



Symbiosis Institute of Management Studies Annual Research Conference (SIMSARC13)

## Assessing Integration between Project Management with NPD Process in Heavy Industrial Components Industry and Developing a Framework to align them

Sonam Rawat<sup>a</sup>, Brig. Rajiv Divekar<sup>b\*</sup>

<sup>a</sup>MBA Student, Symbiosis Institute of Management Studies, Pune

<sup>b</sup>Director, Symbiosis Institute of Management Studies, Pune

---

### Abstract

This report aims to provide a research how companies align New Product Development (NPD) Process and Project Management in their organizations. Developing a new product on time and within budget is a huge challenge to be faced in today's competitive marketplace. One of the major constraints faced for NPD success is day to day Project Management. The Research results explored how companies structure their NPD process and Project Management to strike a balance between the needs to optimize efficiency and flexibility of both, which often carry opposing implications for organizing and managing projects and NPD process.

This paper proposes a set of requirement for establishing a design and framework for Heavy Component Industries. The framework can aid Project Management Teams and New Product Development Process Teams to work in alignment and could optimally allocate resources and dynamically respond to unexpected delays and budget overruns.

**Key words** : *new product development, project management, heavy component industry*

\* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000 .

E-mail address: [director@sims.edu](mailto:director@sims.edu)

© 2014 Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Selection and/or peer-review under responsibility of Symbiosis Institute of Management Studies.

---

## 1. Introduction

The challenges faced by Organizations across the world are to integrate technology and business strategy is to match technology push to market pull. The product portfolio management of the Organization integrates the technical expertise with the business strategy.

A New Product Development Process flow is most appropriate in the long-term product development process. New Product Development (NPD) process is a phase/gate process that integrates proven business practices (customer-driven marketing and pricing, global engineering, preferred parts and suppliers, reverse auctions) with industry best practices in new product development. Engineering, Marketing, Procurement, and other functional areas must collaborate continuously to fully leverage the opportunities of the New Product Development process. NPD process helps the firm maximise on its expertise and also provides a framework for Efficient and Reliable products; and also ensures that all the projects follow same development process and have uniformity.

NPD plays a vital role in determining the economic success of organizations. Companies must continuously strive to develop new products to satisfy the needs of the market as well as to compete with other companies. NPD is the key to becoming market leader and emphasis must be given to the product design effort so that overall cost as well as design and development time can be reduced to the minimum. By building in quality during product design, later engineering changes, production time and overall cost can be reduced. In NPD, organizations often struggle to achieve both efficiency as well as flexibility due to their often opposing implications for organizing and managing NPD projects along with project management.

Cost escalation in projects management is the result of many important factors, most of which can be directly attributable to design and sourcing decisions at the early developmental stages of the project. Very seldom are real data of NPD gets integrated into design. Through design and integration at the early stage of Project Management, difficult manufacturing processes can be avoided. Traditionally, design and manufacture have been executed in serial order and the consequence of design decision on subsequent processes such as manufacturing become apparent only during process planning.

In sequential Project Management, communication and cooperation between upstream and downstream phases are limited, which further results in large feedback loops, more iterations, uneven workloads, inefficient use of resources, and therefore lengthy development cost. Sequential designing de-emphasizes the need for cross-functional teamwork which can result in communication breakdown. Sometimes, the project Management is carried out in adhoc during manner, where most of the activities are not recorded and properly documented. Sometimes each engineer has their own method of managing the work and this can create substantial variation in the project

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات