

March 2005



The Real-Time Enterprise: Competing on Time with the Revolutionary Business SEx Machine
Peter Fingar and Joseph Bellini

Meghan-Kiffer Press
\$34.95, 222 pages

by Paul Harmon

This is a business managers' book, not a technical book. It doesn't tell you how to create a real-time enterprise; instead, it tells you why you ought to want to create a real-time enterprise.

In 1993 Curt Hall and I wrote a book: *Intelligent Software Systems Development: As IS Manger's Guide* (Wiley) in which we confidently predicted the rise of the intelligent, real-time enterprise. We argued that computing had begun in the back office automating filing, and then routine tasks. In the Nineties, as we wrote it was moving out into the front office, and expert systems, our particular focus, was making it possible for software applications to support complex decision making tasks. In other words, we sketched an overview of what needed to be done in a company and suggested that one task after another was being automated. In the end, we suggested, we would be able to automate nearly everything, and companies would function like intelligent animals, responding to stimuli in real-time.

Curt and I knew in 1993 that the real-time enterprise was a goal and not something that would be realized in the Nineties. In the time since we wrote our book, the AI techniques used in expert systems have spread to every aspect of application design. Workflow systems not only incorporate rules and inferencing techniques to support complex analysis and design decisions, but include rules and inferencing to handle decisions about how to route tasks, taking into account the current work load of various employees and their specific skills and how those skills relate to the task being processes. In a similar way, AI techniques are used with Data Warehouses to mine the data for interesting patterns and in Decision Support Systems to filter the data so that senior managers are only presented with the most pressing information. Other systems monitor the items being presented to senior managers and prepare option lists to suggest possible responses to developing situations.

In spite of all this intelligence, and the really impressive work that has gone into automating service interfaces -- everything from Automated Teller Machines to online shopping -- global companies still routinely employ tens of thousands of workers. So, automation proceeds apace, and the use of information from sensors and from data mining continues to gather and summarize information proceeds as well, and we are still a long way from a real time company.

In fact, one might argue, as Fingar and Bellini do, that part of the problem, today, is that executives are overwhelmed with information and information systems and cannot seem to get the overview they need. Curt and I considered this, only indirectly, in 1993, when we talked about CASE (Computer Aided Software Engineering) tools that could help automate programming. Today, however, as any reader of BPTrends undoubtedly knows, managers are increasingly looking to Business Process Management (BPM) techniques to help them maintain the enterprise overview they need to understand what is happening and to determine how they might change as the environment changes.

At a minimum, a business process orientation provides an executive with a better way of understanding the business. Most managers still orient toward



organization charts. But a casual glance at an organization chart will make you aware of what they do not picture. They don't show your customers or your suppliers. They don't give you any idea of how things flow from supplier to customer. If customers are unhappy, or a production line breaks down, you can't glance at an organization chart to find out what the implications of the delay might be. If your company produces more than one product line, you usually can't glance at the organization chart to determine which people are involved in which product line.

High-level systems or process diagrams provide a lot more useful information. As organizations find themselves changing more often and more rapidly, process diagrams provide the kinds of information an executive needs to plan for a quick change. In the best cases, a process diagram allows an executive to "pull a string" and see what activities are supporting what processes, what people are working on those activities, and what IT applications and databases are being maintained to facilitate those same activities.

Even more exciting to the authors of *The Real-Time Enterprise* is the possibility that BPM software products will be able to not only manage the routine execution of major business processes, but the hope that in some cases, business managers will be able to manage to execute process changes with minimal support from IT specialists.

As I suggested earlier, however, this book isn't about how you can actually do any of this. Instead, it's filled with high-level discussions of why you might want to create a real-time enterprise, and case studies of individuals and companies that have taken steps in that direction. Like Hammer and Champy, in the mid-Nineties, Fingar and Bellini, argue that technology makes major improvements in business productivity possible.

All the major themes are here: the importance of doing things quickly to satisfy customers, the need to link strategy and process and make sure that you can change either very quickly, the need to control the global spread of operations, the fact of outsourcing, and the many changes in IT that are making progress possible, ranging from the Internet and XML to BAM and BPM. (The SE_x in the title, besides being a way to grab attention(?) stands for "Strategy-Execution machine) which is the term the authors would apply to the next generation BPM products.

The book moves quickly and quotes lots of important people. The case studies are good and this book will probably motivate lots of executives to consider how they might do something similar at their organization.

If you are a practitioner who has been engaged in business process change for awhile, you won't find much new in this book. On the other hand, it's a common place to say that successful business process change projects depend on the support of senior management. This book is designed to motivate senior management to support business process change projects. It offers them a vision of the future which, in some cases, will lead executives to become the sponsors of process change. If you know an executive who needs some encouragement, this would be a good book to give him.

