Abstract

The term flexible alliances denotes types of collaboration, which are particularly suitable to counter dynamic market-requirements. To achieve the goals determined by a flexible alliance efficiently, it is absolutely necessary to design and initiate underling processes quickly and to use adequate information and communication technology.

In the context of this thesis a knowledge and process framework was created. It acts as an object of reference and gives recommendations and thus supports the design of underling processes as well as the operative management of flexible alliances. Furthermore the framework helps to develop technical concepts for alliance-supporting information and communication systems.

The construction of the framework is based on an object-oriented reference modeling approach. The generalization and respectively the specialization of model aspects enables that the behavior and structure of the system *flexible alliance* become generalized in so far that any possible configuration of cooperating enterprises can be depicted. Moreover this approach allows for the required specification to make recommendations for action for every imaginable situation. Accordingly this thesis offers a generic master-reference-model for flexible alliances as well as the corresponding procedure, which allows for the specification of a generic model for domain-specific aspects. The procedure offers methodic support in developing domain-specific reference models.

The method was exemplarily proven in the case of a pharmaceutical development process; a domain-specific reference model was constructed from which a technical concept for an information and communication system resulted. A final evaluation was conducted in two case studies.