I’ve gotten into several discussions, recently, about specific methodologies, so I thought I’d try to provide an overview of the field – as I understand it. To make sense of the dozens of different business process methodologies being offered, one needs some criteria.

To avoid considering the hundreds of different informal "methodologies" that have been described in papers or research articles, I usually only consider methodologies that are defined in a book and taught in classes that are open to the public. This automatically limits the discussion to methodologies that have a real presence in the marketplace.

To provide a context for the discussion, let's start by rolling back the calendar to 1990. If we do that we find that the Eighties was dominated by three business process methodologies.

The best known business-oriented methodology was what is commonly termed Rummler-Brache. It is defined in a book, *Performance Improvement: Managing the White Space on the Organization Chart* (Jossey-Bass, 1990), which came out after Rummler and Brache had been teaching classes on process analysis and redesign for several years. This methodology was especially popular with business managers and those in organization development. It didn't put much emphasis on automation and focused, instead, on thinking of the entire business organization as a system that could be decomposed into processes and ultimately into jobs or tasks that needed to be performed. Managers were urged to think about how work got done, how it was measured and managed, and how performance could be improved.

Although less well documented, Six Sigma was already an established methodology in 1990. It began at Motorola in the mid-Eighties, and was supported by courses given at Motorola University. Six Sigma, as a process analysis and redesign methodology, combined a process analysis approach derived, in part, from courses that Rummler-Brache had given at Motorola in the mid-Eighties and, in part, from TQM and the measurement and control strategies developed by the quality control people at Motorola. The immediate emphasis was on making the outputs of processes more consistent. Much emphasis was placed on saving money by making processes more efficient. In its initial version, Six Sigma didn’t put all that much emphasis on revolutionizing organizations, but as it spread, it was embraced as a way of changing a corporate culture to focus more attention on processes and, especially, on continuous process improvement.

A third approach to process analysis and design was a methodology that is usually termed IDEF (Integrated Definition Methods). This approach was originally developed for the US Air Force. It derived from a wide variety of software development work that had been done in the Eighties. These software methodologies were usually lumped together under the term “Structured Methodologies.” IDEF included both a business analysis component (IDEF0) and other components that focused on software design and database organization (IDEF1, IDEF2, etc.) One book that documents this approach is David Marca and Clement McGowan's *IDEF0/SADT: Business Process and Enterprise Modeling*.

These three approaches established the broad approaches that still dominate the BPM arena. There are analysis and redesign methodologies designed to help business managers, others to help people working in the quality control tradition, and others designed to help business analysts or software developers who...
usually begin by trying to document the process they will then seek to automate. As time has passed, of course, each approach has incorporated features found in the other approaches.

The early Nineties were dominated by Business Process Reengineering, kicked off by books on Reengineering by Hammer, Champy and Davenport which appeared in 1993. These early books motivated companies to consider process change, but didn’t provide specific directions. Thus, the interest in Reengineering gave a big boost to the analysis and redesign methodologies that were already in existence. Rummler-Brache suddenly found its workshops filled with people who were there to learn about Reengineering.

By the mid-Nineties dozens of books about process analysis and redesign had been written. Each of the major consulting companies (they were mostly accounting firms at that time.) offered a BPR methodology, and these approaches have evolved into BPM methodologies today. Most of these methodologies are systematic, but they are designed to not only structure process change, but to also structure consulting engagements. In a similar way, a variety of software vendors, who were initially Computer Aided Software Engineering (CASE) vendors and then evolved into process analysis and design vendors, began to offer process analysis methodologies. In these cases, of course, the methodologies were designed to work in conjunction with a software product.

In the public domain, in the mid-Nineties, most of the business process methodologies in the repackaged the concepts found in Rummler-Brache, Six Sigma or IDEF0.

**Business-Focused Approaches: Descendents of Rummler-Brache**

Most current business process change methodologies draw on ideas first introduced in Rummler-Brache. For example, Rummler-Brache introduced the idea of swimlanes as a way of keeping track of who was responsible for the management of processes. This concept is now used by nearly all of the methodologies.

Geary Rummler has formed a new company, Performance Design Lab (PDL), and offers workshops that describe his latest thinking on process redesign. BPTrends Associates offers a methodology that is described in my recently published book, *Business Process Change, 2nd Edition* (Morgan-Kaufmann, 2007) and delivered in courses developed by BPTrends Associates. The BPTrends Associates methodology draws heavily on Rummler-Brache and combines it with concepts developed by Roger Burlton who has evolved his approach, primarily from the IDEF0.

Probably the most interesting new business process methodology in the business domain is the Supply Chain Council’s SCOR methodology. SCOR, and the various other Operations Reference models in the SCOR tradition, start by defining a set of generic processes and relations and measures for those processes. Then, process development becomes a matter of first characterizing your processes in a generic way, and then refining the reference model to more accurately reflect your specific business processes. A good book that defines this approach is *Supply Chain Excellence* by Peter Bolstorff and Robert Rosenbaum (AMACOM, 2003).

**Quality Focused Approaches: Descendents of Six Sigma**

Six Sigma has spread from Motorola to hundreds of other companies and many books have been published on this approach. Some books refine the techniques used by Six Sigma to improve processes. Others have been written to discuss how the use of Six Sigma training can change a company’s culture.

LEAN is a different approach that derives from a collection of practices that originated at Toyota in the Eighties and that were formally described in Taichi Ohno’s book, the *Toyota Production System*, first published in Japan in 1978. The approach didn’t become popular in the US, however, until James Womack, Daniel Jones and Daniel Roos published *The Machine That Changed the World*, in 1990. Interest in LEAN grew throughout the Nineties and is currently being adopted by Six Sigma practitioners who want to extend their scope beyond a focus on quality and consistency. LEAN focuses on streamlining processes at both the enterprise and the specific process levels.

Another approach very much in the Quality Control tradition is the Capability Maturity Model (CMM, CMMI). Designed as an auditing process that would certify companies with effective processes, it has evolved over time into a methodology that prescribes how companies can improve their process work by improving their process management competencies. The source of the CMM work is Mark Paulk,
Charles Weber, Bill Curtis and Mary Beth Chrissis’s *The Capability Maturity Model*. (Addison-Wesley, 1995) There are, today, several methodologies that seek to incorporate maturity model concepts.

**Process : Descendents of IDEF0**

In the course of the Nineties, software methodologies evolved from structured methodologies to object-oriented methodologies, and eventually standardized on the OMG’s Unified Modeling Language (UML). Within UML, which provides a wide range of modeling techniques, one element focused on process or workflow modeling and, by the mid-Nineties, UML Activity Diagrams had largely replaced IDEF0 diagrams. A major change introduced by UML, however, was to separate methodology and notation. The early structured methodologies and IDEF0 provided both a graphic notation and a well-defined set of steps and phases to structure a redesign project. The OMG decided to standardize the notation, but did not attempt to formalize a methodology. Thus, UML Activity Diagrams are a notation without a methodology. In the past few years the process modeling vendors joined together to create a new Business Process Management Notation (BPMN). This notation, which is now administrated by the OMG, is another example of a process notation that does not have an associated methodology. On the other hand, most of today’s methodologies – like the BPM vendors – use the BPMN notations.

During the Nineties, ERP applications (e.g. SAP, Peoplesoft, Oracle) were widely adopted. Initially, the vendors created a variety of diagrams to show how the ERP applications could support business processes. In the late Nineties, SAP standardized on the ARIS methodology and notation of IDS Scheer. Since then, Oracle and Microsoft have also embraced the ARIS notation to diagram their ERP applications. IDS Scheer has published a number of books on the ARIS methodology.

During the past few years there has been a considerable emphasis on Enterprise Architecture and most of the methodologies that have been developed to structure Enterprise Architecture efforts have derived from IDEF0 and related software methodologies.

In the Eighties, there were several methodologies developed to support the development of rule or knowledge-based software systems. Recently, Ronald Ross developed a Business Rules methodology that derives from both the rules methodologies and database methodologies that were used in earlier periods. In a similar way, Amit Mitra and Amar Gupta are working on defining a very complex methodology for defining a company’s business rules.

The most interesting software development in the past few years has been the development of Business Process Management Systems products. To date, there is no public BPMS methodology. The early sketches of possible methodologies, published as papers, have primarily emphasized the analysis and redesign of processes in the Rummler-Brache and IDEF0 tradition. In other words, they have focused on improving processes and not on using the BPMS tools to automate the day to day execution of the processes. This will probably change as BPMS applications are better understood.

In a nutshell: There are lots of public, documented business process methodologies. Some are designed to help business people, some are designed to support teams working in the quality control tradition, some are designed to support company-wide culture change, and others are designed to support IT professionals who are engaged in improving processes by automation. Some focus narrowly on improving a specific project while others focus on helping a BPM team develop a business process architecture or automate a portion of a process. Some, like SCOR, focus on helping business managers improve a specific process, like the supply chain. Some methodologies can scale to handle very large and complex processes while others are limited to relatively small scale process improvement projects. Predictably, different methodologies are better for some uses and less effective when used for other purposes. Moreover, given the rapid rate of change in the business process market, leading methodologies will continue to change in the months and years ahead to assure they continue to support the complete range of tasks that fall under the steadily expanding definition of BPM.

Most BPM centers of excellence will want to be versed in 2-3 different process change methodologies to assure they can support all the people working on process change within their organizations.
ABOUT PAUL HARMON

Paul is a Co-Founder, Executive Editor and Market Analyst at BPTrends, (Business Process Trends), the most trusted source of information and analysis on trends, directions and best practices in business process management, (www.bptrends.com). He is also a Co-Founder, Chief Methodologist and Principal Consultant of BPTrends Associates, a professional services company providing executive education, training and consulting services for organizations interested in understanding and implementing business process management. He has worked on major process improvement programs at Bank of America, Wells Fargo, Prudential and Citibank, to name a few.

Paul is the Co-Author and Editor of the BPTrends Product Reports, the most widely read reports available on BPM software products and the author of the best selling book, Business Process Change: A Manager's Guide to Improving, Redesigning and Automating Processes. He is an acknowledged BPM thought leader and noted consultant, educator, author and market analyst concerned with applying new technologies and methodologies to real-world business problems. He is a widely respected keynote speaker and has developed and delivered executive seminars, workshops, briefings and keynote addresses on all aspects of BPM to conferences and major organizations throughout the world. BPTrends Associates is partnered with Boston University to develop and deliver the BUCEC BPM Curriculum and Certification Program.