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Yang, Li and Yejun Wu. 2019. "Creating a Taxonomy of Earthquake Disaster Response and Recovery for Online Earthquake Information Management." *Knowledge Organization* 46(2): 77-89. 43 references. DOI:10.5771/0943-7444-2019-2-77.

**Abstract:** The goal of this study is to develop a taxonomy of earthquake response and recovery using online information resources for organizing and sharing earthquake-related online information resources. A constructivist/interpretivist research paradigm was used in the study. A combination of top-down and bottom-up approaches was used to build the taxonomy. Facet analysis of disaster management, the timeframe of disaster management, and modular design were performed when designing the taxonomy. Two case studies were done to demonstrate the usefulness of the taxonomy for organizing and sharing information. The facet-based taxonomy can be used to organize online information for browsing and navigation. It can also be used to index and tag online information resources to support searching. It creates a common language for earthquake management stakeholders to share knowledge. The top three level categories of the taxonomy can be applied to the management of other types of disasters. The taxonomy has implications for earthquake online information management, knowledge management and disaster management. The approach can be used to build taxonomies for managing online information resources on other topics (including various types of time-sensitive disaster responses). We propose a common language for sharing information on disasters, which has great social relevance.

Zhang, Chengzhi, Hua Zhao, Xuehua Chi and Shuitian Ma. 2019. "Information Organization Patterns from Online Users in a Social Network." *Knowledge Organization* 46(2): 90-103. 37 references. DOI:10.5771/0943-7444-2019-2-90.

**Abstract:** Recent years have seen the rise of user-generated contents (UGCs) in online social media. Diverse UGC sources and information overload are making it increasingly difficult to satisfy personalized information needs. To organize UGCs in a user-centered way, we should not only map them based on textual topics but also link them with users and even user communities. We propose a multi-dimensional framework to organize information by connecting UGCs, users, and user communities. First, we use a topic model to generate a topic hierarchy from UGCs. Second, an author-topic model is applied to learn user interests. Third, user communities are detected through a label propagation algorithm. Finally, a multi-dimensional information organization pattern is formulated based on similarities among the topic hierarchies of UGCs, user interests, and user communities. The results reveal that: 1) our proposed framework can organize information

from multiple sources in a user-centered way; 2) hierarchical topic structures can provide comprehensive and in-depth topics for users; and, 3) user communities are efficient in helping people to connect with others who have similar interests.

Golub, Koraljka. 2019. "Automatic Subject Indexing of Text." *Knowledge Organization* 46(2): 104-121. 126 references. DOI:10.5771/0943-7444-2019-2-104.

**Abstract:** Automatic subject indexing addresses problems of scale and sustainability and can be at the same time used to enrich existing metadata records, establish more connections across and between resources from various metadata and resource collections, and enhance consistency of the metadata. In this work, automatic subject indexing focuses on assigning index terms or classes from established knowledge organization systems (KOSs) for subject indexing like thesauri, subject headings systems and classification systems. The following major approaches are discussed, in terms of their similarities and differences, advantages and disadvantages for automatic assigned indexing from KOSs: "text categorization," "document clustering," and "document classification." Text categorization is perhaps the most widespread, machine-learning approach with what seems generally good reported performance. Document clustering automatically both creates groups of related documents and extracts names of subjects depicting the group at hand. Document classification re-uses the intellectual effort invested into creating a KOS for subject indexing and even simple string-matching algorithms have been reported to achieve good results, because one concept can be described using a number of different terms, including equivalent, related, narrower and broader terms. Finally, applicability of automatic subject indexing to operative information systems and challenges of evaluation are outlined, suggesting the need for more research.

Zeng, Marcia Lei. 2019. "Interoperability." *Knowledge Organization* 46(2): 122-146. 70 references. DOI:10.5771/0943-7444-2019-2-122.

**Abstract:** Interoperability refers to the ability of two or more systems or components to exchange information and to use the information that has been exchanged. This article presents the major viewpoints of interoperability, with the focus on semantic interoperability. It discusses the approaches to achieving interoperability as demonstrated in standards and best practices, projects, and products in the broad domain of knowledge organization.