

MIT Sloan School
**15.575 Research Seminar in Information
Technology and Organizations: Economic
Perspectives**

Spring 2010

Professor Erik Brynjolfsson

Course Information

Business organizations and markets use a wide variety of structures to coordinate the productive activities of their stakeholders. Dramatic changes in information technology and the nature of economic competition are forcing firms to come up with new ways of organizing work. Similarly, new types of digital information goods, much lower search costs, and improved targeting and personalization are changing the nature of many markets. This course uses economic theory to investigate the roles of information and technology in the existing diversity of organizations and markets and in enabling the creating of new organizational forms.

The class is designed for Ph.D students in management, economics, information technology, organizational behavior, industrial relations and related disciplines. For economists, this class offers the opportunity to apply economic tools to understand how information technology and information in general affect organizations and markets. For non-economists, this class offers an exposure to fundamental ideas in the economics of information, organizations, and markets.

A seminar class works because students come prepared to engage in thoughtful discussions of the material. Students are therefore asked to write informal, two page memos prior to several of the classes. These memos will generally be responses to some questions or issues we pose prior to each class. In addition, each student will be asked to lead part of the class discussion. This will typically involve meeting with the instructor ahead of time to discuss objectives and discussion plans and may involve suggesting new readings.

There are no exams in this class but a final paper is due at the end of the semester. It can be either a survey of the research in a particular area or a research paper on a specific topic. Either way, the paper can be thought of as a step towards developing a research program. In the past, some of these papers have led to publications. Further details of the paper will be provided in class.

Location: E51-390

Time: Mondays 2:30-5:25

First Class: Feb 8, 2010

Course Website: <http://stellar.mit.edu/S/course/15/sp10/15.575/>

Instructor's website: <http://digital.mit.edu/erik/>

Readings:

Handouts are distributed in class.

Optional:

Shapiro & Varian - *Information Rules*, HBS press, 1998.

Brynjolfsson & Saunders, *Wired for Innovation: How IT is Reshaping the Economy*, MIT Press, 2010.

Requirements:

- Weekly readings and class discussion
- Each participant will serve as a facilitator for one or two class sessions
- Term Paper (suitable for conference submission when complete)
- Short papers: Five 2-page short papers, as noted in the syllabus

Grading:

Grades will be assigned on the following basis:

Class participation and leadership	40%
Two page papers on readings (5)	20%
One Survey or Research Paper	40%

Session Overview

Session Leader or Guest Speaker	Date	Topic
	2/8	Introduction; Information Goods; Bundling
Prof. Marshall Van Alstyne	2/16 (Tues)	Network Effects; Two sided networks and Information Complements
	2/22	IT, Productivity and Performance (2 page analysis due)
Prof. Sinan Aral	3/1	Computational Social Science and Social Networks
Prof. Lorin Hitt	3/8	Switching Costs and Knowledge Spillovers (2 page analysis due)
Prof. Yannis Bakos	3/15	Search and Competition (2 page analysis due)
	3/22	<i>Spring Break</i>
Prof. Chris Dellarocas	3/29	Knowledge in Organizations and Collective Intelligence (paper proposal due)
Prof. Drazen Prelec	4/5	Economics of Information and “Superstars” (2 page analysis due)
Prof. Eric von Hippel	4/12	Innovation Incentives/Open Source (2 page analysis due)
	4/20	<i>Patriots Day Vacation</i>
Prof. Michael D. Smith	4/26	Consumer Surplus and The “Long Tail” (draft paper due)
	5/3	Student Presentations
	5/10	The Future of the Information Economy (Final paper due)

Note: We will be updating both the topics and the specific readings based on student input. In particular, student preferences and recommendations will help shape the readings for the last half of the semester.

Feb 8: Readings

1A. Introduction

Optional:

Varian, H. "How to Build an Economic Model in your Spare Time." In *Passion and Craft: Economists at Work*. Edited by Michael Szenberg. Ann Arbor, MI: University of Michigan Press, 1999. ISBN: 0472066854.

Stiglitz, J. E. (2000). "The Contributions of the Economics of Information to Twentieth Century Economics." *Quarterly Journal of Economics* 115(4): 1441-1478.

1B. Information Goods and Information Bundles

Optional:

Shapiro and Varian, *Information Rules* (S&V), Ch. 1 – The Information Economy

Varian, H. (2000) "Buying, Sharing and Renting Information Goods" *The Journal of Industrial Economics*, Vol. XLVIII, Number 4, December 2000.

Bakos and Brynjolfsson. (1999) "Bundling Information Goods" *Management Science*, Vol. 45, No. 12 pp. 1613-1630.

Bakos and Brynjolfsson (2000) "Bundling and Competition on the Internet" *Marketing Science*, Volume 19, Number 1 (Winter 2000), pp. 63-82

Bakos, Yannis and Erik Brynjolfsson "Aggregation and Disaggregation of Information Goods: Implications for Bundling, Site Licensing and Micropayment Systems," in Varian and Kahin, Eds. *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*, MIT Press, 2000.

Recommended URLs:

<http://www.apple.com/itunes/> What do you think of Apple's pricing model?

<http://www.ascap.com/licensing/generalfaq.html> How does ASCAP's revenue model work?

<http://www.comcast.com/> Click on "get prices" for Comcast Cable. You can put in MIT and 02142 for the address, if you like. How does Cable TV charge for most content? Why?

Feb 16: Readings

2A. Network Effects and Increasing Returns

Shapiro and Varian, *Information Rules* (S&V), Ch. 7 – Networks and Positive Feedback

Arthur, W. Brian “Increasing Returns and the New World of Business” *Harvard Business Review*, July-Aug., 1996

<http://tuvalu.santafe.edu/research/publications/workingpapers/96-05-028.pdf>

Optional: Leibowitz, Steven and Steve Margolis. “Chapter 6: Beta, Macintosh, and Other Fabulous Tales” *Winners, Losers & Microsoft – Competition and Antitrust in High Tech*, 1999.

Leibowitz, Steven and Steve Margolis, “Network Externalities (Effects)” *The New Palgrave Dictionary of Economics and the Law*, MacMillan, 1998.

<http://wwwpub.utdallas.edu/~liebowitz/palgrave/network.html>

2B. Two Sided Networks and Information Complements

Parker and van Alstyne, 2002, "Two-Sided Network Effects: A Theory of Information Product Design", *Management Science*, Oct, 2005.

Chris Anderson, “Free! Why \$0.00 Is the Future of Business” *Wired*, Feb 25, 2008. http://www.wired.com/techbiz/it/magazine/16-03/ff_free

Rich, Motoko, “With Kindle, the Best Sellers Don’t Need to Sell” *New York Times*, January 22, 2010.

Optional: Parker and Van Alstyne, “Strategies for Two-Sided Markets” *Harvard Business Review* (2006)

Study Question:

Read the New York Times article by Motoko Rich about the free best sellers on Kindle.

- 1) Is this example really a 2-sided network? Why or why not?
- 2) When does a free strategy like this really work? What are the conditions for it to succeed? Where else might a strategy like this work?

Feb 22: Readings

3A. IT, Productivity and Labor Demand

Brynjolfsson, E., and L. Hitt. "Beyond Computation: IT, Organizational Transformation and Business Performance." *Journal of Economic Perspectives* 14, no. 4 (2000): 23-48.

Stiroh, K. "Reassessing the Impact of IT in the Production Function: A Meta-Analysis." Federal Reserve Bank of New York, 2002.

Bloom, Nicholas, Sadun, Raffaella and Van Reenen, John Michael, Americans Do I.T. Better: US Multinationals and the Productivity Miracle (May 2007).

Autor, D., F. Levy, and R. Murnane. "The Skill Content of Recent Technology Change." *Quarterly Journal of Economics* 118, no. 4 (2003): 1279-1333.

Optional:

Bresnahan, T., E. Brynjolfsson and L. Hitt. "Information, Technology, Workplace Organization and the Demand for Skilled Labor: Firm-Level Evidence." *Quarterly Journal of Economics* 117, no. 1 (2002): 339-376.

Nicholas G. Carr "IT Doesn't Matter" *Harvard Business Review* May 1, 2003.

Brynjolfsson, E. and Hitt, L. "Computing Productivity: Firm-Level Evidence, *Review of Economics and Statistics*, 2003.

Brynjolfsson, E., L. Hitt, and S. Yang. "Intangible Assets: Computers and Organizational Capital." *Brookings Papers on Economic Activity* 1 (2002): 137-181.

Two Page Assignment due February 21 at 11:59pm (day before class).

Please write a short, two page essay addressing the following questions:

1. To what extent can IT be analyzed the same way as other inputs into production (ordinary capital, labor, materials)? In what ways, if any, must it be treated differently? What the implication for theory and for empirical analysis.
2. Considering your answer to question 1, as well as the research that has already been done, how would you design a study to go beyond these studies and shed new light on IT, productivity and labor demand?

Please email this memo to: Erik Brynjolfsson (erikb@mit.edu). The length is a maximum of 500 words – be concise and feel free to use bullet points. Please email the memo to me no later than 11:59pm on Sunday (the day BEFORE class).

March 1: Readings

4a. Computational Social Science

Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabasi, A.L., Brewer, D., Christakis, N., Contractor, N., Fowler, J., Gutmann, M., Jebara, A., King, G., Macy, M., Roy, D., Van Alstyne, M., (2009) "Computational Social Science" *Science*, Feb. 6, 2009.

Lynn Wu, Erik Brynjolfsson "The Future of Prediction: How Google Searches Foreshadow Housing Prices and Sales" NBER Conference Technological Progress & Productivity Measurement, 2009; WISE, 2009; ICIS, 2009.

4b. Social Networks

Aral, S., Muchnik, L. & A. Sundararajan (2009) "Distinguishing Influence Based Contagion from Homophily Driven Diffusion in Dynamic Networks" (Proceedings of the National Academy of Sciences (PNAS), Dec. 22, 2009, vol. 106, no.51.)

Mark Granovetter, "The Strength of Weak Ties: A Network Theory Revisited", *Sociological Theory*, Volume 1 (1983), 201-233

Lynn Wu, Ben Waber, Sinan Aral, Erik Brynjolfsson, Sandy Pentland, "Water Cooler Networks: Performance Implications of Informal Face-to-Face Interaction Structures in Information Intensive Work", MIT Center for Digital Business Working Paper, 2010.

Cohen-Cole, E and M Fletcher. "Is Obesity Contagious? Social Networks vs. Environmental Factors in the Obesity Epidemic." *Journal of Health Economics* 2008, 27(5): 1382-1387

Optional:

Aral, Sinan, Brynjolfsson, Erik and Van Alstyne, Marshall W., "Productivity Effects of Information Diffusion in Networks" (May 18, 2007)

Aral, S., Brynjolfsson, E. and Van Alstyne, M. "Information Technology and Information Worker Productivity: Task Level Evidence" Working paper, Nov. 2005.

Study Questions

1. Lazer et al. describe how new types of electronic data is revolutionizing social network research and Wu and Brynjolfsson show how simple use of Google trends data can outpredict traditional models. What other types of "nanodata" are available today that could lead to breakthrough research?
2. Leading publications touted research published in the New England Journal of Medicine claiming that obesity, happiness and many other characteristics were "contagious". Do you find this research credible? How can social network researchers distinguish contagion from homophily?

March 8: Readings

5a. Organizational Complementarities

Brynjolfsson, E. and P. Milgrom. "Complementarities in Organizations", Draft Working Paper.

Optional:

Milgrom, P. and J. Roberts. "The Economics of Modern Manufacturing: Technology, Strategy, and Organization." *American Economic Review* 80, no. 3 (June 1990): 511-528.

Bloom, Nicholas; Sadun, Raffaella and Van Reenen, John. "It Ain't What You Do It's the Way That You Do IT-Testing Explanations of Productivity Growth Using US Affiliates," Centre for Economic Performance, London School of Economics, 2005

Bresnahan, T., E. Brynjolfsson and L. Hitt. "Information, Technology, Workplace Organization and the Demand for Skilled Labor: Firm-Level Evidence." *Quarterly Journal of Economics* 117, no. 1 (2002): 339-376.

5b. Knowledge Spillovers

Tambe, Prasanna and Hitt, Lorin M., Job Hopping, Knowledge Spillovers, and Regional Returns to Information Technology Investments (February 1, 2010).

5c. Switching Costs

Reichheld, Frederick and Phil Schefter, "E-Loyalty: Your Secret Weapon on the Web, Harvard Business Review, July-August 2000.

Chen, Pei-Yu (Sharon) and Lorin Hitt, "Measuring Switching Costs and the Determinants of Customer Retention in Internet-Enabled Businesses", Management Science, Sept. 2002.

Two Page Assignment due March 7 at 11:59pm (day before class). Please write a short, two-page essay addressing the following question:

Pick an industry (preferably IT intensive, but *not* online brokerage) where you believe switching cost plays a role in competition.

- A) Explain how you believe switching costs affects competition (including the prices firms can charge),
- B) Explain how a firm might be able to affect their level of switching costs,
- C) Discuss the implications of engaging in the practices you describe in part B (potentially positive or negative) for the firm and for overall consumer welfare.

Please email this memo to: Erik Brynjolfsson (erikb@mit.edu). The length is a maximum of 500 words – be concise and feel free to use bullet points.

March 15: Readings

Search and Competition

Required:

Bakos, Y. (1997) [Reducing Buyer Search Costs: Implications for Electronic Marketplaces](#) *Management Science*, Volume 43, Issue 12 (December 1997), 1676-1692.

NOTE: This is a heavy going paper. Skim it and make sure you understand Bakos's hypothesis and implications. You can skip the math.

Brynjolfsson, E. and Smith, M. (2000) [Frictionless Commerce? A Comparison of Internet and Conventional Retailers](#) *Management Science*, Vol. 46, No. 4 (April 2000), pp. 563-585

Lynch and Ariely. "[Wine Online: Search Costs and Competition on Price, Quality, and Distribution](#)", *Marketing Science*, 19(1), Winter, 83-103. (Skim)

Ellison, G. and S. F. Ellison "Lessons About Markets from the Internet", *Journal of Economic Perspectives*, Volume 19, 2, Spring 2005, 139-158

Recommended:

Goolsbee, 2003, "[Measuring prices and price competition online: Amazon and Barnes and Noble](#)" *Quantitative Marketing and Economics*, 1, 203–222, 2003.

Smith, Bailey and Brynjolfsson. "Understanding Digital Markets" in Brynjolfsson and Kahin, eds. *Understanding the Digital Economy*, MIT Press. October 2000. NOTE: This reading gives you a quick overview of what has been researched in this topic.

Stiglitz, J. "Imperfect Information in the Product Market." Ch. 13 in Schmalensee, R. and R. Willig (eds.), *Handbook of Industrial Organization*, Vol. 1. 769-844. Elsevier Science, 1989. (Read especially pp. 771-823.) Note: This is a long reading, and heavy going, but worth it, since it captures the essence of literally dozens of seminal articles, many by the Nobel Prize-winning author.

Study Questions

1. What is the role of search costs in electronic markets?
2. Think of a market that was created as a result of lower search costs. How did it come into being? How do you expect it to evolve?

3. What is the role of intermediaries operating electronic systems? (examples: eBay, Pricegrabber, Expedia). Will these tend to disappear over time when search costs are even lower?
4. How do Brynjolfsson and Smith's findings compare to Bakos's theory?
5. How do price dispersion vs. elasticity compare as a measure of competition?
6. Ariely and Lynch argue that sellers should have more transparent e-environments. Bakos notes that sellers have incentives to not do so. How do you explain the differences?
7. Describe an empirical phenomenon that you think can be explained by changes in search costs. How would you test your hypothesis?

Two Page Assignment due March 14 at 11:59pm (day before class).

We will have a debate in class on the following topic:

Resolved: *Mobile search will lead to more price competition among traditional retailers.*

You should prepare to defend both sides of the argument. Two people will be randomly assigned to each side of the debate. The "pro" side will have 4 minutes to make their case, followed by 4 minutes for the "con" side. Then each side will have 3 minutes for a rebuttal and a closing statement. Accordingly, please prepare a one-page case for the "Pro" side and a one-page case for the "con" side, with a maximum of 500 words total. You can use an outline format to maximize the amount of content per word. For the debate, you may not use PowerPoint, but you may use the blackboard and, of course, your notes.

Please email this memo to: Erik Brynjolfsson (erikb@mit.edu). The length is a maximum of 500 words – be concise. Please email the memo to me no later than 11:59pm on Sunday (the day BEFORE class).

March 22, 2008: No Classes, Spring Break

March 29: Collective Intelligence

Readings

4a. Knowledge in Organizations;

Von Hayek, F.A. "[The Use of Knowledge in Society](#)." *American Economic Review* 35:4 (September 1945): 519-530.

Jensen, M. and Meckling, W. (1992). "[Knowledge, Control and Organizational Structure](#)." In *Contract Economics*, L. Werin, & H. Hijckander (Ed.), (pp.251-274). Cambridge, MA: Basil Blackwell.

Collective Intelligence:

Malone, Thomas W., Laubacher, Robert and Dellarocas, Chrysanthos N., *Harnessing Crowds: Mapping the Genome of Collective Intelligence* (February 3, 2009). MIT Sloan Research Paper No. 4732-09. Available at SSRN: <http://ssrn.com/abstract=1381502>

Optional:

Galbraith, J. "[Organization Design: An Information Processing View](#)." *Interfaces* 4:5 (1974): 28-36.

Surowiecki, J. *The Wisdom of Crowds*. New York: Doubleday, 2004. Introduction and Ch. 1.

1. What does Hayek regard as incomplete in the existing (i.e., 1940's) research? What do you regard as his contributions? How are these relevant to IT and organizations today?
2. How does Jensen and Meckling's approach to knowledge differ from Hayek?

Due: Paper Proposal. Details discussed in class.

April 5: Economics of Information and “Superstars”

Readings

Required:

1. Rosen, S. (1981). “The Economics of Superstars.” *The American Economic Review* 71(5): 845-857
2. Krueger, A. (2005). “The Economics of Real Superstars: The Market for Rock Concert in the Material World.” *Journal of Labor Economics* 23(1): 1-30
3. Kim, Heekyung H. and Erik Brynjolfsson. (2010). “CEO Pay and Information Technology.” Draft Working Paper.
4. Stigler, J. (1961). “The Economics of Information.” *Journal of Political Economy* Vol. 69 no.3: 213-225 (skim)
5. New York Times. “The Richest of the Rich, Proud of a New Gilded Age”, June 15, 2007 (skim)
6. New York Times. “Rise of the Super-Rich Hits a Sobering Wall”, August 21, 2009

Recommended:

1. Stiglitz, J. E. (2000). “The Contributions of the Economics of Information to Twentieth Century Economics.” *The Quarterly Journal of Economics* 115(4): 1441-1478
2. Wilson, Robert (1975). “Informational Economies of Scale.” *The Bell Journal of Economics* 6(1): 184-95
3. Nagle, T. (1984). “Economic Foundation for Pricing.” *Journal of Business* 57(1): 3-26
4. Crain and Tollison (2002). “Consumer Choice and the Popular Music Industry: A Test of the Superstar Industry.” *Empirica* 29: 1-9

Two Page Assignment due April 4 at 11:59pm (day before class). Please write a short, two-page essay addressing the following question:

1. How can the superstar theory of Rosen help understand the money earned by the super-rich?
2. How will the proliferation of the most recent wave of Internet and digital technologies affect the sales of music and the earnings of musicians?

Please email this memo to: Erik Brynjolfsson (erikb@mit.edu). The length is a maximum of 500 words – be concise and feel free to use bullet points.

April 12: Innovation Incentives/Open Source

Readings

Required:

1. Baldwin, Carliss Y. and Von Hippel, Eric A., “Modeling a Paradigm Shift: From Producer Innovation to User and Open Collaborative Innovation” (November 25, 2009). Harvard Business School Finance Working Paper No. 10-038; MIT Sloan Research Paper No. 4764-09. Available at SSRN: <http://ssrn.com/abstract=1502864>

Eric von Hippel will be joining us for the first part of class

2. Davis, Randall “The Digital Dilemma” *Communications of the ACM*, February, 2001.
3. Eric Raymond, “The Magic Cauldron”
4. Brynjolfsson, E. and Zhang, M. “Innovation Incentives for Information Goods” Draft for *NBER Conference on Innovation Policy and the Economy*, 2006.

Recommended:

5. Besen and Raskind. (1991). An Introduction to the Law and Economics of Intellectual Property. *Journal of Economic Perspectives*, Vol. 5 (No. 1), pp.3-27.
6. Richard Stallman, “Why software should not have owners” in *Free Software, Free Society: The Selected Essays of Richard M. Stallman*.
7. Summary of the Digital Millennium Copyright Act by U.S. Copyright office
8. Lerner, Joshua and Tirole, Jean, "The Scope of Open Source Licensing" (November 2002). Harvard NOM Working Paper No. 02-42. Available at SSRN: <http://ssrn.com/abstract=354220>
9. Sorensen, C. & Snis, U., “Innovation Through Knowledge Codification,” *Journal of Information Technology*, 16, (2001), 83-97.

The following two are books. Feel free to look at them if you are interested, now or at some future time.

10. Lessig, L., *Free Culture: How Big Media Uses Technology and the Law to Lock Down Creativity*, (2004), Penguin Press.

11. Fisher, W., *Promises to Keep: Technology, Law, and the Future of Entertainment*, (2004), Stanford University Press.

Study Questions

Please think about the following questions as you do the readings.

1. How do Carliss Baldwin and Eric von Hippel see as the key drivers of the “paradigm shift” they describe? Do you agree? What questions do you have for Prof. von Hippel, who will be coming to class?
2. What does Randy Davis think are the main problems with current intellectual property protection for software? What is his proposed solution?
3. Where does Eric Raymond think open source software will be most successful? Do you agree?
4. Can you think of any information goods with incentives systems similar to the one described by Brynjolfsson and Zhang?
5. Sloan Management Review plans to make its articles available on the web and wants to build a creative community of content and discussions. What should the “business model” be? Why?

Assignment due April 11 at 11:59pm (day before class)

Students will be asked to give a short presentation to the class. After reading all the articles, you should pick one of the first three articles (by Baldwin and von Hippel, Davis, or Raymond) that you most AGREE with and one that most DISAGREE with. Prepare a three to four minute explanation of why your favorite article is more convincing than the one you disagree with. Be detailed with specific economic arguments.

Please write up the talking points for your mini-presentation in a two-page paper for class, with a maximum of 500 words total. Please email this memo to: Erik Brynjolfsson (erikb@mit.edu).

April 26: Consumer Surplus and the “Long Tail”

Readings

Required:

6a. The Long Tail

Anderson, Chris. “The Long Tail,” *Wired*, available from
<http://www.wired.com/wired/archive/12.10/tail_pr.html>

Brynjolfsson, Erik, Yu (Jeffrey) Hu, and Michael D Smith. 2003. “The Longer Tail: The Changing Shape of Amazon’s Sales Distribution Curve” *MIT Working Paper*, March 2010.

Brynjolfsson, Erik, Hu, Yu Jeffrey and Smith, Michael D., From Niches to Riches: Anatomy of the Long Tail. *Sloan Management Review*, Vol. 47, No. 4, pp. 67-71, Summer 2006.

6b. File Sharing and Music Sales

Oberholzer, F. and Koleman Strumpf, “The Effect of File Sharing on Record Sales: An Empirical Analysis.” *Journal of Political Economy*. 2007. 115(1):1-42.*

Danaher, Brett, Dhanasobhon, Samita, Smith, Michael D. and Telang, Rahul, Converting Pirates Without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy (March 3, 2010). Available at SSRN: <http://ssrn.com/abstract=1381827>

Recommended:

Brynjolfsson, Erik, Hu, Yu Jeffrey and Smith, Michael D., Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers (June 2003). *Management Science*, Vol. 49, No. 11. Available at SSRN: <http://ssrn.com/abstract=400940> or doi:10.2139/ssrn.400940

Liebowitz, Stan J., "How Reliable is the Oberholzer-Gee and Strumpf Paper on File-Sharing?" (September 2007). Available at SSRN: <http://ssrn.com/abstract=1014399>*

“More on the famous file-sharing paper “
<http://newmarksdoor.typepad.com/mainblog/2008/03/more-on-the-fam.html#more>

Brynjolfsson, Erik, Yu (Jeffrey) Hu, and Mohammed Rahman. 2008. “Battle of the Retail Channels: How Product Selection and Geography Drive Cross-channel Competition ” working paper, revised, March 2008.*

Smith, Michael D. and Telang, Rahul, "Competing with Free: The Impact of Movie Broadcasts on DVD Sales and Internet Piracy" (January 2008). Available at SSRN: <http://ssrn.com/abstract=1028306> *

Varian, Hal R. 2005. "Reading Between the Lines of Used Book Sales," *New York Times* 28 Jul 2005.

Study Questions

1. What is the Long Tail?
2. What is the theory and evidence for the Long Tail becoming more important?
What is the theory and evidence for the Long Tail becoming less important?
3. Looking forward 5-10 years, what business and economic predictions can you make based on the Long Tail theory and evidence?
4. Why might file sharing reduce the sales of music CDs? Why might it increase their sales? Why might file sharing be correlated with increases in CD sales even if there was no causal relationship?

Assignment

Please email a draft of your term paper before class. We will distribute these to your classmates for them to read and comment on before your presentation.

May 3: Student Papers and Presentations

Required Readings

Draft Student Papers and Presentations

Advice on writing and presenting (Optional):

1. Varian, H. "How to Build an Economic Model in your Spare Time." In *Passion and Craft: Economists at Work*. Edited by Michael Szenberg. Ann Arbor, MI: University of Michigan Press, 1999.
<http://people.ischool.berkeley.edu/~hal/Papers/how.pdf>
2. Cochrane, John H., "Writing Tips for Ph.D. Students", June 8, 2005.
http://faculty.chicagobooth.edu/john.cochrane/research/Papers/phd_paper_writing.pdf
3. Kremer, Michael, "Writing papers: A Checklist".
<http://www.economics.harvard.edu/faculty/kremer/files/checklist.pdf>
4. Hamermesh, Daniel S., "Top 10 tips for Junior Faculty on Jump-Starting Your Career" *CSWEP Newsletter*, Spring/Summer 2006.
<https://webspaces.utexas.edu/hamermesh/www/Top10Tips.pdf>
5. Romer, David, "Out in Five"
http://www.j-bradford-delong.net/teaching_Folder/Romers_rules.html
6. Hamermesh, Daniel S. "The Young Economist's Guide to Professional Etiquette" *Journal of Economic Perspectives*, Vol. 6, No. 1. (Winter, 1992), pp. 169-179.
<http://pages.stern.nyu.edu/~wstarbuc/Writing/Etiquette.htm>
7. Choi, Kwan, "How to Publish in Top Journals" August 7, 2003.
http://www.econ.ucla.edu/doepke/teaching/how_to_choi.pdf
8. Levine, David, "David Levine's Cheap Advice: Writing a Dissertation".
http://faculty.haas.berkeley.edu/levine/cheap_advice.html#dissertation
9. Levine, David, "David Levine's Cheap Advice for new Faculty".
http://faculty.haas.berkeley.edu/levine/cheap_advice.html#newfaculty

10. Levine, David, "David Levine's Cheap Advice: How to Present for Results".
http://faculty.haas.berkeley.edu/levine/cheap_advice.html#results
11. Piazzesi, Monika, "Tips on How to Avoid Disaster in Presentations"
<http://www.docstoc.com/docs/2558775/Tips-on-how-to-avoid-disaster-in-presentations>
12. David Laibson's Job Market Advice
<http://www.economics.harvard.edu/files/LaibsonNotes.pdf>
13. Mankiw, N. Gregory. "My Rules of Thumb". *The American Economist*, Vol. 40, 1996.

Assignment due May 2 at 11:59pm (day before class)

1. Please prepare a presentation for class based on your term paper.

The presentation should be approximately 15-20 minutes, plus 10 minutes for Q&A. Feel free to ask the class for help or advice on how to best addressing portions of your research question. Please send me either your PowerPoint/Acrobat/Keynote presentation file, or a detailed written outline for your talk.

2. For each one of your classmate's papers, please prepare a separate sheet with your brief (1-2 sentence) answers to these questions:

1. What did you like best about this paper?
2. What would you recommend changing about this paper?
3. What is the most important thing you learned from this paper?
4. What concrete suggestions do you have (e.g. related articles, contacts at companies or elsewhere, data sources, other comments)?
5. What questions do you still have about the research? (You may want to ask these during your classmate's presentation).

Print out each of these sheets and bring them to class. During each presentation, you may wish to write additional comments. After class, give the relevant sheet to each presenter and collect corresponding sheets on your own presentation from your classmates.

May 10: The Future of the Information Economy

It's useful to understand what the future will be like. After all, we'll be spending the rest of our lives there. Fortunately, some predictions are relatively easy to make. For instance, we can be pretty confident that Moore's law will continue and not only microprocessors, but all sorts of information and communication technologies from data storage and memory, to fiber optics and wireless bandwidth, will improve by orders of magnitude in the next decade. But what are the implications for how we live and work, or even whether we live and work? Two authors, each with something of a track record, make their best estimates. The predictions may surprise you.

Readings

Pick one:

Kelly, Kevin "We are the Web" *KurzweilAI.net* Jan, 2006
<http://www.kurzweilai.net/meme/frame.html?main=memelist.html?m=1%23664>
(originally published in *Wired*, August 2005) (11 breezy pages)

Joy, Bill "Why the Future Doesn't Need Us", *Wired*, 8.04
<http://www.wired.com/wired/archive/8.04/joy.html>
(19 sometimes-depressing pages)

Study Questions

Please think about the following questions as you do the reading and think back on the course.

- 1) Do you think the bold, shocking predictions made in the article(s) you read are likely to come true? If so, what are the implications for you personally? If not, what is the flaw in the author's reasoning?
- 2) Make one bold, shocking prediction that you are ready to share with the class and be ready to explain why you think it might come true.