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## Performance Measurement in Finnish Industrial R&D Management

Several decades of R&D studies have produced a good deal of data with respect to effective management and measurement of product development. However, some studies have indicated that product development management is still mostly based on gut-feeling rather than systematic measurement; it has been concluded that – typically – companies do not measure the R&D activity very well but they are striving to find out how to do it effectively. At the same time, academic research has tended to be theory-driven instead of being applications-based. In this respect, it seems fair to claim that a good deal of work to improve the efficiency of the interface between industrial R&D

management and academic R&D research is still needed.

The objective of the paper is to describe what is the role of performance measurement (PM) in Finnish industrial R&D management today. The paper illustrates the key results of a survey conducted year 2001. The questionnaire was sent to 350 Finnish R&D managers of industrial companies that employed more than 200 employees. The analysis of the results is based on classification of objectives, employed measures and their purposes of use.

On the basis of the literature review, it is suggested that product development performance is a multidimensional and multifaceted issue. Rather analogously to the BSC framework presented by Kaplan and Norton (1992), it is proposed that the performance and success of new product development can be evaluated and measured from at least four directions that provide a multifaceted view; *Customer view*: how well (compared with competitors' products) does the product respond to the customer need, is the quality sufficient, what are the operating costs, is appropriate after sales support available. *Shareholder view*: does R&D produce profitable business, is the growth rate of the business acceptable, what is the competitive position. *R&D view*: deployment of strategic resources, competence development, learning. *Supply chain view*: cost efficiency, time to market, design for assembly or manufacture, availability of appropriate sales, and delivery channel/feasibility of the product from the supply chain point of view.

The results show that approximately 70 percent of the companies had developed explicit measures for tracking the product development performance. The measures used were classified into 14 different categories, which fo-

cused on apparently different subjects. Classification revealed that 56,8 percent of companies measured the R&D performance with metrics that could be associated with time – being the most popular domain of product development measurement.

Overall, the results indicate that the ability to measure things that are perceived important is weak in some cases. That is especially the case with the customer perspective. The results also indicate a contrary situation. The metrics used focused very often on the company shareholders' perspective although this perspective was not considered a very important one. In addition, the majority of the R&D managers felt the R&D metrics used to be dissatisfactory. One of the main observations made during the study seems interestingly inconsistent with the prior perceptions: if a primary aim of R&D were to promote a company's long-term profitability, it could be expected that measures of long-term profitability would be very common. However, this is not the case in practice: sales or revenue metrics dominate the financial measurement at company level. ■