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Driving Improvement and Business Progression Utilizing New Product Development Approach: A Comprehensive Empirical Study

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Abstract

New Product Development (NPD) is a strategic process used by industry as a measure of business improvement practice to create and introduce new products or services to the market. The purpose of this paper is to explore how cross-functional collaboration inspires involvement of internal /external partners that subsequently promotes new product development (NPD) process accomplishment efficiently and effectively. The case study industry typically followed a structured process that includes idea generation, concept development and testing, product design and development, and commercialization. The exploratory study reveals that cross-functional collaboration directly promotes NPD success and the study provided a conceptual framework to extend our practical understanding of the underlying mechanisms that CFM improves NPD performance. Stabilization of new model production processes was attained to supply first time right products to the customers utilizing a metric termed as Stabilization Time Ratio. In one of the new models, the ST Ratio was achieved as 0.43 that governs the early stabilization of the new production process. The second target of NPD was to improve plant readiness to accommodate manufacturing of modified and new models of vehicles. NPD initiatives also remained successful in meeting this goal in most of the new models.

Keywords

New Product Development, cross-functional collaboration, Stabilization of production process, plant readiness.