

### 3.4.5 Project Support

The project support model specifies domain engineering support for product manufacturing projects, including the capabilities projects need to build products, a project-directed evaluation of the degree to which the domain supports efficient and effective use of those capabilities, and the support projects are provided to foster such use.

#### Project Needs

The project needs element specifies the perspective of product manufacturing projects as to the capabilities that the domain needs to provide. A domain is a necessary balancing of a broad program-market perspective with more narrowly focused project-customer perspectives. The result is a program-level coordination and collaboration between the overall market-focused domain engineering effort and product manufacturing projects. This element is organized around the identification and resolution of common and differing needs of projects and their customers, technical issues and tradeoffs in products, and future needs for domain evolution based on future market needs as a generalization of the current and future needs of existing and prospective customers.

#### Domain Evaluation

The domain evaluation element specifies the validation of domain capabilities from a project-directed perspective. Validation has two concerns: that the domain enables projects to achieve expected productivity and that it results in a product that is a proper realization of its specification. It describes how consistency, completeness, and quality of the domain as a whole (including product family and manufacturing process) is established. Emphasis is given to applying project-informed scenarios to specify, generate, and verify sample products to evaluate the developmental quality achievable in using the domain. For each derived product, the domain capability for product evaluation is used to determine that the product relative to its specification is a proper realization and exhibits expected behavioral quality.

## Domain Delivery

The domain delivery element specifies the means by which the domain engineering effort supports its customers (the program's product manufacturing projects) in the efficient and effective use of domain capabilities. This element encompasses:

- How projects are to be oriented to the use of domain-provided manufacturing capabilities, specifically how the process and practices by which manufacturing is to be performed are to be perceived from a project perspective;
- How the domain is configured, packaged, and deployed to a product manufacturing project;
- How domain capabilities are communicated to developers in forms sufficient to instruct and guide them in proper use of the domain, including information provided in documents (hardcopy or electronic), in domain-integrated guidance and explanation, and in training materials
- How domain acceptance by a project, including validation, training, and transition into operational use, is supported;
- How a project's developers are assisted in effective and efficient use of the domain;
- How flaws and unmet project and associated customer needs are organized and communicated to inform domain increments and as prospective domain and market needs to inform domain evolution.