



Model Your Decisions with DMN

Members of the Object Management Group® (OMG®), an international, open membership, not-for-profit technology standards consortium, have produced three successive, powerful and complementary standards, which together can model the range of working methods used across most organizations. This “triple crown” of process improvement standards offers support for process management (BPMN™), case management (CMMN™) and decision management (DMN™). This data sheet describes DMN: Decision Model and Notation™.

Value Proposition

Using DMN to model your organizational decision-making will:

- help all stakeholders understand a complex domain of decision-making using easily readable diagrams
- provide a natural basis for discussion and agreement on the scope and nature of business decision-making
- reduce the effort and risk of decision automation projects through graphical decomposition of requirements
- allow business rules to be defined simply and reliably in unambiguous decision tables
- simplify development of decisioning systems using specifications that may be automatically validated and executed
- provide a structured context for the development and management of predictive analytic models
- enable the development of a library of reusable decision-making components.

Decision Model and Notation

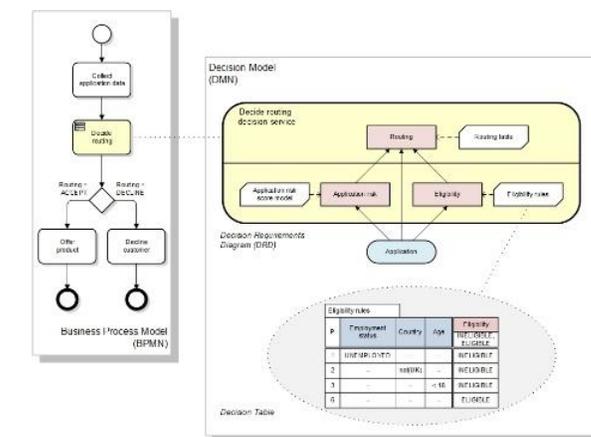
DMN is a modeling language and notation for the precise specification of business decisions and business rules. DMN is easily readable by the different

types of people involved in decision management. These include: business people who specify the rules and monitor their application; business analysts who transform user requirements into detailed decision models; and software developers who implement them in enterprise systems. Modeled decisions can also be put into a business context, linking them to organizations, metrics and business goals.

DMN is designed to work alongside BPMN and/or CMMN, providing a mechanism to model the decision-making associated with processes and cases. This figure shows how a decision model in DMN may be used to define the decision-making associated with a business process task defined in BPMN: a DRD (Decision Requirements Diagram) defines the functionality of a decision service as a network of decisions with supporting business knowledge models, and decision tables are used to model the decision logic underlying the components of the DRD.

DMN allows models to be constructed on three levels:

Decision requirements: a notation for Decision Requirements Diagrams (DRDs) which shows graphically the decisions to be made in a business domain, together with their dependencies on each other, on input data, and on business knowledge. DRDs can be used on their own as a high-level analysis of a domain of decision-making, or used as a framework for defining an



executable decision service. **Boxed expressions:** a flexible notation allowing components of decision logic to be drawn graphically. One important contribution of DMN is an unambiguous notation for decision tables, which are a clear, convenient and commonly understood way to express business rules as boxed expressions. **Decision logic:** an expression language (FEEL) for defining decision logic, usually to be associated with the components of a DRD or the cells of a decision table. FEEL defines structured logic, calculations, simple data structures, and externally defined logic (from Java and PMML) as executable expressions with formally defined semantics. All of these three levels are executable when fully specified, and interchangeable as XML

Next Step

We are happy to discuss how OMG membership will benefit your organization! Explore our website at www.omg.org and when you are ready, please contact 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 modeling standards enable powerful visual design, execution and maintenance of software and other processes. Visit www.omg.org for more information.

