**Spring 2024**

**Thursday 2:20 – 5:35 pm, Kravis Hall Rm. 640**

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**Office: Geffen 694**

**Office hours:**

**Jason Adam Buckweitz: Wednesday 2:00pm-4:00pm or by email appointment**

**William J. Drake: By email appointment**

**B8211**

**The Digital Economy: Regulatory Conflicts and Opportunities**

**Course Syllabus**

**Spring 2024**

**I. Overview**

This 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 skills needed to navigate this interaction are critical for managers in the emerging digital economy, as well as to forward-looking policy making. This 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 online 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 and Schedule**

**January 25**

1. Introduction to the Course and the Digital Economy

**February 1**

1. The Telecommunications and Internet Industries

**February 8**

1. Intellectual Property and Technology Standards

**February 15**

1. State Intervention and Support for Digital Industries

**February 22**

1. Digital Markets: Industry concentration in Digital Markets.

**February 29**

1. The Challenges of Online Financial Transactions

**March 6**

**\*Midterm Exam\***

**March 21**

1. Cross-border Data Flows and Global Digital Trade

**March 28**

1. Privacy and Cyber-Security

**April 4**

1. Openness and Fragmentation of the Internet

**April 11**

1. The Purported Negative Effects of the Internet

**April 18**

1. Artificial Intelligence, New Technology, and Future Trends

**April 25**

1. Conclusion and Outlook

**May 2**

**\*Final paper Due\***

**II. People**

**Jason Adam Buckweitz**

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Jason Buckweitz is the Executive Director of the Columbia Institute for Tele-Information, a research center on media, tele-communications, and IT. He has lead research projects on media ownership around the world, media management, the next generation of online streaming video, digital financial services, and metaverses. In addition to organizing research, publishing, and hosting events, he is a regular contributor on media matters.

He holds a Juris Doctor from New York Law School, with a background in Intellectual Property and Anti-trust law, and is a practicing attorney in New York. His background in regulatory experience stems from his Bachelors from Rutgers University in Political Science, as well as his time as a councilmanic aid at the New York City Council. He has been involved in digital technology and law for many years, and has significant knowledge about each and their intersection.

**William J. Drake**

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William J. Drake is Director of International Studies at Columbia Institute for Tele-Information, Columbia Business School, in New York City. In addition, he teaches adjunct at Columbia Business School and the Center for Executive Education in Technology Policy, Carnegie Mellon University; and is an International Fellow in the Media Change & Innovation Division of the Department of Communication and Media Research at the University of Zurich, where he also served as a Lecturer from 2010 - 2020. Other previous work experience has included: Senior Associate at the Centre for International Governance at the Graduate Institute for International and Development Studies; President of Computer Professionals for Social Responsibility; Senior Associate and Director of the Project on the Information Revolution and World Politics at the Carnegie Endowment for International Peace; founding Associate Director of the Communication, Culture and Technology Program, Georgetown University; Assistant Professor of Communication at the University of California, San Diego; and adjunct professor at the School of Advanced International Studies and the Georgetown School of Business.

Drake’s activities in the academic and practitioner environments have included: advisor to the World Economic Forum’s System Initiative on Shaping the Future of Digital Economy and Society; core faculty member of the European and South schools on Internet governance; co-editor of the MIT Press book series, The Information Revolution and Global Politics; three terms as Chair of the NonCommercial Users Constituency, seven terms on the Board of Directors of the European At Large Organization, two terms on the Nominating Committee, and two terms on the Council of the Generic Names Supporting Organization, all in the Internet Corporation for Assigned Names and Numbers (ICANN); member of the Multistakeholder Advisory Group of the UN’s Internet Governance Forum; expert advisor to the high-level Panel on Global Internet Cooperation and Governance Mechanisms; member of the UN’s Working Group on Internet Governance; member of the inaugural Coordination Committee of the NETmundial Initiative; member of the Coordination Committee of the 1Net initiative; member of the Group of High-Level Advisors of UN Global Alliance for ICT and Development; and Vice Chair and founding Steering Committee member of the Global Internet Governance Academic Network. Drake received his PhD in Political Science from Columbia University.

**III. Course Website**

The primary administrative access point to the course will be through the school’s *Courseworks* site. Go to <https://courseworks2.columbia.edu> and select the course. On there you can find the Required Readings along with non-required Supplemental Readings, which can be helpful for additional knowledge.

**IV. Lectures**

Students are expected to follow the three P’s, be Punctual, be Prepared, and be Participatory. Lectures are presented in class and the Power Points will be made available online after class.

**V. Cases**

Each class we will integrate the teachings from the lecture into an illustrative case. The cases are required reading in advance of class.

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| --- | --- |
| **Lecture** | **Case Discussion** |
| Class 1- Introduction to the Course and the Digital Economy | Comcast vs. Google |
| Class 2- The Telecommunications and Internet Industries | European Telecom Operators vs. “Big Tech” |
| Class 3- Intellectual Property and Technology Standards | GE’s Management of its Intellectual Assets |
| Class 4- State Intervention and Support for Digital Industries | Google in China |
| Class 5- Digital Markets: Industry Concentration in Digital Markets | Rupert Murdoch |
| Class 6- The Challenges of Online Financial Transactions | Bitcoin and M-Pesa |
| **March 6th** | **Midterm Exam** |
| Class 7-Cross-border Data Flows and Global Digital Trade | Corporate Participation in Digital Trade Policy Processes |
| Class 8 – Privacy and Cyber-Security | Amazon |
| Class 9 – Openness and Fragmentation of the Internet | Facebook’s Zero Rating |
| Class 10 – The Purported Negative Effects of the Internet | Twitter/X |
| Class 11- Artificial Intelligence, New Technology, and Future Trends | OpenAI |
| Class 12- Conclusion and Outlook | Vivendi’s Canal Plus |

**VI. Course Readings**

* Readings are located on Courseworks.
* Supplementary Readings are provided on Courseworks for the use of students who want to study topics in greater detail.

**VII. Exams**

* Midterm will be held during the midterm exam period. It will be composed of short essays and multiple-choice questions.
* No final exam, but a final paper.

**VIII. Grading**

* 5% Class attendance.
* 20% Course participation.
* 30% Mid-term
* 45% Final paper grade.

**IX. Class Participation Grading**

For each class, professors will track and evaluate each student’s participation. Our evaluation will follow the following criteria, and we ask students to act accordingly.

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| --- | --- | --- | --- | --- |
|  | **Criteria** | **Exceeds Expectations**  **(2 points)** | **Meets Expectations**  **(1 point)** | **Below Expectations**  **(0 points)** |
| **1** | **Preparation for class** | Completes all readings, often re-reading assigned texts to develop novel and critical responses to them; completes, edits, and submits all work on time. | Completes all assigned readings far enough in advance to have developed thorough responses to them; completes and submits all work on time. | Does not complete multiple reading assignments; many assignments missing, completed late, or containing significant errors. |
| **2** | **Frequency of participation in class** | Initiates contributions more than once in each session. | Initiates contributions once in each session. | Initiates contributions in at least half of the total class sessions. |
| **3** | **Quality of comments** | Comments are always insightful and constructive; uses appropriate terminology. Comments balanced between general impressions, opinions, and specific, thoughtful criticisms or contributions. | Comments are mostly insightful and constructive; mostly uses appropriate terminology. Occasionally comments are too general or irrelevant to the discussion. | Comments are sometimes constructive, with occasional signs of insight. Doesn’t use appropriate terminology and comments are not always relevant to the discussion. |
| **4** | **Listening skills** | Listens attentively when others present materials, perspectives, as indicated by comments that build on others’ remarks (i.e., the student hears what others say and contributes to the dialogue). | Mostly attentive when others present materials, perspectives, as indicated by comments that build on others’ remarks. Occasionally needs encouragement from instructor to refocus comment. | Often inattentive. Occasionally makes disruptive comments when others are speaking. |
| **5** | **Classroom conduct and respect for others** | Avoids cell phone/laptop use during discussion; makes eye contact; encourages others to share conflicting viewpoints; looks to learn from others’ experiences and backgrounds. | Demonstrates respect by avoiding cell phone and laptop use while others are speaking; makes eye contact; avoids personal attacks when disagreements arise. | Is often distracted and inattentive during discussions; may dominate conversation or lack courtesy when addressing others; interrupts others often. |

**X. Final Paper Project**

The paper is due one week after the last lecture of the course. It should be based on one of the suggested topics below. It should be about 10 pages in length or 15+ pages if done as a team of two.

* Paper Topics:

1. Policy memo to the student’s boss (internal strategic memo) or regulator (a reply memo to a regulatory authority) on a topic of the students choosing.
2. A business plan for a startup, focusing on how the company would handle the policy compliance for that new company.
3. A student's proposal for another type of paper approved by the professors.

A short (1 paragraph) description of your paper topic you plan on pursuing must be submitted no later than **March 21st, 2024.**

**XI. Course Culture**

As is the case for all courses at the Columbia Business School, the School’s stated principles of its educational culture are the following:

**Attendance:** To be in the class, you must be present, on time, and arrive prepared. Given that the discussions 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:

* Actively participate in class discussions, pulling in insights from readings.
* Device usage (phones, laptops) will take away from your participation grade.

**XII. Relation to the Core and Prerequisites**

There are no prerequisites 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.

**XIII. Outline of Classes**

**January 25**

1. **Introduction to the Course and the Digital Economy**

Summary: The emergence of an economy based on data, information, and digital technology. Impacts at the macroeconomic and microeconomic levels. The networked globalization of firms and markets. Strategic implications for companies. Volume, employment, trends. Nature of regulatory oversight. Digital vs analog.

Class outline:

* 1. A Changing Zeitgeist: From The Technological Society to the Digital Economy
  2. The Information Revolution as a Control Revolution
  3. The Centrality and Dynamics of Data
  4. Macroeconomic Change: The Nature and Scope of Digital Transformation
  5. Microeconomic Change: Digital Firms, Platforms and Markets
  6. Networked Globalization
  7. Strategic Implications for ‘Born Digital’ and Digitalized Companies
  8. The Economics of the Digital Economy
  9. The *Process* of Digital Regulationand how to deal with it

1. The Regulatory Process
   1. Managing the Self-Regulation Process
   2. Strategic Use of the Regulatory Process
   3. **Case Discussion Segment #1: How Much Should Comcast Invest in the Regulatory Process?**
   4. **Case Discussion Segment #2: Comcast vs. Google**
   5. Influencing Government and the Public
   6. *Substantive policies*: Speech and Net Neutrality in the digital environment and the business implications.
   7. **Case Discussion Segment #3: Net Neutrality—Comcast vs. Google: Playing the System.**
   8. Conclusions, Outlook, and Management Takeaways

**February 1**

1. **The Telecommunications and Internet Industries**

Summary: The historical evolution of the telecommunications network and services industry and the central role played by public policy. The international governance of telecommunications and its transformation. The nature and institutional organization of the Internet. The Internet network and services industries. The conflictual evolution of global Internet governance. Case study on the tensions between the telecommunications and Internet service industries.

**Class outline:**

* 1. The US Telecommunications Industry
  2. The Telecommunications Industry in Europe and Beyond
  3. The Dynamics of Market Liberalization and Institutional Change
  4. The International Regimes for Telecommunications, Radio and Satellites
  5. Corporate Influence and International Regime Change
  6. The Nature and Institutional Organization of the Internet
  7. The Institutionalization of Internet Governance
  8. The Global Battle over Internet Governance
  9. Tensions between the Telecommunications and Internet Industries
  10. **Case Discussion: European Telecom Operators vs. “Big Tech”**
  11. Strategic Implications for Business

l. Conclusions

**February 8**

1. **Intellectual Property and Technology Standards.**

Summary: This unit addresses the importance of intellectual property in the digital economy, how to secure, value, and monetize these rights, and what conflicts exist.

**Class outline:**

* 1. Intellectual Assets
  2. **Case Discussion Segment #1: GE and its Intellectual Assets**
  3. Copyrights
  4. **Case Discussion Segment #2: GE Copyright Infringements**
  5. Patents
  6. The Licensing of Intellectual Property
  7. **Case Discussion Segment #3: GE Patent Infringements**
  8. Protecting Intellectual Property: How to Deal with Piracy and Infringement
  9. The Changing Environment
  10. Conclusion and Management Takeaways

**February 15**

**4. State Intervention and Support for Digital Industries**

Summary: National efforts to promote digital development using alternative policy models and tools. Direct vs. indirect, positive vs. negative supports. The contemporary dynamics of new industrial policies, techno-nationalism, and geo-economics. Tensions between global blocs. The special challenges of developing countries.

**Class outline:**

* + - 1. Assessing National Promotion
      2. Historical Evolution and Change
      3. The Clash of Digital Capitalisms
      4. A Digital Cold War?
      5. **Case Discussion: Google in China**
      6. Strategic Implications for Business
      7. Conclusion

**February 22**

**5. Digital Markets: Industry concentration in the information economy.**

Summary:This unit tackles the major issue of market power and media ownership. Fundamental economics, merger rules, anti-trust regulation, ownership structures of various media industries, and cross-ownership issues. The regulatory framework for M&A.

**Class outline:**

1. Policy Challenges of the Digital Economy
2. Governmental Approaches to Market Power in the Media and Online Sector
3. **Case Discussion Segment #1: Rupert Murdoch in the Crossfire**
4. Trends
5. **Case Discussion Segment #2: Rupert Murdoch in the Crossfire**
6. Conclusions, Outlook, and Management Takeaways

**February 29**

1. **The challenges of online financial transactions.**

Summary: This unit covers new financial technologies in the digital economy, including NFTs, Cryptocurrencies, and Blockchain. After discussing the environment in which these new financial instruments and payment rails have emerged, it covers the regulatory field and its effect on their possible success. The class provides a managerial understanding of disruptive financial offerings along with the opportunities afforded, and how to deal with regulators around the world in this emerging field.

**Class outline:**

* 1. The nature of digital financial services and digital money
  2. **Case Discussion Segment #1: The Bitcoin story**
  3. Global DFS: differences between developed and developing world
  4. **Case Discussion Segment #2: The M-Pesa Story**
  5. Regulators
  6. Conclusions and Management Takeaways

**March 21**

1. **Cross-Border Data Flows and Global Digital Trade**

Summary: The growth of barriers to corporate data flows across national borders. Efforts in the World Trade Organization and other international forums to negotiate agreements limiting digital protectionism and its impact. Challenges in overcoming the limitations of trade policy mechanisms. Strategic implications for companies. Corporate participation in and influence on international rule-making.

**Class outline:**

1. Introduction: An Historical Perspective on Borders and Flows
2. The Rise of Barriers to Crossborder Data Flows and Forced Data Localization
3. The Shift to International Trade Policy Responses
4. Minilateral Free Trade Agreements
5. Multilateral Negotiations in the World Trade Organization
6. New Approaches: Digital Economy Agreements and Multitrack Cooperation
7. **Case Discussion: Corporate Participation in Digital Trade Processes**
8. Strategic Implications for Business
9. Conclusions

**March 28**

1. **Privacy and Cyber-Security**

Summary:Data issues of the digital economy. Threats to privacy and cybersecurity, how companies can address them, as well as data regulations that companies need to navigate.

**Class outline:**

1. Introduction
2. Privacy and Tradeoffs
3. Security
4. Technologies of Privacy Intrusion
5. Security Threats
6. Economic Analysis of the Cost of Breaches
7. **Case Discussion Segment #1: Optimizing Privacy and Security Investments – Amazon.com**
8. Industry Self-regulation
9. Privacy Remedies by Regulation and Legislation
10. Private Remedies
11. **Case Discussion Segment #2 Optimizing Protection Investment – Amazon.com**
12. Technological Protection Tools
13. Markets in Privacy and Security
14. Conclusions, Outlook, and Management Takeaways

**April 4**

1. **Openness and Fragmentation of the Internet**

Summary:Internet openness, and its relation to governance. The growth of pressures for fragmentation of the Internet. The impact of these issues on the shape of the global digital economy. The case of Facebook’s zero rating. Strategic implications for companies.

**Class outline:**

1. Internet Openness and its Discontents
2. The Rise of Internet Fragmentation
3. Technical, Commercial and Governmental Fragmentation
4. The Coexistence of Openness and Fragmentation in the Global Digital Economy
5. **Case Discussion: Facebook’s Zero Rating**
6. Strategic Implications for Business
7. Conclusions

**April 11**

1. **The Negative Effects of the Internet**

Summary: The debates about the purported negative social, economic and political impacts of the Internet and digital business practices. Inequality and the digital divide, nationally and globally. Job creation and job destruction. Social media and information integrity. Government and business responses to these challenges.

Class outline:

* + - * 1. The Digital Divides
        2. Employment Effects of Digitalization
        3. The Dynamics of Social Media
        4. Misinformation and Disinformation
        5. Case Discussion: Twitter/X
        6. Strategic Implications for Business
        7. Conclusions

**April 18**

1. **Artificial Intelligence, New Technology, and Future Trends**

Summary: Overview of some of the emerging technologies that could further transform the digital economy and society in the years ahead. Business and governance aspects of artificial intelligence, blockchain, the metaverse, quantum computing, and more. An analysis of the likelihood of adoption and the potential for social and economic disruption. The case of generative AI.

Class outline

* 1. Introduction
  2. Quantum Computing
  3. Artificial Intelligence
  4. The Metaverse
  5. Blockchain
  6. Case Discussion: OpenAI
  7. Strategic Implications for Business
  8. Conclusions

**April 25**

1. **Conclusion and Outlook**

Summary:The transformational aspects of the digital economy, and the ramifications to existing industries.

Class outline:

1) Review of the Course Sessions

2) Medium-Term Trends

3) Implications for Business Management

4) Conclusions

5) Course Evaluation