



ABSTRACT

Nowadays many department (community) are thinking how to get more knowledges and metadata by linking more systems from other community. There are great challenges to make all systems organizing knowledge and sharing metadata – to make it easy searched, indexed and used in different context. Metadata is data about data. Metadata describes how and when and by whom a particular set of data was collected, and how the data is formatted. Metadata is essential for understanding information stored in data warehouse and has become increasingly important in Web applications. In this dissertation we will focus on metadata in specific domain - ‘Poverty’ and ‘Library’. For some community “Poverty” refers the state of one who lacks a certain amount of material possessions. For other community, “Poverty” refers to the deprivation of basic human needs, which commonly includes food, water, sanitation, clothing, shelter, health care and education. Regardless of the various definitions of poverty, in this dissertation we will focus on managing metadata in “Poverty” with many different terms therein. The issue of synonyms can occur in a variety of case study, for example, the Library case study. Many academic libraries are actively involved in building institutional repositories of the institution's books, papers, theses, and other works which can be digitized. Many of these repositories are made available to the general public. Each digital library has the right to use the list of terms it deems proper. Some use the term standard and some use the terms that *have not been standardized*. Some terms that have been standardized are available online in DCMI. DCMI¹ is a set of vocabulary terms which can be used to describe resources for the purposes of discovery especially in Library case study. Ontology Mapping is the process of relating similar concepts or relations from different sources through some equivalence relation. Mapping allows finding correspondences between the concepts of two ontologies. If two concepts correspond, then they mean the same thing or closely related things. Currently, the mapping process is regarded as a promise to solve the problem between

¹ <http://dublincore.org/documents/dcmi-terms/>



ontologies since it attempts to find correspondences between semantically related entities that belong to different ontologies. It takes as input two ontologies, each consisting of a set of components (classes, instances, properties, rules and axioms). Based on the presented reasons, we believe that ontologies with common terms and common concepts are very important in a metadata sharing process.

Keywords: Knowledge; Perception; Terminology; Ontology; Common Ontology; Mapping.