

October Sponsor

This BPTrends E-mail Advisor is sponsored by MEGA.



The most comprehensive review of BP software products ever published

The OMG, Process Metamodels and Now - Process Maturity

There are a number of standards groups actively developing business process standards. Most are engaged in standards for software. Some, however, are working on enterprise modeling standards, like the Supply Chain Council and the Value Chain Council. Some are working on standards that help companies evaluate their overall business process efforts - like the CMMI standard developed by the Software Engineering Institute (SEI) that companies use to audit their IT business processes. Still others are engaged in defining modeling notation standards.

The group that has emerged as the dominant standards group in the evolving BPM market is the Object Management Group (OMG). (For general information on the OMG, visit www.omg.org.) It's not that their standards are the most important. Other standards groups are responsible for equally important standards. Rather, it's that the OMG is committed to developing a comprehensive set of BPM standards and are going about it in such an energetic manner.

The OMG is a consortium that was founded in 1989. It consists of a mix of vendors and companies that rely on software and its membership is open to any company that wants to join. Their original focus was on object-oriented standards and, for awhile, they dominated that arena. By the late Nineties, however, the OMG realized that its object

The logo for BMG Breakthrough Management Group, featuring four colored squares (yellow, red, green, blue) and the text "BMG BREAKTHROUGH MANAGEMENT GROUP".

Performance Improvement

Lean & Six Sigma

- * Train Employees
- * Empower Managers
- * See RESULTS

Gartner

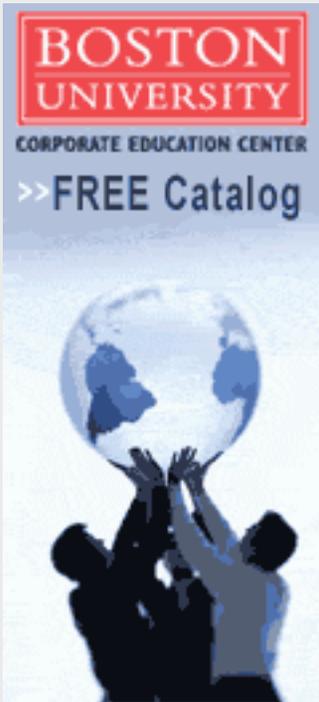


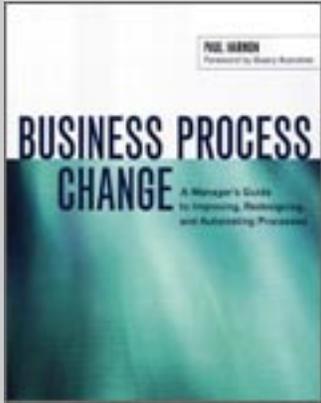
standards were only some of the standards being used by most large companies. And, they realized that they would have to move to a higher level of abstraction if they were going to provide their members with the interconnectivity they had set out to provide.

The first major expansion of the OMG charter involved the development of a software modeling notation - the Unified Modeling Language or UML - that is now the notation of choice among software modelers throughout the world. Their next step was to initiate the development of a series of metamodels that would define how different specific models could be mapped to each other. This sounds technical, and it can be, but in essence, it simply assures companies that if they build a model of a data base using a relational model, and later want to know how that model would interface with another database model, or with a software language model, they have an established way to define the relationships and make the transformations. This work is key to user companies that want to use a variety of tools but want to assure that, ultimately, the information they model can be shifted from one tool to another, or stored in a common repository. The OMG's metamodeling effort is part of an overall approach which is termed the Model Driven Architecture (MDA).

Of course, most of the large software vendors - like Microsoft and SAP - offer their own metamodels to link their own proprietary products and languages together, but only the OMG is committed to developing a truly open, comprehensive system that will allow all users to smoothly move from any software system to any other.

Many different groups are developing metamodels under the general aegis of the OMG's MDA effort. The OMG has proved a popular place for organizations to work together because it combines a rigorous approach to open software standards development, and because its practical approach to standards development usually





generates workable standards faster than other standards groups. Four times a year, representatives of the OMG's 500 member companies gather together to work on various standards. At any given Technical Committee meeting there will be from 10-20 groups meeting to consider various standards. Some of the groups are focused on technical software standards, but more are focused on standards for specific industries or specialized domains. Thus, for example, financial, healthcare, government and transportation standards are all being developed at the OMG.

Of particular interest to readers of BPTrends are the business process standards being developed by the OMG's Business Modeling and Integration Domain Task Force (popularly known around the OMG as BMIDTF or just BMI. This group started out three years ago to create a Business Process Metamodel (which is currently called the Business Process Definition Metamodel or BPDM). The idea was to create a very generic definition of what was involved in a business process so that one could move any business process model from one tool to another. At about the same time, the UML task force was revising the various UML models and it was assumed that the UML Activity Diagram, the UML's basic way of representing a process flow, would be reflected in the BPDM and vice-versa. The BPDM has yet to be completed, but that's primarily because of the many related events that occurred along the way.

For one thing, the OMG began working closely with various business rules vendors to create metamodels for business rules. Since everyone agrees that business rules and business processes are related, the work on the business rules metamodels was assigned to the BMIDTF. In the process, the business process metamodel standard was delayed while everyone considered exactly how processes and rules are related. This effort resulted in a generic Business Rules metamodel, a proposal for a more generic business metamodel that would explain how rules and processes, among other things, work together, and a more specific proposal for a

metamodel for Production Rules - the specific rules used by inference-based business rules software tools. (For information on the latest efforts of the BMI task force, check <http://bmi.omg.org/>).

A more important delay was generated by the merger of the Business Process Management Initiative (BPMI) and the OMG in 2005. BPMI.org was originally a consortium of business process modeling tools vendors and user companies that joined to develop an XML-based business process language (BPML). At the same time, they also launched an effort to create a business process notation (BPMN) tailored for BPML, and a query language (BPQL). In 2004, when BPEL was announced, most of the effort on BPML ceased as companies conceded that a standard supported by IBM, Microsoft and BEA would become the dominant XML-BP language standard. The group of process modeling vendors who had been working on the BPMN notation, however, quickly adapted the BPMN notation to support BPEL, and pushed forward. Eventually, they decided they would be better off working under a larger umbrella, and they merged with the OMG.

One might imagine a conflict between UML Activity Diagrams and BPMN. In fact, although they are very similar in many ways, BPMN has features designed for choreographing processes across company boundaries and support for human participation that go beyond UML Activity Diagrams. Equally important, business people have never been enthusiastic about UML, but they are enthusiastic about BPMN which is supported by the business processing tools business people commonly use. Thus, the OMG has agreed to support both. The key to supporting both, of course, is the business process metamodel, which everyone agreed could be extended to support the innovations in BPMN and BPEL. At the recent OMG Technical Conference in Anaheim, in September, the latest version of BPDM was reviewed and it was agreed that additional time would be allowed for adjustments to the BPDM proposal. At this

point it seems likely that BPDM will be the metamodel for BPMN, and BPMN and UML will be able to exchange models between them.

Meanwhile, the OMG has created a BPMI Steering Committee to provide OMG members with a vehicle to support their effort to influence the development of the broader business process market. Earlier this year, the BPMI held a conference (the BPMI Think Tank) to bring together a wide variety of individuals to discuss the future of business process standards and future initiatives are being planned.

If all this isn't complex enough, Borland has proposed that the OMG consider a business process maturity standard. This would clearly not be a standard in the traditional sense of OMG standards. It would be something much closer to a broad description of the stages that organizations go through on their way to becoming progressively more capable of managing and maintaining business processes. In other words, the OMG would be entering the domain currently occupied by SEI. SEI originally created its Capability Maturity Model (CMM) to help the US Department of Defense determine which software vendors were more or less likely to deliver quality software on time. The assumption was that IT departments that had well-defined and managed software development processes would be more effective. Recently, the CMM effort has been extended in a number of ways and the latest, integrated version of the various approaches that have been developed by SEI is termed CMMI. Today, corporate IT groups throughout the world use CMMI to establish their process maturity.

There have been various efforts undertaken to develop a maturity model that would be broadly useful for organizations that want to evaluate all of their business process management and maintenance efforts. One effort was led by Bill Curtis, one of the leading developers of the original CMM model. Bill Curtis, John Alden, and Charles Weber created

an original version of the Business Process Maturity Model (BPMM) while at TeraQuest. TeraQuest was acquired by Borland Software and Borland decided that the Business Process Maturity Model should be placed in the public domain. Thus, at Anaheim, the OMG BMI task force began to discuss how it might adopt a process maturity model. It will undoubtedly take the OMG some time to determine just how it might relate to a "framework for organizational improvement" which isn't either a software standard or a notation. In addition, the BPMM uses a vocabulary of its own, drawn from CMM and from the quality control movement. It is already agreed that BPMM will need to share a common vocabulary with existing and future OMG business process standards. Making the vocabulary of the BPMM compatible with the language of UML Activity Diagrams and BPMN represents a significant challenge. More challenging, perhaps, many OMG members think of "process" from the narrow perspective of IT while BPMM thinks of processes more broadly, as business managers usually do. Embracing both perspectives will be a major challenge for many OMG members.

We have gone on at length about the OMG's efforts, not to emphasize the challenges, but to point out that the OMG is rapidly emerging as the most interesting venue for the discussion of cutting-edge business process issues. Different groups with very different perspectives are now meeting every quarter at the OMG Technical Committee meetings to discuss basic issues that everyone involved in business process development must consider. Two years ago, it would have been easy for those who are more business oriented to dismiss the OMG as a technical, software standards group. With its merger with BPMI, and its consideration, this September, of a comprehensive Business Process Maturity Model, the OMG has suddenly emerged as the best place for those interested in the technical aspects of business process management to meet and discuss the issues that are critical to the smooth evolution of business process technologies.

This month, in Burlingame, for example, the OMG is hosting a workshop for those interested in discussing the problems faced by those building a Service Oriented Architecture with BPM and MDA. The OMG's next Technical Committee meeting will meet in Washington, DC in December.

There are other groups that may prove just as influential as the OMG, but it is hard to think of another group that is approaching open process standards in as comprehensive a manner as the OMG, or that is committed to quarterly meetings and a variety of workshops focused on important technical concerns. I wouldn't recommend that a senior business manager or a supply chain executive attend the OMG meetings. But, I would strongly recommend that those managers have one of their technical people at the OMG meetings to monitor the development of the standards that will help define the process market in the years ahead.

Till next time,

Paul Harmon

:: [email us](#)
:: [Visit BPTrends](#)