ABSTRACT

One of the principal determinants of business success is technological innovation. Successful organizations sustain competition by innovating different aspects of their business ranging from developing new products to offering customized solutions and new services. Introducing new products in the market has long been considered as the successful strategy followed by the organizations to stay ahead of competition and prove their operational effectiveness to the business world. Thus, research on the successful practices in the New Product Development (NPD) assumes significance in strategic management literature. However, not all the new products are successful in the market. Hence, careful examination of the successful introduction, implementation and performance of the product are critical in the NPD accomplishments.

New product development is one of the most important components of product policy and product management in organizations. A progressive firm has to consider new product development as a cardinal element of its product policy. The business firm has to respond to the dynamic requirements of its clientele. These responses take the shape of new products and new services. Through such a response, firms reap a good deal of benefits. New product development (NPD) is the process adopted by organizations worldwide to develop products and services for customers. Employees, suppliers, dealers and customers of the organization are often involved throughout the NPD process. Based on the Caterpillar New Product Development Framework and Competitive Benchmarking, the research objectives of the study are confined to evaluate the adherence of process steps
in each of the phases of new product development framework in the introduction of new model of trucks. The study is aimed at evaluating the performance of the new model of trucks and to carry out production studies with the competitor machines and generate production study data to substantiate the advantages of the new trucks over the competitors.

The results of this study determines how systematic adherence of new product development process at Caterpillar for the introduction of 40/50 ton rear dump trucks has paved way for the successful production launch of its products and how Caterpillar 40/50T products were subjected to competitive benchmarking with similar class products of competitors and emerged superior over competitors with regard to product performance and reliability. This study is also related to the adherence of the new production introduction process and the results of the production studies to place the new product in the market. It is based on predetermined objectives and methodology. In the process of study, the objectives are pre-determined and the methodology has been designed to fulfill the purpose of the study.

The production studies carried out as part of the study opens new dimensions in the evaluation of the performance of the new products with the competitor products. This study contributes to the existing body of literature on new product development by providing new insights from the lessons learnt in the various processes in the development framework.