



45-842

Organizational Learning and Strategic Management

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Section A

Mini 2, Fall 2020

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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. Some organizations show remarkable performance improvements while others show little or no learning and improvement. Understanding the sources of this variation (aka firm heterogeneity) is a central topic in strategic management. We will identify factors explaining the variation in firm performance and discuss which factors are sources of competitive advantage. Understanding sources of learning can enable managers to improve firm performance and compete effectively. 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, for retaining knowledge 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. We will examine social and technological factors that enable organizations to create, retain, and transfer knowledge.

In order to be effective, managers must excel at both quantitative analysis and qualitative judgment. In the course, we will discuss how to analyze data about learning curves, which can be estimated when organizations produce the same product or deliver the same service with some regularity. We will

also develop judgment about how to learn from experience that (fortunately) occurs more rarely such as the two recent cases of the Boeing 737 MAX crashes.

Questions addressed in the course include:

- 1) Why do some organizations learn and others fail to learn? How can you increase the rate of learning at your firm?
- 2) How can organizations leverage transactive memory systems, or knowledge of who knows what, to improve firm performance?
- 3) 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?
- 4) How can you assess if "forgetting" is occurring in your organization? What strategies can you use to retain knowledge in your firm?
- 5) 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?
- 6) How can organizations facilitate the internal transfer of knowledge while minimizing the spillover of knowledge to competitors?
- 7) When is it better to innovate and when is it better to replicate?
- 8) How can innovation be fostered in organizations? Does hierarchy facilitate or impede organizational learning and innovation?
- 9) How can knowledge management systems be designed and used to support organizational learning?
- 10) Which knowledge repositories contain knowledge that is likely to be a source of competitive advantage in firms?

READINGS

Current:

Links for readings

Future:

Journal of Knowledge Management, Management Learning

GRADES

Your final grade will be computed using the following weights:

Group Article Presentation	.15
Quizzes (2 @ .20 each)	.40
Participation	.15
Final Paper and Presentation	.30

GROUP ARTICLE PRESENTATION

You are expected to lead (along with a group of other students) the presentation of one article (see articles with asterisks on syllabus). You will have 20 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!

QUIZZES

There will be two open-book and open-note quizzes. The questions will be essay questions -- either short-answer essays or analyses of (brief) cases. The purpose of the exams is to check your knowledge of fundamental concepts and to give you an opportunity to apply your knowledge to analyze real business situations.

PARTICIPATION

Although it takes some quantity of participation to gauge its quality, participation is assessed primarily in terms of the quality 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 for each reading that may help you prepare for its discussion are included in this syllabus. Individuals who monopolize the discussion are rarely seen by their peers or by me as adding value to class discussion.

You are required to write up and submit brief answers to the questions for three cases (Rank Xerox, NASA JPL and Children's Hospital and Clinics) and submit them by noon on the day of the class discussion. Case write-ups will be graded pass/fail. No late assignments can be accepted.

FINAL PAPER AND PRESENTATION

You have two options for your final paper. You can either analyze an experience you had in an organization in terms of learning and knowledge management (see Experiential Exercise below) or you can empirically analyze rates of organizational learning and knowledge transfer at a firm. For students choosing the empirical option, you can either use data you assemble yourself or analyze a data set that will be provided (see Empirical Analysis below). You will have 5 minutes during the last week of class to present your conclusions to the class.

A. EXPERIENTIAL ANALYSIS

You are required to analyze an experience you had in an organization and present your analysis to the class during the last week. You should:

- a) Analyze the experience in terms of course concepts. For example, you might choose to analyze a knowledge transfer event in terms of barriers and facilitators to knowledge transfer.
- b) Identify positive and negative outcomes associated with the experience.
- c) Recommend how the firm's handling of the experience could be improved. Be sure to discuss how your solution remedies the problems you identified and the measures you would use to assess the effects of the changes that you propose?

Your analysis should be approximately 5 double-spaced pages.

B. EMPIRICAL ANALYSIS

Your task is to analyze learning and knowledge transfer at a firm and prepare a report of your analysis for its top management team. You are hired as a consultant by the top management team of an electric car manufacturer. The firm, which manufactures both a high-end and a mass-market product, is considering divesting its mass-market product. The firm sees its core competency as focused on developing new technology and questions whether producing a high-volume mass-market product is consistent with its core competency. The firm asks for your advice about whether producing the mass-market product benefits their production of the more technologically sophisticated high-end product. That is, the firm wants to know if knowledge transfers from the low-end to the high-end product. You will be given a data set for your analysis. Your report should answer to the following questions:

- 1) What is the firm's progress ratio?
- 2) Does knowledge transfer occur across the two models at your firm?
- 3) Do economies of scale occur in production at your firm?

Your report should be 2-3 double-spaced pages and use concepts from the course in a conversational (i.e., jargon-free) way. Be sure to explain the basis for your conclusions. Please include a table with your results in an appendix.

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Organizational Learning and Strategic Management: Section A

SCHEDULE		
<u>Date</u>	<u>Topic</u>	<u>Requirements</u>
<u>WEEK ONE</u>		
October 27	Why are some organizations better at learning than others?	Argote (Chapter 1) Video on Assessing Learning
October 29	Transactive Memory	Argote & Ren Group Exercise
<u>WEEK TWO</u>		
November 3	No class meeting – only asynchronous material	Argote (Chapter 4) Video on Organizational Memory
November 5	Knowledge Transfer	Argote (Chapter 6) Szulanski*
<u>WEEK THREE</u>		
November 10	Conversation with Frank D’Souza	
November 12 (Two Discussion Sections)	Knowledge Transfer: Across Organizational Boundaries Online Quiz	Rank Xerox Case**
<u>WEEK FOUR</u>		
November 17	Knowledge Transfer: Across Projects and Individuals	Myers* Nonaka* Hargadon & Sutton*
November 19 (Two Discussion Sections)	Knowledge Transfer: Across Projects and Individuals	NASA JPL Case** Video on Launch of Perseverance
<u>WEEK FIVE</u>		
December 1	Learning from Success and From Failure	Gino & Pisano* Cannon & Edmondson* Garvin*
December 3 (Two Discussion Sections)	Leading a Learning Organization	Children’s Hospital and Clinics**
<u>WEEK SIX</u>		
December 8	Knowledge Sharing in Groups	Group Exercise Twelve Angry Men video
December 10	Knowledge Management Strategies And Artificial Intelligence Online Quiz	Hansen, Nohria & Tierney* Readings on AI*

WEEK SEVEN

December 15 Presentations of Final Papers

December 17 Presentations of Final Papers Written Analyses Due

Readings marked with an * are eligible for group presentations.

Answers to questions for cases marked with a ** are to be submitted by noon on the day of each class.

Learning Curves (October 27)

Argote (Chapter 1)

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 design experience in their firms to promote learning?
4. Why is learning a source of competitive advantage in firms?

Transactive Memory Systems (October 29)

1. What is a “transactive memory” system?
2. How does a transactive memory system affect group and organizational performance?
3. How do you build transactive memory systems in organizations?
4. Are transactive memory systems a source of competitive advantage in firms?

Organizational Memory and Knowledge Repositories (November 3)

Argote (Chapter 4)

1. What are the key knowledge repositories in organizations?
2. Give an example of knowledge embedded in each of these repositories.
3. What are the strengths and weaknesses of each repository for retaining and transferring knowledge?
4. How can knowledge be retained in organizations in the face of turnover?

Knowledge Transfer (November 5)

Argote (Chapter 6)

1. Discuss how to assess if knowledge is transferring in your organization.
2. What are barriers to knowledge transfer in organizations?
3. How can you promote the effective transfer of knowledge in your organization?
4. Describe the roles of “supra organizations” such as chains or franchises in transferring knowledge across organizational units?

Szulanski

1. Identify barriers to knowledge transfer in organizations. That is, which factors impede knowledge transfer?
2. Which factors facilitate knowledge transfer?
3. Szulanski downplays the role of motivation in knowledge transfer. Do you agree or disagree with his position? Why?

Rank Xerox Case (November 12) ** Write-ups due at noon

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

Transferring Knowledge between Individuals and Projects (November 17)

Myers

1. Describe approaches organizations use for promoting vicarious learning (learning from the experience of others) in organizations.
2. Why does Myers recommend “coactive” approaches to vicarious learning, in which the person learning and the person sharing the knowledge work together?
3. What steps can a firm take to foster coactive vicarious learning?

Nonaka

1. Discuss Nonaka’s four basic patterns for creating knowledge in organizations.
2. What can organizations do to facilitate the creation and transfer of knowledge?

3. What is tacit knowledge?
4. How can organizations be designed to promote the transfer of tacit knowledge?

Harqadon & 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?
4. What is analogical reasoning?
5. How can analogical reasoning be fostered in organizations?

NASA JPL Case (November 19) ** Write-ups due at noon

1. Why is it challenging to transfer expertise from Senior personnel to their less experienced counterparts?
2. What is the best way to educate newcomers in complex organizations? What are the advantages and disadvantages of the “small project” approach, such as the ROV-E project?
3. When is knowledge replication likely to be successful? When is innovation more likely to succeed?

For video of launch of Perseverance, the following segments are most related to our discussion:
start-12:22, 25:00-34:00, 48:00-54:00

LEADING A LEARNING ORGANIZATION (December 1)

Gino & Pisano

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?

Cannon & Edmondson

1. What are the technical and social barriers that make it hard for organizations to learn from failure?
2. How can managers overcome these barriers?
3. What are the processes that organizations should put in place to learn from failure?

Garvin

1. How can a leader facilitate learning in his or her organization?
2. Explain what an “after-action” review is.
3. How should after after-action reviews be managed to increase their effectiveness?

Children’s Hospital and Clinics Case (December 3) ** Write-ups due at noon

1. What barriers did Morath face as she tried to encourage people to discuss medical errors?
2. How can these barriers be overcome?
3. What is your assessment of Morath’s leadership of the organizational change process at Children’s?

Knowledge Sharing within Groups (December 8)

1. What steps can you take to facilitate the sharing of information that group members uniquely possess during group discussions?
2. If you have a minority viewpoint in a group, what can you do to increase your ability to influence others? (see Twelve Angry Men Video).

Knowledge Management Systems and Artificial Intelligence (December 10)

Hansen, Nohria & Tierney

1. Describe general strategies for managing knowledge in organizations.
2. Discuss when one or the other strategy is more effective.
3. Are the strategies complements or substitutes? That is, do they interact positively or negatively to affect performance?

Brynjolfsson & Mitchel

Birkinshaw

1. What kind of tasks are amenable to being accomplished with Artificial Intelligence?
2. What new skills does Artificial Intelligence require?
3. How will Artificial Intelligence change the jobs of managers?
4. How will the use of Artificial Intelligence change organizations?

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Suggested Reading

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