Business 453 – Fall 2011
Operations Strategy

Tuesday and Thursday: 2:30 p.m. – 3:45 p.m. (room 204)

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Office Hours: Tuesday: 4:00 – 5:00 p.m.; Thursday: 5:15 – 6:15 p.m.

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ISOM Area Administrative Assistant: Jalisa Norton, room 423, 404-727-8698

Course Prerequisite: BUS 351 or permission from the instructor

Course Positioning: Foundation course for Information Systems and Operations Management and Analytic Consulting Area Depths; Related course for Strategy and Management Consulting and Marketing Area Depths

Course Meetings
Please refer to the Course Schedule for meetings that are outside of regular class meetings. These will be for one of the guest lectures and the Outsourcing Game. These are not optional events. Full attendance during these sessions will be expected. FirstClass (e-mail and the BUS 453 course conference) will be used as the primary means of communication and coordination outside of class.

Course Content – Overview
How can firms compete on operations? Some do it by delighting customers with a steady stream of innovative products. Others deliver goods and services faster or at lower cost than competitors. Such superior operations are typically the result of the operations strategy.

This course on operations strategy explores how operations can create and sustain competitive advantage. The first step in developing an operations strategy is to ask: what value proposition does the firm want to offer its customers? We consider a variety of possible bases of competition, including lowest price/cost, highest quality, flexibility or speed of customer response, and innovativeness.

The choice of value proposition in turn suggests a series of choices with respect to the design and management of the operating system. The course reviews how to configure an appropriate and effective operating system - one that aligns with, supports, and delivers the chosen value proposition. We also examine the complexities associated with global operating systems, including the hidden costs of outsourcing and offshoring.

An important goal of this course is to frame key strategic operations issues and to provide tools to resolve them. The cases, readings, and frameworks covered in the course are designed to serve two audiences: students who plan a career specifically in operations, and students with broader interests who may in the future need to analyze and improve operations for strategic purposes. The latter group may include students envisioning a future in consulting or general management, as well as others interested in strategic management, marketing, accounting, and finance.
Course Objectives

- To further students’ ability to think strategically, analytically, and creatively
- To develop an understanding of formulating and executing an operations strategy
- To develop an understanding of the relation between operations strategy, other functional strategies, and corporate strategy
- To create a basic competence with the tools and techniques of operations strategic analysis

Course Leadership Competencies

In addition to the academic objectives of this course, BUS 453 will provide you with the opportunity to develop the following leadership competencies:

- Dealing with ambiguity
- Decision quality
- Managing and measuring work
- Problem-solving
- Process management
- Managing through systems
- Comfort around higher management
- Innovation management

Course Materials

There is no prescribed textbook for the course. The required materials comprise cases and readings. Along with all cases, you will need to purchase readings associated with the Harvard Business School and book chapters from Study.Net (www.study.net). The remaining course readings will be available to you through Reserves Direct, created for this course by the Goizueta Business Library, Emory University.

Course Format and Evaluation

The course will examine the topics outlined in the schedule below using a mixed pedagogy. Although case discussions serve as the primary vehicle for learning, the course also consists of mini-lectures, experiential exercises, guest speakers, and a large-scale simulation on outsourcing.

A primary requirement for each student is to read the assigned readings and cases and to come to every class ready to actively contribute to discussions. While a typical case will be accompanied by a list of assignment questions to consider, students should think beyond these questions and be prepared to engage in debate of the key managerial issues.

Three individual case write-ups will be assigned at periodic intervals throughout the course. The final case write-up will be assigned at the end of the semester in lieu of a final exam. The page limit for each of these individual case write-ups is four pages of double-spaced text, plus as many exhibits as you wish.

Students will also be assigned a group case analysis. Each team of students is required to submit a six to eight page (double-spaced) analysis of the assigned case, along with any supporting exhibits.

<table>
<thead>
<tr>
<th>Class participation</th>
<th>20%</th>
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<tbody>
<tr>
<td>Individual case write-up #1</td>
<td>25% (due September 15th)</td>
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<tr>
<td>Group case analysis</td>
<td>20% (due October 13th)</td>
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<tr>
<td>Individual case write-up #2</td>
<td>10% (Outsourcing Game assignment – due November 29th)</td>
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<tr>
<td>Individual case write-up #3</td>
<td>25% (assigned on last day of class – December 6th)</td>
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Class Participation

Class participation augments the overall learning experience, and you will be evaluated on your participation. I will rely heavily on cases and class discussions based on assigned readings as the primary vehicle for learning. It is your responsibility to carefully prepare for every case, read the assigned...
background materials, and be ready to lead and actively participate in the discussions. I will also cold call, especially individuals from whom the class has not heard from in awhile. Some criteria for assessing effective class participation are:

- Do the comments help other students learn?
- Are points that are made relevant to the discussion and linked to the comments of others?
- Is there a willingness to test new ideas, or are all comments “safe?” (e.g., repetition of case facts without analysis or conclusions). It is more important that your comments are backed by good reasoning and analysis rather than it being the “right” answer.

The above criteria will be used as the basis for your assessment. Additionally, your participation score will suffer if you are late to or miss class.

Participation in the class can also be augmented via discussions on the FirstClass conference. When done well, these forums can be highly value-adding. The challenge is to learn how to contribute course-related, value-adding insights and ideas to an electronic discussion. Some examples include asking or answering meaningful (topic-related) questions; summarizing, analyzing, and citing an article from the popular press; posting follow-up questions or ideas after a case has been discussed. Value-adding postings will contain descriptive subject lines, proper categorization, and complete thoughts or questions. As with verbal participation, quality is more important than quantity.
Course Schedule

MODULE 1: THE CONCEPT OF OPERATIONS STRATEGY
In this module we cover the basic tenets of an operations strategy. We relate the pattern of strategic operations decisions or choices regarding processes and infrastructure to long-term capabilities and overall strategy.

8/25, Session #1 – Introduction to Operations Strategy
We explore key concepts in operations strategy, including competitive priorities and order winners and qualifiers. The historic, dramatic failure at Babcock & Wilcox sheds light on the role of operations and how it interfaces with the corporate and marketing strategies.

Prepare
• The Great Nuclear Fizzle at Old B&W, H. B. Meyers, Fortune, November 1969 (see email in course conference)

Discussion Questions
• What went wrong with the planning and production of nuclear pressure vessels at Babcock & Wilcox?
• Overall, was Babcock & Wilcox a successful company at the time of the article?
• What are Babcock & Wilcox’s order winners and order qualifiers?

8/30, Session #2 – Introduction to Operations Strategy (continued)

Read

1 Recall from BUS 351 that order qualifiers are “those criteria that a company must meet for a customer to even consider it as a possible supplier. For example, customers increasingly require suppliers to be registered under the ISO 9000 series…Order winners are those criteria that win the order” (Hill 2000, p. 36).
MODULE 2: ANALYSIS OF KEY COMPETITIVE PRIORITIES FOR OPERATIONS

In module 2 we examine the competitive priorities of cost, flexibility or speed of customer response, quality, and innovativeness. We tie emphasis on such priorities to the pattern of strategic decisions or choices regarding, for example, the nature of the production planning and control systems and the type of relationships to be developed with suppliers and customers.

9/1, Session #3 – Competing on Cost

Using the American Connector Company case, we discuss apparent tradeoffs in configuring operations to emphasize low cost over flexibility. In doing so, we compare the operations strategies of two firms and identify and evaluate sources of cost differences at their plants.

Read

Prepare
- American Connector Co. (A), Harvard Business School case by Gary Pisano and Sharon Rossi

Discussion Questions
- How serious is the threat of DJC to American Connector Company?
- What impact do the strategic operations choices at DJC’s Kawasaki plant and American Connector’s Sunnyvale plant have on each organization’s ability to achieve different competitive priorities?
- Analyze the magnitude and source of the cost differences between DJC’s plant and American Connector’s Sunnyvale plant. Consider both DJC’s performance in Kawasaki and its potential in the United States.
- How much of these cost differences are inherent to the way these companies compete? How much is due strictly to differences in the efficiency of the operations?
- What should American Connector’s management at the Sunnyvale plant do?

9/6, Session #4 – Competing on Quality

We explore quality as a strategic priority and the role of management in changing an organization’s view of quality. The Paul Chesler case highlights the systematic nature of product quality and the complexity of quality problems.

Read

Prepare
- Paul Chesler, Director, Quality Assurance, Harvard Business School case by Frank S. Leonard

Discussion Questions
- What are the causes of the quality problems on the Greasex line?
- Why was Paul hired?
- What should be the responsibility of the Quality Department for the Greasex product?
- What should Paul do?
9/8, Session #5 – Competing on Quality (continued)
Service quality is notoriously difficult to measure and monitor. Using the AT&T Universal Card Services case, we examine the design and implementation of a measurement and compensation system developed by a service company striving to compete on the basis of low cost and high quality (as reflected by customer satisfaction).

Read

Prepare
• Measure of Delight: The Pursuit of Quality at AT&T Universal Card Services (A), *Harvard Business School* case by Roy Shapiro, Michael Watkins, and Susan Rosegrant

Discussion Questions
• How should the term “quality” be defined in financial service organizations?
• What are the risks of placing too much emphasis on measurements of internal process performance?
• How should UCS establish performance standards for internal processes (i.e., those having no direct impact on customers)?
• Has UCS created a system that supports continuous improvement or one that simply supports a sustainable level of service?
• Would you want to be a telephone associate at UCS? Can you imagine anyone who would? Why or why not?

9/13, Session #6 – Competing on Quality (continued)

Read

9/15, Session #7 – Competing on Cost (continued) (write-up due)
The Tork Corporation case provides us with an opportunity to apply the cost-driver framework to strategic operations decision-making. By conducting a thorough analysis, we can gain insights regarding the implications of various competitive cost drivers.

Prepare
• Tork Corporation: Competitive Cost Analysis, *Darden Business Publishing* case by Tim Laseter and James Hammer

Discussion Questions
• What are the primary cost drivers for room air conditioning? How do the drivers differ between Tork and LG for the low-end model, Model A?
• Is LG’s Model A cost advantage sustainable? Why or why not?
• Does LG’s advantage extend to the larger range of room air conditioning products, and specifically to Model F? In answering this question, use case data for Model A to extrapolate the cost differences between Tork and LG for Model F.
• How should Tork respond to the LG offer?
9/20, Session #8 – Competing on Quality (continued)

We use the TD Canada Trust case series to illustrate the role of performance measurement and analytics in translating a fuzzy service model of “comfortable banking” into operational terms.

Prepare

- TD Canada Trust (A): The Green and the Red, Harvard Business School case by Dennis Campbell and Brent Kazan
- TD Canada Trust (B): Linking the Service Model to the P&L, Harvard Business School case by Dennis Campbell and Brent Kazan*

*For the purposes of our class discussion, it is not important to understand the factor analysis methodology utilized in TD Canada Trust (B) in detail.

All you need to know is that factor analysis is a statistical method used to uncover relationships among many variables. It allows numerous interrelated measures to be reduced to a fewer number of underlying dimensions.

For example, the branch scorecard in Exhibit 3 contains measures of both the proportion of customers who said that their transaction was processed quickly and the proportion of customers who said their wait time was acceptable. These two measures are likely to be highly interrelated and really capturing the same underlying service dimension of “speed of service.”

Discussion Questions

- What factors led to the adoption of the “comfortable banking” service model? Why did Chris Armstrong initiate the “linkage analysis” described in the (B) case? What problems is he trying to address with this analysis?
- According to the linkage analysis results in Exhibit 9 of the (B) case, employee satisfaction, CSI, demographics and other business factors respectively explain 1%, 19% and 41% of the variance in branch-level profitability. Describe how these results enhance the credibility of the linkage analysis. How might you use these results to detract from the credibility of the linkage analysis?
- Will the branch incentive plan proposed by Armstrong and his team be effective in ensuring branch-level execution of the “comfortable banking” service model? What specific features are likely to enhance its effectiveness? Which features might detract from its effectiveness?
- What changes would you recommend to the branch incentive plan? How are your recommendations informed by the results of the linkage analysis?

9/22, Sessions #9 and #10 combined – Competing on Quality (continued)

Read

- Improving Service Quality in America: Lessons Learned, Leonard L. Berry, A. Parasuraman, and Valerie Zeithaml, Academy of Management Executive, May 1994

A PANEL OF PRACTITIONERS ON SERVICE QUALITY

6:30 p.m. to 9:15 p.m. Room 130
9/27, Session #11 – Competing on Quality (continued)

9/29, Session #12 – Competing on Innovation
We review concepts in creating an aggregate project plan—a tool for managing new product development—in the context of Medtronic Corporation’s Cardiac Pacemaker business. We go on to uncover important interactions amongst various factors during the development process, including clarity of strategy, capacity commitments, culture, customers, stage-gate processes, and measurement systems.

Read


Prepare
• We’ve Got Rhythm! Medtronic Corp.’s Cardiac Pacemaker Business, *Harvard Business School* case by Clayton Christensen

Discussion Questions
• Review the history of how Medtronic nearly lost its position as market leader in the 1970s and 1980s. Try to chart on a piece of paper what the root causes of the outcomes were.
• Which of the improvements in the new product development process that the Medtronic management team implemented strikes you as having been particularly crucial to turning the company around?
• What do the concepts of *product line architecture* and *train schedule* mean in the pacemaker business? What are the costs and benefits of having implemented these concepts as the Medtronic management team has done? What elements of Medtronic’s approach could be applied in very different business settings?
• Evaluate the nature of senior management involvement in Medtronic’s implementation of its product development system. Which elements of the system does senior management need to be intimately involved in, and which can it delegate or pay less attention to?

10/4, ***No Class***

10/6, ***No Class***

10/11, ***No Class*** – Fall Break
10/13, Session #14 – Competing on Innovation (continued) (write-up due)
We explore the link between competitive performance of the firm and product line choices using the LE Petit Chef case. In doing so, we generate insights on typical problems firms encounter in their product planning activities.

Prepare
• Le Petit Chef, Harvard Business School case by Alan MacCormack and Sandra Sucher

Discussion Questions
Brigitte Gagne, Le Petit Chef’s new director of Microwave R&D, is in the process of deciding the product development agenda for the next year. She has a pressing deadline to meet – the Executive Board is meeting in Paris tomorrow to review her choices.

• What should Gagne do? Specifically, which projects should she fund and why? How should she handle the executive meeting?
• What factors explain Le Petit Chef’s poor performance? What actions would you recommend to remedy the situation?
• How should Brigitte sell her recommendations to the Executive Board?

10/18, Session #15 – Back Bay Battery Strategic Innovation Simulation
This simulation is designed to bridge theories in innovation and the impact of an emerging, disruptive technology to the real-world context in which managers make decisions about investing in innovative technologies under conditions of uncertainty. The simulation enables students to experience the challenges associated with making investment choices in both mature and emerging technologies under uncertain – and highly constraining – real-world conditions.

(Note: Please do not discuss this simulation with others until after you have completed the practice run.)

Read

Prepare
• Self-register for the simulation via the registration email sent from Harvard Business Publishing. Registration takes just a few minutes and provides you with a username/password as well as the URL to the simulation itself.
• Review all tabs contained within the “Prepare” section of the simulation (How-To-Play, Simulation Summary, Foreground Reading, Intro Video).
• Conduct one practice run of the simulation (the “Basic” Scenario), individually, prior to class.

10/20, Session #16 – Back Bay Battery Strategic Innovation Simulation (Debrief)
MODULE 3: BUSINESS PROCESS OUTSOURCING AND OFFSHORING

Module 3 explores strategic and tactical issues related to business process outsourcing and offshoring. The motivation for these new technology-enabled, complex business models are evolving from a primary focus on cost reduction to an emerging emphasis on improving business performance.

10/25, Session #17 – Introduction to Business Process Outsourcing and Offshoring

View
- The World is Flat, Thomas Friedman, Foreign Affairs columnist for the New York Times (http://mitworld.mit.edu/video/266)

Prepare

Discussion Questions
- Are the economics of offshoring compelling for Global Information Systems? Is the “arithmetic of offshoring” as clear as Global Information Systems thinks?
- Are the political and other non-economic risks offset by the financial gains for Global Information Systems?
- If you had to give Jason Harding advice, what types of jobs seem safe from offshoring and outsourcing?

10/27, Session #18 – Business Process Outsourcing and Offshoring (continued)

11/1, Session #19 – Business Process Outsourcing and Offshoring (continued)

What countries are routinely ranked as attractive locations for offshore work? In this session, we examine issues that factor into such offshore decisions, especially those associated with cultural decisions that exist around the world.

Read
- Instructions for: Who wants to be a Millionaire? A Class Exercise on Cultural Issues in Global Operations Strategy

11/3, Session #20 – Business Process Outsourcing and Offshoring (continued)

Read

Guest Speaker: TBD, Room 204
11/8, Session #21 – The Outsourcing Game (Background)
We review background materials for *The Outsourcing Game: A Simulation of Power Dynamics in Outsourced Supply Chains*. This role-playing exercise enables participants to experience decision-making in an outsourced supply chain environment, the results of which provide a basis of discussion for the changed nature of operational decision-making in today’s highly outsourced economy.

*(Note: Please do not discuss this game with others who have played the game until after you have completed the exercise.)*

11/10, ***No Class***

11/11 or 11/12, Sessions #22 and #23 – The Outsourcing Game (Class Exercise)

**Game Play Options**

- **Friday, November 11th**
  - 9:00 a.m. to 11:45 a.m.

- **Saturday, November 12th**
  - 9:00 a.m. to 11:45 a.m.

- **“Time Alone” Room**
  - room 231

- **Negotiation Room #1**
  - room 201

- **Negotiation Room #2**
  - room 234

**Meet for class in room 231**

11/15, ***No Class***

11/17, Session #24 – Designing, Managing, and Improving Operations
We examine strategic execution in the context of the Deloitte & Touche Consulting Group case. Through case discussions, we review two common dilemmas faced by an operations consultant: managing the dual responsibility to both client and consulting firm; and managing the often competing pressure to deliver immediate results while laying the foundation for long-term performance improvement.

**Prepare**
- Deloitte & Touche Consulting Group, *Harvard Business School* case by David Upton and Christine Steinman

**Discussion Questions**
- What specific steps would you take to solve SKS’ short-term and long-term problems?
- What is your assessment of Maria Chen’s performance?
- Imagine that you are Chen. A foreman comes up to you on the shop floor and asks “How many times have you done this before?” What will you say?
- What should Chen do?

11/22, Session #25 – Designing, Managing, and Improving Operations (continued)
11/24, ***No Class*** – Thanksgiving Break

11/29, Session #26 – The Outsourcing Game Debrief (write-up due)

12/1, Session #27 – Designing, Managing, and Improving Operations (continued)

Guest Speaker: TBD
Deloitte Consulting, Strategy and Operations
Room 204

12/6, Session #28 – Course Integration and Wrap-up