

The optimal way to cooperate

Scientific analysis underlines the successful concept

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Customer input is critical to a company's success. By involving its customers in the innovation process, a company can improve its innovation capabilities and reduce the market risk inherent in discontinuous innovations.

The earlier a customer's knowledge and experience can be incorporated into the process, the more the company can focus its R&D activities to satisfy customer demands. This integration helps identify information on

customer needs, disseminates the information throughout the critical functional areas within a company and translates it into auspicious new products and services.

Empirical studies show that integrating customers into the innovation process is an applied method seeing increasing use that seeks to reduce the risk of failure in investment.



At the top of each management agenda, discontinuous innovations pose a specific risk because they involve more uncertainty than incremental innovations [Factbox](#). The nature of the product itself, the organization's capacity to effectively and efficiently produce the product, its market acceptance and, ultimately, profitability are all at stake. At the same time, traditional product-development best practices associated with incremental innovation also present a challenge, as both the product attributes and the breakthrough innovation's future environments are not yet known. The results of traditional approaches in forecasting customer needs and market potential, whether they are quantitative techniques or qualitative methods, are limited to mere insights with respect to product improvements. Early customer integration, including the integration of other customers with similar needs as well as potential future customers, helps shed light on the previously unknown demands of the target market and on customers' future needs and can therefore lead to disruptive innovation [Factbox](#).

Companies have, in fact, often tried to leverage the advantages of customer integration into their new product development process. Customers can be incorporated in different ways into the R&D environment with their contribution varying according to the phase of involvement. **1** provides a summary of how customer integration can differ at each stage of the innovation process, and which customers are best suited to achieve the expected input **2**.

Early customer integration helps shed light on the previously unknown demands of the target market.

Requesting customers provide ideas for new products that follow from their needs. A requesting customer's contribution depends on the company's capability to capture customer knowledge, which is often expressed in the form of complaints and suggestions. As complaints are mostly anchored to current product uses and characteristics, they are a rather limited source of new product information. Conversely the *launching customer* is integrated right from the development phase to simulate or design, or to participate in development activities. The reference customer, on the other hand, supplies application experience. The highly productive role that

reference customers can play in product and prototype testing has been revealed in numerous empirical studies. The *first buyer*, however, plays a more passive role in development. As described in models for the diffusion of innovation, a precursor that strongly influences market penetration may support market success. Customers who can cover all stages of the R&D process clearly are the preferred choice for cooperation – they are the *lead users*.

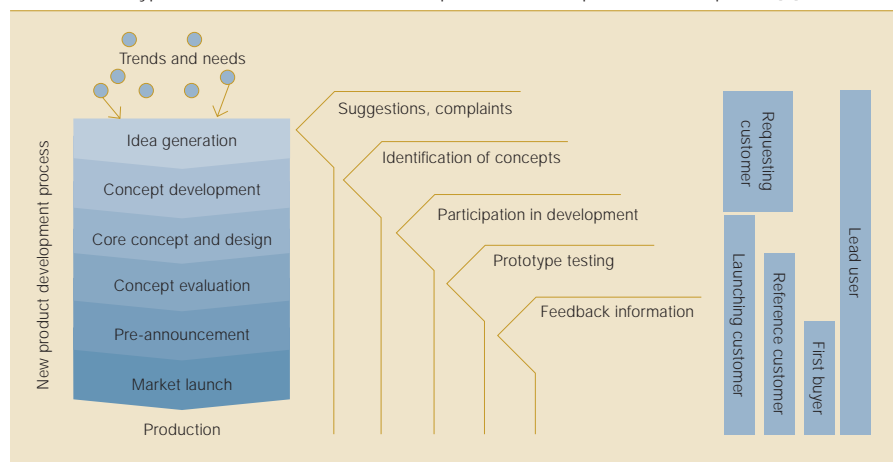
Several empirical studies have emphasized that the novelty of innovation, the expected turnover, market share and strategic importance for innovation projects based on lead-user methods are significantly higher than for projects based on traditional approaches. The lead-user method's multi-stage approach not only seeks to generate new, innovative product concepts, but

also to improve and enhance the effectiveness of cross-functional product development teams.

Customer knowledge can help significantly to generate ideas, identify opportunities and define concepts for future products, processes or services.

Lead users differ greatly from ordinary users. They face new needs significantly earlier than the majority of customers in the market and they benefit from innovations that meet those needs. Lead users can contribute to different sub-phases in the early innovation process, sometimes called the "fuzzy front end." As **2** illustrates, customer knowledge can help significant-

1 Customer types and their contribution to the process of new product development [1]



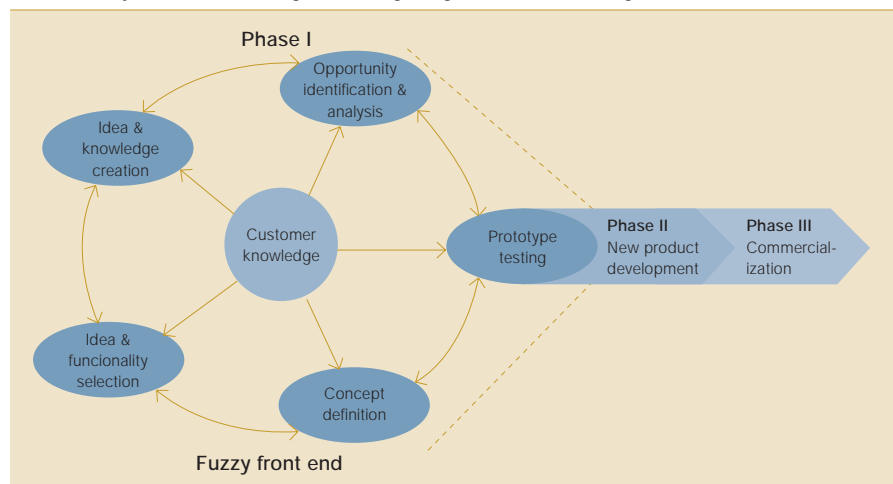
Factbox Innovation glossary

Discontinuous or disruptive innovation: a technological product or system that overtakes the current dominant technology or status quo product and creates a new market.

Incremental innovation: a small improvement upon an existing technology that satisfies short-term goals and sustains a company's growth.

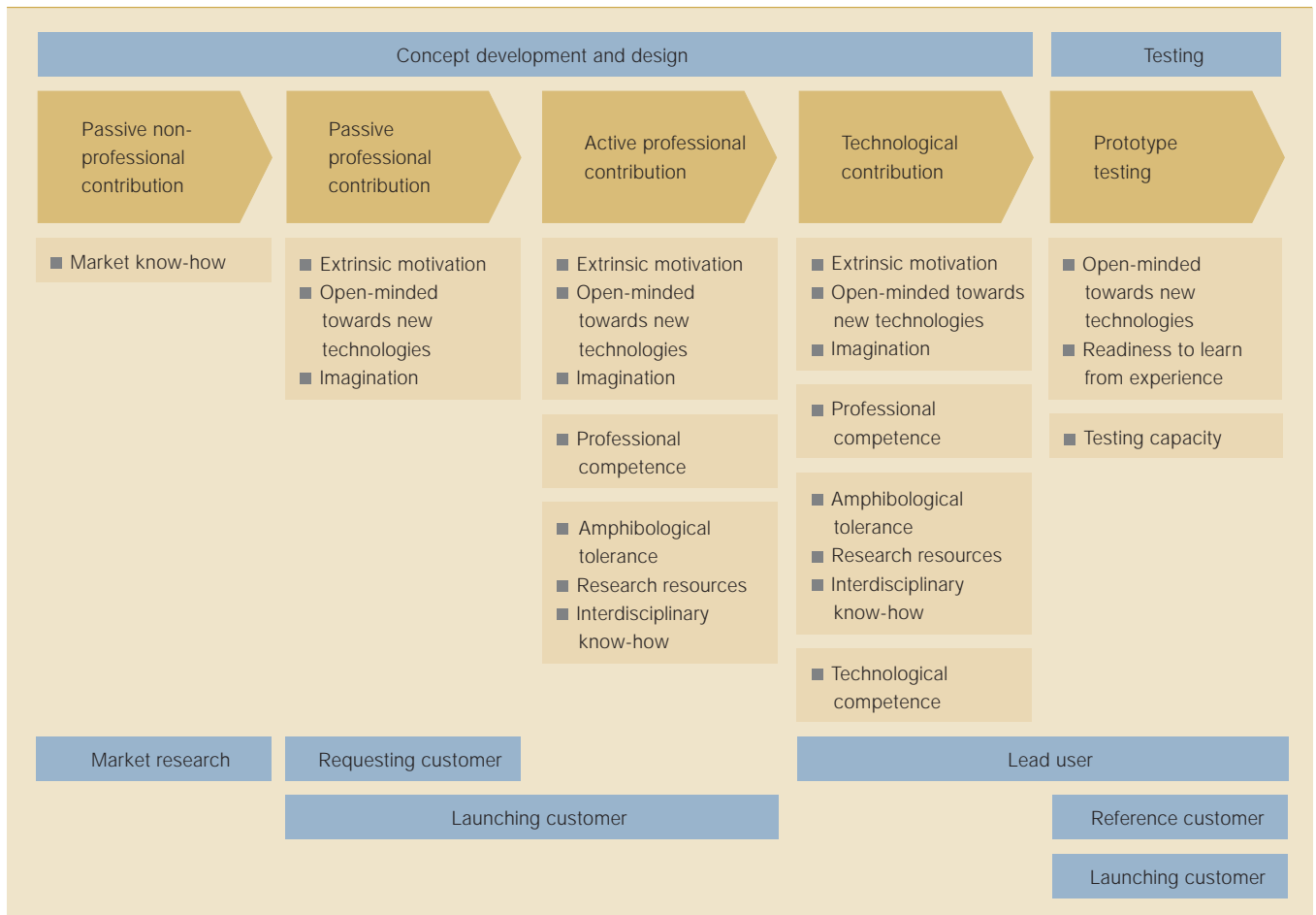
Open innovation: the buying or licensing of processes or technologies from other companies; methods and procedures for the field of open innovation have been developed in the last five years [5].

2 The "fuzzy front end" with regard to integrating customer knowledge



Collaboration gateway

3 Required customer profiles for participation in the new product development process [1]

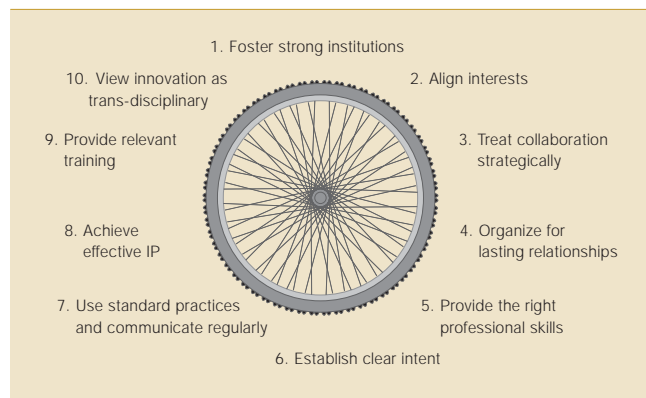


ly to generate ideas, identify opportunities and define concepts for future products, processes or services.

Integrating external knowledge not only from customers, but also universities and public research institutes, into the innovation process has created the promising new field of *open innovation* [Factbox 5]. The practical aspects and guidelines developed under the framework of open innovation also can be applied to the customer relations [4] [2].

Collaboration with partners, when not properly managed, can also be risky. It can lead to a loss of proprietary competence, dependence on customer views, a limitation to mere incremental innovation or it may serve only

4 Ten guidelines to maximize the success of cooperation in R&D



niche markets [3, 4]. However, by following the above and other advice from best practice, the inherent risks of customer collaboration can become insignificant and the opportunities great.

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