Book Review

Business Intelligence Roadmap: The Complete Project Lifecycle for Decision-Support Applications

by Larissa T. Moss and Shaku Atre ISBN 0-201-78420-3 © 2003 Pearson Education, Inc., Larissa Moss, and Shaku Atre Boston, Massachusetts

Business Intelligence Roadmap represents a major, and I believe largely successful, effort to fill a void in the literature on BI (Business Intelligence). The book carefully works through the dependencies among the decisions and activities necessary to implement a dynamic, integrated BI decision support environment which, as it states "cannot be built in one big-bang." Moss and Atre point out that such efforts must emphasize business opportunities, cross-organizational strategies, strategic requirements, business analysis (versus systems analysis), and iterative development and release. In their effort to provide the ultimate tome on the BI lifecycle, they have addressed all aspects of BI project requirements analysis, design, and implementation, including databases, ETL (extract, transform, and load), data mining, meta data repositories, and the application.

This is primarily a book about project management and the attendant issues of scoping, data quality, cost estimates, risk assessment, ROI, success factors, infrastructure assessment, and staffing. It provides guidance for solving the problems that will inevitably be uncovered, and various best practices such as developing an enterprise wide logical data model over time.

Along the way, various tasks are described in overview such as database design. In this context, I was particularly pleased that the authors took care to define logical data models as being independent of physical issues. Unfortunately, they subsequently present such adhoc practices as star and snowflake schemas as logical database design, even though they violate the definition already given. As usual, the claim is that these practices are advantageous because they provide performance (e.g., by either minimizing joins or else handling large table joins effectively) thereby ignoring the dictum that performance is a physical requirement and so an issue of physical database design. Although common in BI databases, datamarts, and datawarehouses, I couldn't denigrate star schemas and related approaches more. In over twenty years of database consulting, I repeatedly demonstrated that good logical and physical database design were superior in terms of performance, ease of use, and integrity.

I do wish that the book did not perpetuate the separation of operational and decisionsupport databases. In this age of ever increasing pressure to support real-time business such separation is not desirable since it introduces long latencies between operational decisions and the analyses on which they are based. With certain advances in database technology, it is also increasingly unnecessary. I also wish the book had addressed the impact of some of the current technologies such as web services, the integration of business process management and business analytics, BAM (business activity management), business performance management, JDBC versus ODBC, analytic extensions to SQL and to XML, and so on. The book does address the impact of XML on metadata exchange and repositories.

All in all, this is a comprehensive book which (with the caveats I've raised above), I would recommend be used by anyone planning an enterprise-class BI project. For that matter, it should probably be added as a reference to every IT department library. Furthermore, I believe that many of the concerns addressed and advice given apply equally well to the lifecycles of other application domains such as EAI.

David McGoveran April 11, 2003