Data warehouse conceptual design - a literature survey

ABSTRACT

Data Warehouse (DW) can provide an excellent approach in transforming Online Transaction Processing (OLTP) data into useful and reliable information to support organization's decision making. As such, it can be a basis for data analysis techniques such as multidimensional analysis and data mining. However, DW design process has been known as a complex task that requires systematic and structured approach to guarantee its success. Therefore, there have been various methodologies proposed to carry out the design process which can be classified into requirement-driven, data-driven and hybrid approaches. In this study, a literature survey was made to obtain related works by a set of pertinent key words related to DW conceptual design. The objective of this survey is to provide the state of the art of DW conceptual design methodologies in narrative and summarized forms. The main contribution is to provide understanding of the trend, issues and solutions proposed to date in DW conceptual design and along the way to discover the novel and great contribution works that form an important basis in the DW conceptual design.

Keyword: Data warehouse; Conceptual design; Multidimensional model; Surve; Provide; DW conceptual