Abstract Details

Title: Domain Level Analysis of Data Mart Quality Factors along with Best-fit Tests to Minimize Defects

Authors: Payal Pahwa and Renu Miglani

Abstract: In modern epoch Data Warehouse is a crucial business application and used extensively by management in various types of organizations to take strategic decisions. A huge amount of data is transformed, incorporated, structured, purified and assembled during the construction and expansion of DW. Decision making in an organization relies heavily on the accurate retrieval of facts. Any faults in these facts results in business loss. DW testing is an activity that is intended for evaluating quality of a DW and also for improving it, by identifying these faults. Therefore testing is a crucial phase of any DW development procedure to improve its quality. It is too difficult, too costly, too impolitic and requires too much more efforts to test the huge amount of data warehouse, for most of the organizations. Therefore the concept of data mart arises. Testing of a data mart is much easier and manageable process. Data Mart testing cannot test the quality of data directly instead it measures the related factors that give us the estimation of quality. In our paper we have discussed various quality factors related with different domains of DW/Data Mart and also walk through some of the basic tests to improve the quality. As a single test can measure more than one quality attributes, so any organization can select best fit test according to their requirements and importance of the particular quality factor.

Keywords: Data mart, Data Warehouse, Data Mart testing, Data Mart quality, Data Mart quality factors.