Managing Distributed Product Development

Objectives
- Identify a generic process of distributed product development
- Based on the generic process, identify key success factors at various interfaces between different process stages and partners.
- Develop a framework which may serve as a basis to improve distributed product development.

Background
In recent years, new product development has been subject to two major pressures. The first is the now familiar pressure to reduce time-to-market. The second is the increasing disintegration of NPD processes as both production and development activities are outsourced or performed in partnership.

Consequently, there is an urgent need for a structured process and a management system which promotes effective collaboration and yet maintains adequate protection against loss of confidential information. However, existing new product management theories implicitly assume a static, all-within-a-company type of new product development which may not be relevant any more due to its dynamic and uncertain nature of today’s environment. What is the ideal process of distributed product design? To what degree are existing approaches suitable? What effects have distribution, speed, creativity and uncertainty on the product development performance? Which value creating network configuration fits best to which product and technology strategy? These are some of the questions which this project seeks to address.

Research Approach
The major stages of this research program are:
- Literature review in relevant areas, such as engineering design, operations management, marketing, and organization behavior.
- Information gathering in participating companies by interviews, questionnaires, workshops, and supplement documents.
- Data analysis and framework development

Deliverables
- Characterization of new and emerging distributed product development processes and its best practices
- A process-based framework for better distributed product development

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