



Massachusetts Institute of Technology

Sloan School of Management

This is to acknowledge that

*Roger P. G. Thijs*

has completed the program

*Strategic Marketing for the  
Technical Executive*

Cambridge, Massachusetts

*July 14-15, 2005*

A blue ink signature of Richard L. Schmalensee, written in a cursive style.

Richard L. Schmalensee, Dean

# About the Program

4

Marketing is not just selling or advertising. It is a rigorous, disciplined science that applies a reasoned framework to the assessment of consumer needs, market segmentation, product design, branding, advertising, channel management and pricing. As a technical manager in this program, you will learn to look at marketing problems through the lens of an analytical framework that will help you better understand:

- what information you can provide to improve marketing strategy, and tactics, and when your technical decisions should reflect marketing issues
- how to collect customer data to support the product development process
- how to communicate more effectively with the marketing team

Examples will be drawn from a variety of industries, including business-to-business technology and consumer markets.

## Day One

### 1. Customers: *Understanding Customer Segmentation and the Customer Decision Process*

This session will begin by providing the strategic and tactical reasons for segmenting customers, and enable you to identify viable customer segments. The second half of the session focuses on the customer decision process, including:

- how customers collect information and the factors and distortions which influence their search

- how customers form expectations in the absence of information
- how you can make your own product more attractive by changing the context in which customers evaluate it
- how customers trade off attributes, and how you can measure these trade-offs

### 2. Marketing Strategy: *Which Markets to Enter?*

As a technical manager, to make a significant contribution to marketing strategy you need to understand marketing strategy. Which markets are more attractive, and how should you select target markets? You will learn how to:

- target markets in which the potential profits are high
- avoid markets in which competition is intense or competitors are likely to enter
- recognize the importance of competition from your suppliers and distributors and identify how to improve your bargaining position

### 3. Product Development: *The Trade-off Between Risk and Reward*

Around five percent of new product development projects are successful. Why engage in product development? The answers are different for large and small firms. In either case, you must learn how to manage your risk. In this session, we will describe how to design your product development process so that you learn whether you will succeed before you risk too much capital. The focus will be on practical insights:

- why you need an independent advisory group

“... provided an easy-to-understand approach to marketing strategy.”  
Jack Heineman, Engineering Manager, Kaman Aerospace Corporation

“Excellent course for technical and marketing executives. I left feeling re-energized to overcome the challenges of creating the right solutions for the market.”  
Susan Herman, Director, Product Strategy, Texas Instruments

- when you should speak to customers
- why you should write down your criteria for success
- when you should worry about competitive response

We will teach you to think about the product development process in six stages:

1. idea generation
2. idea screening
3. concept testing
4. product development
5. market testing
6. launch

The key to product development success is not simply designing the best product but managing the downside and acquiring information without risking too much money.

#### 4. Concept Testing: *The Product Design Exercise*

In this exercise, you will attempt to solve a real-life product development problem: what products to offer in a new product category. You will look at two parts of the problem: 1. measurement of customer preference, and 2. optimization of product design. The session illustrates state-of-the-art methods for addressing both issues.

You will work in small teams to engage in a conjoint analysis task using data provided by an innovative manufacturer. You will first use real data to infer customer preferences and predict which products customers will choose. You will use this information to design a product line.

Which five products should the firm produce? You will be able to compare your choices with actual sales data to evaluate the quality of your choices.

The session highlights what is possible when firms use a rigorous approach to solve marketing problems. The optimization and measurement methods that we illustrate represent leading edge research developed at MIT. The profit improvement will demonstrate why marketing is a science, not simply a set of loose principles.

#### Day Two

#### 5. Designing and Managing Your Channel:

*Achieving Coordination and Aligning Incentives*

Many managers are surprised by the extent of the problems that arise when managing their supply or distribution channels. This surprise reflects the infrequency with which firms change channel strategies.

Most channel problems fall into one of two categories: coordination issues or incentive issues. Through the use of a series of case examples, you will become familiar with these issues, anticipate when they will occur and learn how to solve them. At the end of the session you will understand the problems that arise when:

- there are too many decision makers
- decision makers are separated from information
- how outsourcing affects coordination and incentive problems

“... hit on many key issues that my firm is currently wrestling with.”  
Ken Kane, Vice President, Research and Development, Lighting Services, Inc.

“This is an excellent plunge into the most fundamental and important areas of marketing any business.”  
Grant Cerny, Project Manager, Hewlett-Packard Financial Services

## About the Program (continued)

6

You'll also learn about the role of adverse selection and moral hazard phenomena and using contractual solutions to resolve incentive conflicts.

### **6. The Barco Case: Finding the Right Market**

The Barco Case describes a low-volume, high value-added producer faced with the intrusion into their market by a giant corporation that controls the high-volume, low value-added segment. How quickly will customers defect and what should the smaller company do to survive? The case illustrates the classic interaction between market size and competition.

In this case you will look at questions of pricing, product options, distribution, sources of sustainable market power and long range market planning. You will also be asked to identify mistakes made by the smaller company that contributed to its problems and learn how the company finally succeeded by finding its own niche. The case is designed to illustrate many of the topics in the previous day's sessions.

### **7. Pricing: How Pricing Decisions Are Made**

How do you set the price for your product? In this session, we will look at the factors that influence pricing decisions, including the role of costs, the availability of data, customers' price perceptions, and competitive reactions. Surprisingly, many customers lack good price knowledge and so are much more sensitive to pricing cues than to actual prices. You will learn

how to manipulate those cues in order to convince your customers that the price is right.

You will also learn how to think about variable costs, fixed costs and demand. We will describe how your pricing strategy is affected by the intensity of competition and how firms can work out the optimal price for new products without any demand history. The session will conclude with a brief overview of legal constraints on pricing decisions, including:

- collusion and resale price maintenance
- predatory pricing and price discrimination
- resale price ceilings or minimum pricing restrictions

### **8. Advertising**

Advertising is risky, and managing the advertising process is difficult. Customers often don't just consume the attributes of the product, they consume the image as well. Advertising response is hard to measure, and if your advertising is bad, it can actually reduce the demand for your products.

In this session we will discuss the challenges associated with managing an advertising campaign. The topics covered include:

- positioning your product: who is the product for and what can you do for them?
- selecting a product image
- managing the creative process
- planning the media campaign and choosing from primary and secondary media options

*"An excellent class in thinking about your strategy and where to start."*  
Mike Dillon, Chief Technology Officer, Quest

*"The class answered and addressed questions and issues I didn't even realize I had!"*  
Susan Mannix, Vice President, Global Technology Manager, Reuters

# Program Faculty

## Duncan Simester

Duncan Simester is Professor of Management Science at MIT's Sloan School of Management. He is the head of the Marketing Group at Sloan and is an expert on how economic theory, statistics and operation research can contribute to the understanding and practice of marketing. He has consulted for a variety of corporations on marketing strategy, product development, marketing research, survey design, outsourcing, and the management of marketing channels. He has provided expert testimony regarding marketing research and the impact of marketing strategies.

Professor Simester's work on retail pricing investigates how customers form inferences about competitive prices from common marketing cues such as sale signs, price endings, installment billing offers and credit card logos.

He has examined how firms can use customer satisfaction measures in employee incentive schemes and recently studied how Continental Airlines used group incentives to raise performance. His work on marketing channels explains why procurement hinders coordination and he is currently investigating factors that contribute to channel conflict and determine the allocation of ownership in a channel relationship.

Other current work includes a study of the impact of a stockout on retailer profits and what actions retailers can take to mitigate this impact, together

with work on adaptive techniques for conjoint analysis and experimental design.

Professor Simester teaches the Strategic Marketing course at Sloan. This is among the the most popular and highly rated courses in the Sloan MBA program. Prior to joining MIT, Professor Simester taught at the University of Chicago. He holds a Ph.D. in Management Science from MIT. He also has a law degree and graduate and undergraduate degrees in commerce from the University of Auckland, New Zealand.

Professor Simester has published widely and has won several awards for his research. He is on the Editorial Board of Marketing Science and is an Area Editor at Management Science.

### About the Sloan School Executive Series on Management, Innovation & 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 is one in a series of interactive, executive-level programs that have been designed to help both technical and non-technical management succeed in an environment of accelerating technological change.

*"Program delivers what is promised. Instructor is obviously an expert and is entertaining while he teaches."*

David Niles, Manager, Printing Technology, Sappi Fine Paper

*"... terrific instructor — kept interest and attention high with examples and humor."*

Wendy Jones, Program Executive, Biogen Idec, Inc.