

## **Demand-Oriented Supplier Integration in Agile New Product Development Projects**

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**Abstract :** Companies are facing an increasing pressure to innovate faster, cheaper and more radical in last years, due to shrinking product lifecycles and higher volatility of markets and customer demands. Especially established companies struggle meeting those demands. Thus, many producing companies are adapting their development processes to address this increasing pressure. One approach taken by many companies is the use of agile, highly iterative development processes to reduce development times and costs as well as to increase the fulfilled customer requirements and the realized level of innovation. At the same time decreasing depths of added value and increasing focus on core competencies as well as a growing product complexity result in a high dependency on suppliers and external development partners during the product development. Thus, a successful introduction of agile development methods into the development of physical products requires also a successful integration of the necessary external partners and suppliers into the new processes and procedures and an adaption of the organizational interfaces to external partners according to the new circumstances and requirements of agile development processes. For an effective and efficient product development, the design of customer-supplier-relationships should be demand-oriented. A significant influence on the required design has the characteristics of the procurement object. Examples therefore are the complexity of technical interfaces between supply object and final product or the importance of the supplied component for the major product functionalities. Thus, this paper presents an approach to derive general requirements on the design of supplier integration according to the characteristics of supply objects. First, therefore the most relevant evaluation criteria and characteristics have been identified based on a thorough literature review. Subsequently the resulting requirements on the design of the supplier integration were derived depending on the different possible values of these criteria.

**Keywords :** iterative development processes, agile new product development, procurement, supplier integration

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