

Alternative Technologies

Enterprise Integrity: A Great Debt Forever Unpaid

Vol. 8, No. 1

This month we have the sad duty to recognize an unpayable debt to two people who made enormous contributions to business integration. Both have made their final contributions, though the understanding and impact of those contributions will be long felt. Some of you will recognize their names, others will not. Hopefully, all who read this column will remember them in the years to come.

Over the years, many authors of Business Integration Journal articles have alluded to the maxim “you can’t manage what you can’t measure.” Indeed, the entirety of BAM (Business Activity Monitoring), EPM (Enterprise Performance Management), TQM (Total Quality Management), and many other aspects of our field are applications of, and ultimately owe their origin, to this concept. Unfortunately, few of the authors I’ve reviewed over the years cited the originator of that and many other important principles of business – Peter F. Drucker. Professor Drucker was perhaps the person most responsible for creating modern business management theory, treating it more as a dynamic interplay of organizational and individual forces than any researcher before. We lost forever the hope of further contributions from Dr. Drucker when he died at his home in Claremont, California on Friday, November 11th. Had my previous column not already gone to press, I would have gladly interrupted the series on Composite Application Platforms and devoted it entirely to him and his work.

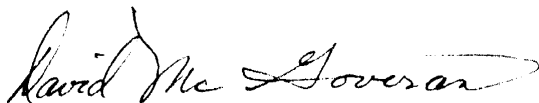
So many of Drucker’s influential ideas have been conveyed informally as business folklore that their depth and importance is sometimes poorly appreciated and haphazardly followed. I can’t begin to review all of Professor Drucker’s contributions, let alone explain them here. Perhaps a few phrases that he popularized will ring bells and help you understand why we should honor the man: profit center, supply chain, value chain, demand chain, and management by objective. Or perhaps you’ll remember one of his many books such as [Concept of the Corporation](#), [The Practice of Management](#), [Managing for Results](#), [Innovation and Entrepreneurship](#), or [Managing in the Next Society](#). If you’re a manager and these books are unfamiliar, you’ve important reading to do.

Data modeling and integration are key elements of business integration. As most business database management systems are based on SQL, which is in turn derived from relational

database ideas. A key concept in data modeling is normalization, a procedure which serves to standardize table design in a stepwise fashion, progressing through a set of five consecutive “normal forms.” Normalization of a logical database design eliminates certain harmful redundancies and insures that relational operations produce predictable and consistent results when applied to the tables in that database. In other words, it preserves data integrity. In the early days of relational commercialization, normalization theory was often considered esoteric and few practitioners understood it. Then, in 1981, William “Bill” Kent wrote A Simple Guide to Five Normal Forms in Relational Database Theory, published first as an IBM Technical Report and then in 1983 in Communications of the ACM. This paper introduced informal and easy to understand explanations of the five normal forms.

Over the years, from his tenure with IBM and subsequently with HP Labs, Kent contributed a fairly large body of work on object-oriented databases and semantics, as well as multi-databases. His discussion of the limitations of record-oriented databases and information models was enlightening and deserves to be reread from time-to-time by those who did not live through the pain we used to suffer programming and administering such systems. I didn’t always agree with Kent’s conclusions, but even at its most controversial his work always deserved a careful read. As someone who has taught courses and many workshops and seminars (and consulted for years) on data modeling, I believe that many database designs would have been of little more value than a pile of paper records without Kent’s intuitive rephrasing of the five normal forms. I am very sorry to have to report that Bill Kent’s efforts ceased on Saturday, December 17, 2005.

Peter Drucker and Bill Kent addressed very different aspects of the problem of business integration. For Drucker, the problem was one of how people understood their relationships to business and each other. Reading his works, one grasps his respect and appreciation for human value. Therein lay his integrity. For Kent, the issue was faithfully representing the myriad elements and relationships in an enterprise. His work shows a consistent pattern of trying to maintain integrity. The pursuit of *enterprise integrity* has suffered with the passing of these men.

A handwritten signature in cursive script that reads "David Mc Govern". The signature is written in black ink and is centered on the page.