Service Science
MGMT 150 / COGS 152
University of California Merced
Fall 2011

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Lecture Monday, 6:00 – 8:45 PM
Social Sciences and Management (SSM) 104

UCMCROPS F11-COGS 152/MGMT 150 LEC

URL http://faculty.ucmerced.edu/pmaglio/mgmt150.html

Grades

Six short papers	5 points each
Eight quizzes	5 points each
Attendance	5 points
Classroom participation	10 points
Final paper	15 points

Assignments

Sept 12 **Service Journal**. Two-page paper due: Describe *two specific services* you've used, one that you think is good and one that you think is not-so-good. Describe how each service works and your interactions with the services, showing why you think one is better than the other and how you might improve the not-so-good one. You may use the "service encounter" form (in UCMCROPS) to guide you here. In fact, you may simply turn in two of these filled-out forms for this assignment if you like. **Hint:** Keep a service journal all term using this method—it will come in handy for later assignments.

Sept 26 **Real Feedback**. Two-page paper due: Write and send a letter to a firm that recently provided you with service. The letter should be submitted through www.planetfeedback.com or www.complaints.com. It should be a "letter of congratulations" or a "letter of complaint." The letter should not exceed two pages and should include: a description of the service situation, reasons for kudos or complaint based on your expectations and what you experienced, and suggestions for improvement including comparisons with competitors or other similar services. **Hint:** Use your service journal entries and form as a guide.

Oct 10 **Real Complaints**. Two-page paper due: Analyze a set of actual customer complaint letters. Complaint letters for a specific industry (e.g., banking) or firm (e.g., American Airlines) can be downloaded from the customer feedback site www.planetfeedback.com or www.complaints.com. A sample of 25 letters should be used. Read each carefully and classify the complaints along dimensions of service quality, such as reliability, responsiveness, assurance, empathy, tangibles, and so on. Also classify the types of solutions suggested in the letters, and perhaps suggest your own. Your paper should outline the complaints and improvements. **Hint**: You may find it useful to classify and tally the types of complaints and improvements, and report the numbers in your paper.

Oct 24 **Observing a Service**. Two-page paper due: Watch, document, and analyze a single service encounter from an observer's perspective; for instance, go to a store with your friend, watch someone buying something online, or observe what happens when a plumber comes to fix the drain in your parent's sink. Take any service encounter and watch it from the outside—but don't get in the way, observe from a distance. It may help to pretend (in your mind) you're from another planet and have no context about how things work on Earth. Write down what exactly happens from the perspective of someone from another planet – who

does what, who says what, when do participants do things together, and so on? What do you have to know to make sense of the interactions you observe? **Hint:** Describe what knowledge or information participants have in common at the start and what common knowledge or information is built up over time (what does someone from another planet have to know?).

Nov 7 **Service Design**. Two-page paper due: Create and describe a service blueprint for one of the services you've encountered (e.g., as described in your service journal). Focus on **either front-stage or back-stage** processes (not both). Fill in a blueprint diagram (available on UCMCROPS), describe how each process works, where the decision points are, how problems or errors may be handled, and so on. **Hint:** You can also relate your diagram and design to a service journal entry, which you may include as an additional page in your write up.

Nov 21 **Innovation**. Two-page paper due: Invent and describe a new innovative service based on an existing service you have experience with (e.g., as described in your service journal). Your description should focus on differences from the existing service and on how your suggestions make the service better. Innovation in service results from systematic reconfiguration of the roles and responsibilities in a service system (see Normann & Ramirez, 1993). For example, you may take an existing offline service and identify modifications to enhance the service using interactive capabilities of online technologies, or you may consider some ways in which service customers can take on more or less responsibility for service processes. Many other approaches are possible. **Hint:** You can also relate your innovative service redesign to a service journal entry, which you may include as an additional page in your write up.

Dec 5 **Final Paper.** Five-page (plus references) paper due: The final paper must (1) pose a question about service or a question for service science more broadly, and (2) provide a thoughtful, well-reasoned discussion of the issues related to it. All papers must include references to at least six published articles, chapters, or books that are **not** on the required reading list. You can use web sources such as wikipedia, but not more than two web sources. References must be formatted in a standard style, either following *The Chicago Manual of Style*, the *Publication Manual of the American Psychological Association,* or some other standard. **Hint**: You can find plenty of potential references on the *optional* reading list.

Ground Rules and Other Useful Information

Being in Class
When you're in class, be in class. If you have a laptop, use it to take notes or look up things related to the class or to the discussion, but please don't use it for any non-class activities. It's simple: Pay attention, ask questions, participate.

Quizzes
Quizzes will be given during most of the fourteen class periods. Each will consist of several multiple-choice and short-answer questions based on required readings and class lectures. Each will also contain extra credit questions based on optional readings. Your best eight quizzes will count toward your final grade.

Attendance
There are five points for attendance. So show up. We'll take attendance implicitly through the quizzes. If you take the quiz, we'll suppose you're in class. You'll get the full five points if you're in class all the time, four points if you miss one or two, three if you miss three or four, and so on.

Participation
In-class participation is required. So raise your hand. Get called on. You don't have to answer questions. You can ask them. Just take part in the discussion. Be an active part of the class. You'll learn more. There are ten points for participation, and if we don't know who you are, you can't get too many of them.

Papers
All papers must be single-spaced with one-inch margins on all sides, and formatted in a legible font (such as Times Roman) with font-size 12. All papers must be clearly written (see Strunk and White's *Elements of Style*), and must be proofread so they contain few typos.

Short Papers: Maximum length, two pages
There are six assignments: A short, two-page paper is due every two weeks. Each paper is worth 5 points: 2 points for turning it in on time, up to 1 point for reasonably clear and grammatical writing, and up to 2 points for coherent and appropriate content.

Final Paper: Maximum length, 5-pages
The final paper is due on the last day of class. It paper is worth 15 points: 5 for clarity of thought and writing; 5 for execution in terms of formatting, organization, and logic; and 5 for effort, which depends on how interesting, well thought out, and supported the paper is.

Turning in Work; Late or Missing Work
Papers must be turned in through UCMCROPS by 6:00 PM the day they are due. Short papers can be turned in up to a week late, but the maximum score for a late paper is 3 points. There will be no make-up quizzes. The final paper cannot be turned in late. If you have a problem with any of this, contact Paul or Janelle.

Cheating and Academic Honesty
Don't cheat. Like all universities, UC Merced has a formal policy on this: http://studentlife.ucmerced.edu/what-we-do/student-judicial-affairs/academicy-honesty-policy

Disability Services
UC Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities (see http://disability.ucmerced.edu/). If you need any assistance, please contact Paul or Janelle.

Office Hours and Contact
Paul has no scheduled office hours but will be on campus Mondays, so if you'd like to set up a time to meet, contact Paul by email at pmaglio@ucmerced.edu.

Janelle's scheduled office hours are Tuesdays 3 – 4PM. For other times, contact her at jzsary@ucmerced.edu.

And please feel free to contact Paul or Janelle with any type of issue or question you have about the class. If you send email, please put MGMT 150 or COGS 152 in the subject line or else we may miss it.

Student Learning Outcomes: What will you learn in this course?

The US economy – and economies of all industrialized nations – are made primarily of service jobs (more than 80% of jobs in the US are service jobs. So chances are that when you get out of school, you are going to be working in a service job or in the service sector.

In this course, you will learn about service. You will learn what service is, why it is different from other sectors and other jobs, and why it is important. You will learn about problems in service, such as measuring performance, increasing quality, and creating innovation. You will learn how some have recently begun to study service from a variety of different perspectives – including social sciences, cognitive science, management, engineering, and others – to address these problems. This new approach is called *service science*. You will learn how this kind of interdisciplinary research might be effective in studying and understanding service. In the end, you will be able to have an informed and intelligent conversation about the nature of service, how to think about measurement in service, and how to increase innovation in service. And you will be (at least a little more) ready for the workforce you are about to enter.

So what is service science?

Service science is the study of service, which can be broadly defined as actions that one takes on behalf of another (such as washing a car or managing web servers). There really is no such thing as service science today – there is no single accepted, integrated, interdisciplinary scientific study of the service economy or of service jobs. Service science is more like a movement whose goal is to focus attention on service-related problems. Service science is emerging. Its basic unit of analysis is the *service system*, made of configurations of people, technologies, and other resources that interact with other configurations to create mutual value. Many systems can be viewed as service systems, including families, cities, and companies.

More precisely, *service* is the application of resources (including competences, skills, and knowledge) to make changes that have value for another entity. For instance, in information technology (IT) outsourcing services, a service provider operates computing infrastructure for a service client. The provider augments the client's capabilities, taking on responsibility for monthly service-level agreements and year-over-year productivity improvements. The formal representation and modeling of service systems is nascent, largely because of the complexity of modeling people, their knowledge, activities, and intentions. Service system complexity is a function of the number and variety of people, technologies, and organizations linked in value-creation networks, such as professional reputation systems of a single kind of knowledge worker or profession, work systems composed of multiple types of knowledge workers, enterprise systems, industrial systems, national systems, and even the global service system. Knowledge workers depend on their knowledge, tools, and social-organizational networks to solve problems, be productive, continually develop, and generate and capture value. Service science must combine formal models with models of human behavior to understand service systems.

Readings

Books (Available at the UC Merced Bookstore)

Hsieh, T. (2010). *Delivering happiness: A path to profits, passion, and purpose.* New York: Business Plus.

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

Book (Available through UCMCROPS)

Davis, M. M. & Heineke, J. (2010). *Service science: A structured approach for the co-creation of value.* Chapters 1, 3, 5, 6, 10, 11,13

Articles and Chapters (Available through UCMCROPS)

Campbell, C. S., Maglio, P. P. & Davis, M. M. (2011). From self-service to super-service: How to shift the boundary between customer and provider. *Information Systems and eBusiness Management*, 9(2) 173-191.

Chase, R. B. (1978). Where does the customer fit in a service operation? *Harvard Business Review, 56,* 137 – 142.

Chesbrough, H. & Spohrer, J. (2006). A research manifesto for services science. *Communications of the ACM, 49*, 35 – 40.

Clark, H. H. & Brennan, S. E. (1991). Grounding in communication. In L. B. Resnick, J. M. Levine & S. D. Teasley (Eds.), *Perspectives on Socially Shared Cognition.* APA Press.

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

Frei, F. X. (2008). The four things a service business must get right. *Harvard Business Review* (April): 70-80.

Glushko, R. J. (2010). Seven contexts for service system design. In P. P. Maglio, C. A. Kieliszewski, & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.

Gummesson, E. (2010). The future of service is long overdue. In P. P. Maglio, C. A. Kieliszewski, & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.

Heskett, J. L., Jones, T. O., Loveman, G. O., Sasser, W. E., Schlesinger, L. A. (1994). Putting the service profit chain to work. *Harvard Business Review, 72,* 164 – 174.

Hutchins, E. (1995). How a cockpit remembers its speeds. *Cognitive Science, 19,* 265 – 288.

Maglio, P. P., Srinivasan, S., Kreulen, J. T., Spohrer, J. (2006). Service systems, service scientists, SSME, and innovation. *Communications of the ACM, 49,* 81– 85.

Maglio, P. P., Kandogan, E., & Haber, E. (2008). Distributed cognition and joint activity in computer-system administration. In M. S. Ackerman, C. Halverson, T. Erickson, & W. A. Kellogg (Eds.), *Resources, co-evolution, and artifacts: Theory in CSCW*. New York: Springer.

Maglio, P. & Spohrer, J. (in press). Principles of service science. To appear in G. M. Golinelli & E. Gummesson (Eds.), *Advances in Service Systems Research,* Padova: Kluwer-Cedam.

Maglio, P. P. & Spohrer, J. (2008). Fundamentals of service science. *Journal of the Academy of Marketing Science*, 36, 18-20.

Maglio, P. P., Vargo, S. L., Caswell, N. & Spohrer, J. (2009). The service system is the basic abstraction of service science. *Information Systems and e-business Management*, 7, 395-406.

Monk, A. (2003). Common ground in electronically mediated communication: Clark's theory of language use. In J. M. Carroll (Ed.), *HCI models, theories, and frameworks: Toward a multidisciplinary approach.* New York: Morgan Kaufmann.

Moon, Y. & Frei, F. X. (2000). Exploding the self-service myth, *Harvard Business Review*, 78, 26-7.

Normann, R. & Ramirez, R. (1993). From value chain to value constellation: Designing interactive strategy. *Harvard Business Review, 71*, 65 – 77.

Perry, M. (2003). Distributed cognition. In J. M. Carroll (Ed.), *HCI models, theories, and frameworks: Toward a multidisciplinary approach.* New York: Morgan Kaufmann.

Spohrer, J. & Maglio, P. P. (2010). Service science: Toward a smarter planet. In W. Karwowski & G. Salvendy (Eds.), *Introduction to service engineering*. New York: Wiley & Sons.

Spohrer, J. & Maglio, P. P. (2008). The emergence of service science: Toward systematic service innovations to accelerate co-creation of value. *Production and Operations Management*, 17(3), 1-9.

Spohrer, J., Maglio, P. P., Bailey, J. & Gruhl, D. (2007). Steps toward a science of service systems. *Computer, 40*, 71-77.

Vargo, S. L. & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing, 68*, 1 – 17.

Optional Readings (Available through UCMCROPS)

Bitner, M. J., Ostrom, A. L., & Meuter, M. L. (2002). Implementing successful self-service technologies. *Academy of Marketing Executive, 16*, 96 – 109.

Bitner, M. J., Ostrom, A. & Morgan, F. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review, 50,* 66 – 94.

Blomberg, J. (2008). Negotiating meaning of shared information in service system encounters. *European Management Journal, 26*, 213 – 222.

Chase, R. B. & Dasu, S. (2001). Want to perfect your company's service? User behavioral science. *Harvard Business Review*, (June), 79 – 84.

Chesbrough, H. & Davies, A. (2010). Advancing services innovation: Five key concepts. In P. P. Maglio, C. A. Kieliszewski, & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.

Gadrey, J. (2002). The misuse of productivity concepts in services: Lessons from a comparison between France and the United States. In J. Gadrey & F. Gallouj (Eds). *Productivity, Innovation, and Knowledge in Services: New Economic and Socio-economic Approaches.* Cheltenham UK: Edward Elgar, pp. 26 – 53.

Glushko, R. J. & Tabas, L. (2009). Designing service systems by bridging the ‘‘front stage’’and ‘‘back stage’’, *Information Systems and eBusiness Management*, 7, 407-427.

Hagel, J. & Singer, M. (2000). Unbundling the corporation. *The McKinsey Quarterly, 2000/3*, 148 – 161.

Herzenberg, S., Alic, J. & Wial, H. (1999). A new deal for a new economy. *Challenge, 42*, 102 – 129.

Hill, P. (1977). On goods and services. *Review of Income and Wealth, 23*, 315 – 338.

IfM & IBM (2008). *Succeeding through service innovation: A service perspective for education, research, business and government*. Cambridge, UK: University of Cambridge Institute for Manufacturing. ISBN: 978-1-902546-65-0

Johnson, B. C., Manyika, J. M., & Yee, L. A. (2005). The next revolution in interactions. *The McKinsey Quarterly, 2005/4*, 20 – 33.

Lovelock, C. (1983). Classifying services to gain strategic market insights. *Journal of Marketing, 43*, 10 – 20.

Lovelock, C. & Gummesson, E. (2004). Whither services marketing? In search of a new paradigm and fresh perspectives. *Journal of Service Research, 7*, 20 – 41.

Miles, I. (2008). Patterns of innovation in service industries. *IBM Systems Journal, 47*, 115 – 128.

Palmisano, S. J. (2006). The globally integrated enterprise. *Foreign Affairs, 85*, 127 – 136.

Prahalad, C. K. & Ramaswamy, V. (2000). Co-opting consumer competence, *Harvard Business Review*, 78, 79-93.

Sampson, S. E. (2010). The unified service theory: A paradigm for service science. In P. P. Maglio, C. A. Kieliszewski, & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.

Schneider & Bowen (2010). Winning the service game: Revisiting the rules by which people co-create value. In P. P. Maglio, C. A. Kieliszewski, & J. C. Spohrer (Eds.), *Handbook of service science*. New York: Springer.

Schultze, U. & Bhappu, A. D. (2005). Incorporating self-serve technology into co-production design. *International Journal of E-Collaboration, 1*, 1 – 23.

Syllabus

Aug 29	Lecture 1: What is Service? Reading: Chesbrough & Spohrer (2006) Davis & Heineke (2010), Chapter 1 Teboul (2006), Chapter 1 Optional: Hill (1977), Lovelock (1983), Herzenberg et al (1999)
Sept 5	*No Lecture (Labor Day Holiday)*
Sept 12	Lecture 2: Delivering Happiness Reading: Hsieh (2010) **Service Journal Assignment Due**
Sept 19	Lecture 3: The Role of the Customer Reading: Chase (1978) Davis & Heineke (2010), Chapter 10 Teboul (2006), Chapter 2 Optional: Chase & Dasu (2001), Sampson (2010)
Sept 26	Lecture 4: Creating a Service Culture Reading: Davis & Heineke (2010), Chapter 11 Heskett et al (1994) Teboul (2006), Chapter 3 Optional: Schneider & Bowen (2010) **Real Feedback Assignment Due**
Oct 3	Lecture 5: Measuring Service Quality Reading: Davis & Heineke (2010), Chapter 13 Frei (2006) Teboul (2006), Chapter 6 – 7 Optional: Gadrey (2002)
Oct 10	Lecture 6: Self Service, Full Service, and Super Service Reading: Davis & Heineke (2010), Chapter 3 Campbell, Maglio & Davis (2011) Moon & Frei (2000) Optional: Bitner et al (2002), Schultze & Bhappu (2005) **Real Complaints Assignment Due**

Oct 17	Lecture 7: Coordination and Collaboration Reading: Clark & Brennan (1991) Maglio, Kandogan & Haber (2008) Monk (2003) Optional: Hagel & Singer (2000), Prahalad & Ramaswamy (2000)
Oct 24	Lecture 8: Distributed Cognition Readings: Hutchins (1995) Perry (2003) Optional: Blomberg (2008), Johnson et al (2005) **Observing a Service Assignment Due**
Oct 31	Lecture 9: How to Design a Service Reading: Davis & Heineke (2010), Chapter 5 Glushko (2010) Teboul (2006), Chapter 8 Optional: Bitner, Ostrom & Morgan (2008), Glushko & Tabas (2009)
Nov 7	Lecture 10: Service Innovation Reading: Davis & Heineke (2010), Chapter 6 Normann & Ramirez (1993) Teboul (2006), Chapter 10 Optional: Chesbrough & Davies (2010), Miles (2008) **Service Design Assignment Due**
Nov 14	Lecture 11: Service Systems Reading: Frei (2008) Maglio et al (2006) Spohrer et al (2007) Optional: Maglio et al (2009)
Nov 21	Lecture 12: Service-dominant Logic Reading: Vargo & Lusch (2004) Optional: Lovelock & Gummesson (2004) **Innovation Assignment Due**
Nov 28	Lecture 13: Service Science Reading: Spohrer & Maglio (2008) Maglio & Spohrer (2008) Optional: Gadrey (2002), Maglio & Spohrer (in press)
Dec 5	Lecture 14: Future Reading: Gummesson (2010) Spohrer & Maglio (2010) Optional: IfM & IBM (2008), Palmisano (2006) **Final Paper Due**