

*outsourcing*

*electronic  
commerce*

**FOCUS  
STUDY**

*total cost*

*ethics*

*supply chain  
management*

*strategic alliance*

*global sourcing*

*purchasing  
consortiums*

*operational  
resource management*

*minority enterprises*

**Front-End Loading:  
Supply Management and  
New Product Development  
in Japan**

By CAPS Research Japan Group

2009

CAPS Research

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# Introduction

Time-to-market is the period of time it takes to move a product from the initial idea stage to its ultimate introduction into the market. Historically, Japanese companies have had a shorter time-to-market than companies in Europe. This trend is not limited solely to the automotive industry. Involving suppliers in the early stages of new product development can improve time-to-market. Suppliers can provide important product information and creative ideas in the early planning stages of a new product. Early supplier involvement can also reduce engineering lead-time and some costs.

This research study explores the concept that the traditional sequential or pipeline approach to technology and product development is no longer adequate in today's business climate. The rapid escalation of global competition demands dramatic reductions in the time-to-market cycle. Global competition also requires companies to improve quality while reducing costs. Anecdotal evidence collected during the research suggests that front-end loading — complemented by early supply management and supplier involvement — has tremendous potential to improve the three key business concerns of time, quality and cost. The concept of front-end loading is explored and examined in greater detail in the next chapter of this study.

The two most significant features of front-end loading are (1) customer focus centering on doing the right things, and (2) cycle-time reduction focusing on doing them correctly.

## Opportunity

Because today's supply markets demand ever-increasing levels of integration, such as concurrent or simultaneous

engineering, it is the perfect time for supply management professionals to take a hard look at the various opportunities available to reduce time-to-market, improve the product development process and reduce costs.

## Research Goals

Following are the topics examined in this study:

- Current state of front-end loading (FEL) in Japanese industries
- Level of recognition of FEL
- Examination of an FEL organization
- Competency of supply managers to implement front-end loading
- Analysis of factors preventing implementation of FEL
- Expansion of the supply manager's role today

The concept of front-end loading has not received a great deal of favorable attention in the past. Relatively few professionals seem to recognize its value as a strategy. Some of the companies researched appear to have a structure in place that is conducive to front-end loading, while others clearly have barriers to overcome if front-end loading is to succeed. In general, purchasing must expand its scope of work beyond traditional tactics and activities to include broader supply management strategies. Even supply managers who have spent several decades in the profession may not be familiar with this concept.