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Abstract: A comprehensive set of evaluation criteria, named OnE, for evaluating ontologies has been proposed in this paper. Each criterion of OnE has been defined in a way such that together they are capable of evaluating any ontology from all aspects. The process of using OnE for evaluation has been demonstrated by evaluating chemical ontologies. Also, for this purpose, an ontology on the domain of agricultural chemicals has been constructed by following the human-centric faceted approach for ontology construction (HCFOC) and has been evaluated using OnE. The results obtained after the evaluation has provided insights about the ontologies. The constructed ontology aims to support any information system trying to support farmers in the process of decision making while selecting chemicals for use in agriculture. Also, it is envisaged that the demonstrated ontology and the set of evaluation criteria named OnE will redefine ontology evaluation and make it easy while making a strong impact on ontology developers.


Abstract: The lack of standardization in the production, organization and dissemination of information in documentation centers and institutions alike, as a result from the digitization of collections and their availability on the internet has called for integration efforts. The sheer availability of multimedia content has fostered the development of many distinct and, most of the time, independent metadata standards for its description. This study aims at presenting and comparing the existing standards of metadata, vocabularies and ontologies for multimedia annotation and also tries to offer a synthetic overview of its main strengths and weaknesses, aiding efforts for semantic integration and enhancing the findability of available multimedia resources on the web. We also aim at unveiling the characteristics that could, should and are perhaps not being highlighted in the characterization of multimedia resources.


Abstract: S.R. Ranganathan is credited with the introduction of the term “facet” in the field of knowledge organization towards the middle of the twentieth century. Facets have traditionally been used to organize document collections and to express complex subjects. In the digital world, they act as filters to facilitate navigation and improve retrieval. But the popularity of the term does not mean that a definitive characterization of the concept has been established. Indeed, several conceptualizations of the facet co-exist. This article provides an overview of formal and informal definitions found in the literature of knowledge organization, followed by a discussion of four common conceptualizations of the facet: process vs product, nature vs function, object vs subject and organization vs navigation.


Abstract: The modern classification of mathematical subjects occurred within the larger framework of library classification, a project receiving sustained attention in the period from 1870 to the present. The early work of the library cataloguers was carried out against the background of a broad nineteenth-century interest in the classification of knowledge. We explore different views during this period concerning the position of mathematics in the overall scheme of knowledge, the scope of mathematics and the internal organization of the different parts of mathematics. We examine how mathematical books were classified, from the most general level down to the level of particular subject areas in analysis. The focus is on the Library of Congress Classification in its various iterations from 1905 to the present. The article ends with an examination of the Mathematics Subject Classification Scheme employed today by reviewing services Mathematical Reviews in the United States and Zentralblatt in Germany.

Abstract: This article builds on our previous work, when we critically analyzed some aspects of the research evaluation system valid in the Czech Republic until 2017. This article also focuses on the evaluation of articles in journals with IF, but develops the relationship between so-called RIV-points allocated by the system and the amount of work done, using different models of work distribution. The results generally support the conclusions of the original study.