomies support accurate search and retrieval across multilingual content.

Introduction to Taxonomies

Metadata & Controlled Vocabularies

- Some, but not all, metadata properties get filled with values/terms from a controlled vocabulary (taxonomy).
- When a controlled vocabulary term is tagged to content in a designated metadata property, then it becomes metadata.
- Most implementations of controlled vocabularies are as metadata.

Exceptions (non-metadata controlled vocabularies):

- A nondisplayed controlled vocabulary that serves only search
- A taxonomy that is a model for navigation

Taxonomy use in SharePoint

SharePoint can make use of taxonomies various ways:

- ➔ 1. As facets or post-search refinement/filters
- ➔ 2. Metadata terms for sorting or filtering columns of content items (documents, images, etc.) in document libraries
3. Implemented in navigation as menu labels, headers, and page URL names
4. Search support (functioning as a synonym ring), with added technologies
5. As a hierarchical model for naming and organizing libraries and folders



Taxonomy use in SharePoint

SharePoint supports various types of terms for tagging as metadata

1. Globally/enterprise-shared “Common” sets of tags in the Term Store
 2. Locally used sets of tags as Document Categories for specific sites
 3. Globally/enterprise-shared *uncontrolled* Enterprise Keywords
 - Users can add new terms anytime, but they also see what terms others have created so may choose to use those terms.
- Features are the same for on-premises or cloud/Office 365 versions
 - No new taxonomy features have been made since 2010

Taxonomy use in SharePoint

SharePoint Term Store

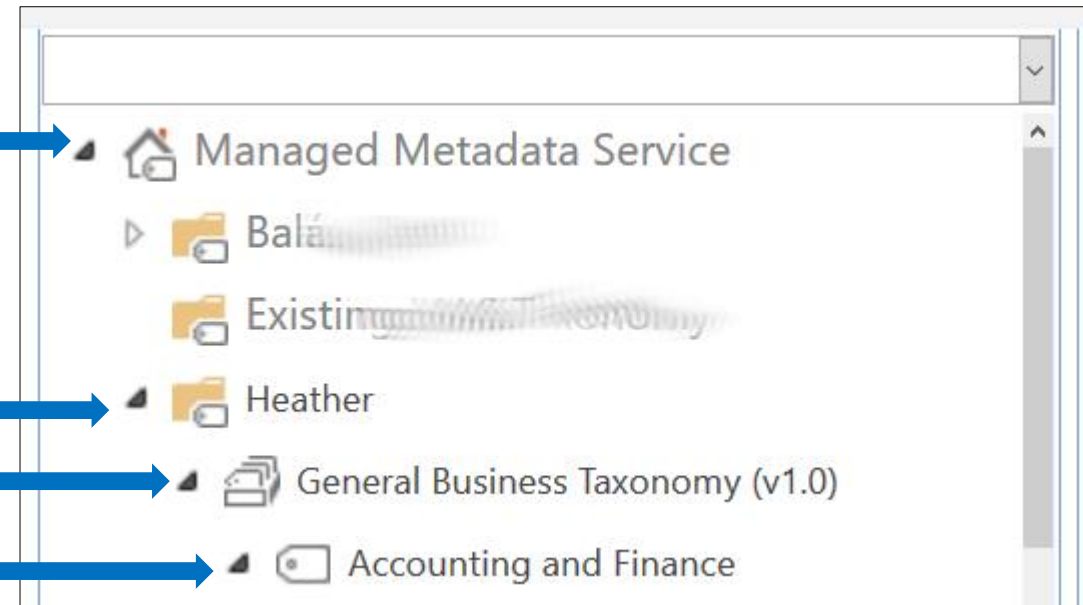
With permission, can be edited in Site Settings > Site Administration > Term Store Management

Term Store

Group – set of Term Sets with shared users

Term Set – a hierarchical taxonomy or facet

Term – a node or concept



Term sets then are used as refinement filter/facet types and as library column headers.

Refine results by

Content type

- Announcement
- Document
- IGDSDocument
- ILO FAQ
- SHOW MORE

Document type

- agreement
- annex
- Announcement
- brochure
- business case
- SHOW MORE

Result type

- Excel
- PDF
- PowerPoint
- Web page
- Word
- Zip

Language

Home > Search

Search

benefits

Everything News Documents People Offices Projects Normes
 Publications Evaluations

Sort by Relevance

Displayed terms as post-search refinement filters/facets

Internal Governance Document System (IGDS)

The IGDS website contains all ILO internal policies, rules, directives, procedures ... status report and application for dependency **benefits** for 2019–20, IGDS No.145 (Version 12 ...
intranet.ilo.org/apps/igds/en-us

Welcome to the Staff Operations Branch HR/OPS

STATUS REPORT AND APPLICATION FOR DEPENDENCY **BENEFITS** - PDF [172.05KB] Family Status Report and Application for Dependency **Benefits** form Request form approval of External ...
intranet.ilo.org/en-us/hrd/hrops

Family Allowance

status report and application for dependency **benefits** (ILO 1411) Family status report and application for dependency **benefits** (ILO 1411) - PDF [159.28KB] Family ...
intranet.ilo.org/en-us/hrd/hrops/Pages/Family-Allowance.aspx

PDF Finance Manual: Chapter 5. Payroll

INTERNATIONAL LABOUR OFFICE – FINANCE MANUAL January 2020 95 5. Payroll Scope and purpose ... by the staff member, to the Voluntary Thrift **Benefit** Fund (VTBF), the Credit Unions (the ...
intranet.ilo.org/en-us/finance/Documents/Chapter 5. Payroll.pdf

PDF Office Procedures, Family status report and application for dependency **benefits** for 2009, IGDS No.61 (Version 1)

Taxonomy Integration with Search

Refine results by

Content type

Document type

annex
brochure
Form
guidelines
manual
SHOW MORE

Result type

PDF
PowerPoint
Web page
Word

Home > Search

teleworking

Refine results by

Content type

Document type

agreement
brochure
concept note
financial statement
Form
SHOW MORE

Home > Search

library

Search

Everything News Documents People Offices Projects Normes
Publications Evaluations

Sort by Relevance

Library catalogue
Labordoc is the largest collection of knowledge on the world of work, including almost every document since 1919.
labordoc.ilo.org/

View Document Details

Terms available from the taxonomy vary based on search

Taxonomy use in SharePoint

Filtering and Sorting

- **Filtering** – displays a selection of the library/folder's files, that meet the filtered criteria
 - such as only the files that have been tagged by a certain taxonomy term
- **Sorting** – also called **Grouping**, displays all of the library/folder's files, grouped by selected criteria label
 - such as grouped by tagged taxonomy term, alphabetically arranged by term name
(Those not tagged with a taxonomy term, as blank, sort to the top.)

If documents are put into folders and subfolder, change the view to make the folders not display and there is a long list of all documents in the library.

Taxonomy use in SharePoint

Selecting metadata terms (once it is made available as a column) for sorting or filtering columns within Document libraries

The image shows a SharePoint Document Library interface. At the top, there are buttons for 'Sync' and 'Export to Excel'. Below this is a table of documents with columns for 'Name' and 'Title'. A dialog box titled 'Filter by Document Type' is open in the center, listing various document types with checkboxes: agenda, annex, audit report, dashboard, dataset, Development Cooperation documents, diagram, email, and Financial and administrative Document. At the bottom of the dialog are 'Apply' and 'Clear all' buttons. On the right, a dropdown menu is open, showing options: 'A to Z', 'Z to A', 'Filter by' (highlighted with a red box), and 'Group by Document Type'.

Name	Title
External Reviews	External Reviews
0 Facts Figures EC-ILO...	Facts and Figures
0. Facts Figures EC-IL...	XXXXXX
0_Facts Figures EC-IL...	facts and figures
1. Internal evaluation ...	EVALUATION FORM FOR

Filter by Document Type

- agenda
- annex
- audit report
- dashboard
- dataset
- > Development Cooperation documents
- diagram
- email
- > Financial and administrative Document

Apply Clear all

Document Type Document Cate

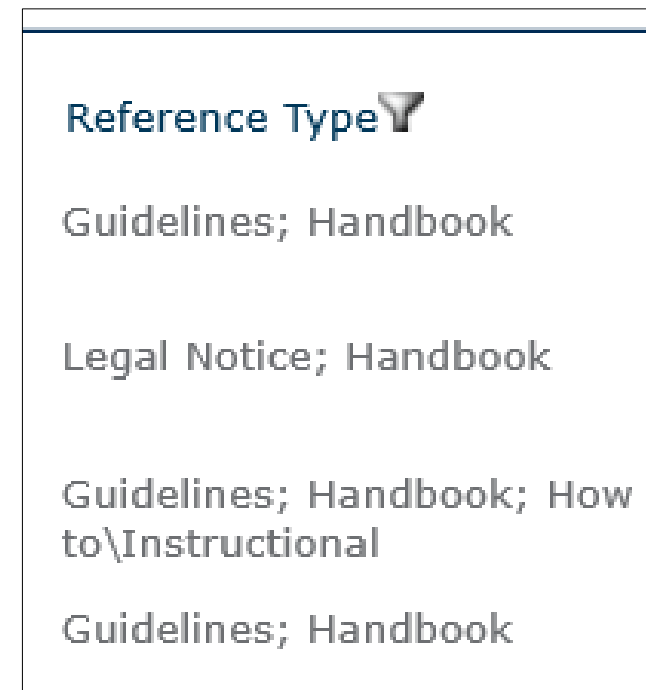
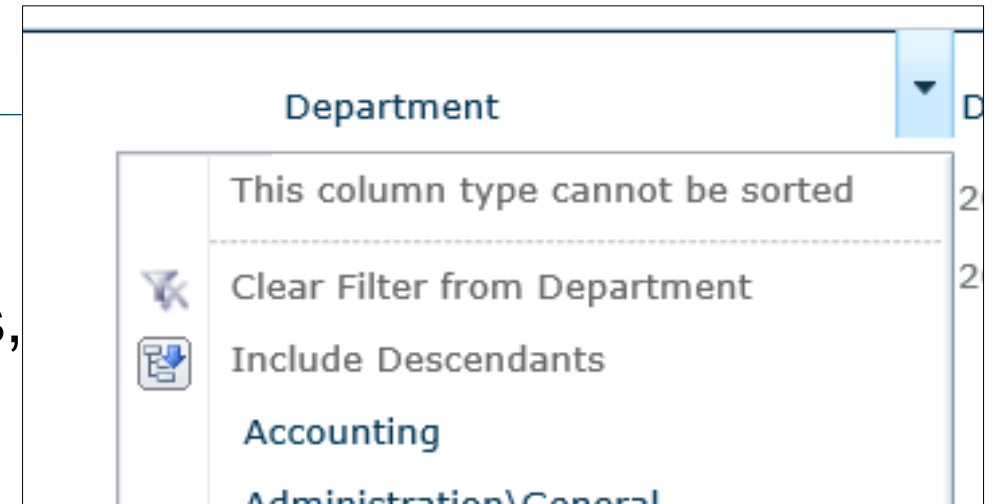
- A to Z
- Z to A
- Filter by
- Group by Document Type

Taxonomy use in SharePoint

Filtering and Sorting

- Filtering or sorting are enabled in settings, so not every column may be filtered or sorted.
- Filtering by a selected taxonomy term when multiple terms are tagged to the same document is still possible.

Filtered results include all documents that have been tagged with the selected term, even if tagged with additional terms.



Taxonomy use in SharePoint

Other customization in making taxonomy metadata available to filter

Home Offices ▾ Resources ▾ New Business Center ▾ Project Center Contract Center Business Tools ▾ QMS Our Brand My Site

Quick
Launch Navigation

Resources

- Forms
- Templates
- References\Guidelines

Tips on finding content

Tree View Navigation: View available terms and filter through content in the library by clicking on terms in the tree view.

Key Filters: Type in terms to filter content.

Column Filters: Sort through and filter content by using the dropdowns located at the top of the library.

References\Guidelines

Name	Reference Type	Topic	Department	Description
2019 Benefits Overview Guide	Brochure	Benefits	Human Resources	2019 Benefits Overview of all Employee Benefits
2020 OE Benefits Guide	Brochure	Benefits	Human Resources	2020 Open Enrollment Benefits Guide
Act 77 PA Letter	Informational List	Benefits	Human Resources	
Brand Constitution FOR WEB				
Caregiver Leave Policy		Other; Benefits	Human Resources	Caregiver Leave Policy and Request Forms
CFA - Claim Form	Guidelines	Benefits	Human Resources	Form to submit Claim for medical
CFA Registering An Account	Guidelines	Benefits	Human Resources	How to register an account with CFA for medical b
Check Request Policy				
Cisco Phone Guide	How to\Instructional	Training Material; Hardware; Phone	Learning\Development; Information Systems	Help with using Cisco desk phone
Commuter Quick Reference (006)	How to\Instructional	Benefits	Human Resources	Commuter Benefits and How To Enroll
Conference Room Information - Hunt Valley	Informational List		Administration\General	
Conference Room Phone Extensions - All Offices	Informational List	Phone	Administration\General	
Conference Room Phone	Informational List	Phone	Administration\General	

References\Guidelines

- Department
- Reference Type
- Topic

Key Filters

Topic

Taxonomy use in SharePoint

Quick
Launch Navigation

Resources

Forms

Templates

References\Guidelines

References\Guidelines

- Department
- Reference Type
- Topic

Key Filters

Topic

All Site Content

Tips on finding content

Tree View Navigation: View available terms and filter through content in the library by clicking on terms in the tree view.

Key Filters: Type in terms to filter content.

Column Filters: Sort through and filter content by using the dropdowns located at the top of the library.

Using drop-down options for Column Filters

References\Guidelines

Name	Reference Type	Topic	Department	Description
2019 Benefits Overview		Benefits	Human Resources	2019 Benefits Overview of all Employee Benefits
2020 OE Benefits Guide		Benefits	Human Resources	2020 Open Enrollment Benefits Guide
Act 77 PA Letter		Benefits	Human Resources	
Brand Constitution				
Caregiver Leave Policy		Other; Benefits	Human Resources	Caregiver Leave Policy and Request Forms
CFA - Claim Form		Benefits	Human Resources	Form to submit Claim for medical
CFA Registering An Account		Benefits	Human Resources	How to register an account with CFA for medical
Check Request Policy				
Cisco Phone Guide		Training Material; Hardware; Phone	Learning\Development; Information Systems	Help with using Cisco desk phone
Commuter Quick Reference		Benefits	Human Resources	Commuter Benefits and How To Enroll
Conference Room I			Administration\General	
Hunt Valley				
Conference Room P		Phone	Administration\General	
Extensions - All Offices				
Conference Room P		Phone	Administration\General	
Extensions - Hunt Valley				
Contract Process		Contracts\Agreements	Legal	
CRM Resource Guide		Proposal	Marketing	Features of Dynamics 365 CRM database

Creating or Editing Taxonomies in SharePoint

Taxonomy in SharePoint Term Store features

- Multiple taxonomies or multiple facets
- Unique identifiers on terms
- Hierarchical taxonomies, many levels deep
- Synonyms, also called “Other labels,” in support of tagging
- Scope notes or definitions in a “Description” field
- Type-ahead search on taxonomy terms and on synonyms for those tagging
- Option to create broader categories, which are not terms for tagging, to group terms
- Customizable sort order of terms at the same level

Creating or Editing Taxonomies in SharePoint

Taxonomy in SharePoint Term Store deficits

- Does not enforcement of standards (can create duplicates, circular references, same terms as both preferred and synonyms)
- Tagging user interface browse of hierarchies has very limited space in certain contexts (requires much scrolling)
- Hierarchies do not display in search refinements/facets by default
- Term Store taxonomies synonyms, which support tagging, are not also included end-user search
- No true polyhierarchy within a Term Set
- No associative relationships (related terms)

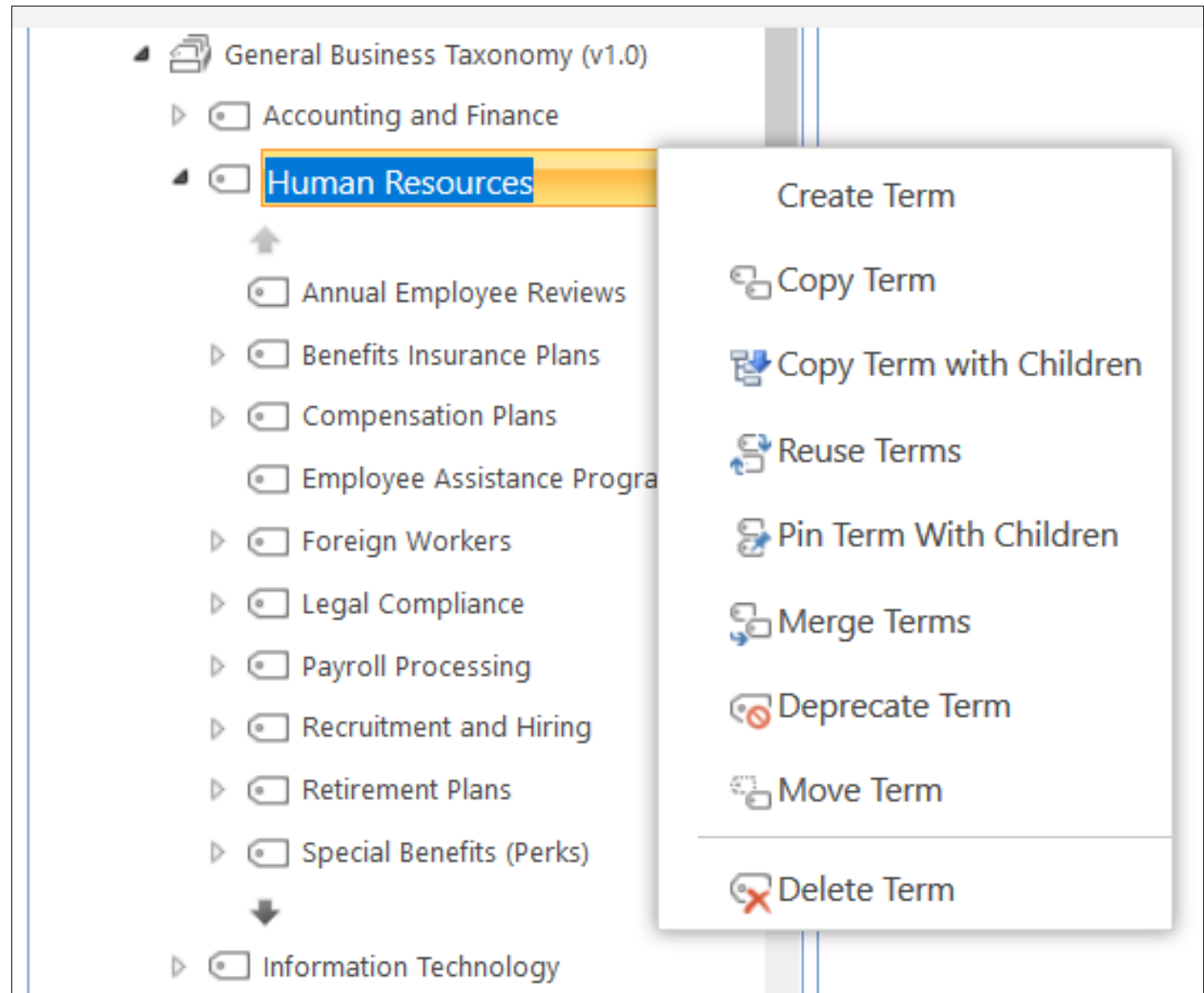
Creating or Editing Taxonomies in SharePoint

Editing the taxonomy
(terms sets and terms
in the Term Store)

Site Settings >

Site Administration >

Term store management



Creating or Editing Taxonomies in SharePoint

- Create hierarchical relationships
 - not too deep
 - when true in all circumstances
 - logical, expected, and helpful to the person tagging
- Write a descriptions (scope note)
 - if providing additional helpful guidance, not always
 - keeping them concise
- Create “other labels” (synonyms)
 - for variations those who tag are likely to look up
 - for approximately equivalent (in the context) or more specific concepts
 - that begin with a different word that might be looked up first

Creating or Editing Taxonomies in SharePoint

Because user can only do a search on the start of a term name, you need to add “other labels” with different words at the beginning.

Example: **Travel expenses**

Do *not* need "Other labels" for:

Travel claims

Travel costs

Travel expenditure

But *do* need "Other label" for

Expenses, travel

Creating or Editing Taxonomies in SharePoint

Option for short term lists, in addition to Term Store taxonomies: Choice Lists

- A short flat “pick list” of terms or categories
- No synonyms or hierarchies
- Good for broad categories
- Not shared with other sites like the Term Store

+ Add column ▾

- Single line of text
- Multiple lines of text
- Location
- Number
- Yes/No
- Person
- Date
- Choice**
- Hyperlink
- Picture
- Currency
- More...

Show/hide columns

Create a column

Learn more about column creation.

Name *

Description

Type

Choices *

Can add values manually ⓘ

Default value

Use calculated value ⓘ

Tagging with Taxonomies in SharePoint


- Pages and documents can be tagged with taxonomy terms and other metadata
- Manually or automated with additional software
- Formerly tagged when uploaded, now can be tagged later even if required.
- Complex manual tagging can be done with a template
- Tagging policy, guidelines, and training are important


Tagging with Taxonomies in

View of taxonomy as a term set for someone tagging










- Only up to 10 terms on the same level display. Clicking on the up/down arrows will display more.
- Right triangle/arrows indicate deeper levels.
- Larger font/grayed out, with tag at angle indicates this is a grouping category with narrower terms but itself cannot be used for tagging.

Select : Add Terms

 Make a request or send feedback to the Term Set manager.

 Taxonomy

↑

- ▶  economic and social development
- ▶  economic sectors
- ▶  economy
- ▶  education and training
- ▶  environment
- ▶  finance
- ▶  government and public administration
- ▶  health
- ▶  human rights

↓

Select >>

Tagging with Taxonomy

- Expanding the hierarchy.
- Mouse-over a term to read its description.
- Click on terms to select them, which will appear in the Select box below.
- Term set can be configured to allow multiple or only a single term selected when tagging.

The screenshot displays a taxonomy interface. At the top, a list of terms is shown with expandable icons: education, human resources development, lifelong learning, training (expanded), management development, and occupational qualification. A tooltip for 'vocational training' is visible, containing the text: "Activities aiming at providing the skills, knowledge and attitudes required for employment in a particular occupation, or group of related occupations, in any field of economic activity." and "Synonyms: industrial training". Below the tooltip, the term 'vocational training' is highlighted with an orange border. Further down, a list of other terms is shown with expandable icons: environment, finance, government and public administration, health, and human rights. At the bottom left, there is a blue button labeled 'Select >>'. At the bottom right, a text box contains the selected terms: 'teaching material; vocational training;'.

Tagging with Taxonomies in SharePoint

- Tagging-user can also search the taxonomy by entering words or phrases in the box next to “Select”.
- Matches to the word(s) in terms or synonyms (in parentheses) are highlighted in yellow.
- The term’s broader term path is shown following a colon, to give context.

Select >>

health

Suggestions

health [Taxonomy]

health insurance [Taxonomy:social protection:social security]

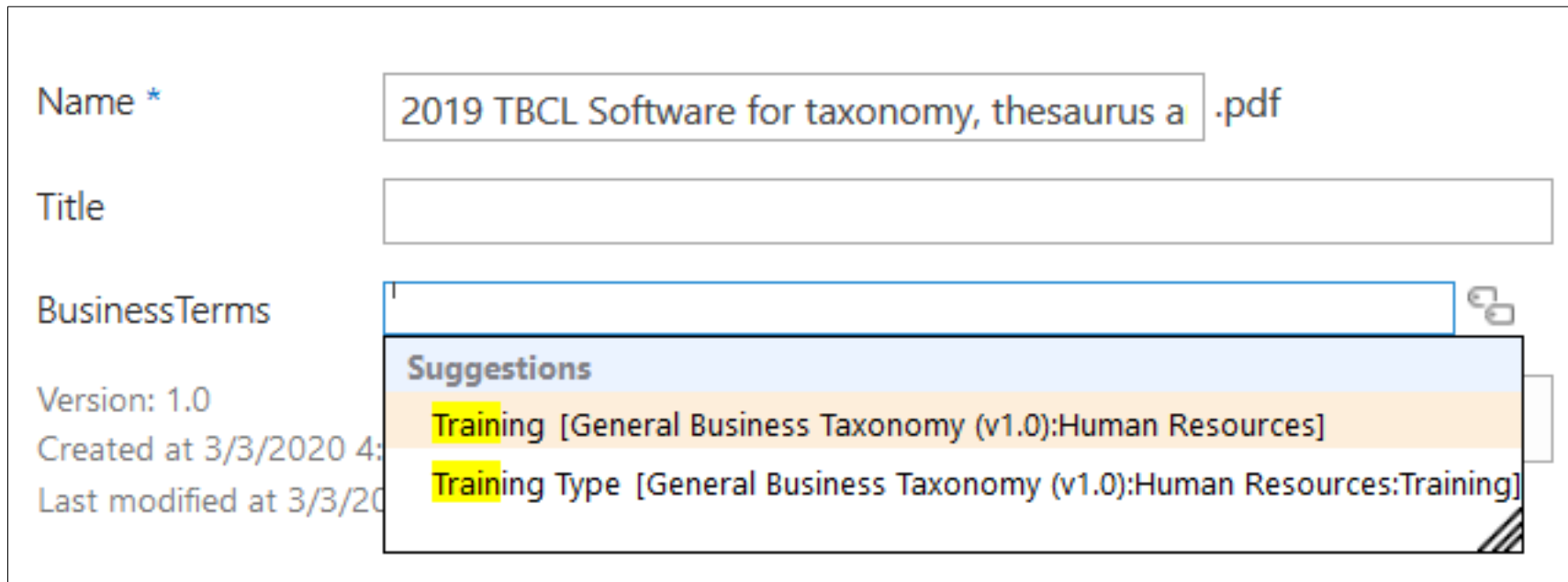
(health care benefit) [Taxonomy:social protection:social security]

medical care (health care system) [Taxonomy:health]

health policy [Taxonomy:health]

Tagging with Taxonomies in SharePoint

- Type-ahead auto-fill for searching and selecting taxonomy terms may also be implemented directly in the Properties pane



The screenshot shows the SharePoint Properties pane for a document. The 'Name' field contains '2019 TBCL Software for taxonomy, thesaurus a .pdf'. The 'BusinessTerms' field is active, and a dropdown menu is open showing suggestions. The suggestions are:

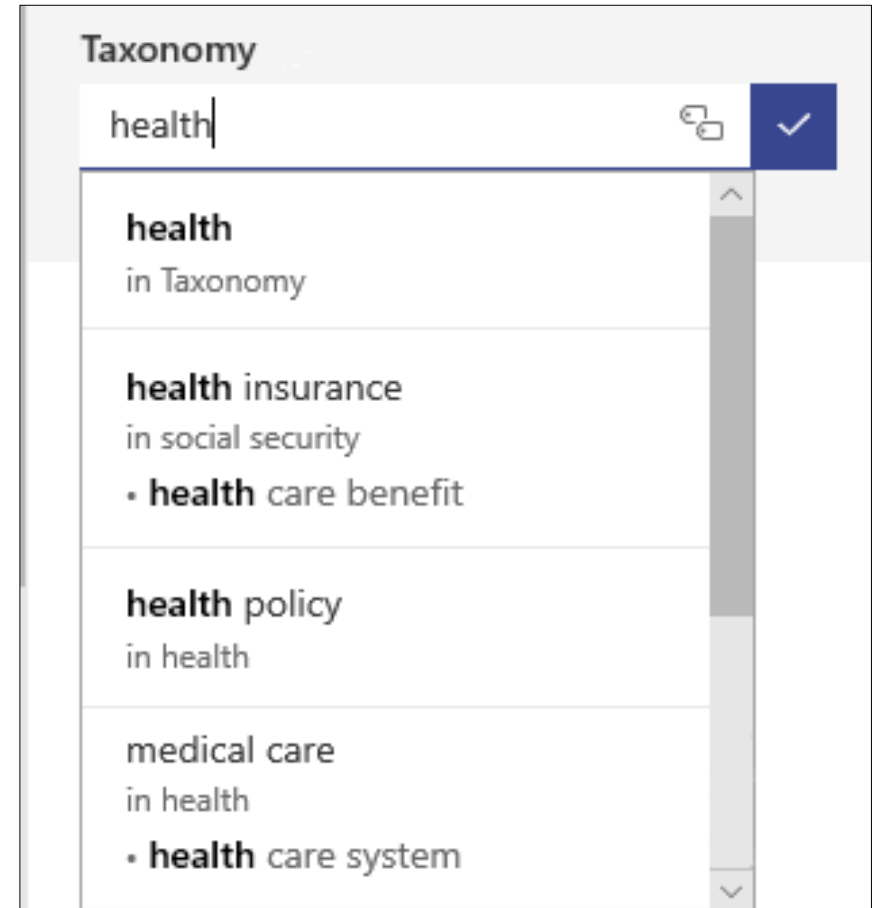
- Training [General Business Taxonomy (v1.0):Human Resources]
- Training Type [General Business Taxonomy (v1.0):Human Resources:Training]

Other fields visible include 'Title', 'Version: 1.0', 'Created at 3/3/2020 4:', and 'Last modified at 3/3/20'.

Office 365 view

Tagging with Taxonomies in SharePoint

- Type-ahead auto-fill for searching and selecting taxonomy terms may also be implemented directly in the Properties pane,
- It only lacks the full hierarchical path of each term, displaying only the immediate broader terms.



Taxonomy Governance

Taxonomy Governance

- Decide whether the metadata property/term set is required or not
- Decide whether multiple or only a single term is permitted from a term set
- Create Taxonomy editorial policy/guidelines for maintenance
 - Criteria and process for approving the addition of new terms
 - Term format and style guidelines
- Create tagging policies, guidelines and instructions
- Determine and role and department that owns and maintains the global taxonomies and metadata and provides guidance for local taxonomies

Contact/Resources

Heather Hedden
Hedden Information Management

Carlisle, MA USA

www.hedden-information.com

accidental-taxonomist.blogspot.com

heather@hedden.net

+1-978-467-5195

<http://books.infotoday.com/books/Accidental-Taxonomist-2nd-Edition.shtml>

Use code TAT20 through 30 April for 25% discount