Course Information and Syllabus

Bus 40110: Managing Service Operations

Autumn 2012, Eisenstein

Course description:

The service economy is growing, currently comprising over 70% of the nation’s GDP and employing 8 out of every 10 workers. The growth in developing countries is rapid, with India and China approaching 50% service employment.

This class is concerned with the design and delivery of services: How to design and improve the service offering for sustained excellence, and how to identify and overcome key challenges in the service delivery. We consider a wide range of industries: from traditional services such as restaurants, to e-commerce, professional services, and services from both the public and private sector.

We consider a service one in which the customer is involved, actively or passively, in the production process, and we strive to understand and leverage the role customers play in the process. This course draws ideas not only from operations management, but also from consumer behavior, marketing, and strategy. And while mathematical modeling is not the focus of the course, it plays an important role.

We develop a Service Framework with three main components: A Service Model, Process Flows and Customer Interaction Diagrams

The Service Model has four parts: The Service Offering (what customer needs and expectations does the service emphasize, and which ones will it sacrifice?), the Funding Mechanism (how the offering is funded), the Employee Management System (with emphasis of job design) and the Customer Management System (the role and expectations placed upon your customers).

Process Flows are used to understand the aggregated flow of customers through a process to address issues such as capacity utilization, throughput, and waiting time of a system. These flows are covered in much detail in Bus 40000, but we develop for this class the ideas needed for services, as such there will be some overlap in this piece of our framework and Bus 40000.

Customer Interaction Diagrams depict the flow of a single customer. They are useful in examining the interactions between the firm and its customers, and can help explore service innovations, and the role management should play.

The course has both lecture and cases. Most cases are designed to explore our Service Framework in a broad sense, and then delve into a particular aspect in some detail.

Prerequisites and Fit in Curriculum: A basic knowledge of statistics is assumed. This course can be taken in addition to Bus 40000 or as an alternative. You may take this course in addition to Bus 40000 if you are looking for more depth in the area of Operations, with the understanding that there will be some overlap as mentioned above (somewhere around 15% of this course overlaps Bus 40000). You may take this course as an alternative to Bus 40000 if you are mostly interested in Operations as it pertains to the delivery of services to the end consumer, rather than the issues of moving goods through the supply chain as a whole.

Grading: Your grade is based on class contribution, case analyses and assignments, a midterm exam and final paper.
Course Web Page: http://chalk.uchicago.edu

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• Tom Best
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Sections:
• 40110-81: Friday 6:00-9:00 (Gleacher 404)
• 40110-85: Saturday 9:00-12:00 (Gleacher 404)
• NOTE: You should attend the section for which you registered. If you must attend another
  section due to a critical issue, then email me to let me know. I will allow this on a limited basis.

Course Materials:
• All on Chalk, or handed out in class.

Grades:
• Class Contribution (Individual): 15%
• Case Write-ups (Group) + Concept Check Assignments (Individual) : 20%
• Midterm Exam: In Class (Individual) 20%
• Final Exam: Take Home (Group) 45%

Case Write-ups:
• Case write-ups are group assignments.
• Questions for each case are typically contained within the syllabus (or else posted on Chalk).
• Prepare all questions for class discussion.
• Turn in written responses via the Chalk system to all questions marked with a
• Turn in only one write-up for the entire group from one of the group members. Specify all group
  members on a cover page.
• Case write-ups should be concise. If there is a page limit, I will specify in the instructions with
  the Chalk link used to submit the assignment.

Concept Check Assignments:
• Concept Check Assignments are individual assignments.
• Turn in all questions via the Chalk system.

Assignments:
• All written assignments are to be uploaded into the Chalk system. They are due by the
  start time of class of any group member’s attendance.
• You will find a link within the Class Materials section for each assignment within the Session
  for which it is due. Use this link to upload your completed assignment. After you SAVE the
  assignment you must then SUBMIT it.
• Each case/assignment will have a separate link. So create a separate document for each case/assignment
  due.
• You can submit either a pdf or doc file format.
Expectations: Attendance/Class Contribution/Final Grades:

- You are expected to attend every class and to be well prepared. Case discussion is an important component of this course and so class contribution is a significant portion of your grade. It will be impossible to receive an “A” in this course without excellent class contribution, and impossible to receive a “B” without good class contribution.

- You should attend the section for which you registered. If you must attend another section due to a critical issue, then email me to let me know.

- I prefer that you find a seat you are comfortable with and attempt to stay there the entire quarter. This will help me learn everyone in class and more accurately assess student contribution.

- Please use your name card every class.

- You should expect to spend 4-5 hours of work per week outside of class.

Group Work:

- You should form a work group for your case analyses. I prefer groups of size 4, but will accept a group of size 3 or 5. I also suggest that you make the backgrounds of your group members diverse.

- You can form a group across sections.

- At the end of the term I will ask each student to rate their fellow group members. I will use this to adjust Group grades. The purpose is to identify free-loaders, not to make minute adjustments of group assignment grades.

Exams:

- The Midterm is an in-class exams.

Final Paper:

- The final paper is to be done in your work group, and is due Monday Dec 16, 2013.

- Detailed requirements for the Final Paper will be given during the quarter, but in short, each group will apply our service framework to analyze a firm.

Provisional Grades:

- To receive a provisional grade all assignments, the midterm exam, and class contribution must be acceptable.

Honor Code:

- Students in my class are required to adhere to the standards of conduct in the Chicago Booth Honor Code and the Booth Standards of Scholarship. The Chicago Booth Honor Code also requires students to sign the following Chicago Booth Honor Code pledge, “I pledge my honor that I have not violated the Honor Code during this assignment/examination.”
Syllabus

September 3, 2013: SUBJECT TO CHANGE

Session 1.

Topics:
- The Service Framework
  - The Service Model: Service Offering, Funding Mechanism, Employee Mngt System, Customer Mngt System
  - Customer Intensity Diagrams

Materials:
- [Chalk] Read: Service Innovation Toolkit, Sampson — What we refer to as Customer Intensity Diagrams (CI-Diagrams), are the simplest firm-customer diagrams that form the basic building blocks of Sampson’s Process Control Networks.

Session 2.

Topics:
- Deterministic Process Flows: Throughput, Cycle Time, Inventory, Capacity
- Sources of customer variability
- Accommodation and Reduction strategies

Materials:
- [Chalk] Case: TSA, Eisenstein
- [Chalk] Read: Harold’s Hot Dog Stand, Part I, Eisenstein
- [Chalk] Read: Harold’s Hot Dog Stand, Part II, Eisenstein
- [Chalk] Read: Breaking the trade-off between efficiency and service, Frei
- [Chalk] Read: Justice — Wait for It — on the Checkout Line, WSJ, Bialik, Aug 19, 2009

Assignments Due:
- TSA
  1. What do you dislike about the TSA service?
  2. Should Vicky have gone around Karen? What are the underlying causes of the conflict?
  3. Consider the 5 types of Customer-Induced Variability described in the “Breaking the trade-off ..” article. In what ways are they present in the TSA service? For each, describe one accommodation strategy and one reduction strategy.
  4. What metric (or performance measure) is most important to passengers?
  5. What metric (or performance measure) is most important or critical from the perspective of the TSA?
6. Some airports are experimenting with creating three separate security check-in lines. One for experienced business travelers, one for the casual traveler, and one for families. Is this a good idea? What are some Pro’s and Con’s of the idea?

Session 3.

Topics:

- Lean Services, 6 Sigma, Toyota System
- Pooling
- Specialist vs. Generalist
- Variance: accommodation and reduction
- Guest Speaker Carla Carla Goldstein, Chief Strategic Innovations Officer, SeyfarthLean Consulting, LLC

Materials:

- [Chalk] Case: Reading Rehabilitation
- [Chalk] Read: Harold’s Hot Dog Stand, Part III, Eisenstein

Assignments Due:

- [Chalk] Concept Check (Individual Assignment): Deterministic Process Flows
- Reading Rehabilitation
  1. What are the benefits of the new system in which care delivery is organized around diagnoses or “service lines” in comparison to the old system where patient care was organized by function? What are the drawbacks?
  2. At 116 therapists, is RRH overstaffed? How many therapists would you hire?
  3. Should RRH keep service lines, or return to the earlier way of organizing care around functions?

Session 4.

Topics:

- Sources of customer variability
- Accommodation and Reduction strategies
- Controlling customer behavior
• Newsvendor model/Critical Fractiles

Materials:
• [Chalk] Case: Southwest Rapid Rewards
• [Chalk] Read: What makes Southwest Airlines Fly, Leadership and Change, Wharton
• [Chalk] Read: Re-booking on United. flyertalk.com
• [Chalk] Case: Zipcar
• [Chalk] Read: Zipcar — The best new idea in business, Fortune
• [Chalk] Read: Five Minutes with Scott Griffith, Chicago GSB
• [Chalk] Read: Share My Ride, New York Times

Assignments Due:
• Southwest Rapid Rewards.
  1. What service attributes does Southwest emphasize? de-emphasize?
  2. Pick an attribute that Southwest deemphasizes. Why does SW ask its customers to give up this attribute?
  3. Why, for so long, did SW not save low-numbered boarding cards for their most frequent flyers (what Liz Bast is asking them to do)? How has the policy changed since the case was written? Why did SW make this change? What does SW risk with this change?
  4. How is SW able to deliver on “friendly” service?
• Zipcar
  1. Draw a CI-Diagram for a traditional rental car service such as Hertz. Draw the CI-Diagram for Zicar. Compare and contrast these two diagrams. Which steps of the Zicar CI-Diagram would you characterize as critical to the success of the service?
  2. What mechanisms does Zipcar have in place to manage customer behavior? What, specifically, are these mechanisms intended to accomplish? What adjustments, if any, would you recommend that the company make to these mechanisms?

Session 5.

Topics:
• Consumer-direct services
• Service Culture
• Distribution Centers
• Inventory Pooling
• Critical Fractiles: The Newsvendor Model (Optimal Service Levels)

Materials:
• [Chalk] Case: Zappos.com 2009
• [Chalk] Watch: The longest call in Zappos history
• [Chalk] Read: A Shine on Their Shoes, Business Week Dec 5, 2005
• [Chalk] Read: Zappos Core Values
• [Chalk] Watch: Nightline Zappos
• [Chalk] Watch: Tony Hsieh, Business Innovation Factory
• [Chalk] Read: Zappos’s CEO on Going to Extremes for Customers, Tony Hsieh, HBR, 2010
• [Chalk] Watch: Robotic Distribution
• [Chalk] Optional Reading: Newsvendor Model, Adelman, Barnes-Scheuster, Eisenstein

Assignments Due:

• Zappos
  1. Compare the Service Offerings of Zappos to a traditional bricks-and-mortar shoe store.
  2. [抽检] Construct a CI-Diagram for the Zappos/customer interaction. And construct one for a traditional bricks-and-mortar shoe store/customer interaction. Compare the two. In what ways has Zappos used Enabling Innovations? Relieving Innovations? Identify customer “pain points”? “value points”? Indicate and discuss talks that increase revenues (+$) and increased costs (-$) for the service.
  3. [抽检] Consider the Employee Management System of Zappos. How is it set up for success? What do you find interesting or odd about the system?

Session 6.

Topics:

• Monitoring and Controlling Employee Behavior (Operations Design vs. Management Control)
• Revenue Management

Materials:

• [Chalk] Case: Commerce Bank
• [Chalk] Case: Affinity Plus
• [Chalk] Case: The Killer Application of Revenue Management: Harrah’s Cherokee Casino & Hotel
• [Chalk] Read: The bank that’s rising amid Europe’s ashes, CNN Money, June 13, 2012

Assignments Due:

• [抽检] [Chalk] Concept Check (Individual Assignment): Critical Fractiles
  Commerce Bank. We will not concern ourselves with the proposed Retailtainment service.
  1. [抽检] What service attributes does Commerce Bank emphasize? What do they ask their customers to give up?
  2. [抽检] How does Commerce bank ensure that its employees deliver on its offering?
  3. [抽检] Describe its funding mechanism.
• Affinity Plus. As the case describes, Markland set out to empower his workers in order to attain his strategic objective of building customer relationships founded on trust.

1. What makes it difficult to control and monitor employee behavior under this new strategy?

2. What mechanisms did Affinity set into place to help control and monitor employee behavior.

• Harrah’s
(Do not worry about the details of the more mathematical issues, will be cover in class what we need.)

1. How is the concept of RM used by Harrah’s Cherokee Casino & Hotel?

2. How do they segment their customers?

3. How does the customer experience the RM system? Do you think Harrah’s lies to their customers? Are you comfortable with the system?

Session 7. MIDTERM EXAM

Topics:

• Midterm Exam : In Class Exam.
• Final project: Review expectations and a look at some past projects.

Session 8.

Topics:

• Guest Speaker John Sauerland, Personal Lines Group President, Progressive Insurance

Materials:

• [Chalk] Case: Innovation at Progressive (A) Pay-As-You-Go Insurance
• [Chalk] Case: Progressive Insurance Concierge Program

Assignments Due:

• Innovation at Progressive

1. How does Progressive’s performance as an auto insurer compare to that of typical insurance companies?

2. Why would Progressive offer “Comparison Quote”, when many customer’s find a better price with a competitor? Why is such a service not offered by its competitors?

3. How might a service like “Immediate Response” be economically viable?

4. What do you see as the advantages/disadvantages of the “Autograph” service? Would you be comfortable using it? Why or why not.

• Progressive Insurance Concierge Program

1. What are the risks, and potential benefits of the Concierge program to Progressive? What are the potential risks/benefits to the customer?
Session 9.

Topics:
- Guest Speaker Jason Keeler, VP Clinical and Procedural Services, University of Chicago Medical Center
- Revenue Management/Capacity Planning at University of Chicago Hospitals, Eisenstein

Materials:
- [Chalk] Read: Chicago Hospital Doctors Protest Planned Bed Cuts, WSJ, 2010
- [Chalk] Read: Initiative to divert patients called ‘dangerously close’ to breaking the law, Tribune, 2009
- [Chalk] Read: “Managing Hospital Bed Capacity through Partitioning Care into Focused Wings”, Best, Eisenstein, Meltzer, Sandikci

Assignments Due:
- Managing Hospital Bed Capacity through Partitioning Care into Focused Wings
  1. What are the advantages and disadvantages to forming wings?
  2. In what ways does focus impact the hospital?
  3. How does a patients ability or willingness-to-wait for a bed impact wing formations?

Session 10.

Topics:
- Customer Loyalty
- Service Recovery
- [Chalk] Read: “A self-coordinating bus route to resist bus bunching”, Bartholdi and Eisenstein
- Course wrap-up

Assignments Due:
Group Assignment: Loyalty and Service Recovery

- Describe a most recent service encounter (from a member of your group) that left you dissatisfied. Did you complain? If so, to who? How, if at all, did the firm respond? If you did not complain, why not? Will you return to the service?
- Each group member should answer the above question for him/herself for class discussion.
- Consider a loan officer at a bank who has some discretion to set loan rates for customers. Do you think the officer should set rates the same, a bit lower, or a bit higher for loyal bank customers compared to newer customers (given all other risk factors are equivalent)? Why?