Knowledge Organization Solutions

categorize
organize
discover

synaptica
www.synaptica.com
Knowledge organization lays the foundation for building smart search and discovery applications. Knowledge Organization Systems (KOS) use ISO/W3C data models to centralize and standardize enterprise terminology. Concepts and names are unambiguously labelled and defined, then organized within hierarchical and associative schemes called taxonomies.

KOS help users to understand how concepts, people, places, products, processes and organizations relate to one another. They may describe high-level groupings and associations, as well as highly specific properties and logical dependencies.

Categorization enables an enterprise to sort and rank content based on what it is about. Concepts and names in the KOS provide the metadata values for tagging documents and database records. The tagging process leverages the semantic definitions and structure of the KOS to contextualize the meaning of the words and phrases found in documents.

Aboutness algorithms then rank the most relevant concepts and names in each document. Generalization algorithms group content into broad categories, while salience algorithms identify what sets particular documents apart from the rest.

Knowledge organization and categorization combine to deliver a context-aware semantic search and discovery experience. Semantic search returns more complete and accurate search results with fewer false matches or missing documents. KOS also support rich end-user discovery experiences including browsable navigation, faceted query refinement, and the ability to recommend related content.

Clearly defined terminology, accurately tagged metadata, and logically structured concept schemes empower users with the tools for precision search and retrieval as well as the discovery of latent knowledge.
Enterprise Taxonomy provides the foundation for building smart search and discovery applications.

Synaptica KMS is an award-winning, robust and highly scalable enterprise taxonomy management system. KMS delivers many business benefits.

- Improve retrieval by mapping terms to alternative synonyms, aliases and acronyms.
- Improve precision by disambiguating concepts and names that have multiple meanings.
- Improve discovery by providing navigational paths to find broader, narrower and related content. Enable query refinement via faceted search filters. Validate data using authoritative resources.
- Reduce the time and money spent searching for information. Reduce corporate risk by improving accuracy and completeness.
- Improve customer satisfaction through enhanced user experiences.

Switch seamlessly between taxonomy editing and categorization rule editing views.

Enterprise Taxonomy bridges the gap between the language people use for search and browse, and the language found in documents.
Text Analytics uses natural language processing to identify and extract concepts and named entities (people, places, products, organizations, etc.) found inside enterprise content. Categorization indexes and classifies content using authoritative concepts and named entities defined within enterprise taxonomies. Aboutness algorithms rank the most relevant and salient concepts and names within individual documents and across collections.

Synaptica Text Analytics Platform (TAP) is fully integrated with Synaptica’s enterprise taxonomy management system. TAP’s innovative design tackles common pain-points.

- Compress the learning curve through simple user interfaces that help taxonomists become fluent in categorization without having to learn esoteric syntax.
- Categorization rules are fully transparent and easily editable. The no-black-box principle helps users understand how auto-categorization works and to refine indexing rules.
- Integrate systems and synchronize the taxonomy management and categorization processes. The no-silo approach reduces complexity and improves productivity.

Automatically suggests rules based on taxonomy and thesaurus semantics.

Build document type definition templates to improve weighted relevancy ranking.

Review full text documents with in-line tagging mark-up and contextual scores.

QC accept/reject machine indexing and refine indexing rules where necessary.

Create a production pipeline for building search indexes and tagging enterprise content using taxonomy-based metadata.
Linked Data is a powerful new industry standard data model for designing and building Knowledge Organization Systems (KOS).

Synaptica Graphite is a powerful new tool that simplifies the creation and management of enterprise Linked Data, delivering several key benefits.

- Reduce costs and speed up project deliverables by reusing a vast and rapidly growing library of public domain property vocabularies (ontologies) and value vocabularies (taxonomies).
- Build smarter search and discovery applications by leveraging the logical dependencies defined by properties, predicates and classes.
- Simplify systems integrations by adopting open industry standard data models and portable data interchange formats.

Graphite: simple, reusable building blocks for creating and managing enterprise Linked Data

Graphical UI and workflow.
Curate enterprise and public domain ontology predicates and classes.
Quickly design KOS schemes using plug-and-play predicates and classes.
Create and manage taxonomies and other Linked Data KOS schemes with drag-and-drop ease-of-use.

Generate RDF triples and publish Linked Data graphs.
Synaptica is your end-to-end solution partner. Our mission is to help you organize, categorize and discover the knowledge in your enterprise.

As well as providing robust enterprise-class software tools, we also provide a broad range of complementary professional services. Our solution team includes an international network of independent thought-leaders with expertise in: knowledge management, information architecture, UX, taxonomy, ontology, Linked Data, metadata, text-analytics, categorization, natural language processing, chatbots, SharePoint and search.

Synaptica has over two decades of proven past performance supporting global corporations, government agencies and public institutions, including many extremely high-scale and complex knowledge organisation systems.

We listen carefully to the individual needs of every client, and then utilize industry standards to design systems that are optimized for each client’s specific business applications and use-cases.

New industry standards are constantly emerging as technology evolves. Synaptica works closely with the standards development community and pursues an innovative research and development program. By fostering long-term partnerships with our clients, we stay focused on their challenges, enabling us to develop new capabilities to help them win and maintain a leadership position in their domain.

Read our customer stories and insights at www.synaptica.com/insights