

Supply Chain Management

www.utdallas.edu/~metin/teaching.html

The objective of this course is to explore the key issues associated with the design and management of industrial supply chains. Supply Chains are concerned with the efficient integration of suppliers, factories, warehouses and stores so that products are distributed to customers in the right quantity and at the right time. One of the primary objectives is to minimize the total supply chain cost subject to various service requirements.

In today's fiercely competitive environment, companies are forced to invest into supply chains to improve on four key aspects of business: *lower costs*, *faster delivery*, *higher quality* and *mass customization*. Supply chains absorb more than 30% of the sales dollars in some firms although they do not involve any *value adding processes*. Hence, any efficiency improvements in supply chains are direct contributions to profits. The importance of supply chains is well understood by the industry as well:

- Think of every enterprise ... involved in adjusted capacity-demand pricing. ... If this can be done ... in real time, you'll see another power of 10 increase in the efficiency of the work in economic system. Now how do we get there?

Andy Grove, CEO of Intel Corp.

- Asset Management Tool [for supply chain management] helps our business units identify the optimal supply chain strategies. ... It allows for enormous cost-saving, inventory reduction, customer responsiveness, and speed of delivery ... [and] has totally transformed our global operations.

Nick Donofrio, Senior Vice President, IBM.

- i2 Technologies will add \$50 billion of value in growth and savings [via Supply Chain Management] for our customers by the year 2005.

Sanjiv Sidhu, CEO of i2

This course, being a medley of practice and methodology, will survey both industrial success stories and useful techniques. We will examine supply chain practices of many companies including Dell, 7-Eleven, W.W. Grainger, IBM, Amazon.com, 3M, i2, Motorola, Procter&Gamble, Wal-Mart, L.L. Bean, GE, Sport Obermeyer. We will study supply chains with a system view — often across departmental boundaries — and emphasize key points such as uncertainty, risk and flexibility. We will also talk about supply chain implications of two new trends: E-business and information economics. We are going to watch two videos: “Supply chain management in the internet age” and “The future of e-business”. We will play two Supply Chain games: Truck and Beer games.