ABSTRACT

ANALYSIS AND IMPLEMENTATION ARCHITECTURE OF DATA QUALITY MANAGEMENT WITH OPEN SOURCE BASED

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Data is a very valuable aspect, especially for an organization. A data must have good quality because data can provide business value as a decision maker. But in reality today, many companies and SOEs do not have good quality data in their management. This is often caused by large organizations, data requirements can be very diverse. At the departmental and division level, each requires a different business process and IT system, so it directs to create a specific application system with various platforms. This situation causes the amount of data to repeat and become inconsistent. To overcome this problem, the architecture is needed to carry out data quality management that can carry out data transformation paths such as data profiling and data cleansing. This method can be done with various types of data quality applications, both paid and opensource. The high price of paid applications makes many companies want an open application in managing data integration. In this study researchers developed an application architecture for data quality by applying methods to the data integration process. One of them is the ETL process which later can run data transformation algorithm features such as profiling data and data cleansing. The results of this study are expected to meet the needs of the company for the needs of opensource data quality management applications. In testing the results of this study using a case study method to test based on a specific scope.

Keywords: data, data profiling, open source, data cleansing, data integration, data quality, data quality management