Supply Chain Strategy & Management

Improving Performance through
- Supply chain integration
- Optimized sourcing & make-buy decisions
- IT & decision support systems
- Deploying an effective logistics network
- Strategic partnering and supply contracts
- Integrating supply chain design with concurrent engineering

A Two-Day Program for Senior Management

in Cambridge, Massachusetts
July 24-25, 2002
November 11-12, 2002
April 7-8, 2003

http://mitsloan.mit.edu/execed
Strategic Approach to Supply Chain Design and Management

In this intensive, two-day, senior faculty-led program, we’ll explore issues that include:

State of the art practices: What are the best supply chain practices for surviving the rapid changes in markets, product innovation and other developments that challenge senior supply chain managers today?

Technology sourcing: Where will your company acquire the product and process technology it needs to remain viable and competitive in the future? Will you develop it yourself or will you outsource?

Strategic make/buy analysis: If you do outsource, how will you develop a supply chain strategy that will:

• position your company for future growth?
• ensure timely supply of components?
• allow you to survive the fierce competition, the shorter product life cycles and the heightened customer expectations in today’s global markets?

You will learn about a new MIT framework for strategically managing supply chains in today's rapidly changing markets.

You’ll also learn how recent developments in information systems and communication technologies, together with sophisticated decision support systems, have created the opportunity for revolutionizing manufacturing and logistics.

Program materials include two widely-recommended faculty-authored texts:

Clockspeed: Winning Industry Control in the Age of Temporary Advantage, by MIT Sloan Professor Charles Fine: “A new lens for rethinking your business and the tools to mine your supply chain for fresh gold.”

Atlanta Business Chronicle

Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies, by MIT Engineering Professor David Simchi-Levi. “Very few books on supply chain management succeed as both an instructional vehicle for the student and hands-on resource for the practitioner. Designing and Managing the Supply Chain is the happy exception.”

Supply Chain Management Review

Who Should Attend

This program is for senior managers responsible for the general business and strategic management of product supply and development, including: VPs of manufacturing, product development, transportation, logistics, inventory, and purchasing and distribution; general managers, IT managers, strategic planners, senior supply chain managers, and project management executives.

Attendance is appropriate for firms involved in implementing information system and decision support systems, those engaged in strategic partnering, and those which manufacture or distribute products, as well as financial service companies and retailers who would like to control more of the supply chain.

“This is the premier program that bridges the business of supply chain management with new supply chain tools. They cover ‘what works’ versus what’s new and untested.”

Ron Volans, Customer Marketing Planning Manager, McNeil Consumer Healthcare

“Important perspective on the relative importance of supply chain strategy in developing or revising business models.”

Mark Proft, Director, Strategic Marketing, Pitney Bowes Document Factory Solutions
This is an MIT-led, practice-oriented program that will help you to learn ...

... Important strategic concepts about supply chain management, including:

- The next generation of supply chain ideas
- How to better structure your supply chain strategy
- Guidelines for making strategic sourcing and make-buy decisions
- How to integrate eBusiness thinking into supply chain strategy and management
- How the speed of industrial change is driving new approaches to supply chain management and product development
- “Clockspeed benchmarking,” a tool for deriving critical business insights and management lessons from industries with the highest obsolescence rates of products, process technologies and organizational structures (industrial “fruitflies”)

... Effective supply chain strategies, including:

- Creating value through supply chain integration
- Identifying the right supply chain strategy

for a specific product and a particular eBusiness model

- The integration of information and decision support systems in the management of the supply chain
- Purchasing, production and distribution strategies in the global environment
- Strategic partnering and outsourcing

Special Program Features

- Participants will have an opportunity to use a computerized simulation of a multilevel supply chain to demonstrate the effect of demand variability, supply lead times and centralized information and decision making on system performance.
- Real-world case studies will be used to illustrate and analyze important concepts such as strategic partnering and outsourcing.
- State-of-the-art decision support software will be used to integrate strategic, tactical and operational decisions in the supply chain.

“I highly recommend it for supply chain specialists, general managers and anyone who wants to understand the impact of effective supply chain management and how the supply chain function should be integrated into corporate strategy.”

James Malakoff, Special Assistant to the President, Global Operations, Estee Lauder Companies

“Excellent explanation of the supply chain issues/challenges of today’s markets.”

Stephen Safranek, National Account Manager, Rockwell Automation
About the program

Led by two of the world’s leading experts, Supply Chain Strategy and Management presents innovative strategies and best practices for improving supply chain performance. The program will focus on:

I. DEVELOPING A SUPPLY CHAIN STRATEGY

1. A Dynamic Framework for Developing Supply Chain Strategies

Use the concept of technology clockspeed to identify the strategic leverage of supply chain design in your industry and to conduct a strategic assessment of end-to-end chain capabilities. You will learn:

• How to distinguish and design your company’s fulfillment supply chain and its technology supply chain

• How to use a combined understanding of business cycle dynamics, value chain structural dynamics and corporate strategy dynamics to design a robust supply chain strategy

Key skills include understanding

• The pitfalls of too much outsourcing

• The five key evaluation criteria required to conduct a strategic sourcing assessment

• How to build a sourcing strategy

decision tree

• How to integrate make-buy decisions with supplier relations

• Why strategic make-buy decisions cannot focus merely on the cost, quality and time implications of the decision

• Plus how to use the clockspeed framework to draw supply chain maps of organizational, technology and capability chains as a means of assessing their dynamics.

2. Supply Chain Evolution

How supply structures change over time. You’ll learn about:

• Crafting strategies to exploit structural dynamics

• Anticipating changes in opportunities for key players in the chain

Make/Buy Case Study

This case will illustrate strategic make-buy decisions in both R&D and manufacturing. It will emphasize how to leverage the core capabilities in your chain with outsourcing of less essential functions. The case will also illustrate the use of Internet connectivity to leverage capabilities, as well as how to apply these principles in a very fast clockspeed environment.

“Helped me structure things I knew intuitively and develop arguments to convince others.”
Sarita Kotek, Head, Next Generation Supply Chain Demand, GlaxoSmithKline

“Great opportunity to ground yourself and your company in . . . the latest trends and strategies being employed in supply chain decision and management.”
Ray Hunt, Vice President, Logistics, Mast Industries
How supply chain structures interact with product architectures, including examples of vertical industry structures with integral architectures and horizontal industry structures with modular architectures.

How supply structure dynamics vary in different parts of the chain, and how these structures are affected by the speed of change in their industry.

Volatility amplification in the “bullwhip effect”

Clockspeed amplification in the “speedup effect”

Industry examples include supply chain dynamics in the automotive, aerospace, telecommunications, electronics and multiple service sector industries.

3. Integrating supply chain design with product and process development

In this segment, we will articulate the three key components of strategic supply chain design, and provide a framework for coordinating and integrating product development, process development and supply chain development.

How to integrate strategic outsourcing needs with suppliers and relations.

Plus, key concepts of supply chain architecture and how to build your supply chain.

4. Supply chains in the age of electronic connectivity

How to design supply chains for the age of electronic connectivity, and how to assess supply chain strengths and weaknesses in an eBusiness environment. How eBusiness disruptions have forced companies to adjust their supply chain strategies and structures, and what the supply chain implications are for:

- retail on the Web
- business-to-business relationships
- end-to-end fulfillment integration

II. DESIGNING AND MANAGING THE SUPPLY CHAIN

In this segment of the program, we will explore issues and concepts related to supply chain integration; the integration of information and decision support systems in the management of the supply chain; and the impact of the Internet of supply chain strategies.

We also will examine state-of-the-art planning models and practical tools for supply chain design, inventory control, distribution management and multi-plant coordination.

“Excellent presentation of supply chain dynamics.”
John DiLullo, Vice President/General Manager, MSC Software

“Strategic overlook of supply chain management in the Internet age.”
Joseph Bruno, Vice President, Supply Chain, Intertape Polymer Group
1. Supply Chain Integration and eBusiness Strategies

An overview of issues, concepts and strategies for supply chain integration including:

• the bullwhip effect
• push, pull and push-pull strategies
• collaborative planning, forecasting and replenishment
• the impact of the Internet
• state-of-the-art procurement strategies
• dynamic pricing to improve supply chain performance

2. Strategic partnering and outsourcing

A case study will motivate the discussion on:

• continuous replenishment
• vendor-managed inventory
• third-party logistics

3. Decision Support Systems

*Extending ERP with decision support systems:*

• replacing sequential planning with global optimization
• using DSS to develop a supply chain master plan

4. Inventory Management

An overview of efficient strategies to manage demand uncertainty, with emphasis on:

• risk pooling
• accurate response
• supply contracts

5. Supply Chain Simulation

Participants will take part in a computerized simulation of a multilevel supply chain. This small team exercise will demonstrate the impact of demand variability, lead times, centralized information and centralized decision making on supply chain performance.

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“Great program, presented in an understandable format.”
Roger Harris, General Manager, MSS Technologies
**Program faculty**

**Charles H. Fine**
Charles Fine is Chrysler LFM Professor of Management at the MIT Sloan School of Management. His research focuses on technology supply chains.

In particular, he focuses on assessing the present—and especially the future—profitability and strategic leverage among the various sectors in the supply chain; designing the supply chain (that is, determining the boundaries and identity of the organization) based on strategic, as well as logistical, assessment; and assembling the capability to realize the organizational boundaries of choice and to manage within and across those boundaries.


**David Simchi-Levi**
David Simchi-Levi is Professor of Engineering Systems at MIT. His current research focuses on the analysis, development and implementation of robust and efficient techniques for the design, control, and operation of logistics systems.

He is a co-author of *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (McGraw-Hill, 1999), winner of the Book-of-the-Year Award and Outstanding IIE Publication Award given in 2000 by the Institute of Industrial Engineers. He is also a co-author of the book *The Logic of Logistics* (Springer, 1997).

Simchi-Levi has consulted and collaborated with numerous companies and organizations. He is the founder and chairman of Logic Tools Inc. (www.logic-tools.com), a developer of optimization-based decision support systems for logistics and supply chain management.

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**About Sloan’s Executive Series on Management & Technology**

The impact of technology on the corporation is being felt not only in terms of the products, processes, and services companies are able to design and market, but in the way organizations are being restructured and managed. For senior technical and corporate executives, staying abreast of the competition means staying abreast of the way technology is redefining the corporation. This set of two-day, interactive, executive-level programs has been designed to help both technical and non-technical management succeed in an environment of accelerating technological change.

“I was thoroughly impressed with Professor Fine and Professor Simchi-Levi. They have an obvious command of their fields and clearly present usable models to apply best practices and new theories to today’s industries.”

Doug Schnelzer, Vice President and Business Manager, Digital Focus
About the MIT Sloan School of Management
As a world leader in management education and research, the MIT Sloan School prepares managers for success in a rapidly evolving and highly competitive global business climate where continuous innovation is crucial to productivity and growth in all aspects of every industry. The Sloan School's dedication to the pursuit of excellence in business education is supported by a world-renowned faculty, an innovative curriculum and the Massachusetts Institute of Technology itself, one of the world's leading educational and research institutions.

REGISTRATION: Supply Chain Strategy and Management
The registration fee is $2600 (U.S.), which includes continental breakfasts, luncheons, reception and complete program materials. The fee does not include hotel accommodations. To register, return this form to Maureen Tracy, Center for Management Research (conference administration office), 55 William Street, Wellesley, MA 02481, or call Ms. Tracy at (781) 239-1111.

Note: You may also fax this form to (781) 239-1546. Confirmation of receipt will be by mail.

Accommodations: We have reserved a block of rooms at a hotel convenient to the program site. Information on how you may arrange for accommodations will be sent to you approximately eight weeks prior to the session date.

Certificates: Certificates of Participation will be awarded to all those completing the program.

Attendance Limitations & Liability: Attendance at this program will be reserved on a first-come, first-served basis. If a session is canceled, MIT’s liability is limited to the registration fee.

Name (Mr./Ms.)________________________________________Title_____________________________
(please type or print clearly)
Organization__________________________________________________________________________
Address_____________________________________________________________________________
City________________________________________State___________Zip_____________
E-Mail__________________________ Phone____________________Fax__________________________

Team Registration: Others attending with me include:
Name________________________________________Title________________________
Name________________________________________Title________________________
Name________________________________________Title________________________
(please note if addresses of those on team differ)

I/we wish to attend Supply Chain Strategy and Management on:
[ ] July 24-25, 2002
[ ] November 11-12, 2002
[ ] April 7-8, 2003

[ ] Check enclosed. Please make payable to CMR/Supply Chain (U.S. dollars only).
[ ] Please bill me. Reminder: Payment is expected prior to session.
[ ] Confirming earlier registration by phone.
[ ] I cannot attend the program on the dates listed but would like to be notified of future programs in the MIT Sloan School Executive Series on Management & Technology.

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