New Service Innovation, MGMT/ENGR 158 University of California, Merced Spring, 2015 Thursdays, 4:30PM, COB 267

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Welcome to a new and experimental hybrid/online course in which you will be responsible for doing lots of the work on your own, including watching video-recorded lectures and doing short assignments and readings, and even taking exams. We'll meet once a week in class mainly for discussion of a case study. In addition to video lectures by Professor Maglio, there will also be videos lectures by Professor Vish Krishnan of the Rady School of Management at UCSD and by Professor Bob Glushko of the School of Information at UC Berkeley. And we have created a number of other video interviews with business leaders and other experts on service innovation.

What is Service and Service Innovation All About?

Service thinking is revolutionizing businesses all over the world. It is important to understand and prepare for this revolution from educational, skills development, and career opportunity perspectives. Because the service sector is the fastest-growing economic sector, accounting for more than 80% of jobs in the US, this course can also be helpful for students to discover employment and entrepreneurial opportunities. The course begins with a basic introduction to service, and moves quickly through high performance organization design, service management and delivery, and industrialization of service for improved productivity and scalability. Overall, the course focuses on *service innovation*, generation of new successful service ventures. It will help students gain the skills necessary to be successful in three main aspects of service production and delivery systems: the back office, the front office, and service design. The course has the following objectives:

- (1) To develop awareness of the characteristics of service and also skills of service thinking.
- (2) To learn about opportunities offered by technology to improve productivity and value creation in service organizations.
- (3) To understand service growth and expansion both domestically and internationally, and to appreciate the entrepreneurial opportunities in service.

Online Course Materials

To access the online course materials, which are hosted on the UC Online Canvas site:

- 1. Visit the UC Online login page (https://login.uconline.edu/)
- 2. Click "UC Campus Student and Faculty" in the login box
- 3. Click "UC Merced" from the list that appears
- 4. Log in using your UC Merced login ID and password
- 5. Click on the course title, "MGMT 158: Service Innovation".

Videos, Readings, Cases, Assignments

This course provides a hybrid or blended learning experience. One primary aspect of instruction is course videos. These videos, developed by sponsorship of the University of California Online Learning Technology Initiative, will help you prepare for the work required in this class. There is a text and a set of readings as well, including business case studies. The readings and videos are required. There will be short assignments due each week in conjunction with viewing the lecture videos. There will be an exam during Week 5 and an exam during Week 10.

Each week is structured with a series of video lectures, which you are to review on your own, and a single class period, which will require preparation and in-class discussion of a business case. You need to prepare for the discussion of every case study, as that will determine the participation grade. For background on how to think about cases, see McGraw-Hill's *Guide to Case Analysis*, available at: <u>http://highered.mcgraw-</u> hill com/cites/dl/free/0072060431/362614/guide to case applysis pdf

hill.com/sites/dl/free/0072969431/362614/guide_to_case_analysis.pdf

Final Project: New Service Innovation. Midway through the semester (Week 6), we will form project teams. Your team will design a new service offering, and present it to the class in the last class session. To do well in this exercise, it is imperative that the proposed new service incorporates correctly the key concepts covered in the course. The service needs to have a reasonable chance of success in the marketplace. One class session will (Week 9) be devoted to teams sharing their projects with the class, and one short assignment will require each student to summarize his to her team's idea and progress (Week 12). The final deliverable is a team presentation and a final team paper describing the new service, both due the last week of the semester (Week 15).

Grading and Policies

Grades will be calculated as follows:

Component	Percentage
Class Participation	20%
Assignments	25%
Exams	25%
Final Project	30%

Attendance. Attendance and participation in class discussions is required. Your participation during discussion accounts for 20% of your grade. If you don't come to class, you can't get many of those points. Simple.

Late Work. Late work will not be accepted. If you have a question about this or you have some specific issue, please contact Paul, pmaglio@ucmerced.edu, or Morgan, mfleming2@ucmerced.edu.

Plagiarism. We encourage working together. But don't cheat. Don't copy off your friend's exam, and don't copy your roommate's assignment. We'll know. Nevertheless, there may be a fine line between copying and working together. It is fine to work together, to study together, to discuss with friends and classmates, but when it comes to individual assignments, please complete these on your own. UC Merced has a formal <u>Policy on Academic Honesty</u>. Don't make me use it.

Readings

You can access all UC Merced library resources online while connected to the campus network either while physically on campus or virtually through the campus VPN

Textbook

• Teboul, J. (2006). *Service is front stage: Positioning services for value advantage.* Insead Business Press/Palgrave Macmillan.

Available at the bookstore and online for free through the UC Merced library at http://www.ucm.eblib.com/patron/FullRecord.aspx?p=370470

Articles

- Allmendinger, G. & Lombreglia, R. (2005). Four Strategies for the Age of Smart Services, *Harvard Business Review*, 83(1), 131-145.
- Berry, L. L., Zeithaml, V. A. & Parasuraman, A. (1990). Five Imperatives for Improving Service Quality, *Sloan Mgmt Review*, Summer.
- Berry, L. et al. (2006). Creating New Markets Through Service Innovation, *Sloan Management Review*, Vol. 47, No. 2.
- Bitner, M. J., Ostrom, A. & Morgan, F. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, 50, 66–94.
- Boynton, A. (2011). Are you an "I" or a "T"? *Forbes Magazine*.
- Chesbrough, H. (2011). Bringing open innovation to services. *Sloan Management Review*, 52, 85-90.
- Frei, F. X. (2006). Breaking the trade-off between efficiency and service. *Harvard Business Review*, 84, 93 101.
- Gardiner, B. (2013). How an Army of Sensors Helps Us Track Tsunamis and Score Parking Spots, *Wired*.
- Glushko, R. J. (2010). Seven Contexts for Service System Design, in Maglio, P. P., Kieliszewski, C, & Spohrer, J. (Eds.), Handbook of Service Science, 219-249.
- Glushko, R. J. (2013). Describing Service Systems, *Human Factors and Ergonomics in Manufacturing & Service Industries*, 23(1), 11-18.
- Glushko, R. J., and Nomorosa, K. J. (2013). Substituting Information for Interaction: A Framework for Personalization in Service Encounters and Service Systems, *Journal of Service Research*, 16(1), 21-38.
- Kirsh, D. (1995). The Intelligent Use of Space. AI Journal, 73, 31-68.

- Michel, S. et al. (2008). Service-Logic Innovations: How to innovate customers, not products, *California Mgmt Review*, Vol 50, No. 3.
- Michel, S. & Meuter, M. L. (2008). The service recovery paradox: true but overrated? *International Journal of Service Industry Management*, 19(4), 441-457.
- Parasuraman, A. (2010). Service productivity, quality and innovation: Implications for service design practice and research, *International Journal of Quality and Service Sciences*, 2(3), 277 286.
- Patrício, L., Fisk, R. P., Falcão e Cunha, J. & Constantine, L. (2011). Multilevel Service Design: From Customer Value Constellation to Service Experience Blueprinting, *Journal of Service Research*, 14, 180-200.
- Pew Internet Project (2014). The Internet of Things Will Thrive by 2025, 1-20.
- Qiu, R. (2013). We must rethink service encounters. Service Science, 5(1), 1-3.
- Sampson S. E. (2011). *Introduction to PCN analysis*. Technical report. Brigham Young University.
- Sawhney, M., Balasubramanian, S. & Krishnan, V. K. (2004). Creating Growth with Services, *Sloan Management Review*, 45(2), 34-43.
- Spohrer, J., Maglio, P. P., Bailey, J. & Gruhl, D. (2007). Steps toward a science of service systems. *Computer*, 40, 71-77.
- Spohrer, J. & Maglio, P. P. (2010). Toward a science of service systems: Value and symbols, in P. P. Maglio, C. A. Kieliszewski & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.
- Tax, S. S. & Brown, S. W. (1998). Recovering and Learning from Service Failure. *Sloan Mgmt Review*, Fall.
- Vargo, S., Maglio, P. and Akaka, M. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145–152.

Week-by-Week Course Outline

Week 1: Introduction

Introduces some background and context on service and service innovation.

Learning Objectives

- What is a service? How are services different from goods?
- Why are countries and companies moving toward service?
- What challenges and opportunities are presented in the migration to service?

Readings

- Teboul, Chapter 1
- Vargo, S., Maglio, P. and Akaka, M. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145–152.

Video Lectures and Assignments

- Lectures: Two short video lectures, one with Professor Vish Krishnan and one with Professor Paul Maglio, that introduce some basic service and service innovation concepts and questions.
- Assignments: List some services, describe one of them in a little detail, and also describe a technology-based service innovation. (Detailed prompts posted on Canvas).

Case

• Golden State Travel (A)

Week 2: T-shaped Skills for Service Employees and Customers

Describes the practical aspects of human-human interactions in service, from customerprovider interaction to back-end processes, and what these mean for effective service skills, specifically T-shaped skills.

Learning Objectives

- Identify the ways in which a service enterprise different from manufacturing enterprise, particularly in terms of frontline interactions.
- Describe through examples the need for improvisation and spontaneity in service interactions.
- Discuss the need for T-shaped skills that are required for success in service settings, including depth and breadth, analysis and synthesis.
- Demonstrate creativity, empathy, and effective communication in service interactions.

Readings

- Teboul, Chapter 2
- Boynton, A. (2011). Are you an "I" or a "T"? Forbes Magazine.
- Spohrer, J. & Maglio, P. P. (2010). Toward a science of service systems: Value and symbols. In P. P. Maglio, C. A. Kieliszewski & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.
- Qiu, R. (2013). We must rethink service encounters. Service Science, 5(1), 1-3.

Video Lectures and Assignments

• Lectures: Short video lectures on service and T-shaped-ness with Professor Paul Maglio, and two short video interviews with experts on T-shaped skills. Assignments: List some of your T-shaped skills, rethink the nature of the service encounter, list some high-skill service jobs, and describe why empathy is important. (Detailed prompts posted on Canvas).

Case

• Golden State Travel (B) and (C)

Week 3: Service Experience Mapping and Blueprinting

Presents concepts and techniques for service system design, particularly coordinating front-stage and backstage activities.

Learning Objectives

- How to understand a service encounter?
- Mapping the customer journey with experience mapping
- Mapping the delivery process with blueprinting
- Introduction to the concepts of a theater and a factory

Readings

- Teboul, Chapter 3
- Bitner, M. J., Ostrom, A. & Morgan, F. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, *50*, 66 94.
- Glushko, R. J. (2013). Describing Service Systems, *Human Factors and Ergonomics in Manufacturing & Service Industries*, 23(1), 11-18.

Video Lectures and Assignments

- Lectures: Two video lectures, one on service blueprinting with Professor Krishnan, and one on service systems with Professor Glushko; and two short video interviews with experts on service system design.
- Assignments: Discuss service blueprinting and describe a service system from one specific perspective. (Detailed prompts are posted on Canvas).

Case

• California DMV

Week 4: Service Process Design

Describes more specific methods for service design including an extension of blueprinting and something called *PCN Analysis*, which takes more of a process view than a customer experience view on service design.

Learning Objectives

- Identify what is service blueprinting is good for and what Process Chain Network (PCN) analysis is good for, and the relative uses and benefits of the two design approaches
- Demonstrate several approaches to designing front-stage and backstage service processes through appropriate use of design techniques, including blueprinting and PCN analysis on example cases
- Demonstrate use of PCN analysis to service resign, service innovation, and increased service value creation on example cases.

Readings

• Sampson S. E. (2011). *Introduction to PCN analysis*. Technical report. Brigham Young University.

• Patrício, L., Fisk, R. P., Falcão e Cunha, J. & Constantine, L. (2011). Multilevel Service Design: From Customer Value Constellation to Service Experience Blueprinting, *Journal of Service Research*, 14, 180-200.

Video Lectures and Assignments

- Lectures: Short video lectures on PCN Analysis with Professor Maglio, covering the reading specifically, and one video lecture on the PCN technique by Professor Scott Sampson from BYU (via Youtube).
- Assignments: Describe and explain several aspects of PCN Analysis, and apply (in a small way) the technique in a simple example. (Detailed prompts are posted on Canvas).

Case

• Sampson's Malawi Pizza Case

Week 5: Exam 1

This week you will take an exam during the regular discussion period, Thursday at 4:30. It will be an essay exam, administered through Canvas. You will take the exam on your own. It is an open-book and open-web exam. You will have up to 2 hours to complete it.

Week 6: Service Analysis and Improvement

Discusses many of the tradeoffs among operational and experience aspects of a service. Traditional ways for firms to handle these tradeoffs, such as simplifying offerings or hiring more skilled workers, often lead to less than optimal results. What are some other ways improving service outcomes while at the same time operational keeping costs low?

Learning Objectives

- Identify ways to improve service outcomes
- Identify the different stakeholders and their priorities in a service experience
- Discuss tradeoffs between efficiency and various aspects of service experience
- Discuss ways to apply creativity to improve service outcomes in specific circumstances

Readings

- Teboul, Chapter 4
- Frei, F. X. (2006). Breaking the trade-off between efficiency and service. *Harvard Business Review*, 84, 93 101.

Video Lectures and Assignments

• Lectures: Short video lectures with Professor Maglio on tradeoffs between efficiency and experience, and one video lecture with Professor Glushko on stakeholders in complex service systems.

• Assignments: List and describe examples and aspects of customer behaviors, intensity, variability, tradeoffs, and point of view in service systems. (Detailed prompts are posted on Canvas).

Case

• Pret-A-Manger

Project Preparation

• This week at the end of class on Thursday, we will form project teams so that you can begin to work together to develop a new service innovation.

Week 7: Service Strategy and Positioning

Discusses how to develop the strategy and positioning of a new service, which also aids understanding the strategy of an existing service. In addition, discusses spatial and physical aspects of service delivery and service settings.

Learning Objectives

- Understand how to find competitive advantage in a service setting
- Apply mapping and blueprinting to create a competitive advantage
- Discuss how aspects of the spatial layout and physical components of a service affect service outcomes

Readings

- Teboul, Chapter 5
- Kirsh, D. (1995). The Intelligent Use of Space. AI Journal, 73, 31-68.

Video Lectures and Assignments

- Lectures: Two video lectures, one with Professor Krishnan on service strategy, and one with Professor Glushko on spatial aspects of service or the "servicescape", and one interview with an expert on IT services.
- Assignments: List and describe service-specific strategy considerations, and connect these to spatial and physical aspects of service. (Detailed prompts are posted on Canvas).

Case

• Short Shouldice Hospital

Week 8: Service Innovation

Discusses some theoretical and practical approaches to new service innovation, including service design patterns and service business models.

Learning Objectives

- Understand various ways to develop an idea for a new service
- Orchestrate service delivery through service design
- Discuss methods for creating a business model for a service

Readings

- Berry, L. et al. (2006). Creating New Markets Through Service Innovation, *Sloan Management Review*, Vol. 47, No. 2.
- Michel, S. et al. (2008). Service-Logic Innovations: How to innovate customers, not products, *California Mgmt Review*, Vol 50, No. 3.
- Glushko, R. J. (2010). Seven Contexts for Service System Design, in Maglio, P. P., Kieliszewski, C, & Spohrer, J. (Eds.), *Handbook of Service Science*, 219-249.

Video Lectures and Assignments

- Lectures: Short video lectures with Professor Maglio on service innovation and new service design, and one video lecture with Professor Glushko on service design.
- Assignments: You are to describe the nature of service innovation, and discuss examples of service innovations given specific dimensions of innovation and specific design patterns . (Detailed prompts are posted on Canvas).

Case

• "I'll take an Uber"

Week 9: Service Innovation II

Discusses open service innovation, technology-based service innovation, and customerled service innovation.

Learning Objectives

- Discuss the concept of "open innovation", especially as applied to service innovation
- Describe various in which technology innovation can influence or lead to service innovation
- Discuss the role of the customer (relative to the role of the firm) in service innovation

Readings

- Chesbrough, H. (2011). Bringing open innovation to services. *Sloan Management Review*, 52, 85-90.
- Michel, S. Brown, S. W. & Gallan, A. (2008). Service-Logic Innovations: How to innovate customers, not products, *California Mgmt Review*, Vol 50, No. 3.

Video Lectures and Assignments

• Lectures: Short video lectures with Professor Maglio on various aspects of service innovation. There is also a youtube video of Professor Henry Chesbrough, UC Berkeley, discussing open service innovation.

• Assignments: Describe open service innovation and customer-based service innovations, explaining how and why they are innovative. (Detailed prompts are posted on Canvas).

Case

• No case discussion this week!

Project Discussion

• This week during the Thursday class period, we will have preliminary reports from each project team. Each team will have 5 minutes to present their initial idea. You can use at most 2 slides, but slides are not necessary. The class will have 5 minutes to discuss and comment on each proposal.

Week 10: Exam 2

This week you will take an exam during the regular discussion period, Thursday at 4:30. It will be an essay exam, administered through Canvas. You will take the exam on your own. It is an open-book and open-web exam. You will have up to 2 hours to complete it. More details to follow.

Week 11: Service Quality I

Discusses the basics of service quality, as distinct from quality in other areas, and particularly as relates to innovation, including technology-based innovation.

Learning Objectives

- Describe some of the ways in which quality in service differs from quality in manufacturing and other areas
- Discuss tangible and intangible aspects of service quality
- Describe ways to measure and assess service quality
- Discuss the relation between innovation and quality

Readings

• Teboul, Chapters 6 and 7

Video Lectures and Assignments

- Lectures: Video lectures with Professor Krishnan on the basics of service quality, and one video interview with an industry expert on service skill needs.
- Assignments: TBD. (Detailed prompts posted on Canvas).

Case

• The Future of Rural Healthcare

Week 12: Service Recovery

Continues discussion of service quality, focusing on approaches for improving quality and recovering from failures.

Learning Objectives

- Describe various ways to improve or foster service quality
- Identify examples of and reasons for service failures
- Describe specific approaches for service recovery, and also implications of recovery processes

Readings

- Berry, L. L., Zeithaml, V. A. & Parasuraman, A. (1990). Five Imperatives for Improving Service Quality, *Sloan Mgmt Review*, Summer.
- Tax, S. S. & Brown, S. W. (1998). Recovering and Learning from Service Failure. *Sloan Mgmt Review*, Fall.
- Michel, S. & Meuter, M. L. (2008). The service recovery paradox: true but overrated? *International Journal of Service Industry Management*, 19(4), 441-457.

Video Lectures and Assignments

- Lectures: Short video lectures with Professor Maglio that delve more deeply into service quality, especially in the context of innovation, design, and IT-enabled service.
- Assignments: TBD. (Detailed prompts are posted on Canvas).

Case

• No case discussion this week!

Informal Project Discussion

• This week's Thursday class period provides time for project teams to meet with one another and with Paul and Morgan about the final project. Attendance is optional... but may be helpful.

Week 13: Service Scaling

Discusses the problems of scaling services, that is, the problems unique to growth in service settings. For certain sorts of service businesses, growing revenue means growing the workforce, and for others, technology can substitute for labor. What sorts of service innovations can lead to real, sustainable growth?

Learning Objectives

- Identify potential growth patterns in services
- Describe cases in which service can scale effectively (growing revenue and profit) and cases in which it cannot
- Discuss several approaches for scaling service businesses

Readings

- Teboul, Chapters 8 and 9
- Glushko, R. J., and Nomorosa, K. J. (2013). Substituting Information for Interaction: A Framework for Personalization in Service Encounters and Service Systems, *Journal of Service Research*, 16(1), 21-38.

Video Lectures and Assignments

- Lectures: Video lectures with Professor Krishnan on various approaches to service system scaling, relying for instance on customer labor and on IT, and a video lecture by Professor Glushko on a design pattern approach for service innovation and scaling.
- Assignments: TBD. (Detailed prompts are posted on Canvas).

Case

• The Future of Higher Education

Week 14: Smart Services

Learning Objectives

• TBD

Readings

- Teboul, Chapter 10
- Allmendinger, G. & Lombreglia, R. (2005). Four Strategies for the Age of Smart Services, *Harvard Business Review*, 83(1), 131-145.
- Spohrer, J., Maglio, P. P., Bailey, J. & Gruhl, D. (2007). Steps toward a science of service systems. *Computer*, 40, 71-77. http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4069198
- Gardiner, B. (2013). How an Army of Sensors Helps Us Track Tsunamis and Score Parking Spots, *Wired*.

Video Lectures and Assignments

- Lectures: Video lectures with Professor Maglio on challenges and prospects for service system scaling (and innovation), particularly in the context of technology innovation and smart services, and one video lecture by Professor Glushko on smart services.
- Assignments: TBD. (Detailed prompts are posted on Canvas).

Case

• No case discussion this week!

Informal Project Discussion

• This week's Thursday class period provides time for project teams to meet informally with Paul and Morgan to prepare for the final presentation. Attendance is optional... but may be helpful.

Week 15: Project Presentations

This week you and your teams will complete your projects. The final paper is due the last day of class, and you will present your project during class this week. We may need to use both Tuesday and Thursday sessions to accommodate all presentations.