

# B BUSINESS P PROCESS M MANAGEMENT WITH OMG STANDARDS



## Introduction

Business Process Management (BPM) is a set of techniques for the continuous, iterative improvement of all the processes involved in running a business. In recent years, BPM techniques have helped reduce errors, reduce costs and increase productivity at organizations ranging from manufacturing companies to telecoms providers, insurance companies and government departments. BPM's successes stem from both more process automation, and more repeatable, error-free manual processes. BPM complements other approaches to organizational improvement, and in particular fits well with the SOA (Service Oriented Architecture) software design philosophy; BPM prompts managers to continuously change and evolve business processes, while SOA can help software architects create enterprise systems that adapt to these ever-changing requirements. While BPM is unashamedly focused on the people within a business and how they work together, good tools for analyzing, understanding and documenting business processes are one of the keys to BPM success.

Object Management Group® (OMG®), an international, open membership, not-for-profit technology standards consortium, develops and maintains several key specifications used in BPM tools. OMG also offers a BPM certification program. For more information, visit [www.omg.org/oceb-2](http://www.omg.org/oceb-2).

## Business Process Maturity Model™ (BPMM™)

The Business Process Maturity Model describes an evolutionary improvement path that guides organizations moving from immature, inconsistent processes to mature, disciplined processes. It provides a reference model for appraising processes within the enterprise and helping prioritize improvements to them. BPMM can also be used to assess risks when developing and deploying new enterprise IT applications supporting business processes.

BPMM is based on Watts Humphrey's original Process Maturity Framework, which is also the foundation of the widely respected Capability Maturity Model for Integration (CMMI), used to help organizations institute repeatable software engineering processes. Following CMMI's success, as many as 200 different maturity models have appeared. However, most are simply descriptions of how an organization might look at different stages of evolution, giving little guidance on the specific steps necessary to move between maturity levels. By contrast, BPMM provides a detailed roadmap for business process improvement.

## Business Process Modeling Notation™ (BPMN™)

Business Process Modeling Notation has become the de-facto standard for business processes diagrams. It is intended to be used directly by the stakeholders who design, manage and realize business processes, but at the same time be precise enough to allow BPMN diagrams to be translated into software process components. BPMN has an easy-to-use flowchart-like notation that's independent of any particular implementation environment. OMG's BPMN 2.0.2 specification has also been published as an ISO/IEC International Standard, ISO/IEC 19510:2013.

## Decision Model and Notation™ (DMN™)

The DMN standard is designed to work alongside BPMN to provide a mechanism to model decision-making within both process models and case models. Complementary to BPMN, the standard may be used to specify decision services to be called from a BPMN process. The standard provides two levels for modeling a domain of decision-making. Decision Requirements Diagrams (DRDs) show the relationships between decisions, business knowledge and input data; decision tables and FEEL (an expression language) allow the definition of decision logic. When the logic is fully specified, a DMN model is executable.

### Business Motivation Model™ (BMM™)

The Business Motivation Model provides a structure for documenting, communicating and managing the key elements of the business and their interrelated purposes in an integrated way. BMM allows the organization to create Meta-Object Facility™ (MOF™)-based representations of the internal and external forces that influence the design of the business, the business's assessment of those forces (such as strengths, weaknesses, opportunities and threats), the organization's objectives, the strategies and tactics used to achieve the objectives, and the relationship of all of these to the business rules and processes that make the business operate.

### Semantics of Business Vocabulary and Business Rules™ (SBVR™)

When communicating information within a business, it's vital that all participants have a shared understanding of the exact meanings of all the terms being used. OMG's Semantics of Business Vocabulary and Business Rules specification provides the means to precisely define business terminology, formally and unambiguously specifying each definition in terms of other definitions in the vocabulary. The specification provides a powerful hierarchical categorization of vocabularies, allowing concepts to be organized from the general to the specific. It also handles synonyms, abbreviations, cross-references and multiple vocabularies, so that one set of meanings can be represented in different languages.

SBVR also supports the definition of governance rules that use the terms in the businesses vocabulary. Although based on precise logic, SBVR rules are expressed in natural language to allow them to be easily read and written by business practitioners. SBVR's MOF modeling foundation supports tools that allow vocabularies and rules to be mechanically checked for consistency, detecting undefined terms, inconsistencies and different rule statements that have overlapping meanings. By providing the tools to store and manipulate vocabularies, SBVR provides much of the glue that ties together business models created using other OMG BPM specifications.

### Value Delivery Modeling Language™ (VDML™)

VDML provides a business-leader abstraction of business processes in the context of a broader context of business design. It fills the gap between strategic planning and operational design. It links business processes to the capabilities they deliver, the organizations that design and perform them, the resources they consume and the values they produce. Business processes are one form of business collaboration, where collaborations represent all of the interactions between people and organizations to accomplish the objectives of the enterprise. Business processes are aligned with capability methods as the building blocks of the enterprise and the components can be re-configured for shared services, enterprise-level optimization, business changes, and configuration of new business operations.

### Case Management Model and Notation™ (CMMN™)

CMMN is a graphical notation used for capturing work methods that are based on the handling of "cases" requiring various activities that may be performed in an unpredictable order in response to evolving situations. Using an event-centered approach and the concept of a case file, CMMN expands the boundaries of what can be modeled with BPMN, including less structured work efforts and those driven by knowledge workers. Using a combination of BPMN and CMMN allows users to cover a much broader spectrum of work methods.

### Want to learn more?

We are happy to discuss how OMG membership will benefit your organization! Feel free to explore our website at [www.omg.org](http://www.omg.org) and when you are ready, please contact [bd-team@omg.org](mailto:bd-team@omg.org) or call + 1-781-444-0404 to get started.

### About OMG

The Object Management Group® (OMG®) is an international, open membership, not-for-profit computer industry standards consortium with representation from government, industry and academia. OMG Task Forces develop enterprise integration standards for a wide range of technologies and an even wider range of industries. OMG's modeling standards enable powerful visual design, execution and maintenance of software and other processes. Visit [www.omg.org](http://www.omg.org) for more information.



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