

Data Mart

S.M. Darraj Hossain
darrajit@yahoo.com

The conventional vision of a data mart is of a cleansed, historical, queryable data source for reports and ad hoc queries. And, of course, these reports are used directly for business decisions. The data mart need support only IT-developed, standard reports. These reports change much more slowly than ad hoc queries, but occasionally they change in leaps and bounds, by releases separated by months if not years. What's

tough from the data mart perspective is that this is a one-of-a-kind construct that probably has to stay in this form. So we not only need to have a good data pipeline into spreadsheets, we need to assist the end user with training and data quality issues as well.

In my opinion, the standard report style of usage lends itself much better to using the data mart as a source for downstream applications, compared to the ad hoc style of usage.

Also, the fact that the data mart already produces agreed-upon, cleansed and trusted, true history-based summary values of business measures may be of great value for applications dedicated to financial analysis, budgeting, forecasting, and statutory reporting. The designers and developers of such applications downstream from our data mart would, of course, prefer not to reinvent the wheel.

In an environment where standard reports are predominant, there is a stronger possibility that the data mart will not be at the end of the information pipeline. In particular, any downstream application which is itself

storing and manipulating data over long periods of time - such as a financially oriented application - needs to depend on stable and specific calculations for various atomic and aggregated measures that it sources from the mart.

Although the concept of data marting, and the architectural model of combining a single warehouse and multiple marts into an enterprise-wide decision support environment

Data marting, conversely, deals almost exclusively with servicing a distinct community of knowledge workers. As a model, data marting ignores the practical difficulties of protecting production systems from the impact of extraction, focusing instead on the knowledge worker's need for information from diverse production systems consolidated into a model that reflects the knowledge worker's understanding of the business.

By creating a multitiered decision-support model that blends warehousing and marting, organizations can achieve the long-term benefits promised by data warehousing without compromising the immediate business requirements of data-hungry knowledge workers.

