B 8254
How to Manage the Regulatory Conflicts and Opportunities of the Digital Economy

Draft

Course Syllabus
Prof Eli Noam
Spring 2015

I. Overview

This half-course covers a subject that is crucial for management success in the future: how government policy and regulation affect the online-based industry and its users, and how the industry in turn can affect government action. The skill to navigate this interaction is critical to management in the emerging information economy, as well as to forward-looking policy making. The course takes an innovative approach, bringing together several strands of the MBA program, together with public policy and technology management, and applies them to the media and information sector. It aims to give students the MBA tools to run or use digital and online businesses in an environment full of government initiatives and restrictions. The course is valuable for future entrepreneurs, investors, creators, marketers, advertisers, users, and public officials.
Lecture Topics

1. Is digital regulation different from analog regulation?
   A. The Process of Digital Regulation and how to deal with it.
   B. Substantive policies: Speech and Net Neutrality access in the digital environment and the business implications.
5. Digital Money and Transactions

II. People

- Prof. Eli Noam
  - noam@columbia.edu
  - 212-854-8332
  - Office hours: [ ], and by appointment, 1-A Uris Hall
Eli Noam is Professor of Economics and Finance at the Columbia Business School since 1976, and its Garrett Professor of Public Policy and Business Responsibility. He served for three years as a Commissioner for Public Services of New York State, and was appointed by the White House to the President’s IT Advisory Committee. He is the Director of the Columbia Institute for Tele-Information, a research center focusing on management and policy issues in communications, internet, and media. He has also taught at Columbia Law School, Princeton University’s Economics Department and Woodrow Wilson School, and the University of St. Gallen, and is active in the development of electronic distance education. Noam has published 30 books and over 300 articles in economics journals, law reviews, and interdisciplinary journals,
and served as a regular columnist for the *Financial Times* online edition. His recent books and projects include: *Media Ownership and Concentration in America* (Oxford); *Peer-to-Peer Video* (Springer); *Who Owns the Media* (ed., Oxford, forthcoming); *Media Management* (3-volumes, forthcoming); and the project: *A National Initiative for Next Generation Video*.

Noam has been a member of advisory boards for the Federal government’s telecommunications network, and of the IRS computer system, of the National Computer Systems Laboratory, the National Commission on the Status of Women in Computing, the Governor’s Task Force on New Media, and of the Intek Corporation. His academic, advisory, and non-profit board and trustee memberships include the Nexus Mundi Foundation (Chairman), Oxford Internet Institute, Jones International University (the first accredited online university), the Electronic Privacy Information Center, the Minority Media Council, and several committees of the National Research Council. He served on advisory boards for the governments of Ireland and Sweden, and is a member of the Council on Foreign Relations. He is a commercially rated pilot, served in the Israel Air Force in the 1967 and 1973 wars, and is currently a search and rescue pilot with the Civil Air Patrol (1st Lt.). He is married to Nadine Strossen, a law professor and national president of the American Civil Liberties Union for 18 years. He received the degrees of BA, MA, Ph.D (Economics) and JD from Harvard University, and honorary doctorates from the University of Munich (2006) and the University of Marseilles Aix-la-Provence (2008).

**Course Teaching Assistant**

**Jason Adam Buckweitz**

jab2322@columbia.edu

**III. Course Websites**

1. The primary administrative access point to the course is the B-School’s *Canvas* site. Go to canvas.gsb.columbia.edu and select the course. On that site you can find the Required Readings and the non-required Background Readings.

2. For additional course content, go to the special course website, either by linking through the Canvas page, or directly. The direct URL is: www.citicolumbia.org/B8xxxx
   - Login: xxxx
• Password: xxxx

This additional course website includes a variety of features such as feedback opportunities, RSS newsfeeds, lecture notes, etc. that are not accommodated by Canvas. You can also access the course readings, including the Required Readings and the Background Readings.

IV. Course Schedule

Session 1: January
Session 2: February
Session 3: February
Session 4: February
Session 5: February
Session 6: March

V. Lectures

Lectures are presented in class and are available online soon thereafter in Powerpoint and Video

VI. Cases

The cases are short business situations, with discussion tracking the lectures

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<th>Lecture</th>
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VI. Course Readings

- Readings are located on the course website.
- They are also provided as a bound paper volume (“Required Readings”).
- Supplementary Readings are provided on the website for the use of students who want to study topics in greater detail.

Additional Resources

- The course website also provides several RSS feeds that continuously update with news on the media industries:
  - TV, Film, Internet, Telecom, Book Publishing, Newspapers, Theater
- The course website also includes many links to outside sites and resources, including industry newsletters for the latest information.

VII. Exams

- No final exam, but Final Paper Project

VIII. Final Paper Project

- The paper’s theme should be either:
  1. Plan for a startup in online video. What are the regulatory constraints, how does one comply with them, and what are the opportunities to shape them?
  2. Discuss how net neutrality can be implemented for online video. What are the issues, obstacles, and enforcement steps?

Grading Composition

Grades will be determined as follows:

- Paper 60%
- Class Participation 40%
Course Culture
As is the case for all courses at the Columbia Business School, and in correspondence with the School’s stated principles of its educational culture, your participation grade will be based on adherence to the following:

Attendance: To be in the class, you must be present, on time, and arrive prepared. Given that the exercises are central to the learning, missing any of the sessions without an excuse will lower your grade

Participation: We expect you to contribute to the learning of your classmates, both through class discussion and feedback during the breakout sessions. Expect cold calling. Good participation is defined as:
On time and present in each class
Actively participate in class discussions, pulling in insights from readings.
When guests are in the room, be respectful and prepared with thoughtful questions.
Device usage (phones, laptops) will take away from your participation grade

Relation to the Core and Pre-Requisites
There are no pre-requisites to the course. The course is multi-disciplinary in approach and exposition, deriving materials and concepts, and refreshing them, from core courses including Marketing, Strategy Formulation, Global Economic Environment, Managerial Economics, and People Leadership.

IX. Outline of Classes

1. Is Digital Regulation Different From Analog Regulation?
   A. The Process of Digital Regulation and how to deal with it.
      I. Introduction: The Information Society and Digital Economy
      II. The Economics of the Digital Economy
      III. Policy Challenges of the Digital Economy
      IV. The Regulatory Process
         1. Managing the Self-Regulation Process
         2. Strategic Use of the Regulatory Process
V. Case Discussion: How Much Should Comcast Invest in the Regulatory Process?

VI. The Legal and Public Affairs Functions in Digital Firms
   1. Organizing the Public Affairs Function
   2. Case Discussion: Comcast vs. AT&T

VII. Influencing Government and the Public
   1. Organizing the Lobbying Function and Strategy
   2. Public Relations Management

B. Substantive policies: Speech and Net Neutrality access in the digital environment and the business implications.

VIII. The Net Neutrality debate.
   1. How the battles are fought. Non-market competition
   2. Implications for networks and for applications
   3. Non-discrimination, its definition, and its enforcement
   4. The emerging information activism

IX. The Regulation of Digital Marketing and Advertising

X. Content Restrictions

XI. Conclusions, Outlook, and Management Takeaways
   1. Case Discussion Summary: Comcast vs. AT&T vs Google: the Net Neutrality Battles
   2. How is Digital Regulation different From Analog Regulation?
   3. Management Implications and Strategies of Dealing with the New Regulation


   I. Governmental Approaches to Market Power in the Media and Online Sector
      1. US and EU Regulations and Antitrust Actions
      2. Case Discussion: Carlos Slim, World’s Richest Man

   II. Trends
      1. Drivers of M&As and of spin-offs
2. Track record of digital M&A deals
3. Trends of media concentration in different countries and industries.
4. Does the transition to Internet-based digital media reduce concentration?
5. Who are the major media owners? Who are the institutional owners?
6. Problem Areas in Online Media Concentration: Google, BRICS, China
7. Regulatory approaches and their track record
8. Case Discussion: Carlos Slim and Global expansion

III. Conclusions, Outlook, and Management Takeaways
1. Impacts on M&A Strategy
   A. Company Strategies to Deal with Governmental Ownership Restrictions
2. Case Discussion Summary: Carlos Slim
3. The emerging digital market structure

   I. Privacy and Tradeoffs
   II. Security
   III. Technologies of Privacy Intrusion
      1. Privacy Threats
      2. Applications
         A. Data Matching and Profiling
         B. Location Tracking and more
   IV. Technologies of Security Intrusions
      1. Protection strategies
   V. Economic Analysis of the Cost of Breaches
      1. Case Discussion: Optimizing Privacy and Security Investments – Amazon.com
   VI. Industry Self-regulation
   VII. Remedies by Regulation and Legislation
      1. Government Regulation
         A. Right to be Forgotten
         B. Ad hoc vs. Specialized Agency Approaches
      2. US vs. Europe, and Trade Barriers
VIII. Private Remedies
   1. Company Protective Actions to Enhance Security
      A. Optimizing Protection Investment – Amazon.com

IX. Technological Protection Tools
   A. Firewalls, Filters, Encryption
   B. Applications to E-commerce
   C. Applications to Electronic Cash
   D. Applications to Digital Signatures

X. Markets in Privacy and Security

XI. Conclusions, Outlook, and Management Takeaways
   A. Case Discussion: Optimizing Privacy and Security Policies– Amazon.com
   B. Company tradeoffs, internal procedures, and optimization

4. Copyrights, patents, and intellectual assets – a system under fire. Strategies and opportunities for the monetization of information and technology.

I. Intellectual Assets
   1. The Rationale for Government Creation and Protection
   2. How Companies Organize their IA Management
   3. Case Discussion: GE and its Intellectual Assets

II. Copyrights
   1. Copyright Overview and the Digital Challenge
   2. How to Get Domestic and International Copyright Protections
   3. How to deal with Infringement
   4. Case Discussion: GE Copyright Infringements
   5. The Licensing of IP
      A. How to Value a License
      B. Strategic Licensing

III. Patents
   1. The Patent System: Overview and Digital Frontiers
2. Getting a Patent and Dealing with the Governmental Patent Office
4. Case Discussion: GE Patent Infringements

IV. How to Protect Against Piracy and Infringement
   1. Private Litigation
   2. Counter-Attacks
   3. Technology Fixes
   4. Business Responses

V. The Changing Environment
   1. The Open Source Movement
   2. Reform Proposals

VI. Conclusion and Management Takeaways
   1. Case Discussion: GE—Conclusion

5. Digital Money and Transactions

I. The nature of digital financial services and digital money
   1. Technology options
   2. The players and their products
   3. Applications of electronic currencies
   4. Risk analysis
   5. Case Discussion: The Bitcoin story

II. Global DFS: differences between developed and developing world
   1. Policy Goals: financial inclusion, economic growth
   2. Case Discussion: The Empesa Story
IV. The Regulators
   1. Central banks, telecommunications regulators, competition authorities
   2. Policy Issues: disruptive nature of DFS on banking system
   3. Policy Issues: money laundering and terrorist financing
   4. The track record of regulation

V. Conclusions and Management Takeaways
   1. MBA tool: risk mitigation strategies in DFS
   2. Case Conclusion: Lessons from Bitcoin and Empesa
   3. Outlook of electronic finance

   I. The Impacts of the Internet on Jobs in Advanced Countries: a new Productivity Paradox?
   II. Case Discussion: Vivendi
   III. Policy Goal #1: Industrial and Technology Upgrade
       1. Tools
       2. Analysis of Success Stories and Failures
   IV. Policy Goal #2: Infrastructure Upgrade
       1. Broadband Policies Around the World
   V. Policy Goal #4: Wireless and Spectrum
   VI. Policy Goal #5: Support of National Culture Industries
       1. Case Discussion: Can Canal Plus Overcome the Hollywood Advantage through Governmental Support Programs?
   VII. Conclusions, Outlook, and Management Takeaways
       1. Case Discussion: Vivendi: Has Government Action Worked?
       2. Support Programs Around the World and their Track Record
       3. Is the Policy System Able to Keep Up With Accelerating Change? Implications for Digital Firms
4. How can Firms Operate Under Regulation, and How Can They Use It?
5. Conclusions on Government-Business Interaction in the Digital Economy