



INDUSTRY AND PRACTICE

Don't Forget the *People* in Database Management!

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Some 20 years ago, when I was a systems analyst for a consulting firm in Columbus, Ohio, I began a project with a new client. Our project manager was an older man named Ken. Our task was to design a database for an organization that could be used to report on harness racing in the United States and Canada. Perhaps because he had never finished his bachelor's degree and I was then completing a graduate degree, he chose to demonstrate the value of his many years of practical computer experience to me and thus educate me in the ways and wisdom of experienced computer professionals. He frequently spoke in homilies intended to impart his knowledge without interfering too much with my work.

I remember one such homily quite well. "Al," he would pontificate, "It's easy to get a computer to do what you want. The tough job is getting people to do what you want." Ken meant that using a computer command correctly, debugging a program, and the like may have required effort. However, at least eventually, one could always make the computer behave predictably and consistently. He also meant that users were less predictable in their interaction with database management and other computer professionals in such tasks as identifying their requirements or validating test results. He meant that his subordinates - systems analysts such as I - likewise did not obey computer management's wishes with the desired fidelity.

Initially, I viewed Ken as an anachronism. I was very proud of my skills at writing and debugging complex software. In fact, the more difficult the program and abstruse the technology might be, the greater my accomplishment and pride. Ken appeared simply to me to make excuses for his own obsolete technical skills.

After all, he was over forty years old.

However, while our months together rolled by, I began to understand the "people issues" of MIS from his point view. As he gave me increasing responsibility for supervising programmers, I began to appreciate better the difficulty of inspiring them to follow my directions as explicitly as I may have wanted. As he gave me increasing responsibility for dealing with users, I began to appreciate better the difficulty of motivating them to identify their needs and properly use the databases and outputs we built for them. So finally, Ken's educational efforts succeeded. Indeed, in my later years as a professor teaching systems analysis, I would refer to him as the man who had "really taught me systems analysis."

The People Challenges

Indisputably, the technical issues in database management are very important. Designers must build databases with high-speed access and update capabilities that can store huge amounts consistent, non-redundant data across multiple platforms. Developers must investigate emerging database technologies, evaluate them, and determine how to implement them. Reliability and security are absolutely essential. These technical issues offer researchers a plethora of topics to investigate and write about in periodicals such as the *Journal of Database Management*.

At the same time, designers of database management systems need to consider the communication between humans and computers. For example, programming languages for the computer professional must have commands that are efficient for coding new development and for changing existing systems. Retrieval languages for the non-professional should also have commands that are quickly and easily learned and that do not require daily use in order to be remembered. Human factors researchers can and do

study these types of topics in order to provide database management with valuable findings.

However, these are not the database management issues that Ken spoke about so often. Rather than being concerned about how humans communicate with computers, his concern was how well humans communicate with each other. This is because he felt that computer failures occurred more often when humans failed to communicate with each other than when they failed to communicate with their machines. His apprehension suggests that database management should also be concerned about a variety of diverse behavioral issues. Examples include the communication between computer professionals and users, the education and training of both groups, motivating them, the impact of new development technologies on them, appraising their performance, designing the information systems department, career paths for database management, and others. Indeed, these challenging issues give researchers plenty to investigate and write about.

While I strongly advocate the study of the technical issues, I believe that the people issues deserve more attention than they receive. The success or failure of database management can hinge on the ability of humans to communicate with each other just as much as, if not more than the technical issues. In effect, I advocate that database management researchers should not forget the people issues.

Epilogue

I could conclude this editorial by simply saying I hope it inspires the reader's interest in the "people issues" in database management. However, Ken's lessons did not stop at the conclusion of our project when we went our separate ways. Instead, over the years I would meet him frequently for lunch. We would discuss old times. Also, I often would ask his advice on how to deal with my most recent "people issue:" perhaps an intractable executive who refused to authorize an information systems expenditure or perhaps an obdurate systems analyst who antagonized others on a project team.

Our lunches became less frequent. Eventually,

I left Columbus and moved east to teach at a business school. Ken and I stayed in touch but even less often than before. When I began to teach an MBA course in systems analysis in the mid-1980s, I phoned him again. He asked to visit one of my classes. I envisioned him interrupting my lecture with his homilies so instead, I invited him to speak to the class about a recent project he had completed. He declined however, saying that a small growth had recently been removed from his throat and he could not speak loudly enough for more than a very brief period.

After that conversation, Ken and I lost touch. About two years later however, I found myself back in Columbus and decided to phone him. His home number no longer appeared in the local directory so I phoned his office. I was surprised to be told he no longer worked there. I asked for his company's Personnel Department to get for his forwarding address. They told me that his small throat growth had been malignant and cancer had taken him. So in addition to teaching me about the "people issues" of the computer field, Ken taught me about other people issues too such as the importance of staying close to the truly important people in our lives and not forgetting them.

I hope that these comments inspire your own interest in the "people issues" in database management.