

Harmon on BPM Paul Harmon

Once More on Business Process Methodologies

A business process methodology is some more or less formal description as to how to approach solving a process problem. In essence, the methodology offers a plan, usually consisting of a set of phases or steps, and a set of tools that can be used at different points along the way.

Any business process methodology is designed to help practitioners solve or eliminate business problems. In essence, one can classify process methodologies by considering what types of problems specific methodologies are designed to solve. The only problem with this approach is that methodologies evolve over time and someone is always extending a methodology to try to solve some new type of problem. Thus, while we might say that a given methodology is limited to a specific type of problem, someone else might claim that that same methodology can be used to solve other problems as well. So, consider the following a discussion of the historical roots of the various methodologies, while accepting that each has been used for other tasks as well.

We'll start by dividing all methodologies into two major categories: General Purpose Methodologies that are designed to tackle any type of business process problem, and Specialized Methodologies that are designed to only tackle a specific subset of the range of business process problems. We'll consider each in turn.

General Purpose Business Process Methodologies

General Purpose methodologies are necessarily more complex and abstract, as they are designed to tackle a wide-range of different problems. To refine our overview still further, we'll divide all general purpose methodologies into two categories, what we'll term top-down methodologies and what we'll call incremental or continuous improvement methodologies. (See Figure 1.)

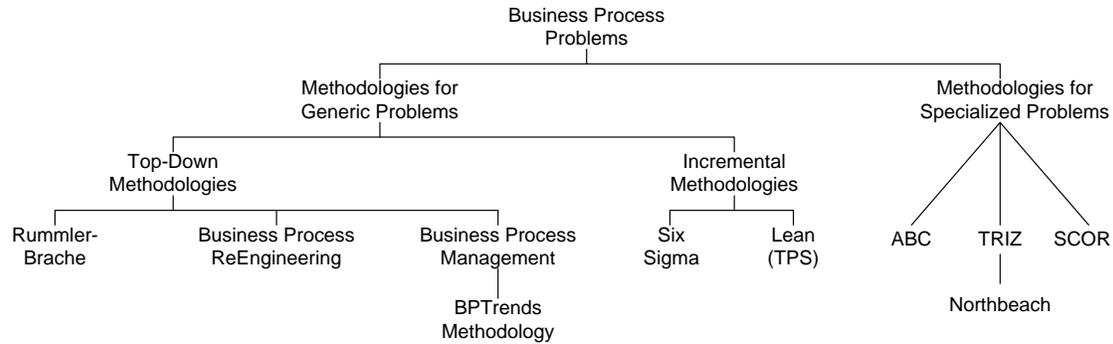


Figure 1. Different Types of Business Process Methodologies

Top-Down Methodologies

A Top-Down methodology is a general purpose process methodology designed to begin its analysis by looking at an entire organization, or at least at a division or an entire value chain. The basic idea is that one begins by getting the big picture and then systematically narrows the search for problems to the specific problems one wants to address. A top down approach is good when there are many problems or when an organization has broad goals, like reducing costs, or improving productivity, and wants to consider various alternative ways to achieve one's goals. It is the approach to use when one wants to create a major new business process, or to transform an organization. Using this approach, one usually begins with a diagram of the organization, or with a business process architecture that defines how the major processes in an organization work together to produce the products or services that the organization provides. Given the ways this type of methodology approaches problems, it usually requires more initial analysis and usually results in larger, more complex projects.

We'll briefly describe three popular top-down, general purpose business process methodologies.

Rummler-Brache Methodology. The Rummler-Brache Methodology takes its name from a book written by Geary Rummler and Alan Brache in 1990: *Improving Performance*. This book documents an approach that Rummler had been using since the mid-Seventies. The approach derived from the idea that organizations were systems that received inputs and transformed them into outputs. One began with a diagram of the organization, showing its major inputs and outputs, and then drilled down into the major processes that the organization used to achieve the transformation of inputs to outputs. Rummler-Brache introduced the idea of the now popular "swimlane diagrams" that show who owns or manages each processes and how the business process interact with customers and suppliers. Geary Rummler's background was in psychology and he had begun his process work in the 1960s, before IT was well-established, and focused a lot of his attention on human performance problems, including how employees performed their specific tasks and how managers supported or discouraged that performance.

For a while, in the Nineties, IBM sold an IT-version of the Rummler-Brache Methodology which it termed LOVEM.

Business Process ReEngineering. In the early Nineties a group of consultants, led by Michael Hammer and Tom Davenport, defined a new, generic, top-down approach to redesigning business processes. These consultants were particularly concerned with the fact that early IT applications had been used to solve specific problems (e.g. automate payroll, capture financial information about sales expenses) and didn't communicate in a consistent or efficient manner. BPR gurus argued that the best way to improve organizational efficiency and effectiveness was to rip out older systems and replace them with systems freshly designed to take advantage of the latest advances in IT. In essence, Hammer argued, we could replace older processes that were simply paved cow paths with new superhighways.

With its emphasis on using the latest IT and revising entire processes – from customer to product delivery – BPR became a very popular process approach in the mid-Nineties. Toward the end of the Nineties, many companies were exhausted from the effort of undertaking major process redesigns, often with unexpected side effects, and many, including Davenport, embraced the newly popular ERP software as the best way to achieve BPR goals. Today, many IT groups still refer to their approach to process redesign as Business Process ReEngineering – especially if it involves installing ERP applications – although few seek to undertake the very larger redesigns that were popular in the mid-Nineties.

Business Process Management. In 2003 Howard Smith and Peter Fingar published a book, *Business Process Management*, that argued that new Internet techniques made it possible to extend workflow software to not only control the execution of specific processes but to create, revise and manage ongoing processes in real time. In effect, monitoring processes online and collecting data, managers could know just where work was at any point in time, and could make changes in business rules or work assignments to increase the efficiency of the process. This BPM software (BPMS) approach to creating and managing business processes was very popular in the first decade of the new century.

At the same time, a different group of process gurus argued for better corporate control over process improvement activities. In essence, many organizations had process people in IT, in Business Analysis, in Six Sigma groups, in Lean groups or supply chain groups, each pursuing a slightly different agenda. It was suggested that managers needed to understand processes better and coordinate all these different process initiatives in a centralized way. This approach emphasized a business architecture, a center of excellence for processes, and the assignment of managers responsible for various processes in an organization. To people in this second BPM tradition, BPM was a management philosophy that emphasized that business managers needed to understand and take responsibility for their organization's processes.

In either case, whether one took the BPMS approach and emphasized software tools or one took the "process as a management philosophy" approach, one ended up with a generic, top-down approach to process analysis and redesign.

A good example of a popular BPM methodology is the **BPTrends Associates Methodology** (BPTA Methodology) created primarily by Paul Harmon and Roger Burlton. Unlike early methodologies that sought to promote a specific perspective, be it human performance or the use of IT, BPTA methodology focused on creating a skeleton on which one could locate a wide variety of different techniques. Thus, for example, in working through a BPTA project, project personnel use diagrams and

tools drawn from Rummler-Brache, IT and BPR, decision management, Six Sigma and Lean, and BPMS. Moreover, much of the emphasis in a BPTA project is on creating the management structures that will assure that process changes will be understood, supported and continuously managed when the new process is actually implemented.

Incremental, Continuous Improvement Methodologies

The alternative to a broad, top-down methodology is a methodology that focuses on smaller problems, usually at a lower level within the organization, fixes them, and then moves on to other small problems and fixes them as well. This approach is referred to as a incremental or continuous improvement approach and is often associated with the Agile software development approach.

Six Sigma. The best-known incremental, continuous improvement methodology is Six Sigma, which originated at Motorola in the Eighties. In effect, Motorola had a quality control program that evaluated products to eliminate defects. They married that approach with the idea of a business process, made up of several activities, and decided that, rather than check output quality at the end of a production line, it would be better if each employee checked as each product completed exited each specific activity. The Six Sigma methodology evolved from this idea to an approach for constantly seeking to make small changes to improve the overall product of the products. The name 6 Sigma refers to a statistical measure that suggests very few defects. Six Sigma is usually implemented as a company-wide initiative in which each department undertakes a number of projects, each designed to save money by reducing defects. Six Sigma relies on a variety of approaches, from SIPOC and cause-effect (fishbone) diagrams to the DMAIC phase model, and uses a variety of statistical tools to determine the quality and nature of improvements in output.

Lean. Lean is a popular name for the use of some concepts derived from the Toyota Production Systems (TPS) as practiced at the automaker in its various factories. The focus is on larger projects than those usually undertaken by Six Sigma practitioners, but it is also on an incremental, agile approach. Lean emphasizes improving the flow of products or services. It places particular attention on inventory, how products are drawn by demand, and on eliminating waste – which is their term for any unnecessary work or downtime in the specific process. Lean has a notation, sometimes termed a Value Steam Map, that picturing a process flowing from a customer order to the order fulfillment and emphasizing inventory and times involved. Lean places a large emphasis on getting people to take responsibility for improving the processes they work on. As such, Lean emphasizes work groups and the idea that managers should mentor employees to help achieve process goals. The approach requires a senior management team completely committed to process improvement and delegating responsibility to employees.

Specialized Process Methodologies

Some process methodologies are designed to structure efforts to deal with very specific types of processes.

ABC (Activity Based Costing) ABC is a methodology that is designed as an alternative or supplement to conventional bookkeeping methods. This approach emphasizes the costs of undertaking activities or processes.

TRIZ TRIZ is a problem-solving methodology. **Northbeach** is a specific approach, and a software tool, designed to use TRIZ to develop new business process solutions. Using TRIZ, or Northbeach, a team analyzes a process and defines how the process could be improved.

SCOR The Supply Chain Council's Supply Chain Operational Reference model is a methodology designed to help supply chain managers analyze and improve supply chain processes. It focuses entirely on supply chains and has a notation and vocabulary for modeling, analyzing and improving different types of supply chain flows.

There are many other specialized methodologies and we have only named a few as examples.

Other Considerations

To clarify the discussion of methodologies, it is worth considering two popular artifacts that are not methodologies.

Frameworks. First, there are a variety of frameworks. One example of a process framework is the **APQC's Business Process Architecture Framework**. This framework is a document that lists some of the process names that one would expect to find in a large organization. A framework can serve as a benchmark when an organization is working on a process architecture and wants to check to see if has left anything out. Frameworks are often used in conjunction with a top down methodology.

Process Maturity Models. A process maturity model describes a series of phases that an organization evolves through as it becomes more mature. The best known process maturity model is Carnegie-Mellon's **Capability Maturity Model (CMM)**. Originally developed for the US Dept. of Defense, this model suggests that organizations go through five phases, from (1) organizations without processes, to (5) those that have fully documented processes that they use in their daily management of the organization. Each phase is defined and one can use the model to suggest what kinds of things an organization needs to do to become more mature.

Neither a framework nor a maturity model is a methodology, as such. They describe outcomes or goals rather than steps one should undertake in a specific process improvement effort. Obviously one could develop a methodology to support either – a methodology to develop a process architecture using APQC, or a step-by-step approach to improving an organization's CMM rating. For our purposes, however, it's best not to confuse frameworks or maturity models with methodologies. In most cases they are tools that are used to explain things that a generic or specific process improvement methodology might then seek to achieve.

Summary

The methodologies we have discussed are *public* methodologies in the sense that they are widely used and described in books. Many companies and consulting organizations have *proprietary* methodologies that they use but do not share with others. We have not considered those methodologies. Nor have we described all of

the public methodologies, or even begun to describe the various specialized methodologies, but have tried to mention the best known methodologies.

Each of the public methodologies we have described has its own strengths and weaknesses. Top-down methodologies, for example, are too complex to use if one has a small problem. On the other hand, incremental methodologies often don't provide an adequate, comprehensive picture when an external problem is impacting several different specific processes. Most companies use a combination of at least one top-down methodology for major redesign efforts or for new process development, and at least one incremental methodology for improving existing processes on a day-by-day basis. And, of course, many companies combine general methodologies with some specialized approaches.

For a more detailed discussion of any one of these public methodologies, see my book, *Business Process Change*.

Author

Paul Harmon



Paul Harmon is the executive editor of BPTrends website and the Chief Methodologist of BPTrends Associates and the author of *Business Process Change*, 3rd edition. He can be reached at npharmon@gmail.com