Contents lists available at ScienceDirect

Mathematical and Computer Modelling

journal homepage: www.elsevier.com/locate/mcm



Data resource management according to customer requirements

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ARTICLE INFO

Article history: Received 11 August 2010 Accepted 4 November 2010

Keywords: Data resource management On-demand customizing Customized database table structure Data resource analysis

ABSTRACT

Data resources have the characteristics of heterogeneity and differentiation; with increasing demand and the development of the scale of application systems, data resources must be constantly enriched and expanded. The traditional data resource management model has been unable to meet users' requirements of flexibility, timeliness and expansion in data resource management, which has led to major bottlenecks in system applications, cost increase and lower efficiency. We propose a method of data resource management using on-demand customizing that can be used to solve the problems stated above: on the basis of analysis of the data resources, the flexible management and customization of data resources is realized, eliminating the tight coupling between information system data storage programs and data resources, and providing transparent, flexible data resource management of information systems.

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1. Introduction

Data lie at the center of enterprise applications, and the majority of enterprise application systems need to access data [1]. Currently, with the differences of history, geography, industry, and application, there exist all kinds of data resource management systems and software systems on the Internet. According to needs, these management and software systems store data resources in a database in the form of tables; through a user-friendly graphical interface, data resources can be managed. However, when there is a need to manage a data resource which is not already set in the system, the database tables need to be redesigned and corresponding codes need to be written by programmers to complete the operation. As a data resource is constantly enriched and expanded, the methods mentioned above not only limit the timeliness and scalability of data resource management, but also increase development costs.

Nowadays, because of the increasing fierce competition in the market, competition among enterprises has turned into time based competition [2,3]. However, with the increase of the number of data resource types and the complexity of structures, a trend of extending system development cycles has emerged. The traditional data management model has been unable to meet the development requirements. An on-demand customizing data resource management model has emerged in the process of change, which is aimed at providing a personalized custom product as well as data management efficiency and reduced cost. Furthermore, the contradictory requirements of high efficiency, low cost, and personalized service will make product information varied and complex. Therefore, technological support for on-demand customizing data resource management is urgently needed.

In order to overcome the shortage of existing data resource management systems and the problem of software which cannot adapt to changes in demand for data resource management, a method of data resource management on-demand

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^{0895-7177/\$ –} see front matter s 2010 Elsevier Ltd. All rights reserved. doi:10.1016/j.mcm.2010.11.013