

70-437

Organizational Learning and Strategic Management

Spring 2017

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"The rate at which individuals and organizations learn may become the only sustainable competitive advantage."

-Ray Stata, Sloan Management Review

"If Hewlett-Packard knew what Hewlett-Packard knows, we would be three times as profitable."

-Former CEO of Hewlett-Packard, Lew Platt Quoted in Davenport & Prusak

COURSE OVERVIEW AND GOALS

Organizations vary enormously in the rates at which they learn—either from their own experience or the experience of others. Some organizations show remarkable performance improvements while others show little or no learning and improvement.

Why does little or no learning occur in some organizations while others show impressive growth in productivity? In the course, we will examine why some organizations show rapid rates of learning and others fail to learn. Understanding sources of learning can enable managers to improve firm performance. Thus, the main goal of this course is to enhance your ability to increase the rate of learning and performance gains at your firm. For example, you will learn techniques for increasing creativity in organizations and for promoting knowledge transfer.

Learning involves innovating or creating new knowledge, retaining that knowledge, and transferring the knowledge throughout the firm. Increasingly, firms are organized in a distributed fashion to take advantage of differences in expertise, labor costs, and access to markets that exist around the world. Managing these distributed organizations effectively requires that knowledge be retained and transferred from one organizational unit to another. Thus, we will examine how organizations create, retain, and transfer knowledge in this course.

In order to manage organizational learning effectively, you need to both analyze and act. The course will increase your ability to analyze by discussing theories, methods, data, and findings. The course will also increase your ability to act and implement strategies through cases and exercises.

Specific questions addressed in the course include:

- 1) Why do some organizations learn and others fail to learn? What factors affect the rate of performance improves with experience in firms? How can you increase the rate of learning at your firm?
- 2) How can innovation be fostered in organizations? When is an open innovation policy likely to be successful?
- 3) How can training programs be designed to promote organizational learning?
- 4) How can organizations leverage transactive memory systems, or knowledge of who knows what, to improve firm performance?
- 5) Where is knowledge stored in organizations? How can firms be designed to capture the knowledge of individuals so that turnover does not hurt firm performance?
- 6) How can you assess if "forgetting" is occurring in your organization? What strategies can you use to retain knowledge in your firm?
- 7) How might you transfer knowledge from one unit of your firm to another so that performance gains made in one unit benefit the entire organization?
- 8) How does experience affect the success of entrepreneurial firms? Which types of experience are most valuable?
- 9) Which knowledge repositories contain knowledge that is likely to be a source of competitive advantage in firms?
- 10) How can knowledge management systems be designed and used to support organizational learning?

READINGS

Current: Course packet of readings.

Future:

Journal of Knowledge Management, Management Learning

GRADES

Your final grade will be computed using the following weights:

.10
.15
.20
.15
.20
.20

In addition, you can improve your final grade by 1% point for each experiment in which you participate up to a total of 3% points.

EXAMS

There will be two closed-book in-class exams. The purposes of the exams are to check your knowledge of fundamental concepts and evidence and to give you opportunities to apply your knowledge to analyze business situations. The last exam will include a question that requires you to integrate material across the course.

PARTICIPATION

Although it takes some quantity of participation to gauge its quality, participation is assessed primarily in terms of the <u>quality</u> of your contributions. Quality comments add value to the discussion by offering a new perspective, by providing relevant evidence, by building on previous comments or by moving the analysis in a new direction. Focus questions to help you prepare for class discussion will be provided. Individuals who monopolize air time are rarely seen by their peers or by me as adding value to class discussion.

GROUP ARTICLE PRESENTATION

You are expected to lead (along one or two other students) the presentation of one article (see articles with asterisks on syllabus). You will have 30 minutes to present the article and lead its discussion. It is usually helpful to use several slides to present your analysis to the class. Specific questions to address in your analysis are included at the end of the syllabus. You should feel free to include additional material that you think would add value to the discussion. Remember to be constructive!

GROUP ENTREPRENEURSHIP PROJECT

Working with a group of other students, you are expected to develop a new entrepreneurial product or service. Your innovation could be in the form of a new tool or a new task or new mappings among tasks, tools and members. For example, in a self-driving car, tools now perform tasks once performed by individual drivers. Another example is a drone that delivers packages directly to your door and thus accomplishes tasks once performed by individuals (e.g., delivery people) and other tools (air craft, delivery vans). You should prepare a report of approximately 4 double-spaced pages describing your new product or service. You will also have an opportunity to present it to the class. Your new product or service will be judged according to both its novelty and usefulness. Be creative!

FINAL PAPER

You are required to prepare a 5-6 page double-spaced analysis of an experience you had in an organization and present it to the class at the end of the semester. The organization could be a volunteer organization, a student group, a service organization or a for-profit firm.

- a) Analyze the experience in term of course concepts. For example, you might choose to analyze a knowledge transfer event in terms of barriers and facilitators to knowledge transfer. Or you could analyze whether the firm has processes and structures in place to learn from its experience (e.g., see the Edmondson, Garvin and Gino article).
- b) Recommend how the organization's handling of the event could be improved.

OFFICE

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	<u>SCHEDULE</u>	
Date	Topic	Reading Requirements
WEEK ONE		
Jan. 17	Introduction	
Jan. 19	Organizational Learning Exercise	
WEEK TWO		
Jan. 24	Organizational Learning	Argote - Chapter 1
Jan. 26	Group Learning: Information Sharing	
WEEK THREE		
Jan. 31	Organizational Memory	Argote - Chapter 3
Feb. 2	Meet with instructor about projects	
WEEK FOUR		
Feb. 7	Organizational Memory	Argote - Chapter 4
Feb. 9	Transactive Memory	
WEEK FIVE		
Feb. 14	Levels of Learning: Nummi vs. Uddewalla	Adler & Cole
Feb. 16	Exam	Berggen
WEEK SIX		
Feb. 21	Knowledge Transfer	Argote - Chapter 6
Feb. 23	Tacit Knowledge	

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WEEK SEVEN		
Feb. 28	Knowledge Transfer	Szulanski
		Rank Xerox Case
Mar. 2	Knowledge Management Systems	Cognizant Case
WEEK EIGHT		
Mar. 7	Creating a Learning Organization	Edmondson, Garvin & Gino*
Mar. 9	Leading a Learning Organization	Children's Hospital & Clinic

WEEK NINE		
Mar. 21	Innovating	Hargadon & Sutton*
Mar. 23	Learning and Innovating	Sun Power Case & Simulation
WEEK TEN		
Mar. 28	Innovating	King & Lakhani* King & Baatatartogtokh*
Mar. 30	Exam	
WEEK ELEVEN		
Apr. 4	Entrepreneurship	Audia & Rider*
Apr. 6	Entrepreneurship	Dahl & Sorenson*
WEEK TWELVE		
Apr. 11	Learning Capstone Case	Leonard-Barton
Apr. 13	Knowledge Capstone Case	Samsung Case
WEEK THIRTEEN		
Apr. 18	Learning from Success and Failure	Gino & Pisano*
Apr. 20	No classes Carnival	
WEEK FOURTEEN		
Apr. 25	Presentation of Group Entrepreneurial Projects	Project Write-ups Due
Apr. 27	Presentations of Experiential Analyses	
WEEK FIFTEEN		
May 2	Presentations of Experiential Analyses	
May 4	Presentations of Experiential Analyses	Papers Due

* Candidates for article presentations

Required Readings

Adler, P. S., & Cole, R. E. (1993). Designed for learning: A tale of two auto plants. <u>Sloan Management Review</u>, <u>Spring</u>, 85-94 and Rejoinder, Winter 1994, 45-49.

Argote, L. (2013). Organizational learning: Creating, retaining and transferring knowledge (2nd Edition). Springer.

Audia, P., & Rider, C. (2005). A garage and an idea: What more does an entrepreneur need? <u>California</u> <u>Management Review</u>.

Berggen, C. (1994). Nummi vs. Uddewalla. Sloan Management Review, Winter, 37-45.

Dahl, M. S., & Sorenson, O. (2013). The who, why and how of spin-offs. Industrial and Corporate Change, 1-28.

- Edmondson, A., Garvin, D., & Gino, F. (March 2008). Is yours a learning organization? <u>Harvard Business Review</u>, *86*(3).
- Gino, F. & Pisano, G. (2011). Why leaders don't learn from success. Harvard Business Review, 89(4).
- Hargadon, A. & Sutton, R. I. (2000). Building an innovation factory. Harvard Business Review, May-June.
- King, A. A., & Baatatartogtokh, B. (2015). How useful is the theory of disruptive innovation? <u>MIT Sloan</u> <u>Management Review</u>, Fall, pp. 77-90.
- King, A. A., & Lakhani, K. R. (2013). Using open innovation to identify the best ideas. <u>MIT Sloan Management</u> <u>Review</u>, 55 (1). Reprint 55121.

Leonard-Barton, D. (1992). The factory as a learning laboratory. Sloan Management Review, Fall, 23-28.

Szulanski, G. (1996). Exploring external stickiness: Impediments to the transfer of best practice within the firm. Strategic Management Journal, *17*, 27-43.

Suggested Readings

Argote, I., & Ren, Y. (2012). Transactive memory systems: A micro foundation of dynamic capabilities. <u>Journal of</u> <u>Management Studies</u>, 49(8), 1375–1382.

Davenport, T. H., & Prusak, L. (2000). Working knowledge. Boston: Harvard Business School Press (Chapter 1).

Garvin, D. A. (2000). <u>Learning in action: A Guide to putting the learning organization to work</u>. Boston: Harvard Business School Press (Chapter 6).

Krackhardt, D., & Hanson, J. R. (1993). Informal networks. Harvard Business Review, July-August, 104-111.

Mahoney, J. T., & Michael, S. C. (2005). Subjectivist theory of entrepreneurship. In S. A. Alvarez, R. Agarwal, & O. Sorenson (Eds.), <u>Handbook of entrepreneurship research</u>. New York: Springer.

Nonaka, I. (1991). The knowledge-creating company. Harvard Business Review, November-December, 96-104.

Focus Questions

<u> Argote (Chapter 1)</u>

- 1. The concepts of "learning curves" and a "progress ratios" were developed to provide measures of organizational learning. Explain these concepts and how they can be used to provide indicators of firm performance.
- 2. What factors explain the variation in progress ratios observed across firms?
- 3. How can managers structure the experience in their firms to promote learning?

Argote (Chapters 3 and 4)

- 1. How can you assess if your firm exhibits organizational "forgetting" or knowledge depreciation?
- 2. What causes knowledge to depreciate?
- 3. What is the role of labor turnover in the depreciation of organizational knowledge?
- 4. How can knowledge depreciation in firms be minimized?
- 5. Describe the repositories in which knowledge is embedded in organizations and give an example of knowledge embedded in each of these repositories.
- 6. What are the strengths and weaknesses of each repository for retaining and transferring knowledge?
- 7. Explain the concept of "transactive memory." Describe a transactive memory system that evolved in a group of which you were a member.
- 8. How do transactive memories help group performance?
- 9. How can you promote the development of transactive memory systems in organizations?

Adler & Cole and Berggen

- 1. Compare and contrast the approach to organizing used at the Toyota-GM joint venture, Nummi, with the autonomous work group approach used at Volvo's Uddevala plant.
- 2. According to Adler and Cole, which approach affords the most opportunities for continuous improvement and organizational learning? Why?
- 3. According to Berggen, which approach affords the most opportunities for continuous improvement and organizational learning? Why?
- 4. Does one approach dominate the other? Are there conditions under which one approach is better than the other? If so, what would those conditions be?

Argote (Chapter 6)

- 1. How can you promote the effective transfer of knowledge in your organizations?
- 2. Which factors impede knowledge transfer?
- 3. a. What is tacit knowledge?
 - b. How can organizations be designed to promote the transfer of tacit knowledge?
- 4. Describe the roles of "supra organizations" such as chains or franchises in transferring knowledge across organizational units.

<u>Szulanski</u>

- 1. What are facilitators of knowledge transfer in organizations?
- 2. What are barriers to knowledge transfer in organizations?

Rank Xerox Case

- 1. Compare and contrast the Wave I and Wave II attempts to transfer best practices throughout Rank Xerox. Evaluate the effectiveness of each wave. What are the facilitators and barriers to knowledge transfer in each wave?
- 2. What should Carlos do now?

Cognizant Technology Solutions Case

- 1. Discuss how Cognizant 2.0 facilitates the transfer of best practices.
- 2. How does Cognizant 2.0 enable the transfer of tacit as well as explicit knowledge?
- 3. Do social factors such as similarity still matter in knowledge sharing in online forums?

<u>Edmondson, Garvin & Gino</u>

- 1. What are characteristics of a "learning" organization?
- 2. How can a leader facilitate learning in his or her organization?
- 3. Explain what an "after-action" review is and how it should be managed to be effective?
- 4. If you have a minority viewpoint, what strategies can you use to increase your ability to influence others?

Children's Hospital and Clinics Case

- 1. How would you evaluate the Patient Safety Initiative at Children's Hospital?
- 2. What is your assessment of Morath's leadership?
- 3. What barriers are leaders likely to face when they aim to create a culture where people discuss errors openly?
- 4. How can these barriers be overcome?

Hargadon & Sutton

- 1. Describe the "innovation factory." How can innovation be institutionalized in organizations?
- 2. What is the role of previous experience in innovation?
- 3. What are the benefits of brainstorming? What are the conditions under which it is effective?

Sun Power Case and Simulation

- 1. What is the effect of knowledge transfer or spillover on costs in an industry?
- 2. Do organizations need some investments in process improvement to benefit from knowledge transfer (i.e., learn from the experience of others)? Why or why not?

<u>King & Lakhani</u>

- 1. How can firms open their innovation process and tap into knowledge outside their boundaries?
- 2. What are the conditions under which a manager should consider opening the idea-creation process?
- 3. What can managers do to encourage individuals outside their organizations to provide ideas?
- 4. What are the conditions under which opening the idea-selection process is likely to result in the best innovations being chosen?

King & Bantartogtokh

- 1. What are the four elements in Christensen's Theory of Disruptive Innovation?
- 2. Evaluate the empirical evidence in support of or against the theory.
- 3. How can managers of incumbent firms leverage existing experience and capabilities to respond to disruptive technologies?

Entrepreneurship

- 1. What makes entrepreneurs successful?
- 2. What are spinoffs and how do they compare to other entrants to an industry?
- 3. Why are spinoffs typically more successful than other entrants?

Leonard-Barton: Chaparral Steel

- 4. Describe the four components of Leonard-Barton's Learning Laboratory System and give examples of:
 - Owning the Problem and Solving It
 - Integration of Internal Knowledge
 - Continuous Innovation/Experimentation
 - Integration of External Knowledge
- 5. Discuss the comment made by a manager at Chaparral saying that he can "tour competitors through the plant, show them almost everything and we will be giving away nothing because they can't take it home with them." p. 24.

Samsung

- 1. What were the sources of Samsung's advantage in DRAM?
- 2. What mechanisms did Samsung use to transfer knowledge?
- 3. Should Samsung set up production facilities in China

<u>Gino & Pisano</u>

- 1. What are the barriers to learning from success?
- 2. Give an example of each of these barriers from your own experience.
- 3. What can managers do to increase the likelihood that their firms learn from success