MD 254
Service Operations Management

Carroll School of Management
Boston College
Spring 2011

Saturdays: Feb. 12, Feb. 19, Mar. 19, Mar. 26
9am-5pm
Fulton 453

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Office: Fulton 454B  Office Hours: By appointment
Phone: 617-552-0442

Course Description:
The service sector is the largest component of all developed countries (in the U.S., it accounts for 70% of GNP and 80% of employment). In addition, some evidence suggests that productivity in services has substantially lagged that of manufacturing. Given the sheer size of this sector of the economy and the opportunities for enhancing productivity and value, it is imperative that attention be given to improving the operations of service delivery systems. Technology alone will not solve this problem. Over the past decade, service industry investments in technology totaled more than $180 billion; 85% of all technology investments in the U.S. are made by organizations in the service sector. Thus, management and engineering talent must be focused on improving the operation processes in services if individual organizations and the economy as a whole are to prosper.

This course will focus on the various aspects involved in the management of service operations within the “pure” service sector (banking, transportation, travel and tourism, government, etc.) and within the service functions of manufacturing (after-sales support, financing, etc.). After an introductory section to provide an overview of the role of services in the economy and within the functioning of various enterprises (manufacturing, government, not-for-profits, etc.), the following topics will be explored: service strategy and design, service quality and process improvement, managing the service encounter (including the service firm, service providers and customer co-producers), designing the servicescape, managing capacity and demand, managing the service supply chain, and growth and globalization of services.

Course materials:
- All materials will be provided in class or by email

Grading:
Final grades will be determined as follows:
The class participation grade is based primarily on contribution to the class discussions, especially your thoughtful insights into the cases, articles, and assignments. Your comments on the cases, in particular, should reflect a solid understanding of the case and demonstrate a thorough analysis of the issues involved. Case questions are provided for each case at the end of the syllabus; being prepared with answers to these questions is a minimum requirement for effective case discussion participation. Your participation grade will suffer when you miss a class or are not prepared to take part in the discussion.

Three case write-ups will be completed in groups of 2 or 3 students. The writeups should be approximately 5 double-spaced pages, plus any exhibits, and are due on the date indicated in the class schedule. Cases are to be written in narrative form (e.g., Introduction, Analysis, Conclusion) and, at the least, address the case questions. The assigned cases are:

   Managing Orthopaedics at Rittenhouse Medical Center
   Zipcar: Influencing Customer Behavior
   Li & Fung 2006

We will be discussing two other cases as well. Even though these cases do not have assigned write-ups associated with them, please come to class prepared to discuss them in detail. Case questions are provided at the end of the syllabus.

   A Measure of Delight: The Pursuit of Quality at AT&T UCS
   Family Pizza Night at the Bala Bay Inn

Six times during the semester you will make an entry into a service journal that relates your experience with services to the topics we have discussed in class. A template for the service journal is provided at the end of the syllabus.

Students have a number of alternatives for an individual project presentation during the last class on March 26. The project presentation format consists of a 15 minute Powerpoint presentation. Alternatives include:

- Focusing on one or two entries in your service journal. From the presentation it should be clear how the course content was applied to understanding and evaluating services you experience.
- A case study about service operations focusing on one of the topics covered in class
- A new service design
- A plan for improvement of an existing service operation

Each project presentation topic must be approved by me before Friday, March 11.

Course Schedule (assignments due in bold):
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings/Assignments</th>
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<tr>
<td>Feb. 12 morning</td>
<td>Introduction to services and service operations, Service strategy, New service development, Technology in services</td>
<td>Ch. 1, 2, 3, 3, 5</td>
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<td>Feb. 12 afternoon</td>
<td>Service quality</td>
<td>Ch. 6</td>
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<td>In-class exercise: The Complaint Letter</td>
<td>Case 6.2: The Complaint Letter, pp.138-140</td>
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<td>Service journal assignment #1 due</td>
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<td>Feb. 19 morning</td>
<td>Rittenhouse Medical Center case discussion</td>
<td>Rittenhouse Medical Center case writeup due</td>
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<td>Service process improvement</td>
<td>Ch. 7</td>
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<td>Feb. 19 afternoon</td>
<td>Managing the service encounter</td>
<td>Ch. 8</td>
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<td>AT&amp;T UCS case discussion</td>
<td>AT&amp;T UCS case</td>
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<td>Service facilities and process flow</td>
<td>Ch. 9 and 10</td>
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<td>Service journal assignments #2 &amp; 3 due</td>
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<td>Mar. 19 morning</td>
<td>Managing capacity and demand, Managing waiting lines, Capacity management and queuing models</td>
<td>Ch. 11, 12, and 16</td>
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<td>Bala Bay Inn case discussion</td>
<td>Bala Bay Inn case</td>
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<td>Mar. 19 afternoon</td>
<td>Yield Management Game</td>
<td>Case 11.3: The Yield Management Analyst, pp.285-288</td>
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<td>Zipcar case discussion</td>
<td>Zipcar case writeup due</td>
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<td>Service journal assignments #4 &amp; 5 due</td>
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<td>Mar. 26 morning</td>
<td>Service supply relationships, growth and globalization of services</td>
<td>Ch. 13 and 14</td>
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<td>Movie: “Outsourced” and discussion</td>
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<td>Mar. 26 afternoon</td>
<td>Li &amp; Fung 2006 case discussion</td>
<td>Li &amp; Fung case writeup due</td>
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<td>Project presentations</td>
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<td>Powerpoints due</td>
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<td>Service journal assignment #6 due</td>
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Case Questions

Managing Orthopaedics at Rittenhouse Medical Center case questions

- Compare and contrast the knee replacement process for faculty practice surgeons and the 3B Ortho surgeons. Include a comprehensive discussion of the differences in performance outcomes (time and quality) between the two groups of surgeons, in particular, the role of surgery volume and standardization.
- How are the aggregation, uncertainty, and efficiency principles of operations (as discussed in class) evident in the processes of each of the two groups, and how are the differences in performance outcomes explained by differences in implementation of these principles?
- What are the operational challenges in managing these two groups of surgeons processes under one system? What are the potential pros and cons of managing the two groups as separate operations?
- What should Neela Wilson, the COO of RMC, do about Dr. Booth’s request to give him team larger raises than the rest of the hospital staff? How does your answer to this question relate to your answer to the previous question?
- What changes, if any, should RMC management make to the hospital operations with respect to managing the two models (i.e., faculty vs. 3B Ortho surgeons)?

AT&T Universal Card Services case questions

- What are the strengths and weaknesses of AT&T Universal Card Services (UCS) current quality measurement system?
- Describe how UCS’s quality measurement and compensation systems are related and the managerial logic behind the relationship.
- What changes, if any, should UCS be making in the quality measurement system, compensation system, or both, and why?
- Why did raising the performance bar create problems with the telephone associates, and how should UCS handle any such changes in the future? Please be comprehensive; there are a number of reasons why raising the performance bar created problems with the telephone associates and a number of options for handling changes in the future, only some of which are discussed in the case.
- Can UCS continue to differentiate itself through its operations strategy in the future? Explain.

Family Pizza Night at the Bala Bay Inn case questions

- What is most important to customers when they dine at the inn? How does this differ by customer type (e.g. children vs. adults), time of the evening, etc.? What are the implications of your answers for how the customer service experience is managed?
- Why are the Bols turning away 40-50 customers on family pizza night? What is the bottleneck? (Some calculations would be helpful here and in the subsequent questions!)
- How could capacity be better managed?
- How could demand be better managed?
- What do you recommend that Ken Bol do? What tradeoffs would be made between cost and customer service?
Zipcar case questions

- How would you characterize the service Zipcar provides? With which companies or services does it compete? What role does it play in the competitive landscape? What are its critical success factors?
- What mechanisms does Zipcar have in place to manage customer behavior (at the time of the case)? What, specifically, are these mechanisms intended to accomplish?
- What can Zipcar do to encourage customers to return cars on-time? What are the pros and cons of each of these options for achieving the theoretical goal of 100% on-time returns? When discussing the pros and cons, consider the effects of these options on the customer with the car (such as Sal Fishman), the customer waiting for the car (such as Anita Karr), and the company (Zipcar). Please be comprehensive; Zipcar has many possible options for trying to affect customers’ car return behavior. (You may have some examples from personal experience of how companies have tried to influence your co-production behavior that could be relevant here.)
- How would you expect each of these options, if having been implemented at the time of the case, to influence Sal Fishman’s decision whether to stay longer at his interview or return the car by 3:30pm? If Sal had instead rented a car from a company such as Hertz or Alamo, for example, would your answers to this question be the same or different and why?
- What is your recommendation for how Zipcar should address the lateness issue? Why do you feel your solution is the best overall?

Li & Fung 2006 case questions

- What was Li & Fung’s historic business model (prior to the U.S. onshore strategy)? Why did it choose to NOT own any of the pieces of the supply chain it was managing?
- Describe the value chain in the export business (i.e., suppliers – transformation process – customers). How does Li & Fung manage the transformation/supply chain process to achieve the goal of “top-notch quality at the best price in the timeliest manner” (p.5 of the case)? How did its initial acquisition strategy (described on pp.2-4 of the case) support this goal?
- How are the aggregation, uncertainty, and efficiency principles incorporated and/or reflected in the design and management of Li & Fung’s processes?
- Describe Li & Fung’s strategy for penetrating the import market in the U.S. Why did they move in this direction (e.g. discuss what is meant by “eating into the soft $3), and how did the capabilities they built in the export business transfer to and support the import business?
- Comment on the questions raised in the last paragraph of the case (p.11 – “The Second Hundred Years”) in terms of a suggested strategy for the second 100 years. How do the capabilities that Li & Fung has developed over the first 100 years and the ones they are in the process of developing through the U.S. onshoring strategy relate to and/or provide a grounding for your suggested strategy?


Service Journal

**Assignment 1:** Identify how technology has changed your interaction with three services in the last few years. Does the use of technology help differentiate these services from competition and/or provide barriers to entry by competitors? Why or why not?
Assignment 2: Perform a service quality gap analysis for a service with which you are familiar. Suggest how the service process can be improved to address the gaps.
**Assignment 3:** Draw a diagram of the servicescape of service you use and evaluate how well its design (layout, process flows, etc.) facilitates or hinders management of the customer encounter. Are there any improvements that can be made to the servicescape to improve the customer experience?
**Assignment 4:** Describe the services located on a busy street corner you pass regularly (include a diagram of their locations). What factors do you think they considered when they located where they did? What do you think are the strengths and weaknesses of that location for those services?
Assignment 5: Evaluate the demand and capacity management practices of a service with which you are familiar. What changes do you suggest to improve these practices to reduce lines and waiting times and better manage the customer waiting experience?
**Assignment 6:** Boston College's growth strategy is described at:
http://www.bc.edu/content/dam/files/sites/imp/pdf/StrategicPlan07.pdf
with more information at: http://www.bc.edu/sites/imp/ (e.g. maps of the proposed campus at: http://www.bc.edu/sites/imp/maps.html, an executive summary of the institutional master plan at: http://www.bc.edu/content/dam/files/sites/imp/pdf/zoning_commision_/00 Executive_S ummary.pdf)

Discuss how you would expect the service delivery process and student experience a decade from now to be different from your experience – both positively and/or negatively. What should BC be especially concerned about to ensure the continued and increased satisfaction of stakeholders (e.g. students, employees, alumni, community) as they grow?