

Measuring Operations Performance

Andrea Chiarini
Pauline Found
Nicholas Rich *Editors*

Understanding the Lean Enterprise

Strategies, Methodologies, and
Principles for a More Responsive
Organization

 Springer

Measuring Operations Performance

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Lean Management and Product Innovation: A Critical Review

Stefano Biazzo, Roberto Panizzolo and Alberto Maria de Crescenzo

Abstract Nowadays the management of product innovation and development processes is crucial for the survival of firms and it requires that advanced methodologies and tools should be adopted. Many companies are trying to apply the waste elimination philosophy of Lean operations into the innovation and product development processes. The application of Lean manufacturing concepts in innovation processes (Lean Innovation) is not so immediate and presents several problematic aspects. One of the greatest difficulties is not to distinguish the critical differences between the two fields of application. The aim of this work is to identify and discuss the techniques and tools which constitute Lean Innovation practices. First, the Innovation Pyramid model is proposed in order to define an integrated vision of innovation processes which is based upon three levels of activities: absorb, explore and create. Second, an extensive review of the literature has been carried out aiming to recognize the practices that characterize the “translation” of Lean principles in the innovation processes. Finally, the practices that characterize Lean Innovation are analysed throughout the proposed Innovation Pyramid model. The results of this study highlight that the Lean Innovation practices lie mainly at level 3 of the innovation pyramid (i.e. the create level). This evidence suggests that in order to enhance the firm’s innovation capability it is necessary to integrate the Lean Innovation practices with other good practices coming from different research fields.

Keywords Product innovation · Lean product development · Lean practices

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