Preliminary study on semantic knowledge management model collaborative learning

ABSTRACT

Knowledge management (KM) is about collecting, organizing, and storing the knowledge assets of an organization to make it accessible for future knowledge reuse and application. Effective knowledge management system (KMS) should be able to deliver relevant knowledge to the right knowledge user at the right time. Yet, existing KMS is limited in several ways, and still largely relies on human efforts to access, extract and filter information pertinent to their knowledge need. Successful KMS requires the identification of proper technology designed with the right system features to support the KM activities, hence achieve the goals of KM. Due to this motivation, this paper aims to discuss the application of semantic technology to enhance the KMS and propose a semantic KM model to support collaborative learning environment. This preliminary model has been proposed based on the review of the literatures on KM, KMS, semantic technology and collaborative learning environment and the verification of the model components will be done using a questionnaire survey. A pilot survey was conducted to several academicians in Higher Learning Institutions (HLIs) in Malaysia to validate the survey instruments before the actual survey is carried out. Rasch Unified Measurement Method (RUMM) is used to analyze the pilot data. As a result, Person reliability is found to be quit high, but Item reliability suggested fair data. A few respondents and items were identified as misfits with distorted measurements. Some problematic questions are revised and the negative questions are considered to be reworded into positive questions.

Keyword: Knowledge management; Collaborative learning; Knowledge management system; Semantic