



## Kimball Design Tip #49: Off The Bench

By Margy Ross

Intelligent Enterprise published an article entitled "The Bottom-Up Misnomer" in their latest September 17th issue. I wrote this article with Ralph several months ago. While it's been working through the publishing pipeline, an industry newsletter has sparked more bottom-up versus top-down discussion. Everyone seems to feel qualified to explain the Kimball approach. Unfortunately, they sometimes spread misunderstandings and continue to blur the issues. While we are certainly not the expert source for a detailed explanation of the corporate information factory (CIF), we do feel it's our responsibility to clarify our methods rather than watching from the sidelines.

When we wrote The Data Warehouse Lifecycle Toolkit, we referred to our approach as the Business Dimensional Lifecycle. In retrospect, we should have probably just called it the Kimball Approach as suggested by our publisher. We chose the Business Dimensional Lifecycle label instead because it reinforced our core tenets about successful data warehousing based on our collective experiences since the mid-1980s.

- 1) First and foremost, you need to focus on the business. If you're not enabling better business decision-making, then you shouldn't bother investing resources in data warehouses and business intelligence. Focusing on the business does NOT imply that we encourage the development of isolated data stores to address specific departmental business needs. You must have one eye on the business' requirements, while the other is focused on broader enterprise data integration and consistency issues.
- 2) The analytic data should be delivered in dimensional models for ease-of-use and query performance. We recommend that the most atomic data be made available dimensionally so that it can be sliced-and-diced "any which way." As soon as you limit the dimensional model to pre-summarized information, you've limited your ability to answer queries that need to drill down into more details.
- 3) While the data warehouse will constantly evolve, each iteration should be considered a project lifecycle consisting of predictable activities with a finite start and end.

Somewhere along the line, we were tagged as being a "bottom-up" approach. Perhaps this term was associated because of our strong alignment with the business. Unfortunately, the label fails to reflect that we strongly recommend the development of an enterprise data warehouse bus matrix to capture the relationships between the core business processes / events and core descriptive dimensions BEFORE development begins. These linkages ensure that each project iteration fits into the larger puzzle.

Finally, we believe conformed dimensions (which are logically defined in the bus matrix and then physically enforced through the staging process) are absolutely critical to data consistency and integration. They provide consistent labels, business rules/definitions and domains that are re-used as we construct more fact tables to integrate and capture the results from additional business processes / events.

So these are the concepts that we hold near and dear. I know I'm biased, but I frankly don't see that

they warrant debate. If you want to learn more, check out the Intelligent Enterprise "Bottom-Up" article at <http://www.ralphkimball.com/html/articlesfolder/articlesbydate.html> . Better yet, join us for a Kimball University class where you'll learn from and interact directly with the people who developed the techniques.