A Database Project in a Small Company
(or How the Real World Doesn’t Always Follow the Book)

Efrem Mallach, University of Massachusetts Dartmouth, USA

EXECUTIVE SUMMARY

The case study describes a small consulting company’s experience in the design and implementation of a database and associated information retrieval system. Their choices are explained within the context of the firm’s needs and constraints. Issues associated with development methods are discussed, along with problems that arose from not following proper development disciplines.

Keywords: case study; database; database administration; database administrator; database design; data entry; database logical design; database management; database operation; database requirements; database requirements analysis; data modeling; design methodologies; end-user computing; entity-relationship diagrams; file updating; industry analysts; information retrieval; input operations; IS planning methods; normal form; normalization; prototyping; research firms; retrieval; system development techniques; systems analysis; systems design; user needs assessment; user requirements

EXECUTIVE SUMMARY

This case describes the development of a database system used to track and analyze press comments by experts on the information technology industry. The system was developed in a haphazard fashion, without the benefit of professional developers, originally based on a loosely organized collection of data assembled by a staff member, with little visibility into its ultimate uses. Design decisions made early in the project without careful consideration were difficult to change, or were never changed later, even after their negative impact was evident. The system provided real value to its users, but use of proper development disciplines could possibly have reduced some problems while not reducing that value.

ORGANIZATION BACKGROUND

The job of an industry analyst (Columbus, 2004) is to interpret goings-on in a particular field to nonexperts, advising them on where the field is going and which vendors, products, or services are most likely to suit a particular user need. Because information and communication...
technologies (ICTs) are complex, rapidly changing, and “mission-critical” to businesses of all types, analysts are especially important in that field. Their recommendations move large amounts of revenue toward vendors whose products and services they favor, or away from those about whom they feel negatively.

In 2005, there are about 500 (Kensington Group, 2004) industry analysis firms (also known as research firms when this is unlikely to cause confusion with other types of research) worldwide. Total industry revenue can be estimated at roughly $3 billion, based on published annual revenue of industry leader Gartner being about $900 million (Gartner Group, 2005), and the existence of several privately held firms employing over 100 analysts each, such as International Data Corporation with over 600 (IDC, 2005) and Forrester Research with nearly 200 (Forrester, 2005). It is reasonable to estimate that the industry employs at least 2,000 analysts, probably considerably more.

As a result of analysts’ influence on the market, ICT vendors pay a great deal of attention to them. Most large vendors have a dedicated analyst relations department. The efforts of Alcatel (2005), Computer Associates (2005), Sybase (2005), and Hewlett-Packard (2005), all in different segments of the IT industry, are representative. Vendors spend large sums courting analysts, visiting them, putting on events for them at which they showcase their products, and generally trying to convince them that the vendor’s offering is superior. Since they want to do this as well as possible, vendors often look to outside advisors (Insight Marketing, 2005; Tekrati, 2005) to evaluate and improve their analyst relations programs.

The organization discussed in this case, which will be referred to as Balmoral Group, Inc., was such a consulting firm. It specialized in advising ICT vendors about the impact of industry analysts on their business, and on how to work with them most constructively. As the case opens in 1999, it employed 5 full-time people plus a few part-time contractors for peak survey work. At the end of the case in the summer of 2003, it employed 18, over half of whom were primarily involved with the system described here.

Balmoral Group was founded when its two cofounders, Isabelle Oliviera and Lawrence Ackerman, met. Ackerman had a solo consulting practice in this field. Among other things, he had begun conducting multiclient studies in which analysts told him what they needed in terms of support from vendors, and rated vendors based on how well they provided this support. Oliviera worked for a large hardware vendor and was about to leave it to start her own consulting practice in the same field. Since the two were on opposite coasts of the U.S., they chose to join forces and named their joint venture Balmoral Group. Ackerman was named CEO; Oliviera president. A few years later, in 1996, they incorporated to set the stage for further expansion.

The firm’s initial offerings included the multiclient studies originally done by Ackerman, workshops at which vendor analyst relations professionals could learn the elements of their profession, and custom consulting services. Among the questions that arose frequently in consulting work were “Which analysts are most influential in our space, which are most likely to be quoted about us, and what are they saying?” Balmoral Group, at that time, lacked a systematic way to approach these questions.

The database system described in the rest of this case was originally intended to answer such questions. It eventually provided another offering for the firm that accounted for a large fraction of its income by 2002 and led to expanding its headcount to over 15 people. However, its development proceeded in an unplanned fashion and was characterized by technical decisions that, in retrospect, might better have been made differently. The situation described in the case is in this respect typical of many small organizations. The system development processes described in books are often followed, at least in principle, by larger firms with dedicated MIS staffs, but the small-business reality is not usually as professional in that respect.
Related Content

Can Person-Centered Technology Enhanced Learning Contribute to Develop Project Management Soft Skills in an Academic Context?
www.igi-global.com/chapter/can-person-centered-technology-enhanced/54581?camid=4v1a

Content-Based Retrieval Concept
www.igi-global.com/chapter/content-based-retrieval-concept/14298?camid=4v1a
Critical IT Project Management Competencies: Aligning Instructional Outcomes with Industry Expectations
[www.igi-global.com/article/critical-it-project-management-competencies/212587?camid=4v1a](www.igi-global.com/article/critical-it-project-management-competencies/212587?camid=4v1a)

The Expert's Opinion
[www.igi-global.com/article/expert-opinion/50990?camid=4v1a](www.igi-global.com/article/expert-opinion/50990?camid=4v1a)