

A NEW DESIGN METHODOLOGY FOR METADATA OF MASTER DATA MANAGEMENT SYSTEM

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ABSTRACT. If companies are to survive in an increasingly competitive global marketplace, they must find ways not only to use but to exploit this useful enterprise data. As a popular technology, the state of the art MDM solution is claimed by the software company such as IBM, Oracle to provide the quality data for decision making. This solution is based on completing operational information system. However, most of middle and small companies do not complete information system in China. To construct a MDM system, the metadata in a MDM system should be designed first. So a new design methodology that is purposed in this paper can capture metadata of master data from the enterprise business process. The design procedure consists of four steps including business processes analysis, metadata of master data recognition, metadata of master data integration, and metadata of master data representation. Following the methodology, the metadata of master data can be designed easily and MDM system can be set up before the construction of operational system. The concepts in this paper are not specific to the Chinese industry only. It can be effectively adapted to other enterprises which have not set up any information system. At the same time, a universal mechanism in the management of MDM system that maintaining data accuracy, completeness, and consistency is established, while utilizing master data across different operational and recording system.

Keywords: Data quality, Information silo, Master data management, Metadata of master data

1. Introduction. In the fragmented and fast-paced world, enterprise data has become even more daunting. However, these data resources will not provide the maximum benefit unless they are shared throughout the enterprise to promote better coordination of enterprise activities and improved decision making [1,2]. Once the information is extracted, data analysis can be performed, and analysis result can be given for decision makers as references [3]. So, the quality of data is important to enterprise decision – making, but the resource to be utilized to maintain the enterprise data quality is limited. The solution which focuses on solving this problem is managing the quality of important data (Master Data) in limited resource.

Master Data (MD) is data that are shared and used by several systems and business processes, it describes one or more attributes of core business entities such as customers, suppliers, locations, products, inventory [4-7]. MD is not only the “single” view that enterprise need to management, but also the “right” view – the right view of the information, delivered to the right people and processes at the right time.