

Design Tip #98 Focus on Data Stewardship

By Bob Becker

Delivering consistent data is like reaching the top of Mount Everest for most data warehouse initiatives, and data stewards are the climbers who fearlessly strive toward that goal. Achieving data consistency is a critical objective for most DW/BI programs. Establishing responsibility for data quality and integrity can be extremely difficult in many organizations. Most operational systems effectively capture key operational data. A line in the order entry system will typically identify a valid customer, product, and quantity. Optional fields that may be captured at that point, such as user name or customer SIC code, are sometimes not validated, if they get filled in at all. Operational system owners are not measured on the accuracy or completeness of these fields; they are measured on whether or not the orders get taken, filled, and billed. Unfortunately, many of these operationally optional fields are important analytic attributes. Quality issues or missing values become significantly magnified under the scrutiny of hundreds of analytic business users with high powered query tools.

Identifying and dealing with these issues requires an organizational commitment to a continuous quality improvement process. Establishing an effective data stewardship program is critical to facilitating this effort. The primary goal of a data stewardship program is the creation of corporate knowledge about its data resources to provide legible, consistent, accurate, documented, and timely information to the enterprise. Stewardship is also tasked with ensuring that data is used correctly and to its fullest extent, but only by those individuals authorized to leverage the data. Lack of consistent data across the organization is the bane of many DW/BI system efforts. Data stewardship is a key element in overcoming consistency issues.

Unfortunately, you can't purchase a wonder product to create conformed dimensions and miraculously solve your organization's master data management issues. Defining master conformed dimensions to be used across the enterprise is a cultural and geopolitical challenge. Technology can facilitate and enable data integration, but it doesn't fix the problem. Data stewardship must be a key component of your solution.

In our experience, the most effective data stewards come from the business community. As with technology, the DW/BI team facilitates and enables stewardship by identifying problems and opportunities and then implementing the agreed upon decisions to create, maintain, and distribute consistent data. But the subject matter experts in the business are the ones rationalizing the diverse business perspectives and driving to common reference data. To reach a consensus, senior business and IT executives must openly promote and support the stewardship process and its outcomes, including the inevitable compromises. For more information on how to set up a data stewardship initiative, take a look at this column: [Data Stewardship 101](#) (*Intelligent Enterprise*, June 1, 2006).