NET Institute 2010 Conference

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NET Institute

The Networks, Electronic Commerce and Telecommunications (“NET”) Institute http://www.NETinst.org is a non-profit institution devoted to research on the Internet, electronic commerce, telecommunications, 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, the Kauffman Foundation, and Microsoft.

NET Institute Activities

In 2009, its seventh year of operation, the NET Institute funded twenty five 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/2009_grants.html and on page 23. Similarly, the NET Institute funded forty five research projects in 2008, listed at http://www.netinst.org/2007_grants.html and on page 26, thirty six research projects in 2007, listed at http://www.netinst.org/2007_grants.html and on page 30, thirty four research projects in 2006, listed at http://www.netinst.org/2006_grants.html and on page 34, thirty three research projects in 2005, listed at http://www.netinst.org/2005_grants.html and on page 38, twenty research projects in 2004, listed on page 40 and at http://www.netinst.org/2004_grants.htm, and thirteen projects during 2003, its first year of operation, listed on page 42 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 2009 research papers are featured in this year’s NET Institute conference. The NET Institute continues its summer grants program during the year 2010, and expands its support of research activities, conferences, and scientific meetings. See the call for proposals at http://www.netinst.org/call_for_proposals_2010.htm.
NET Institute Conference on Network Economics

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

April 16, 2010

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

Preliminary Program

(also at http://www.NETinst.org/2010_conference.htm)

Conference Booklet

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

9:00-9:15 Introductory Remarks

Ingo Walter, Vice Dean and Dean of Faculty, Stern School of Business, NYU
Nicholas Economides, Executive Director, NET Institute and Stern School of Business, NYU

9:15-10:45 Internet Search and Competition Online

Chairman: Sébastien Lahaie, Yahoo Research

1. Heski Bar-Issaac (Speaker), Stern School of Business, New York University, Guillermo Caruana, CEMFI, and Vicente Cuñat, London School of Economics, Search, Design and Market Structure [Presentation]
Discussant: Konstantinos Serfes, Drexel University [Presentation]

2. Ramon Casadesus-Masanell (Speaker), Harvard Business School, and Feng Zhu, University of Southern California, “Strategies to Fight Ad-sponsored Rivals” [Presentation]
Discussant: Gaston Llanes, Harvard Business School [Presentation]

3. Andrea Pozzi, (Speaker), Einaudi Institute for Economics and Finance, Shopping Cost and Brand Exploration in Online Grocery [Presentation]
Discussant: Juanjuan Zhang, MIT Sloan School of Management [Presentation]

11:00-12:30 Innovation, Standards, and Network Creation
Chairman: Alexander Tuzhilin, Stern School of Business, New York University

1. **German Lambardi** (Speaker), GREMAQ, Toulouse School of Economics, “Software Innovation and the Open Source Threat” [Presentation]
   Discussant: Arun Sundararajan, Stern School of Business, NYU [Presentation]

2. **Toby Kretschmer**, Ludwig-Maximilians-Universität München, **Eugenio Miravete** (Speaker), University of Texas at Austin, and **José Pernías**, Universitat Jaume I, “Competitive Pressure and the Adoption of Complementary Innovations,” [Presentation]
   Discussant: John Asker, Stern School of Business, NYU [Presentation]

3. **Reto Hofstetter**, University of Bern, **Scott K. Shriver** (Speaker), Stanford University, and **Harikesh Nair**, Stanford University, “Network Effects, User-Generated Content, and Social Ties: Evidence from an Online Social Network,” [Presentation]
   Discussant: Chris Forman, Georgia Institute of Technology [Presentation]

1:00-2:15  
**Lunch; Keynote speaker: Chris Meyers**, Microsoft

2:15-4:15  
**Two-sided Competition, Switching Costs and Learning**

Chairman: Glen Weyl, Harvard University

1. **Hong Guo**, University of Notre Dame, **Subhajyoti Bandyopadhyay**, Warrington College of Business Administration, University of Florida, and **Hsing Kenny Cheng** (Speaker), Warrington College of Business Administration, University of Florida, “The Economic Effect of Broadband User Discrimination,” [Presentation]
   Discussant: Robin S. Lee, Stern School of Business, NYU [Presentation]

2. **Stefan Behringer** (Speaker), Universität Mainz and **Lapo Filistrucchi**, Tilburg University and University of Florence, “Price Wars in Two-Sided Markets: The case of the UK Quality Newspapers,” [Presentation]
   Discussant, Alessandro Gavazza [Presentation]

3. **Jiawei Chen** (Speaker), University of California-Irvine, “Switching Costs in Network Industries,” [Presentation]
   Discussant: Yossi Spiegel, Tel Aviv University [Presentation]

4. **Anindya Ghose** and **Sang-Pil Han** (Speaker), Stern School of Business, New York University, “A Structural Model of User
Learning and Dynamics in Mobile Phone Content Services,”
[Presentation]
Discussant, Sha Yang [Presentation]

4:15-5:30 Cheese and Wine Reception

RSVP at http://w4.stern.nyu.edu/economics/rsvp/
Abstracts of the Conference Papers in Presentation Order

Search, Design, and Market Structure¹

Heski Bar-Isaac  
Stern School of Business, New York University

Guillermo Caruana  
Centro de Estudios Monetarios y Financieros

Vicente Cuñat  
London School of Economics

Abstract

The Internet has made consumer search much easier with consequences for competition, industry structure and product offerings. We explore these consequences in a rich but tractable model that allows for strategic design choices. We find a polarized market structure, where some firms choose designs aiming for broad-based audiences, while others target narrow niches. Such an industry structure can arise even when all firms and consumers are ex-ante identical. We perform comparative statics and show the effect of a fall in search costs on the designs, market shares, prices, and profits of different firms. In particular, a fall in search costs, through the effect on product designs, can lead to higher industry prices and profits. In characterizing sales distributions, our analysis is related to discussions of how the Internet has led to the prevalence of niche goods and the long tail and superstar phenomena.

¹ Previous versions have circulated as “Costly Search and Design.” We thank for their helpful comments the Editor, three anonymous referees, Simon Anderson, Michael Baye, Juanjo Ganuza, Avi Goldfarb, Maarten Janssen, George Mailath, Eric Rasmus, Michael Rauh, Andrew Rhodes, and excellent seminar participants at the IIROC (Boston 2009), the North American meeting of the Econometric Society (Boston 2009), 2nd Workshop on the Economics of Advertising and Marketing (St-Germain en Laye), the Madrid Summer Workshop in Economic Theory 2009, Groningen Workshop on Search and Switching Costs, Anderson School of UCLA, Columbia University, University of Pennsylvania, University of Virginia, and the Stern work-in-progress lunch. Financial support from the NET Institute (http://www.NETinst.org) is gratefully acknowledged. Guillermo Caruana acknowledges the financial support of the Spanish Ministry of Science and Innovation through the Consolider-Ingenio 2010 Project “Consolidating Economics.”
Strategies to Fight Ad-sponsored Rivals

Ramon Casadesus-Masanell
Harvard Business School

Feng Zhu
Marshall School of Business, University of Southern California

Abstract

We analyze the optimal strategy of a high-quality incumbent that faces a low-quality ad-sponsored competitor. In addition to competing through adjustments of tactical variables such as price or advertising intensity, we allow the incumbent to consider changes in its business model. We consider four alternative business models, two pure models (subscription-based and ad-sponsored) and two mixed models that are hybrids of the two pure models. We show that the optimal response to an ad-sponsored rival often entails business model reconfigurations, a phenomenon that we dub “competing through business models.” We also find that when there is an ad-sponsored entrant, the incumbent is more likely to prefer to compete through a pure, rather than a mixed, business model because of cannibalization and endogenous vertical differentiation concerns. We discuss how our study helps improve our understanding of notions of strategy, business model, and tactics in the field of strategy.

1 We thank Lourdes Sosa, Ana Leticia Gonzalez-Palomares, and seminar participants at the London Business School, LeBow College of Business, Drexel University, and HBS Strategy Senior Brown Bag series for helpful comments and discussions. We gratefully acknowledge financial support from the NET Institute (www.netinst.org). Casadesus-Masanell thanks the HBS Division of Research and the Public-Private Sector Research Center at IESE Business School.
Shopping cost and brand exploration in online grocery\textsuperscript{1}

Andrea Pozzi
Einaudi Institute for Economics and Finance

Abstract

This paper studies differences in consumers' grocery shopping behavior when they shop online and in a brick-and-mortar store. To do so, I assemble a new scanner dataset that tracks customers' grocery purchases in-store and on the Internet. This allows comparison in behavior of the same households, shopping in the same chain, for identical items and for identical prices, eliminating many possible confounding factors.

I document that brand exploration - the purchase of a brand not tried in the past - is systematically more prevalent in-store than online. I propose three possible explanations for this finding: (i) shocks to the instantaneous utility of time correlated with the decision to shop online (ii) possibility to reduce shopping cost; and (iii) difficulty in assessing quality of unknown items while shopping online. I develop a model of consumer behavior that allows me to quantify each effect. I find that all of them contribute to hamper trial of new brands online. The counterfactual shows that altering the design of the website to remove potential obstacles to new trials increases brand exploration by 23%. More generally, in contrast to the conventional wisdom of the Internet reducing entry barriers, my work points to features of the online environment that in certain contexts actually could make entry of new brands more difficult.

\textsuperscript{1} I am deeply indebted to Liran Einav, Tim Bresnahan, and Jakub Kastl for their advice and guidance. I also benefited from comments and suggestions by Paul David, Wesley Hartmann, Jon Levin, Sridhar Moorthy, Andres Musalem, Harikesh Nair, Sridhar Narayanan, Frank Wolak and participants in the IIOC 2009, the 7th ZEW Conference on the Economics of ICT, and in seminars at several universities. I thank the managers of the supermarket chain for their help in accessing the data and for sharing with me their knowledge of the industry and of their business practices. I gratefully acknowledge financial support from SIEPR, in the form of the Schultz Graduate Student Fellowship and of the B.F. Haley and E.S. Shaw dissertation fellowship, and from the NET Institute (http://www.netinst.org/). All errors are mine. Einaudi Institute for Economics and Finance, andrea.pozzi@eief.it
Software Innovation and the Open Source threat

German Daniel Lambardi
ICESI University, Colombia

Abstract

In this paper I study how innovation investment in a software duopoly is affected by the fact that one of the firms is, or might become Open Source. Firms can either be proprietary source (PS) or open source (OS) and have different initial technological levels. An OS firm is a for profit organization whose basic software is OS and it is distributed for free. The OS firm, however, is able to make profits from selling complementary software and, on the cost side, it receives development help from a community of users. I first compare a duopoly composed by two PS firms with a mixed duopoly of a PS and OS firm and I find that a PS duopoly might generate more innovation than a mixed duopoly if the initial technological gap between firms is small. However if this gap is large, a PS duopoly generates less innovation than a mixed duopoly. I then extend the setting to allow PS firms to switch to OS or to remain PS. A PS firm wants to become OS if it gets behind enough in the technological race against a competitor. I find that the outside option to become OS might soften competition on innovation since the technological leader prefers to reduce his innovation investment to avoid the OS switch of the follower. Therefore, although the switch to OS could generate higher investment levels ex-post it might generate lower investment ex-ante. In this context I find that a government subsidy to OS firms could be potentially harmful for innovation.

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1 I am indebted to Jacques Crémer for his advice and guidance. I am grateful to Yossi Spiegel for helpful comments on a early draft. I would also like to thank the participants of the 4th ICT Telecom Paris conference. I gratefully acknowledge financial support from the NET Institute (http://www.netinst.org/). I am solely responsible for any mistakes and errors. GREMAQ, Toulouse School of Economics. Email: glambardi@gmail.com
Competitive Pressure and the Adoption of Complementary Innovations

Tobias Kretschmer
Ludwig-Maximilians-Universität München

Eugenio J. Miravete
University of Texas at Austin

José C. Pernías
Universitat Jaume I

Abstract

Liberalization of the European automobile distribution system in 2002 limits the ability of manufacturers to impose vertical restraints, leading to a substantial restructuring of the industry and increasing the competitive pressure among dealers. We estimate an equilibrium model of profit maximization to evaluate how dealers change their innovation strategies with this regime change. Using French data we evaluate the existence of complementarities among adoptions of innovations and the scale of production. We conclude that as firms expand their scale of production they concentrate their effort in one type of innovation only. Results are robust to the existence of unobserved heterogeneity.

Keywords: Competitive Pressure, Complementarity, Product and Process Innovation
JEL Codes: C35, L86, O31

1 We are grateful for comments by Jason Abrevaya, Jonathan Beck, Kenneth Hendricks, Claudio Piga, Howard Smith and seminar participants at Freie Universität Berlin, U.S. Federal Communications Commission, Universities at Lisbon (Técnica), Munich, Odense, Texas-Austin, Utrecht, and WZB, as well as the LACEA/LAMES meeting in Rio de Janeiro, the 2009 Winter Workshop at the Centre for Competition and Regulatory Policy at City University London and the CEPR Applied IO Conference in Mannheim. Funding from the NET Institute (www.NETinst.org) is gratefully acknowledged. Kretschmer thanks the Anglo-German Foundation and the Research Council of Norway for financial support and UT Austin and NYU Stern for their hospitality. Miravete thanks the generous hospitality of the Institute for Communications Economics.
Social Ties and User Generated Content: Evidence from an Online Social Network\textsuperscript{1}

Reto Hofstetter  
University of Bern

Scott K. Shriver  
Stanford University

Harikesh S. Nair  
Stanford University

Klaus Miller  
University of Bern

Abstract

We use variation in wind speeds at surfing locations in Switzerland as exogenous shifters of users’ propensity to post content about their surfing activity onto an online social network. We exploit this variation to test whether users’ social ties on the network have a causal effect on their content generation, and whether content generation in turn has a similar causal effect on the users’ ability to form social ties. Economically significant causal effects of this kind can produce positive feedback that generate multiplier effects to interventions that subsidize tie formation. We argue these interventions can therefore be the basis of a strategy by the firm to indirectly facilitate content generation on the site. The exogenous variation provided by wind speeds enable us to measure this feedback empirically and to assess the return on investment from such policies. We use a detailed dataset from an online social network that comprises the complete details of social tie formation and content generation on the site. The richness of the data enable us to control for several spurious confounds that have typically plagued empirical analysis of social interactions. Our results show evidence for significant positive feedback in user generated content. We discuss the implications of the estimates for the management of the content and the growth of the network.

\textsuperscript{1} We thank the NET Institute (www.NETinst.org) for supporting this research. All errors are our own.
Broadband User Discrimination and the Net Neutrality Debate

Hong Guo
Department of Management, University of Notre Dame,

Subhajyoti Bandyopadhyay
Department of Information Systems and Operations Management, University of Florida

Hsing K. Cheng
Department of Information Systems and Operations Management, University of Florida

Abstract

The net neutrality debate has brought out economic rationale for and against a variety of proposals of the broadband service providers to differentiate between different classes of users. Broadband users are characterized by the differing amounts of content they request online, as well as their valuation for such content. A broadband service provider (BSP) has two potential instruments for user discrimination – price discrimination and traffic prioritization (or degradation). We model six different pricing and prioritization options that cover many of the strategies that actual BSPs have adopted in the marketplace. By comparing these options, we find that imposing net neutrality increases the BSP’s profit if the BSP price discriminates different consumer groups. If net neutrality is not imposed, however, the BSP might still prefer a net neutrality outcome depending on the various parameter values. These and other results will be useful both for the broadband service providers as they mull over the introduction of the different pricing strategies and for policymakers who are dealing with the net neutrality issue.

Keywords: Net neutrality, Internet access pricing, congestion pricing, traffic prioritization, public policy, market regulation
Price Wars in Two-Sided Markets: The Case of the UK Quality Newspapers

Stefan Behringer  
Department of Economics, Universität Mainz

Lapo Filistrucchi  
CentER and TILEC, Tilburg University  
Department of Economics, University of Florence

Abstract

This paper investigates the price war in the UK quality newspaper industry in the 1990s. We build a model of the newspaper market which encompasses demand for differentiated products on both, the readers and advertisers side of the market, and profit maximization by four competing oligopolistic editors who recognize the existence of an indirect network effect of circulation on advertising demand. Editors choose first the political position, then simultaneously cover prices and advertising tariffs. We contribute to the literature on two-sided markets by endogenizing the political differentiation of newspapers in a model with more than two firms. We simulate changes to market structure in order to explore which of the candidate explanations is most likely to lie behind the observed price war.
Switching Costs and Dynamic Price Competition in Network Industries

Jiawei Chen
University of California — Irvine

Abstract

Motivated by policy makers' recent interest in reducing switching costs in various network industries to increase competition, this paper investigates how switching costs affect market outcome in such industries. The results show that the effects of switching costs on market concentration and prices critically depend on two factors: the strength of network effects and the quality of the outside good. For example, switching costs lower prices if network effects are modest and the outside good is attractive, but raise prices otherwise. Therefore, policy makers need to carefully evaluate those two factors in order to make informed decisions.

\[^{1}\] I thank the NET Institute (www.NETinst.org) for financial support.
A Dynamic Structural Model of User Learning in Mobile Media Content

Anindya Ghose
Stern School of Business, New York University

Sang Pil Han
Stern School of Business, New York University

Consumer adoption and usage of mobile communication and multimedia content services has been growing steadily over the past few years in many countries around the world. In this paper, we develop and estimate a structural model of user behavior and learning with regard to content generation and usage activities in mobile digital media environments. Users learn about two different categories of content – content from regular Internet social networking and community (SNC) sites and that from mobile portal sites. Then they can choose to engage in the creation (uploading) and consumption (downloading) of multi-media content from these two categories of websites. In our context, users have two sources of learning about content quality – (i) direct experience through their own content creation and usage behavior and (ii) indirect experience through word-of-mouth such as the content creation and usage behavior of their social network neighbors. Our model seeks to explicitly explain how direct and indirect experiences from social interactions influence the content creation and usage behavior of users over time. We estimate this model using a unique dataset of consumers’ mobile media content creation and usage behavior over a 3-month time period. Our estimates suggest that when it comes to user learning from direct experience, the content that is downloaded from mobile portals has the highest average quality level. In contrast, content that is downloaded by users from SNC websites has the lowest average quality level. Besides, the order of magnitude of accuracy of signals for each content type from direct experiences is consistent with the order of the quality levels. This finding implies that in the context of mobile media users make content choices based on their perception of differences in both the average content quality levels and the extent of content quality variation. Further we find that signals about the quality of content from direct experience are more accurate than signals from indirect experiences. Potential implications for mobile phone operators and advertisers are discussed.

**Keywords:** structural modeling, mobile media, mobile portals, Internet websites, uploading content, downloading content, dynamic programming, simulated maximum likelihood estimation.

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1 We thank Tülin Erdem for very helpful comments. We also thank Sanjeev Dewan, Russ Winer, and participants at the 2009 Marketing Dynamics Conference, the 2009 SCECR conference 2009 and the 2009 Marketing Science conference for helpful comments. We thank the NET Institute (www.NETinst.org) for partial funding for this project. Anindya Ghose acknowledges the generous financial support from NSF CAREER award (IIS-0643847). The usual disclaimer applies.
Short Biographies of Speakers, Discussants and Session Chairpersons

JOHN ASKER joined New York University’s Stern School of Business as an Assistant Professor of Economics in 2004. His primary research areas include empirical industrial organization and applied microeconomics. His research focuses on the competitive effects of vertical market structure, with a particular focus on antitrust issues, and the design of auction markets. Professor Asker's research has examined the impact of exclusive distribution networks on competition in the American beer industry, the impact of withdrawal rights on bidding behavior in auctions, and the use of “scoring rules” to evaluate bids in complex procurement settings. He has recently started investigating different contracting practices between movie studios and video stores, and their impact on inventory, profitability and competition. Professor Asker has a Bachelor of Economics degree from the Australian National University and Master of Arts and Doctor of Philosophy degrees, both in economics, from Harvard University.

HESKI BAR-ISAAC is an Assistant Professor in the Department of Economics at and holds an affiliation with the Department of Economics at the Graduate School for Arts and Sciences at New York University. Professor Bar-Isaac earned a B.A. in Mathematics from Oxford University and a Masters in Economics from the London School of Economics. Before returning to the London School of Economics for his Ph.D., he spent a couple of years as a consultant, working on a range of anti-trust and regulatory issues. Professor Bar-Isaac's research focuses on theoretical models of information and reputation, with applications to training, organizational structure and careers, and firm marketing policies. He has visited economics departments at Tel Aviv University and Harvard University and taught at the Kellogg School of Management, Università Boconni and London School of Economics. His work has won prizes for the Young European Economist and for the Best Corporate Finance paper at the Spanish Finance Association Meeting 2005.

STEFAN BEHRINGER is acting Professor of Economics at the University of Mainz. His research focuses on applied microeconomic theory in particular industrial organization, the economics of networks, and mechanism design. He has published in Economics Letters. Stefan studied Philosophy, Politics, and Economics at the University of York, holds an M.A. in Law & Economics from the University of Hamburg, and an M.Sc. in Economics from the London School of Economics and Political Science. In 2005, he received his doctorate from the University of Mannheim after having been a Marie-Curie exchange scholar at IDEI Toulouse.

RAMON CASADESUS-MASANELL joined the Harvard Business School faculty in 2000. He has taught the required MBA Strategy course, an elective course on Competing Business Models, 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 strategic interaction between organizations that operate different business models. He is also interested in the limits to contracting and the role of trust for management strategy. He has published in the Journal of Economic Theory, the Journal of Economics & Management Strategy, Management Science, the Journal of Law & Economics, the Academy of Management Review, and Long Range Planning among others.

JIAWEI CHEN is an Assistant Professor of Economics at University of California-Irvine. His primary field is Industrial Organization, and his recent research interests include product compatibility and consumer switching costs in network industries, secondary markets in durable goods industries, and two-sided matching in the loan market. He is particularly interested in analyzing firms' dynamic competition and the regulatory and estimation issues related to such dynamics. Professor Chen received a B.A. in International Finance from Sun Yat-sen University, China, and an M.A. and a Ph.D. in Economics from the Johns Hopkins University.

HSING KENNETH CHENG received his Ph.D. in computers and information systems from William E. Simon Graduate School of Business Administration, University of Rochester in 1992. He is Associate Professor of Information Systems and Walter J. Matherly Professor at the Department of Information Systems and Operations Management of Warrington College of Business Administration, The University of Florida. Prior to joining UF, he served on the faculty at The College of William and Mary from 1992 to 1998. His research interests focus on modeling the impact of Internet technology on software development and marketing, and the national debate on net neutrality. Dr. Cheng has co-edited several special issues in various information systems journals. He has served on the program committee of many information systems conferences and workshops, and is a program co-chair for the 2003 Workshop on E-Business.

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. 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 Journal of Economics and Management, 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 web site on the Economics of Networks at 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.

CHRIS FORMAN is Robert and Stevie Schmidt Associate Professor of IT Management at the College of Management at the Georgia Institute of Technology. His research interests include the geography of IT use, electronic commerce, diffusion of IT innovations, IT strategy, and services outsourcing and off shoring. More recently, he has been studying firm strategy in the software industry. His research has appeared in numerous leading journals in economics and information systems. He is an Associate Editor at journals such as Management Science, Information Systems Research, and Information Economics and Policy. He was a visiting scholar at the Federal Reserve Bank of San Francisco in 2004. He is an Alfred P. Sloan Industry Studies Fellow, with an emphasis on the software industry. He is also the recipient of awards from conferences such as the International Conference on Information Systems, the International Conference in Electronic Commerce and the Conference on Information Systems and Technology.

ALESSANDRO GAVAZZA joined New York University Stern School of Business as an Assistant Professor of Economics in July 2008. Prior to joining NYU Stern, Professor Gavazza was an Assistant Professor of Economics at the Yale School of Management and a member of the research staff of the Cowles Foundation. An applied economist, Professor Gavazza’s interests are in industrial organization, contracting and capital investment. His recent research examines the effects of employees' turnover on health insurance contracts, the effect of liquidity in aircraft markets and the structure of leasing contracts in markets for capital equipment. Professor Gavazza’s current research focuses on income heterogeneity and its effects on the markets for durable goods, such as cars. Professor Gavazza received his B.A. in Economics from the Universita' degli Studi di Torino, Italy, his M.Sc. in Econometrics and Mathematical Economics from the London School of Economics and Political Science, and his Ph.D. in Economics from New York University.

SANG-PIL HAN is an Assistant Research Scientist in the IOMS-IS Group at the Stern School of Business of NYU. He received his Ph.D. from the Korea Advanced Institute of Science and Technology in 2008.

ROBIN S. LEE is an Assistant Professor of Economics at NYU Stern School of Business. He received his A.B. and A.M. in Economics and his Ph.D. in Business Economics from Harvard University. His primary research interests are industrial organization and applied microeconomic theory, focusing on bilateral oligopoly in networked industries and contracting between firms with market power. His recent work concentrates on platform and two-sided markets – with applications in hardware-software
industries, content distribution and the healthcare sector – and examines the implications of exclusive or selective contracting and vertical integration on industry structure, competition and welfare.

GERMAN LAMBARDI received his Ph.D. in Economics from the Toulouse School of Economics in 2010. He is an Assistant Professor at ICESI University, Colombia. He may be contacted at gdlambardi@icesi.edu.co

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Recipients of grants from the NET Institute in Summer 2009 (in alphabetical order)


6. Jianqing Chen, The University of Calgary, Hong Xu, University of Texas at Austin, and Andrew Whinston, University of Texas at Austin, “Moderated Online Communities and User-Generated Content,” NET Institute Working Paper #09-11.


11. Hong Guo, University of Notre Dame, Subhajyoti Bandyopadhyay, Warrington College of Business Administration, University of Florida, and Hsing Kenny Cheng, Warrington College of Business Administration, University of Florida, “The


Recipients of grants from the **NET Institute** in Summer 2008 (in alphabetical order)


6. Yong Chao and Guofo Tan, University of Southern California, Bundling and Discounts.


11. Timothy P. Derdenger and Yong Chao, University of Southern California, Bundling in Two-Sided Markets Application to the Video Game Industry.


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.”


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.”


16. Marc Rysman, Boston University, and Tim Simcoe, University of Toronto, “Patents and the Performance of Voluntary Standard Setting Organizations.”


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”


6. **Mark Ginsburg**, Eller College of Management, University of Arizona, “Evaluating Networked Medical Information Credibility with the MEDQUAL System.”

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.”
