

# **Syllabus: MGMT 900 Economic Foundations of Management**

Fall 2019

Professor Daniel Levinthal  
3209 Steinberg-Dietrich Hall

Office Hours: By Appointment  
levinthal@wharton.upenn.edu

## **Overview**

This course examines some of the central questions in management with economic approaches as a starting point, but with an eye to links to behavioral perspectives on these same questions. Economics concerns itself with goal directed behavior of individuals interacting in a competitive context. We adopt that general orientation but recognize that goal directed action need not take the form of maximizing behavior, particularly for organizations comprised of individuals with possibly divergent interests and distinct sub-goals. Further, we treat competitive processes as playing out over meaningful periods of calendar time and, in general, not equilibrating instantaneously. A central property of firms, as with any organization, is the interdependent nature of activity within them. Thus, understanding firms as “systems” is quite important, a perspective which has important implications for understanding processes of organizational adaptation.

Among the sorts of questions we explore are the following: What underlies a firm’s capabilities? How does individual knowledge aggregate to form collective capabilities? What do these perspectives on firms say about the scope of a firm’s activities, both horizontally (diversification) and vertically (buy-supply relationships)? We also explore what our understanding of firms says about market dynamics and industry evolution, particularly in the context of technological change.

## **Assignments**

### *Reaction Papers*

For 10 of the 13 class sessions, you are to prepare a brief (roughly three page) reaction paper. This note should convey some provocative reflections on your part on the readings. These reflections may take many forms. They may be organized around some degree of puzzlement at the argument that the author(s) are making. They may reflect on contrasts in the arguments of the various authors. The write-up might identify gaps in the existing literature and, in turn, research opportunities that these gaps present.

Alternatively, the note could focus on application and examine ways in which the conceptual material may provide insight into some important phenomena. An additional alternative might be to consider how important empirical phenomena point to gaps and weaknesses in the theoretical ideas. These notes should not merely, or primarily, restate the arguments of the various authors. In writing these notes, you should assume that your audience (me and your fellow students) have read the articles associated with that class

session with some care and would not be interested in regurgitation of these ideas, but would be stimulated by a fresh and provocative take on them. Furthermore, your note may draw from a subset of the readings; however, it should be anchored in at least one of the articles. Finally, take a point of view and develop a specific argument. Write-ups that consist of a series of brief, undeveloped thoughts and ideas are not a useful engagement with the exercise; in contrast, write-ups that develop a reasonably linear argument in which you put forth some original ideas are.

Your reaction papers are to be submitted by **8 am the day of class**. Place an electronic copy on the course Canvas web site. **No reaction papers will be accepted subsequent to the associated class session.** The papers will receive substantive comments and an overall assessment. That assessment will take the form of a mark of “-“, “√”, “√ +”, “+”.

### *In-Class Discussion*

In class, we will discuss the particular papers and explore the broader “conversations” in the field of which these papers are a part. Students are expected to participate actively in these discussion. Further, participation should not be restricted to [passively] responding to direct questions, but students are encouraged to come to class with their own questions and issues in mind that they wish to share and jointly explore. Students will also be expected to be able to provide a succinct summary and overview of each of the assigned papers should they be called on to do so.

The course grade will be based on a 50% weight on your reaction papers and 50% class discussion.

### **Materials**

The readings for the course are available on the course Canvas site:

<https://canvas.upenn.edu/courses/1470413>. The readings for each class session have an internal logical flow and are **best read in the sequence suggested in the syllabus**.

### 1. **Theories of Choice** (8/28)

Kreps, D. (1988). *Notes on the Theory of Choice*. Boulder, CO: Westview publishing. Pp 43-46.

Simon, H. (1955). "A behavioral model of rational choice". *Quarterly Journal of Economics*, 69: 99-118.

Kahneman, D. and A. Tversky (1979). "An analysis of decision under risk". *Econometrica*, 47: 263-291.

Gigerenzer, G. and W. Gasissmaier (2011). Heuristic decision making. *Annual Review of Psychology*, 62: 451-82.

Brynjolfsson, E. and T. Mitchell (2017). "What can machine learning do? Workforce implications". *Science*, 358(6370): 1530-1534.

Levinthal, D. (2011). "What is not a behavioral strategy --- What's the alternative?" *Strategic Management Journal*, 32: 1517-1523.

### 2. **Problem of Goals** (9/4)

March, J. (1962). "The business firm as a political coalition". *Journal of Politics*, 24(4): 662-678.

Ethiraj, S. and D. Levinthal (2009). "Hoping for A to Z while rewarding only A: Complex organizations and multiple goals". *Organization Science*, 20(1): 4-21.

Puranam, P. (2017). Chapter 4, "Integration of effort". *The Microstructure of Organizations*. Oxford University Press.

Holmstrom, B. (2017). "Pay for performance and beyond". *American Economic Review*, 107(7):1753-1777.

Aghion, P. and J. Tirole (1997). "Formal and real authority in organizations". *Journal of Political Economy*, 105(1): 1-29.

### 3. **Views of Production Capabilities** (9/11)

Winter, S. (2006). "Toward a neo-Schumpeterian theory of the firm". *Industrial and Corporate Change*, 15(1): 125-141.

Nelson, R. and S. Winter (1982). "Organizational capabilities and behavior". *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.

Winter, S. (2003). "Understanding dynamic capabilities". *Strategic Management Journal*, 24: 991-995.

Bloom, N. et al. (2019). "What drives differences in management practices?" *American Economic Review*, 109(5): 1648-1683.

Grosyberg, B., L. Lee, A. Nanda (2008). "Can they take it with them? The portability of star workers' performance". *Management Science*, 54(7): 1213-1230.

Gibbons, R. and R. Henderson (2012). "Relational contracts and organizational capabilities". *Organization Science*: 1350-1364.

#### **4. Resources and Rent (9/18)**

Peteraf, M. (1993). "The cornerstones of competitive advantage: A resource-based view". *Strategic Management Journal*, 14: 179-191.

Barney, J. (1991). "Firm resources and sustained competitive advantage". *Journal of Management*, 17: 99-120.

Ethiraj, S., P. Garg (2012). "The division of gains from complementarities in human-capital-intensive activity". *Organization Science*, 23(3): 725-742.

Gans, J. and M. Ryall (2017). "Value capture theory: A strategic management review". *Strategic Management Journal*, 38(1): 17-41.

Cattani, G., D. Sands, J. Porac, and J. Greenberg (2018). "Competitive sense-making in value creation and capture". *Strategy Science*, 3(4): 632-657.

#### **5. Aggregation of Knowledge (9/25)**

Hayek, F. (1945). "The use of knowledge in society". *American Economic Review*, 35: 519-530.

Stiglitz, J. (2000). "Contribution of the economics of information to Twentieth Century economics". *Quarterly Journal of Economics*, 115(4): 1444-1478.

Dessein, W. and T. Santos (2006). “Adaptive organizations” *Journal of Political Economy*, 114(5): 956-995.

Cohen, W. and D. Levinthal (1990). “Absorptive capacity: A new perspective on learning and innovation”. *Administrative Science Quarterly*, 35: 128-152.

Grant, R. (1996). “Toward a knowledge-based theory of the firm”. *Strategic Management Journal*, 17: 109-122.

Brown, J and P. Duguid (2001). “Knowledge and organization: A social-practice perspective”. *Organization Science*, 12: 198-213.

## 6. **Firms as Interdependent Systems** (10/2)

Simon, H. (1962). “The architecture of complexity”. *Proceedings of the American Philosophical Society*, 106: 467-482.

Levinthal, D. (1997). “Adaptation on rugged landscapes”. *Management Science*, 43: 934-950.

Roberts, J. (2004). Chapter 2 “Key concepts for organizational design” in *The Modern Firm: Organizational Design for Performance and Growth*. Oxford University Press.

Porter, M. (1996). “What is strategy?” *Harvard Business Review*, Nov.-Dec. 3-20.

Henderson, R. and K. Clark (1990). “Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms”. *Administrative Science Quarterly*, 35: 9-30.

Levinthal, D. and M. Workiewicz (2018). “When two bosses are better than one: Nearly decomposable systems and organizational adaptation”. Pp 207-212 [just the front end of the paper, stopping at the end of section 3.1].

**October 9<sup>th</sup>** Yom Kippur (no class)

## 7. **Exploration and Exploitation** (10/16)

March, J. (1991). “Exploration and exploitation in organizational learning”. *Organization Science*, 2: 71-87.

Posen, H. and D. Levinthal (2012). "Chasing a moving target: Exploration and exploitation in a dynamic environment. *Management Science*, 58: 587-601.

Manso, G. (2011). "Motivating innovation". *Journal of Finance*, 66(5): 1823-1860.

Csaszar, F. (2013). "An efficient frontier in organization design: Organizational structure as a determinant of exploration and exploitation". *Organization Science*, 24(4): 1083-1101.

Burgelman, R. (1991). "Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research". *Organization Science*, 2: 239-262

Levinthal, D. (2017). "Mendel in the C-Suite: Design and the evolution of strategies". *Strategy Science*, 2(4): 282-287.

## 8. **Capital Allocation** (10/23)

Bernardo, A., C. Hongbin, and J. Luo (2001). "Capital budgeting and compensation with asymmetric information and moral hazard". *Journal of Financial Economics*, 61: 311-344.

Stein, J. (1997). Internal capital markets and the competition for corporate resources. *Journal of Finance*, 52(1): 111-133.

Adner, R. and D. Levinthal (2004). "What is *not* a real option: Considering boundaries for the application of real options to business strategy". *Academy of Management Review*, 29: 74-85.

Aghion, P. and J. Stein (2008). "Growth versus margins: Destabilizing consequences of giving the stock market what it wants". *Journal of Finance*, 63 (3): 1025.

Ewens, M., R. Nanda, and M. Rhodes-Kropf (2018). "Costs of experimentation and the evolution of venture capital". *Journal of Financial Economics*, 128: 422-442.

## 9. **Economics of the Diversified Firm** (10/30)

Martin, J. and A. Sayrak (2003). "Corporate diversification and shareholder value: A survey of recent literature". *Journal of Corporate Finance*, 9: 37-57.

Penrose, E. (1959). Chapter VII “The economics of diversification” in *The Theory of the Growth of the Firm*. White Plains, NY: M. E. Sharpe.

Teece, D., R. Rumelt, G. Dosi, and S. Winter (1994). “Understanding corporate coherence: Theory and evidence”. *Journal of Economic Behavior and Organization*, 23: 1-30.

Levinthal, D. and B. Wu (2010). “Opportunity costs and non-scale free capabilities: Profit maximization, corporate scope, and profit margins”. *Strategic Management Journal*, 31: 780-801.

Rawley, E. (2010). “Diversification, coordination costs, and organizational rigidity: Evidence from microdata”. *Strategic Management Journal*, 31(8): 873-891.

## **10. Questions of Markets and Hierarchies (11/6)**

Coase, R. (1937). “The nature of the firm”. *Economica*, 4(16): 386-405.

Williamson, O. (1985). Chp 2 “Contractual man” and Chp 3 “The governance of contractual relations”. *The Economic Institutions of Capitalism*. New York: Free Press.

Hart, O. (1989). “An economist’s perspective on the theory of the firm”. *Columbia Law Review*, 89: 1757-74.

Azoulay, P. (2004). “Capturing knowledge within and across firm boundaries: Evidence from clinical development” *American Economic Review*, 94: 1591-1612.

Freeland, Robert F., and Ezra W. Zuckerman Sivan. (2018). “The Problems and promise of hierarchy: Voice rights and the firm.” *Sociological Science* 5: 143-181.

## **11. Organizational Forms and Collective Action (11/13)**

Puranam, P., O. Alexy, and M. Reitzig (2014). “What’s ‘new’ about new forms of organizing?” *Academy of Management Review*, 39(2): 162-180.

Granovetter (1985). “Economic action and social structure: The problem of embeddedness”. *American Journal of Sociology*, Vol. 91(3): 481-510.

Ostrom, E. (2010). “Beyond markets and states: Polycentric governance of complex economic systems”. *American Economic Review*, 100: 641-672.

North, D. (1991). "Institutions". *Journal of Economic Perspectives*, 5(1): 97-112.

Adner, R. (2017). "Eco-system as structure: An actionable construct for strategy." *Journal of Management*, 43(1): 39-58

## **12. Linking Firm and Industry Dynamics (11/20)**

Porter, M. (1981). "The contributions of industrial organization to strategic management". *Academy of Management Review*, 6(4): 609-620.

Klepper, S. (1997). "Industry life cycles". *Industrial and Corporate Change*, 6(1): 145-181.

Knudsen, T., D. Levinthal, and S. Winter (2014). "Hidden but in plain sight: The role of scale adjustment in industry dynamics". *Strategic Management Journal*, 34: 1569-84.

Klepper, S. (2001). "Employee startups in high-tech industries". *Industrial and Corporate Change*, 10(3): 639-674.

Adner, R., F. Ruiz-Aliseda, and P. Zemksy (2016). "Specialist versus generalist positioning: Demand heterogeneity, technology scalability and endogenous market segmentation". *Strategy Science*, 1(3): 184-206.

Pontikes, E. (2018). "Category strategy for firm advantage", *Strategy Science*, 3(4): 620-631.

## **Thanksgiving Break (11/27)**

## **13. Technological Change (12/4)**

Lipsey, R., K. Carlaw, and C. Bekar (2005). Pp 85-100 Chapter 4 "Technology and technological change" in *Economic Transformations: General Purpose Technologies and Long-Term Economic Growth*. Oxford University Press.

Gans, J., S. Stern (2003). "The product market and the market for 'ideas': Commercialization strategies for technology entrepreneurs". *Research Policy*, 32: 333-350.

Christensen, C. and J. Bower (1996). "Customer power, strategic investment, and the failure of leading firms". *Strategic Management Journal*, 17: 197-218.



Wu, B., Z. Wan, and D. Levinthal (2014). “Complements as pipes and prisms: Innovation incentives and trajectory choices”. *Strategic Management Journal*, 35: 1257-78.

Tripsas, M. and G. Gavetti (2000). “Capabilities, cognition, and inertia: Evidence from digital imaging”. *Strategic Management Journal*, 21(10/11): 1147-1161.