NET Institute
Conference on
Network Economics

April 18, 2008

Co-sponsored by
The Entertainment, Media & Technology Program
Stern School of Business
NET Institute 2008 Conference

Table of Contents

NET Institute .............................................................................................................................. 2
NET Institute Activities .......................................................................................................... 2
Abstracts of Papers in the Conference in Presentation Order .................................................. 5
Short Biographies of Speakers, Discussants, and Session Chairpersons ................................. 15
Recipients of grants from the NET Institute in Summer 2007 (in alphabetical order)............ 27
Recipients of grants from the NET Institute in Summer 2006 (in alphabetical order)............ 31
Recipients of grants from the NET Institute in Summer 2005 (in alphabetical order)............ 35
Recipients of grants from the NET Institute in Summer 2004 (in alphabetical order)............ 37
Recipients of grants from the NET Institute in Summer 2003 (in alphabetical order)............ 39
NET Institute

The Networks, Electronic Commerce and Telecommunications (“NET”) Institute http://www.NETinst.org is a non-profit institution devoted to research on network industries, electronic commerce, telecommunications, the Internet, cable television, “virtual networks” comprised of computers that share the same technical standard or operating system, financial networks including credit card and ATM networks, and on network issues in general. Of particular interest is research on innovation, entry, and introduction of new technology in network industries. The NET Institute functions as a world-wide focal point for research and open exchange and dissemination of ideas in these areas. The NET Institute competitively funds cutting edge research projects in these areas of research. It organizes conferences and seminars on these issues.

The following distinguished academics sit on the NET Institute’s board of directors:
1. Professor Kenneth Arrow, Economics Department, Stanford University
2. Dr. Vinton G. Cerf, Chief Internet Evangelist, Google
3. Professor Nicholas Economides, Stern School of Business, New York University (Executive Director)
4. Dr. Nathan Myhrvold, CEO, Intellectual Ventures
5. Professor Ariel Pakes, Economics Department, Harvard University

The NET Institute gratefully acknowledges the generous financial support of the AT&T Foundation and Microsoft.

NET Institute Activities

In 2007, its fifth year of operation, the NET Institute funded thirty six research projects through its summer grants program in a number of network industries though a competitive process in which a large number of proposals were submitted. The research papers are listed at http://www.netinst.org/2007_grants.html and on page 27. In a similar manner, the NET Institute funded thirty four research projects in 2006, listed at http://www.netinst.org/2006_grants.html and on page 31, twenty three research projects in 2005, listed at http://www.netinst.org/2005_grants.html and on page 35, twenty research projects in 2004, listed on page 37 and at http://www.netinst.org/2004_grants.htm, and thirteen projects during 2003, its first year of operation, listed on page 39 and at http://www.netinst.org/2003_grants.htm. The funded research work include a number of very important contributions in the analysis and understanding of competition, pricing, innovation, market structure, entry, and profitability in network industries ranging from telecommunications, banking networks, software and computers, video games, and airlines, among others. The full papers are downloadable as part of the working papers series of the NET Institute at http://www.netinst.org/NET_Working_Papers.html and at http://www.ssrn.com.

Ten of the summer 2007 research papers are featured in this year’s NET Institute conference. The NET Institute continues its summer grants program during the year 2008, and expands its support of research activities, conferences, and scientific meetings. See the call for proposals at http://www.netinst.org/call_for_proposals_2008.htm.
NET Institute Conference on Network Economics

Sponsored by the NET Institute, http://www.NETinst.org/
and the Entertainment, Media and Technology Program of the Stern School of Business

April 18, 2008

Stern School of Business, NYU, 44 West 4th Street, New York [MAP]

Program
(also at http://www.NETinst.org/2008_conference.htm)

Streaming video Conference Booklet

8:30-9:00 Continental Breakfast (Rm 5-50)

9:00-9:15 Introductory Remarks
Thomas Cooley, Dean, Stern School of Business, NYU
Nicholas Economides, Executive Director, NET Institute and Stern School of Business, NYU
Ariel Pakes, Director, NET Institute, Harvard University and NYU

9:15-10:45 Theoretical Models of Competition in Network Markets
Chairman: Ramesh Sankaranarayanan, University of Connecticut
Discussant: Jay Pil Choi, Michigan State University

Discussant: Arun Sundararajan, Stern School of Business, NYU

Discussant: Alessandro Lizzeri, New York University

11:00-12:30 Internet Search
Chairman: Yongmin Chen, University of Colorado
Discussant: Siva Viswanathan, R. H. Smith School of Business, University of Maryland


1:00-2:15 Keynote speaker Nathan Myhrvold, Intellectual Ventures

2:15-4:15 Issues in Network Industries
Chairman: Allan Collard-Wexler, Stern School of Business


4:15-5:45 Reception

Please RSVP at http://w4.stern.nyu.edu/economics/rsvp/
Competing Complements

Ramon Casadesus-Masanell
Harvard Business School

Barry Nalebuff
Yale School of Management

David Yoffie
Harvard Business School

Abstract

In Cournot’s model of complements, the producers of A and B are both monopolists. This paper extends Cournot’s model to allow for competition between complements on one side of the market. Consider two complements, A and B, where the A + B bundle is valuable only when purchased together. Good A is supplied by a monopolist (e.g., Microsoft) and there is competition in the B goods from vertically differentiated suppliers (e.g., Intel and AMD). In this simple game, there may not be a pure-strategy equilibria. In the standard case where marginal costs are weakly positive, there is no pure strategy where the lower quality B firm obtains positive market share. We also consider the case where A has negative marginal costs, as would arise when A can expect to make upgrade sales to an installed base. When profits from the installed base are sufficiently large, a pure strategy equilibrium exists with two B firms active in the market. Although there is competition in the complement market, the monopoly Firm A may earn lower profits in this environment. Consequently, A may prefer to accept lower future profits in order to interact with a monopolist complement in B.

Keywords: AMD, Complementors, Complements, Co-opetition, Equilibrium non-existence, Installed base, Intel, Microsoft, Pricing.
JEL Classification Numbers: C72, D43, K21, L13, L15, M21.

---

1 We thank Jim Dana, Philip Haile, Doh-Shin Jeon, Sandro Shelegia, Mihkel Tombak, and seminar participants at Yale SOM, LSE, IESE Business School’s SP-SP workshop on Economics and Strategy, MIT’s Organizational Economics Lunch, HBS Strategy Brown Bag, Harvard University’s Organizational Economics Lunch, the 2007 Meetings of the International Industrial Organization Society (Savannah GA) and Universitat Autonoma de Barcelona. Financial support from the NET Institute (http://www.NETinst.org) is gratefully acknowledged. Casadesus-Masanell is grateful to the HBS Division of Research and IESE Business School’s Public-Private Sector Research Center. Yoffie thanks the HBS Division of Research.
Bundling and Competition for Slots

Doh-Shin Jeon  
Universitat Pompeu Fabra and CREA

Domenico Menicucci  
Universita degli Studi di Firenze

Abstract

We study competition among upstream firms when each of them sells a portfolio of distinct products and the downstream has a limited number of slots (or shelf space). In this situation, we study how bundling affects competition for slots. When the downstream has k number of slots, social efficiency requires that it purchases the best k products among all upstream firms’ products. We find that under bundling, the outcome is always socially efficient but under individual sale, the outcome is not necessarily efficient. Under individual sale, each upstream firm faces a trade-off between quantity and rent extraction due to the coexistence of the internal competition (i.e., competition among its own products) and the external competition (i.e., competition from other firms’ products), which can create inefficiency. On the contrary, bundling removes the internal competition and the external competition among bundles makes it optimal for each upstream firm to sell only the products belonging to the best k. This unambiguous welfare-enhancing effect of bundling is novel.

Key words: Bundling, Competition among Portfolios, Limited Slots (or Shelf Space)  
JEL Classification Numbers: D4, K21, L13, L41, L82

---

1 This research was partially funded by the NET Institute (http://www.netinst.org/) whose financial support is gratefully acknowledged.
Price Discrimination in Two-Sided Markets

Qihong Liu
University of Oklahoma

Konstantinos Serfes
Bennett S. Lebow College of Business, Drexel University

Abstract

We examine the profitability and the welfare implications of price discrimination in two-sided markets. Platforms have information about the preferences of the agents that allows them to price discriminate within each group. The conventional wisdom from one-sided horizontally differentiated markets is that price discrimination hurts the firms and benefits consumers, prisoners’ dilemma. Moreover, it is well-known that the presence of indirect externalities in two-sided markets can intensify the competition. Despite all these, we show that the possibility of price discrimination, in a two-sided market, may actually soften the competition. Therefore, the implications of price discrimination from one-sided markets may not carry over to two-sided markets. This is the case regardless of whether prices are public or private, although private prices boost profits. Our analysis also sheds light on the welfare properties of price discrimination in intermediate goods markets, such as Business-to-Business (B2B) markets.

Keywords: Price discrimination, Two-sided markets, Indirect network externalities, Market segmentation.
JEL Classification Numbers: D43, L13.

---

1We thank the NET Institute (www.NETinst.org) for financial support. We would like to thank Bob Hunt, Leonard Nakamura and seminar participants at the 2007 Eastern Economic Association (EEA) meeting, the 2007 Society for the Advancement of Economic Theory (SAET) meeting, the 2007 Conference on Research in Economic Theory and Econometrics (CRETE), the 2007 Far Eastern Meeting of the Econometric Society (FEMES), the 2007 Chinese Economists Society (CES) meeting, the 2007 European Summer Meeting of the Econometric Society (ESEM) and the Federal Reserve Bank of Philadelphia for helpful comments and suggestions. We are responsible for all errors and omissions.

Anindya Ghose  
Stern School of Business, New York University  

Sha Yang  
Stern School of Business, New York University  

Abstract  

The phenomenon of sponsored search advertising – where advertisers pay a fee to Internet search engines to be displayed alongside organic (non-sponsored) web search results – is gaining ground as the largest source of revenues for search engines. Using a unique panel dataset of several hundred keywords collected from a large nationwide retailer that advertises on Google, we empirically model the relationship between different metrics such as click-through rates, conversion rates, bid prices and keyword ranks. Our paper proposes a novel framework and data to better understand what drives these differences. We use a Hierarchical Bayesian modeling framework and estimate the model using Markov Chain Monte Carlo (MCMC) methods. We empirically estimate the impact of keyword attributes on consumer search and purchase behavior as well as on firms’ decision-making behavior on bid prices and ranks. We find that the presence of retailer-specific information in the keyword increases click-through rates, and the presence of brand-specific information in the keyword increases conversion rates. Our analysis provides some evidence that advertisers are not bidding optimally with respect to maximizing the profits. We also demonstrate that as suggested by anecdotal evidence, search engines like Google factor in both the auction bid price as well as prior click-through rates before allotting a final rank to an advertisement. Finally, we conduct a detailed analysis with product level variables to explore the extent of cross-selling opportunities across different categories from a given keyword advertisement. We find that there exists significant potential for cross-selling through search keyword advertisements. Latency (the time it takes for consumer to place a purchase order after clicking on the advertisement) and the presence of a brand name in the keyword are associated with consumer spending on product categories that are different from the one they were originally searching for on the Internet.

Keywords: Online advertising, Search engines, Hierarchical Bayesian modeling, Paid search, Click through rates, Conversion rates, Keyword ranking, Bid price, Electronic commerce, Cross-Selling, Internet economics.  
JEL Classification: C33, C51, D12, L10, M31, M37, L81

---

1 We thank the NET Institute (http://www.NETinst.org) for financial support.
Deriving the Pricing Power of Product Features by Mining Consumer Reviews

Nikolay Archak  
Stern School of Business, New York University

Anindya Ghose  
Stern School of Business, New York University

Panagiotis Ipeirotis  
Stern School of Business, New York University

Abstract

The increasing pervasiveness of the Internet has dramatically changed the way that consumers shop for goods. Consumer-generated product reviews have become a valuable source of information for customers, who read the reviews and decide whether to buy the product based on the information provided. In this paper, we use techniques that decompose the reviews into segments that evaluate the individual characteristics of a product (e.g., image quality and battery life for a digital camera). Then, as a major contribution of this paper, we adapt methods from the econometrics literature, specifically the hedonic regression concept, to estimate: (a) the weight that customers place on each individual product feature, (b) the implicit evaluation score that customers assign to each feature, and (c) how these evaluations affect the revenue for a given product. Towards this goal, we develop a novel hybrid technique combining text mining and econometrics that models consumer product reviews as elements in a tensor product of feature and evaluation spaces. We then impute the quantitative impact of consumer reviews on product demand as a linear functional from this tensor product space. We demonstrate how to use a low-dimension approximation of this functional to significantly reduce the number of model parameters, while still providing good experimental results. We evaluate our technique using a data set from Amazon.com consisting of sales data and the related consumer reviews posted over a 15-month period for 242 products. Our experimental evaluation shows that we can extract actionable business intelligence from the data and better understand the customer preferences and actions. We also show that the textual portion of the reviews can improve product sales prediction compared to a baseline technique that simply relies on numeric data.

Keywords: Consumer reviews, E-commerce, Econometrics, Electronic commerce, Electronic markets, Hedonic analysis, Internet, Opinion mining, Product review, Sentiment analysis, Text mining, User-generated content

1 We thank the NET Institute (http://www.NETinst.org) financial support.
Search Engine Advertising: Pricing Ads to Context

Avi Goldfarb
University of Toronto

Catherine E. Tucker
Sloan School of Business, MIT

Abstract

Each search term put into a search engine produces a separate set of results. Correspondingly, each of the sets of ads displayed alongside these results is priced using a separate auction. There is growing debate whether this marketing strategy merely makes advertising more informative, or whether using context to price also effectively price discriminates. To inform this debate, we examine advertising prices paid by lawyers for 174 Google search terms in 195 locations and exploit a natural experiment in “ambulance-chaser” regulations across states. Where state laws impose limits on lawyers’ contingency fees limits, the relative price of advertising is $2.27 lower. This suggests that context-based pricing allows prices to reflect heterogeneity in the profitability of customer leads. When lawyers cannot contact a client by mail, the relative price per ad click is $0.93 higher. This suggests that context-based pricing allows prices to reflect heterogeneity in advertisers’ other advertising options, even within a given local market. This last result emphasizes that search engine’s pricing clout depends on the extent of competition, both online and offline.

Keywords: Search engines, Advertising prices, Two-sided networks, E-commerce, Internet marketing

---

1 We wish to thank Jayne Huang for excellent research assistance, and Anindya Ghose, Shane Frederick, as well as seminar participants at SCECR 2007, LBS and the University of Toronto for comments. We thank the NET Institute (http://www.NETinst.org) for financial support.
Abstract

This paper develops techniques to analyze the adoption decisions of both consumers and firms for competing platform intermediaries in two-sided markets, and applies the methodology to empirically measure the impact of vertical integration and exclusive contracting in the sixth-generation of the U.S. videogame industry (2000-2005). First introduce a framework to structurally estimate consumer demand in these types of hardware-software markets which (i) simultaneously analyzes both hardware and software adoption decisions; (ii) accounts for dynamic issues including the selection of heterogeneous consumers across platforms, durability of goods, and agents' timing of purchases; and (iii) explicitly provides the marginal contribution of an individual software title to each platform's installed base of users. Demand results show the gains obtained by a platform provider from exclusive access to certain software titles can be large, and failure to account for dynamics, consumer heterogeneity, and multiple hardware purchases significantly biases estimates. I next specify dynamic network formation game to model the adoption decision of hardware platforms by software providers. Counterfactual experiments indicate that vertical integration and exclusivity benefited the smaller entrant platforms and not the dominant incumbent, which stands contrary to the interpretation of exclusivity as primarily a means of foreclosure and entry deterrence.

Keywords: Platform competition, Two-sided markets, Vertical integration, Exclusive contracting, Dynamic demand, Network formation, Videogame industry

JEL Classification Numbers: C61, C63, C73, L13, L14, L42, L86

---

1 I am extremely indebted to Ariel Pakes for his advice, guidance, and support. I also would like to thank Susan Athey, Eric Budish, Marcelo Moreira, Julie Mortimer, Parag Pathak, Marc Rysman, and seminar participants at Harvard University for helpful comments and discussion during various stages of this project; furthermore, I am grateful to Marco Iansiti and Wan Wong for assistance in acquiring data, and Asi Lang, Albert Reed, and numerous others for sharing their insights into the videogame industry. Financial support from the IO Research Group at Harvard University and the NET Institute (http://www.NETinst.org) is gratefully acknowledged. All errors are my own.
Abstract

This paper examines the effect of recommender systems on the diversity of sales. Two anecdotal views exist about such effects. Some believe recommenders help consumers discover new products and thus increase sales diversity. Others believe recommenders only reinforce the popularity of already popular products. This paper is a first attempt to reconcile these seemingly incompatible views. We explore the question in two ways. First, modeling recommender systems analytically allows us to explore their path dependent effects. Second, turning to simulation, we increase the realism of our results by combining choice models with actual implementations of recommender systems. We arrive at four main results. One, some common recommenders lead to a net reduction in average sales diversity. Because common recommenders (e.g., collaborative filters) recommend products based on sales and ratings, they cannot recommend products with limited historical data, even if they would be rated favorably. In turn, these recommenders can create a rich-get-richer effect for popular products and vice-versa for unpopular ones. This finding is often surprising to consumers who express that recommendations have helped them discover new products. In line with this, result two shows it is possible for individual-level diversity to increase but aggregate diversity to decrease; recommenders can push each person to new products, but they often push us toward the same new products. Result three finds that recommenders intensify the effects of chance events on market outcomes. At the product level, recommenders can ‘create hits’ out of products with early, high sales due to chance alone. At the market level, in individual sample paths it is possible to observe more diversity, even though on average diversity often decreases. Four, we show how basic design choices affect the outcome. Thus, managers can choose recommender designs that are more consistent with their sales or product assortment strategies.

Keywords: recommender systems, collaborative filtering, long tail, path dependence, concentration, diversity
JEL Classification Number: D83

1 The authors thank Yannis Bakos, Eric Bradlow, Terry Elrod, Pete Fader, Robin Pemantle, David Schweidel, Michael Steele, Christophe Van den Bulte, and OPIM and WISE seminar participants for their comments. This work is a much extended version of a conference paper by the same authors (2007) from the ACM Conference on Electronic Commerce, and we also thank their three anonymous reviewers. The paper benefited thoroughly from their suggestions, and any remaining errors are the authors’. Finally, we thank you thank the NET Institute (http://www.NETinst.org) for financial support.

Charles Z. Liu  
Katz Graduate School of Business, University of Pittsburgh

Chris F. Kemerer  
Katz Graduate School of Business, University of Pittsburgh

Michael D. Smith  
H. John Heinz III School of Public Policy and Management, Carnegie-Mellon University

Abstract

Both theoretical and empirical evidence suggest that in markets with standards competition, strong network effects can make the strong grow stronger and, in some circumstances, even “tip” the market towards a single, winner-take-all standard. We theorize that in the presence of low cost conversion technologies and digital content, the tendency towards market dominance can be lessened to the point where multiple incompatible standards are viable. Our hypotheses are empirically examined in the context of the flash memory card market where both network effects and high quality conversion are present. The results show that the availability of digital converters reduces the price premium of the leading flash card formats more than of the minority formats. Therefore, producers of the non-dominant standards can be better off with the provision of conversion technology as this technology neutralizes the impact of network effects that would have otherwise been more potent. We discuss both the social and private implications of our findings.

Keywords: Network effects, Standards competition, Conversion technologies, Flash memory, Digital goods

JEL Classification Numbers: C12, C23, D62, L11, L15

---

1 Financial support for this research was provided by the NET Institute (http://www.NETinst.org), National Science Foundation CAREER award IIS-0118767 (Smith) and Katz Graduate School of Business Dissertation Research Grant (Liu). The authors thank the NPD research group for generously providing data on the flash memory card market. Valuable comments on this research were received from seminar participants at Carnegie Mellon University, INFORMS, the ICIS Doctoral Consortium and the Workshop on Information Systems and Economics (WISE).
Competition and Contracting in Service Industries

Ramesh Johari
Management Science and Engineering, Stanford University

Gabriel Y. Weintraub
Columbia Business School

Abstract

Two very different contractual structures are commonly observed in service industries with congestion effects: service level guarantees (SLGs) and best effort (BE) service. We analyze the impact of these contractual agreements on market outcomes in oligopolistic industries. First, we consider a model where firms compete by setting prices and SLGs simultaneously. The SLG is a contractual obligation on the part of the service provider: regardless of how many customers subscribe, the firm is responsible for investing so that the congestion experienced by all subscribers is equal to the SLG. We then consider the BE contractual model where firms compete by setting prices and investment levels simultaneously. With BE contractual agreements, firms provide the best possible service given their infrastructure, but without an explicit guarantee. Using the Nash equilibria (NE) of the games played by firms, we compare these competitive models in terms of the resulting prices, service levels, firms’ profits, and consumers’ surplus. We first show that the SLG game can be reduced to a standard pricing game, greatly simplifying the analysis of this otherwise complex competitive scenario. We then compare the SLG game with the BE game; equilibria for the BE is characterized in a previous paper. Using these results we show that in the case of constant returns to investment, while the NE price for the SLG game is perfectly competitive, firms obtain positive markups in the unique NE for the BE game. We also study the firms’ choice of the strategy space, i.e., whether to offer SLG or BE contracts to the consumer, and find that competition is intensified if even one firm chooses to offer SLG contracts. Our results contribute to the basic understanding of competition and contracting in service industries and yield insight into business and policy considerations.

We are grateful for helpful conversations with Gad Allon, Awi Federgruen, Sunil Kumar, Nolan Miller, Marcelo Olivares, Benjamin Van Roy, and seminar participants at the INFORMS Revenue Management and Pricing Conference 2007 and the INFORMS Annual Meeting 2007. We thank the NET Institute www.NETinst.org for financial support, as well as the National Science Foundation under grants DMI-0620811 and CNS-0644114.
Short Biographies of Speakers, Discussants and Session Chairpersons

NIKOLAY ARCHAK is a doctoral student at the Department of Information, Operations, and Management Sciences at Leonard N. Stern School of Business of New York University. His research interests are in text mining, machine learning and game theory. He received his B.Sc. degree in Computer Science from Software Engineering Department of the Saint-Petersburg State University, Russia in 2002.

HESKI BAR-ISAAC is an Assistant Professor of Economics at the Stern School of Business of New York University and holds an affiliation with the Economics Department in the Graduate School of Arts and Science. His research interests lie in the application of game theory and information economics, and he has had several papers published in top economic journals. Recently he has worked on reputation, organizational design, personnel policies, and implications of consumer information-gathering for marketing strategies. He holds a Ph.D. and an M.Sc. in Economics from the University of London (London School of Economics), as well as a B.A. from Oxford University, and has experience in industry as an economic consultant working in utility regulation and anti-trust for OXERA. He has taught, as a visitor, at the Kellogg School of Management, Northwestern University and Bocconi University. Further details of Heski Bar-Isaac’s research and experience can be found at http://pages.stern.nyu.edu/~hbar-isa.

RAMON CASADESUS-MASANELL joined the Harvard Business School faculty in 2000. He has taught the required MBA Strategy course, an elective course of Competitive Dynamics, and Ph.D. courses on strategy and game theory. He also teaches in Executive Education programs. Casadesus-Masanell received his Ph.D. in Managerial Economics and Strategy from the Kellogg Graduate School of Management, Northwestern University. He received his BA in Economics from Universitat Autonoma de Barcelona, Spain. Casadesus-Masanell's fields of specialization are management strategy, managerial economics, and industrial organization. Casadesus-Masanell studies competition between organizations with different business models. He is also interested in the limits to contracting and the role of trust for management strategy. He has published in Management Science the Journal of Economics and Management Strategy, the Journal of Law and Economics, the Journal of Economic Theory, the USC Interdisciplinary Law Journal, and ABANTE Studies in Business Management, among others.

YONGMIN CHEN is Stanford Calderwood Professor of Economics at the University of Colorado at Boulder. His field of specialization is industrial organization, with research and publications in areas including vertical organization, markets with search/switching costs, oligopoly price discrimination, product differentiation, economics of innovation, and the organization of international trade. He holds a PhD in economics from Boston University. He is an Associate Editor of the European Economic Review and an Associate Editor of the Journal of Industrial Economics. He is also an Editorial Advisor to the Canadian Journal of Economics.

JAY PIL CHOI is Professor of Economics at Michigan State University where he has taught since 2000. Prior to his appointment at Michigan State University, he served on
the faculties of Columbia University and Seoul National University. He is also Co-Editor of *International Journal of Industrial Organization* and serves on the Editorial Board of *Information Economics and Policy*. He has authored or co-authored more than forty articles in a variety of areas in economics. Those articles have appeared in leading scholarly and professional journals, including the *American Economic Review*, the *Quarterly Journal of Economics*, the *Review of Economic Studies*, and the *Rand Journal of Economics*. Many of his articles consider economic issues related to network effects, tying arrangements, and intellectual property rights.

**ALLAN COLLARD-WEXLER** joined the Stern School of Business at New York University as an Assistant Professor of Economics in July 2006. His primary research areas are empirical industrial organization and applied econometrics. His research focuses on the role of sunk costs on competitive dynamics. In particular, he has investigated the role of entry and exit in the ready-mix concrete industry. Recently, he has investigated the impact of mergers in the Canadian Newspaper and Airline industries. Professor Collard-Wexler received his B.A. in Economics at McGill University in Montréal. He received his Master of Arts and Doctor of Philosophy degrees, both in Economics, at Northwestern University.

**THOMAS F. COOLEY** is the Richard R. West Dean and the Paganelli-Bull Professor of Economics at the New York University Stern School of Business, as well as a Professor of Economics in the NYU Faculty of Arts and Science. The former President of the Society for Economic Dynamics and a Fellow of the Econometric Society, Dean Cooley has received numerous awards for his teaching and is recognized as a national leader in both macroeconomic theory and business education. He is a widely published scholar in the areas of macroeconomic theory, monetary theory and policy and the financial behavior of firms.

**CHRIS DELLAROCAS** is an Associate Professor of Information Systems at the Robert H. Smith School of Business of the University of Maryland. His research examines the implications of consumer-generated content and social web (Web 2.0) technologies for trade, marketing, operations and corporate strategy. His academic work on the topic has been published at some of the most prestigious academic journals, such as *Management Science, Information Systems Research* and *IEEE Transactions*, and has been highly cited. He appeared on *CNN Headline News* to discuss the growing impact of “word-of-mouse” in our society and has been quoted in, among other places, the *New York Times*, *The Wall Street Journal*, *Business Week*, *Washington Post* and the *Financial Times*. Dellarocas holds Ph.D. and S.M. degrees in Computer Science from MIT. Before joining the R. H. Smith School of Business, he worked for Andersen Consulting (now Accenture) and McKinsey & Co. and taught at MIT’s Sloan School of Management. He has brought in almost $2 million in research funds from DARPA, NSF and other funding agencies. His research grants include the prestigious NSF CAREER award. He serves as Associate Editor of *Management Science* and *Information Systems Research* and is actively involved, as program chair or committee member, in the organization of several conferences in the fields of Information Systems and Electronic Commerce. He is an inventor with 3 patents, an Advisory Board member of the Word of Mouth Marketing
Association (WOMMA) and board member of several Web 2.0 startups. His full CV is available at [http://www.rhsmith.umd.edu/faculty/cdell/bio.pdf](http://www.rhsmith.umd.edu/faculty/cdell/bio.pdf)

**NICHOLAS ECONOMIDES** is Professor of Economics at the Stern School of Business of New York University and Executive Director of the NET Institute, [http://www.NETinst.org](http://www.NETinst.org). He is an internationally recognized academic authority on network economics, electronic commerce, and public policy. His fields of specialization and research include the economics of networks, especially of telecommunications, computers, and information, the economics of technical compatibility and standardization, industrial organization, the structure and organization of financial markets and payment systems, antitrust, application of public policy to network industries, strategic analysis of markets and law and economics. He has published over one hundred articles in top academic journals in the areas of networks, telecommunications, oligopoly, antitrust, product positioning, and on liquidity and the organization of financial markets and exchanges. He holds a Ph.D. and a M.A. in Economics from the University of California at Berkeley, as well as a B.Sc. (First Class Honors) in Mathematical Economics from the London School of Economics. He has previously taught at Columbia University (1981-1988) and at Stanford University (1988-1990). He is editor of the *Netnomics*, *The Quarterly Journal of Electronic Commerce*, *The Journal of Financial Transformation*, *The Journal of Network Industries*, on the Advisory Board of the *Social Science Research Network*, editor of *Economics of Networks Abstracts* by SSRN, and past editor of the *International Journal of Industrial Organization*. His website on the Economics of Networks at [http://www.stern.nyu.edu/networks/](http://www.stern.nyu.edu/networks/) has been ranked as one of the top four economics sites worldwide by *The Economist* magazine. He is advisor to the U.S. Federal Trade Commission, the governments of Greece, Ireland, New Zealand, and Portugal, major telecommunications corporations, a number of the Federal Reserve Banks, the Bank of Greece, and major Financial Exchanges. He serves on the Advisory Board of the *Economist Intelligence Unit*. The complete C.V. of Prof. Nicholas Economides is available at [http://www.stern.nyu.edu/networks/cvnoref.html](http://www.stern.nyu.edu/networks/cvnoref.html).

**IGNACIO ESPONDA** is an Assistant Professor in Economics at NYU Stern School of Business. He received his Ph.D. from Stanford University in 2006 and his primary areas of research are microeconomic theory and industrial organization. Part of his work focuses on understanding strategic interactions of market participants that suffer from specific biases in behavior, such as the failure to account for adverse selection or the failure to take into account the winner's curse effect in auction settings. Lately, he has been studying entry, participation, and bidding decisions of firms in procurement markets.

**DANIEL FLEDER** is a Ph.D. candidate in the Wharton School's Operations and Information Management Department (OPIM). His research interests are in the management of product variety and personalization. He also has methodological interests in data mining and applied statistics. Daniel received his B.S. in Engineering and M.A. in Statistics, both from the University of Pennsylvania, and won numerous awards during each. Prior to Wharton, Daniel was a consultant with McKinsey & Company.
ANINDYA GHOSE is an Assistant Professor of Information, Operations, and Management Sciences at New York University's Leonard N. Stern School of Business. His research analyzes the monetization of online user-generated content, the value of online word-of-mouth and Web 2.0 advertising, and the impact of geography on electronic commerce. He also works on the economics of IT-based price discrimination as well as on the economics of information security and corporate governance. His research has been published in journals that include *Information Systems Research, Journal of Management Information Systems, Management Science, Marketing Letters* and *Statistical Science*. His research has won Best Paper nominations and Best Paper Awards in several top-tier conferences, and has been widely covered by press outlets such as *The New York Times* and *CNN*. In 2007, he received the NSF CAREER Award from the National Science Foundation for his research that quantifies the effect of user-generated and firm-produced content in electronic commerce. He is also a winner of a 2005 ACM Doctoral Dissertation Award, a 2006 Microsoft Live Labs Award, a 2006 NYU Research Challenge Fund award and a 2007 Microsoft Virtual Earth Award. He is currently a faculty affiliate with the Marketing Science Institute and the Sloan Center for Internet Retailing at the University of California. He has served as the Chair or Program Committee member of several premier conferences across multiple disciplines such as *ACM-EC, CIST, ICIS, PACIS, SECEC, WISE, WWW*, and *WSDM*. He is also serving as an Associate Editor in selected issues of *Information Systems Research* and *MIS Quarterly*. He has worked in GlaxoSmithKline, HCL-Hewlett Packard, and IBM. He has a B. Tech in Engineering from the REC, Jalandhar, and an M.B.A in Finance, Marketing and Systems from the Indian Institute of Management, Calcutta. He received his M.S. and Ph.D. from Carnegie Mellon University's Tepper School of Business.

AVI GOLDFARB is Associate Professor of Marketing at the Rotman School of Management, University of Toronto. He received his Ph.D. from Northwestern University in 2002 and his B.A.H from Queen’s University in 1997. His research focuses on the impact of information technology on marketing, on universities, and on the economy. Professor Goldfarb has published over 20 articles in a variety of outlets, including the American Economic Review, Marketing Science, the Journal of International Economics, the Journal of Economics and Management Strategy, Quantitative Marketing and Economics, the Journal of Urban Economics, and the International Journal of Industrial Organization. He is a co-editor at the Journal of Economics and Management Strategy and an associate editor of Information Economics and Policy. His complete C.V. is available at [http://www.rotman.utoronto.ca/~agoldfarb/vita.pdf](http://www.rotman.utoronto.ca/~agoldfarb/vita.pdf).

KARTIK HOSANAGAR is an assistant professor of Information and Operations Management at the Wharton School of Business, University of Pennsylvania. Professor Hosanagar’s research interests are in Internet commerce with a special emphasis on Internet media and Internet marketing. His work focuses on how consumers choose media and products on the Internet using information filters like search engines, recommender systems and comparison shopping engines and how firms influence the process using various forms of Internet advertising. As part of this stream of work on Internet media, he also studies how firms distribute media to consumers using Content Delivery Networks, P2P and other overlay infrastructure. Professor Hosanagar's research
Page dimensions: 612.0x792.0

The document contains the following text:

has received several awards including the William Cooper award for best thesis in Management Science (2004) and best paper awards at various conferences. He has a Bachelors degree in Electronics and a Masters in Information Systems, both from Birla Institute of Technology and Sciences (BITS, Pilani), India and an M.Phil. in Management Science and a PhD in Management Science and Information Systems from the Heinz School of Policy at Carnegie Mellon University. He is a cofounder of Yodle Inc and serves on the advisory boards of several other startups.

PANOS IPEIROTIS is an Assistant Professor at the Department of Information, Operations, and Management Sciences at Leonard N. Stern School of Business of New York University. His area of expertise is databases and information retrieval, with an emphasis on management of textual data. His research interests include web searching, text and web mining, data cleaning and data integration. He received his Ph.D. degree in Computer Science from Columbia University in 2004 and a B.Sc. degree from the Computer Engineering and Informatics Department (CEID) of the University of Patras, Greece in 1999. He is the recipient of two Microsoft Live Labs Awards, the "Best Paper" award for the IEEE ICDE 2005 conference, the "Best Paper" award for the ACM SIGMOD 2006 conference, and a recipient of a CAREER award from the National Science Foundation

DOH-SHIN JEON is Professor of Economics at Universitat Pompeu Fabra. He is also research fellow of the SP-SP center at the IESE Business School and associated professor of Toulouse School of Economics. His fields of specialization and research include theoretical industrial organization on the one hand, - especially telecommunications, the market for academic journals, electronic commerce – and contract theory and its applications on the other hand – for instances, collusion, downsizing -. He has published a number of articles in journals such as RAND journal of Economics and Journal of the European Economic Association. He holds a Ph.D. in Economics from University of Toulouse, a degree from ENSAE (Ecole Nationale de la Statistique et de l’Administration Economique) as well as a Master and a B.Sc. in Economics from Seoul National University

RAMESH JOHARI is an Assistant Professor at Stanford University, with a full-time appointment in the Department of Management Science and Engineering (MS&E), and courtesy appointments in the Departments of Computer Science (CS) and Electrical Engineering (EE). He is a member of the Operations Research group in MS&E, and the Information Systems Laboratory in EE. He is also a member of the advisory board of the Stanford Clean Slate Internet Program. He received an A.B. in Mathematics from Harvard (1998), a Certificate of Advanced Study in Mathematics from Cambridge (1999), and a Ph.D. in Electrical Engineering and Computer Science from MIT (2004). He is the recipient of a British Marshall Scholarship (1998), First Place in the INFORMS George E. Nicholson Student Paper Competition (2003), the George M. Sprowls Award for the best doctoral thesis in computer science at MIT (2004), Honorable Mention for the ACM Doctoral Dissertation Award (2004), the Okawa Foundation Research Grant (2005), the MS&E Graduate Teaching Award (2005), the INFORMS Telecommunications Section Doctoral Dissertation Award (2006), and the NSF CAREER Award (2007). He has served on the program committees of IEEE Infocom
CHRIS F. KEMERER is the David M. Roderick Professor of Information Systems at the Katz Graduate School of Business, University of Pittsburgh and an Adjunct Professor of Computer Science at Carnegie Mellon University. Previously, he was an Associate Professor at MIT’s Sloan School of Management. He received the B.S. degree magna cum laude from the Wharton School at the University of Pennsylvania and the Ph.D. degree from Carnegie Mellon University, where his dissertation topic was “Measurement of Software Development Productivity? His current research interests include management and measurement issues in information systems and software engineering, and he has published more than fifty articles on these topics in a number of professional and academic journals, including Communications of the ACM, IEEE Computer, IEEE Software, IEEE Transactions on Software Engineering, Information and Software Technology, Information Systems Research, Management Science, Sloan Management Review, and others, as well as editing two books. He has been invited to address audiences in a dozen different countries and numerous cities throughout the United States. He is a former Principal of American Management Systems Inc., the Washington, DC area-based software development and consulting firm where he designed, developed and managed software projects for a variety of public and private sector clients. He continues to serve industry in a variety of roles, including consulting, executive education, and expert testimony. Dr. Kemerer serves or has served on the editorial boards of the Annals of Software Engineering, Communications of the ACM, Empirical Software Engineering, IEEE Transactions on Software Engineering, Information Systems Research, the Journal of Organizational Computing, the Journal of Software Quality, and MIS Quarterly, and is a member of INFORMS, ACM, and the IEEE Computer Society. He is a past Departmental Editor for Information Systems at Management Science, and the immediate past Editor-in-Chief of Information Systems Research.

ROBIN S. LEE is a Ph.D. Candidate in Business Economics at the Department of Economics at Harvard University and Harvard Business School, and expects to receive his degree in June. He will spend a year as a Senior Research Scientist at Yahoo! Research in New York before joining the Stern School of Business at NYU as an Assistant Professor of Economics in 2009. His primary research fields are industrial organization and applied microeconomic theory. His research has focused on the competition between platform intermediaries in two-sided markets -- in particular, on the use of exclusive contracts and integration by platforms -- and also includes work on bilateral contracting, network formation games, and matching theory. He holds a B.A. and A.M. in economics from Harvard University.

ALESSANDRO LIZZERI is Professor of Economics in the economics department of New York University and editor of the Journal of Economic Theory. His fields of specialization and research include Industrial Organization, with special focus on durable goods markets, and Political Economy. He holds a Ph.D. from the Kellogg School of Business at Northwestern University, as well as an undergraduate degree from Universita’ Bocconi in Milan. He has previously taught at Princeton (1995-2000). The complete C.V. of Professor Lizzeri is available at http://www.econ.nyu.edu/user/lizzeria/.
CHARLES LIU is a Ph.D. Candidate of Information Systems at the Katz Graduate School of Business, University of Pittsburgh. He received the B.A. degree from the Department of Economics at Xiamen University, China and the M.A. degree from the Department of Economics at Tulane University. His research interests include the economics of IS and technology adoption in network economy. His dissertation focuses on examining the impact of conversion technologies on standards competition in IT markets. These studies have been presented at several conferences such as ICIS, WISE and INFORMS and are under revision at Information Systems Research (ISR) and Management Science. As a Ph.D. student, Charles won the 2006 Katz School Dean's Research Grant, the 2007 Net Institute Research Grant and is an ICIS Doctoral Consortium Fellow (2006). Prior to joining the Ph.D. program, he had worked in Xiamen International Airport, China as a Project Manager where he was responsible for designing and managing the air cargo information systems.

QIHONG LIU is an Assistant Professor of Economics at the University of Oklahoma. His fields of specialization are industrial organization and applied microeconomics. His current research includes price discrimination, product differentiation, collusion, economics of information related to information technology and e-commerce, and certain business strategies (low-price guarantees). He holds a Ph.D. in Economics from State University of New York at Stony Brook. He was a Research Associate and taught at University of Massachusetts Amherst (2003-2005). The complete C.V. of Prof. Qihong Liu is available at http://faculty-staff.ou.edu/L/Qihong.Liu-1/liu_cv.pdf.

DOMENICO MENICUCCI is Professor of Mathematics for Economics at Università degli Studi di Firenze (Italy). His fields of specialization and research include the theory of auctions, mechanism design, and industrial organization. In the above mentioned areas he has published articles in academic journals including Economic Theory, the Journal of the European Economic Association, and the Rand Journal of Economics. He holds an undergraduate degree from Università degli Studi di Firenze (Italy) and a Ph.D. from Universitat Pompeu Fabra (Barcelona, Spain). He has previously taught at Università degli Studi di Torino (Italy) (1999-2002). His website, which includes his complete C.V., is http://www.dmd.unifi.it/index.php?loc=personal&id=d.menicucci

NATHAN MYHRVOLD. At Intellectual Ventures, Myhrvold is focused on a variety of business interests relating to the funding, creation and commercialization of inventions. During his 14-year tenure at Microsoft, Dr. Myhrvold held various positions within the company and was responsible for founding Microsoft Research and numerous technology groups that resulted in many of Microsoft's most successful products. He has extensive experience successfully linking research to product development and commercialization. In 1986, his company Dynamical Systems was acquired by Microsoft. Prior to that, he was a postdoctoral fellow in the department of applied mathematics and theoretical physics at Cambridge University and worked with Professor Stephen Hawking on research in cosmology, quantum field theory in curved space time and quantum theories of gravitation. Dr. Myhrvold holds 18 patents and has more than 100 patents pending. Dr. Myhrvold earned a doctorate in theoretical and mathematical physics and a master's degree in mathematical economics from Princeton University. In 2005, in recognition of
his distinguished career, Princeton awarded Dr. Myhrvold the James Madison Medal, the university’s top honor for alumni. He also has a master's degree in geophysics and space physics and a bachelor's degree in mathematics, both from UCLA. Currently, he serves on the Advisory Board for the Department of Physics at the University of Washington. He is also an affiliate research associate of paleontology at the Museum of the Rockies where he funds and participates in paleontological research and yearly expeditions. Dr. Myhrvold is a member of the United Way's Million Dollar Roundtable and a regular contributor to local Seattle arts and education non-profits. In 2000, he partnered with Paul Allen and pledged $1 million to the SETI Foundation, to fund the development phase of the world's most powerful telescope – the Allen Telescope Array. An avid nature and wildlife photographer, Dr. Myhrvold's work is featured in the books "America 24/7" and "Washington 24/7" where his photographs helped capture a week in the life of people and nature in the United States during the spring of 2003. His work has been published in scientific journals including Science, Nature, Paleobiology and the Physical Review and he has contributed articles to magazines including Fortune, Time, National Geographic Traveler and the online magazine, Slate. In 2004, he provided the foreword to a book profiling some of the world's greatest inventors – “Juice: The Creative Fuel that Drives World Class Inventors.”

BARRY NALEBUFF is the Milton Steinbach Professor of Economics and Management at Yale School of Management. Prior to his position at Yale, he taught at Princeton and Harvard. He is the coauthor of four books, Thinking Strategically, Co-operation, Why Not?, and the forthcoming The Art of Strategy. His paper "Exclusionary Bundling" won the 2005 Jerry S. Cohen Memorial Fund Writing Award (for research in antitrust). In addition to his academic work, Professor Nalebuff has a regular column in Forbes. Nalebuff serves on the boards of Nationwide Insurance, Bear Stearns Financial Products, and is the chairman and co-founder of Honest Tea, a company that sells ready-to-drink organic iced tea that actually tastes like tea. An MIT graduate, Rhodes Scholar, and Junior Fellow at the Harvard Society of Fellows, Nalebuff earned his doctorate at Oxford University.

ARIEL PAKES is the Steven McArther Heller Professor of Economics at the Department of Economics at Harvard University, and is currently visiting New York University. Before coming to Harvard in 1999, he was the Charles and Dorothea Dilley Professor of Economics at Yale and has held other tenured positions at Yale (1988-97), the University of Wisconsin (1986-88), and the Hebrew University of Jerusalem (1985-86). Pakes is a fellow of the American Academy of Arts and Sciences (elected 2002) and of the Econometric Society (elected 1986). He was the recipient of the Frisch Medal of the Econometric Society in 1986, and delivered the Fisher-Schultz lecture at the World Congress of the Econometric Society in August 2005. Pakes is currently an Editor of the RAND Journal of Economics, and an associate editor of Economic Letters, the Journal of Economic Dynamics and Control, and the Journal of the European Economic Association. Professor Pakes' research has been in Industrial Organization (I.O.), the Economics of Technological Change, and in Econometric Theory. He and his coauthors have recently focused on developing techniques which allow us to empirically analyze behavior in imperfectly competitive industries. This includes: theoretical work on how to estimate demand and cost systems in different environments and then use the estimated
parameters to analyze equilibrium responses to policy and environmental changes; empirical work which uses these techniques to analyze the implications of alternative events in different industries; and the development of a framework for the numerical and empirical analysis of dynamic oligopolies. The dynamic framework includes methodology for both estimating dynamic parameters and for computing dynamic equilibrium, and the numerical analysis includes models which allow for collusion and for asymmetric information. Pakes’ recent empirical work includes an analysis of the impact of the break up of AT&T on productivity in the telecommunication equipment industry, an analysis of the impact of Voluntary Export Restrictions on the profits and consumer welfare generated by the sales of new cars, and an analysis of the impact of the entry and exit of goods on the price index for personal computers. Most recently Pakes has been involved in recent work by his students on ATM networks and HMO-hospital networks. His previous work outside of I.O. proper included the co-development of simulation estimators (in Econometric Theory), and the development of measures of the costs and returns to research and patenting activities (in Technological Change).

RICARDO RIBEIRO is currently a PhD candidate with the London School of Economics and Political Science (LSE). His research interests include industrial and financial economics, competition policy, and applied microeconomics. His recent research applies competition analysis to the financial trading industry modelling explicitly network externalities and aftermarket competition barriers. He holds an M.Res. from LSE and a BA from Universidade Católica Portuguesa. He has teaching experience on industrial economics and econometrics courses and has worked in the past as an accountant for PriceWaterhouseCoopers. Further information about his research is available at http://personal.lse.ac.uk/ribeiro.

RAMESH SANKARANARAYANAN is an assistant professor of Information Systems at the School of Business, University of Connecticut. His current research focuses on strategic analysis of digital goods such as software, music and video games, and the impact of information systems on business processes and the structure of firms. He has served as a management consultant with multinational corporations such as PricewaterhouseCoopers, Morgan Stanley, Wipro Infotech, and ICICI Ltd, providing strategy formulation and implementation, economic analysis of contracts, financial business process re-engineering, systems design and implementation to industries such as financial services, electric utilities, oil and gas, consumer electronics, and enterprise software. He has also taught courses on business information systems and database management systems. Ramesh has a Ph.D. from the Leonard N. Stern School of Business, NYU, an MBA from the Indian Institute of Management, Ahmedabad, and a B.Tech. from the Indian Institute of Technology, Chennai, India.

KONSTANTINOS SERFES is Assistant Professor of Economics at Drexel University. His research interests lie in the areas of industrial organization, microeconomics and applied game theory. In particular, his current research employs game-theoretic models to examine issues in: i) price discrimination, ii) information acquisition and sharing of customer-specific information, iii) product customization, iv) bundling and a la carte pricing, v) two-sided markets, vi) principal-agent theory and matching models, and vii) in general, oligopoly models of strategic interaction. His work has appeared in the
MICHAEL D. SMITH is the Heinz Career Development Associate Professor of Information Systems and Marketing at Carnegie Mellon University, with appointments at the H. John Heinz III School of Public Policy and Management and the Tepper School of Business. He received his Bachelors of Science in Electrical Engineering (summa cum laude) and his Masters of Science in Telecommunications Science from the University of Maryland, and received his Ph.D. in Management Science and Information Technology from the Sloan School of Management at MIT. Dr. Smith's research relates to analyzing and designing efficient information exchanges. His research in this area has been published in leading Management Science, Economics, and Marketing journals and covered by popular outlets including The Economist, The Wall Street Journal, Sloan Management Review, The New York Times, Wired Magazine, Time Magazine and Business Week. He also jointly conducted some of the first academic research into the social welfare impact of increased product variety in Internet markets. This work was cited in Chris Anderson's bestselling, and artfully titled, book "The Long Tail." Dr. Smith has received several awards for his teaching and research including the National Science Foundation's prestigious CAREER Award, the best published paper award runner-up for Information Systems Research in 2006, best paper nominations at the 2002 and 2004 International Conference on Information Systems and the 2004 Hawaii International Conference on Systems Sciences, and the Best Teacher Award in the Masters of Information Systems Management program. Prior to receiving his Ph.D., Dr. Smith worked extensively in the telecommunications and information systems industries, first with GTE in their laboratories, telecommunications, and satellite business units and subsequently with Booz Allen and Hamilton as a member of their telecommunications client service team. While with GTE, Dr. Smith was awarded a patent for research applying fuzzy logic and artificial intelligence techniques to the design and operation of telecommunications networks.

ARUN SUNDARARAJAN is an associate professor at NYU’s Stern School of Business, the NEC Faculty Fellow, director of their IS Ph.D. program, and director of the IT Economics track at their Center for Digital Economy Research. He teaches undergraduate and MBA students about IT and corporate strategy, and doctoral students about the economics of IT. He has degrees in electrical engineering, operations research and business administration from the Indian Institute of Technology, Madras and the University of Rochester. His research studies the economics of information technology, and focuses primarily on pricing digital goods, piracy and digital rights management, network effects, reputation systems, how IT transforms industries, and how social networks affect economic outcomes. He has published in journals that include Decision 24
Support Systems, Economics Letters, Information Systems Research, Journal of Economic Literature, Journal of Management Information Systems, Management Science and Statistical Science. His research has won two Best Paper awards, and has been profiled by publications such as BusinessWeek, the Financial Times and the Tokyo Shimbun. His opinion pieces have appeared in publications that include the Economic Times and BusinessWorld. Professor Sundararajan serves on the editorial boards of MIS Quarterly and Information Systems Research as an associate editor, on the advisory board of SSRN’s ebusiness/ecommerce journal, and was the founding co-chair of the NYU Summer Workshop on the Economics of IT. His past doctoral students hold academic positions at a number of leading institutions which include Dartmouth College, Tel-Aviv University, the University of Maryland, the University of Rochester, the University of Southern California, and the Wharton School.

Catherine Tucker Specializing in the economics of technology diffusion, Catherine Tucker explores the micro-influences of technology adoption by firms. The aim of her research is to guide firms to the best marketing strategies to speed up adoption of their products. She is particularly interested in empirical studies of the adoption of interactive technologies, network effects, search engines, and word-of-mouth. These studies have covered internet portals, banking, electronic payments, and electronic medical records. Her webpage can be found at www.catherinetucker.com.

Siva Viswanathan is an Assistant professor in the Decision and Information Technologies Department at Robert H Smith School of Business, University of Maryland College Park. Siva studies emerging issues relating to online firms and markets, as well as the impact of online intermediaries on various sectors including consumer retailing, financial services, and automobiles. His current research, in collaboration with one of the leading search engine marketing firms, examines the implications of online sponsored search mechanisms for advertisers as well as consumers. Siva has a Ph.D. in Information Systems from New York University, a Master’s degree in Business Administration, and a Bachelor’s degree in Engineering. Siva’s research has appeared in top research journals, and he is also an active participant in international conferences and industry forums.

Gabriel Y. Weintraub is an Assistant Professor of Decision, Risk and Operations at Columbia Business School. His research covers several areas that lie in the intersection between operations/management science, and applied economics. He is particularly interested in developing mathematical and computational models for the economic analysis of problems in operations, management, and information technology; as well as making contributions to industrial organization and computational economics. He holds a Ph.D. on Management Science and Engineering and a M.A. in Economics from Stanford University. Before obtaining his Ph.D. at Stanford, he was a full-time instructor at the Department of Industrial Engineering, University of Chile where he taught and consulted for the Chilean government.

Mo Xiao is an assistant professor of Economics at the Eller College of Business of University of Arizona. Her research applies microeconomic theory and econometrics to analyze various issues concerning firm behavior and market operation. She has worked on topics concerning firms' strategic provision of information and the impact of public
policies on firms' entry, exit and quality choices. Her most recent research is on the relationship of entry and the extent of competition in the broadband market. She holds a Ph.D. and a M.A. in Economics from University of California at Los Angeles, as well as a B.S. (with distinction) in Economics from Beijing University, China. She has previously taught at Iowa State University (2003-2004) and at University of Rochester (2004-2006). Prof. Mo Xiao’s complete C.V. is available at http://www.u.arizona.edu/~mxiao/Xiao_CV.pdf.

SHA YANG is an assistant professor of Marketing at Stern School of Business, New York University. Her primary research focuses on understanding household purchase behavior and market competition in the analysis of scanner panel data, store-level data and survey data. Her research has been published in /Marketing Science, Journal of Marketing Research, Management Science, Quantitative Marketing and Economics, Marketing Letters/, /International Journal of Forecasting/, and /Journal of Economic Psychology/. She is currently on the editorial board of /Marketing Science/. Professor Yang received her Bachelor of Arts in International Economics from Renmin University of China in 1994. She received her graduate degrees of Economics (MA), Statistics (MS) and Business Administration (MA), and Doctor of Philosophy in Marketing from the Ohio State University.

DAVID B. YOFFIE is the Max and Doris Starr Professor of International Business Administration at Harvard Business School. A member of the HBS faculty since 1981, Yoffie has served as chairman of the Strategy Department, chairman of the Advanced Management Program, and is currently the Senior Associate Dean and Chair of Executive Education. Outside of HBS, Yoffie is the Lead Independent Director of Intel Corporation, and a director of the National Bureau of Economic Research and several high tech companies. Yoffie has published eight books and numerous scholarly articles on international trade, firm strategy, and global competition. He has written extensively for the New York Times, the Wall Street Journal, the Harvard Business Review in addition to publishing over 100 HBS cases, which have sold more than 1.5 million copies.

FENG ZHU is a PhD candidate in Science, Technology and Management at Harvard University. His research interests include multi-sided markets, business value of information technology, intellectual property protection, and technology adoption and diffusion. Feng received his B.A. in Economics, Mathematics and with highest honors in Computer Science from Williams College, and his S.M. in Computer Science from Harvard University.
Recipients of grants from the NET Institute in Summer 2007 (in alphabetical order)


11. **Laura Forlano**, Columbia University, “Search and the city: Follow the wireless user.”

12. **Neil Gandal** and **Chaim Fershtman**, Tel Aviv University, “Microstructure of collaboration: The network of open source software.”


35. Jennifer Zhang, University of Texas at Arlington, and Bing Jing, Cheung Kong Graduate School of Business, and “The Impacts of Shopbots on Online Consumer Search,” NET Institute Working Paper #07-34.

Recipients of grants from the NET Institute in Summer 2006 (in alphabetical order)


11. **Kenneth S. Corts**, Rotman School of Management, University of Toronto, and **Mara Lederman**, Rotman School of Management, University of Toronto, “Software Exclusivity and Indirect Network Effects in the U.S. Home Video Game Industry.”


25. Ravi Mantena, Simon Graduate School of Business Administration, University of Rochester, Ramesh Sankaranarayanan, School of Business, University of Connecticut, and Siva Viswanathan, Smith School of Business, University of Maryland, “Exclusive Licensing in Complementary Network Industries.”


Recipients of grants from the NET Institute in Summer 2005 (in alphabetical order)


3. **Jay Pil Choi**, Michigan State University, “Strategic Product Pre-Announcements in Markets with Network Effects.”


8. **David Gabel**, Queens College, and **Carolyn Gideon**, Fletcher School, Tufts University, “Retail Prices and Facility-Based Entry into the Telecommunications Market.”

9. Onsel Emre, University of Chicago, **Ali Hortacsu**, University of Chicago and **Chad Syverson**, University of Chicago, “E-commerce and the Market Structure of Retail Industries.”


18. **Yossi Spiegel**, Tel Aviv University, “The Incentive To Participate In Open Source Projects: A Signaling Approach.”


23. **Michael Ward**, University of Texas, “Rationalizing the E-Rate: The Effects of Subsidizing IT in Education.”
Recipients of grants from the NET Institute in Summer 2004 (in alphabetical order)


4. Nataly Gantman and Yossi Spiegel, Tel Aviv University, “Adware, Shareware, and Consumer Privacy”


7. Austan Goolsbee, University of Chicago, GSB, and Chad Syverson, University of Chicago, “How Do Incumbents Respond to the Threat of Entry on Their Networks? The Case of the Major Airlines.”


14. Mark McCabe, Georgia Institute of Technology, and Christopher Snyder, George Washington University, “The Economics of Open-Access Journals.”


Recipients of grants from the NET Institute in Summer 2003 (in alphabetical order)

1. Fernando Beltran, Universidad de Los Andes, Colombia, “Effects of ISP Interconnection Agreements on Internet Competition: The Case of the Network Access Point as a Cooperative Agreement for Internet Traffic Exchange.”


4. Martha Garcia-Murillo, Syracuse University, “Assessing The Impact Of Internet Telephony On The Deployment Of Telecommunications Infrastructure.”

5. David Gilo and Yossi Spiegel, Tel Aviv University “Network Interconnection with Competitive Transit.”


7. Christian Hogendorn, Wesleyan University, “Excessive(?) Entry of National Telecom Networks.”

8. Jay P. Kesan, University of Illinois at Urbana-Champaign, and Andres A. Gallo, University of North Florida, “Internet Regulation: The Political Economy of ICANN and the Shaping of New Regulatory Regimes for the Internet.”


10. Marc Rysman, Boston University “Adoption Delay in a Standards War,” and “Differentiation Across Standards and Adoption Failure in 56K Modems.”
