

MODELLING OF DIGITAL INFORMATION ENVIRONMENT: INTERFACES OF A DIALOGUE BETWEEN METADATA AND ONTOLOGY

Description

In the modern setting marked by the information explosion, it becomes indispensable that highly distributed information environments, like the Web, share and collaborate with organized and structured information. That fact has challenged professionals from several knowledge areas, mostly from Information Science, to search for solutions for information treatment in those environments, as a way to ensure an efficient search and retrieval of information. Metadata, description schemes, conceptual models for information environments modelling and ontologies constitute central elements and objects of this investigation. To that end, this study starts with these questions: What would be the relation between metadata and ontology in the development of digital information environments? At what points can metadata and ontology provide the relationships between information resources in the establishment of interoperability in digital environments? From the principle that the epistemological and methodological foundations of description forms of resources linked to the technological context, marked by Linked Data, this initiative will ensure the consistency and persistence of information resources in the limiting and structuralist layers of the digital information environment, extensively, in the theoretical field of the construction of the Semantic Web and in carrying out semantic relationships. In this way, the objective is to analyze, in light of the foundations of information representation forms, in what points the metadata and ontology meet the space for discussion from their theoretic bases for modelling digital information environments. As specific objectives the study proposes to: a) analyze the scientific literature available that underpins the principles of digital information environment modelling; b) revisit the theoretical and methodological point of view, description tools and interlocution with ontology; c) identify, from a creation and editing of ontology and knowledge base environment, elements that characterize the role of description in catalogues and bibliographic systems; d) study the conceptual models of data in the bibliographic dominion (FRBR) and its relation to the RDF model for interoperability in digital information environments. The research will follow exploratory and descriptive methods, with a qualitative approach, based on Peterson's (1996) perspectivism, supported by the identification of theoretical and methodological relations and the conceptual modelling processes of digital environments. The study is expected to contribute to critical analysis of performance efficacy of the technological tools studied in the process of information retrieval and identification of information resources.

Research Area: Technology, Information and Representation

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