COURSE OBJECTIVES

Electronic Markets or e-Markets is a term commonly used to describe a plethora of industries and sectors that include firms like Amazon.com’s of the world (those originally providing a digital infrastructure for selling physical goods) to iTunes and Google which provide digital/information goods or services. A common element underlying these industries is that innovations and technological trajectories define core organizational and business strategies. Many strategies devised for physical goods and markets have to be revisited in this new information economy.

The basis for many, if not most online business models, is network economics where network externalities, compatibility and standards play a significant role. In this class, students will be introduced to the fundamentals of network economics through a series of hands-on problems, cases and data analysis. Along with network economics, we will also study pricing and versioning strategies specifically for electronic markets. At the end of the class students will be able to abstract real-world problems into workable components, through analytical models and thinking. It is not the purpose of this class to teach data analysis or regression but we will use what you have learnt in your prior courses toward understanding problem definition, data identification, collection and analysis. While cases often directly provide students with data, a key business problem faced by many firms is identification of data itself.

This course is specifically geared towards MBA students with any of the following interest-profile: 1. General manager in-charge of pricing and analytical strategies in high-tech industries such as mobile networks, software, video games, music. 2.
Marketing manager for any firm with an interest in interactive/online advertising and user generated content/social media. 3. Consultant in-charge of analytical strategies for electronic markets.

PREREQUISITES
The course will build on your exposure to Decision Analysis and Economics and will require knowledge of basic math and statistics (e.g., distributions, regression analysis). Students should also be familiar with Excel and XLstat experience would be helpful for the projects.

SPEAKERS & EXTERNAL EVENTS
Depending upon the time we have I will bring in 3-4 speakers to the class. Generally we have had speakers from Google, Yahoo!, UPS, and the video games and music industry. I shall also post links to external events specific and relevant to our class.

COURSE MATERIALS
Classes will be comprised of case and article discussions and lectures. All the required cases and readings are available through Study.net. Primary means of communication to the entire class will be through your course conference on First Class.

Students are expected to come to each class prepared to discuss all of the assigned readings.
You are expected to adhere to the Goizueta honor code.
NO OPEN LAPTOPS UNLESS SPECIFICALLY INSTRUCTED

EVALUATION
The grading will consist of individual participation, a mid-term, two (2) individual case assignments and two group mini-projects. These components shall be weighted as follows to determine the final grade:

- Case #1: Individual Analysis & Write-up 10%
- Case #2: Individual Analysis & Write-up 10%
- Midterm Exam 25%
- Mini-project #1: Impact of User Generated Content (Group) 20%
- Mini-project #2: Google Online Marketing Challenge (Group) 20%
- Participation (In-class, Online (First Class), Prediction Markets) 15%
- An optional industry analysis (Group) 5%

Because we will often discuss the questions on the day that they are due, late assignments cannot be accepted. Note: “late” is defined as not turning the paper in at the beginning of class in which it is due. The focus of the midterm will be on the foundations and economic principles introduced in the course.
MINI-PROJECTS (GROUP)

There are two mini-projects in this course and you will work in groups for these. Each group will have no more than 5 members and you are free to choose your team members.

Mini-Project 1: Impact of User Generated Content
This project is geared towards structured thinking for unstructured problems. For many businesses the rise of user generated content and the prevalence of social media is possibly a boon but also apparently a source of confusion. There is not only an abundance of social networking sites but also different categories of data. But do these mean anything tangible to businesses? For example, can social networking sites and user-generated content help understand success of movies? Are these impacts different for box-office sales versus DVD-sales? Your goal in this project will be to identify, collect and analyze data to substantiate your claims in an industry of your choice.

Project Timeline:
• Feb 21:
  o Project Proposal Due. Introduction of project goal, data collection method, analysis plan.
• Feb 21 to March 20:
  o Data Collection period. Need to collect weekly base data for at least 4 weeks.
• March 20:
  o Data Collection Due! (Excel of collected data)
• Apr 17:
  o Final Presentation In Class

Mini-Project 2: Google Online Marketing Campaign
The Google Online Marketing Challenge is a great hands-on exercise for students in classes such as advertising, ecommerce, integrated marketing communication, management information systems, marketing and new media technologies. Students will manage and update a Google AdWords campaign and in process learn about valuing information and the nature of two-sided markets. The Challenge works like this:
• Students divide into groups of 3-6, and then receive free online advertising vouchers for Google AdWords worth US$200.
• The groups recruit a small-to-medium business, under 100 employees, who has a website but doesn’t currently use AdWords.
• Each group works with the business to set up an AdWords account and structure an effective online marketing campaign.
During a 3-week competition window, the groups optimize and refine their campaigns. They must submit two competition reports – one before they begin and one after the campaign ends.

Google and a panel of independent academics from all over the world select the winning teams based on the success of their campaign and the quality of their competition reports.

Project Timeline:

- **Feb 28:**
  - Pre-campaign Report submit to Google and TA
  - It may take several weeks for Google to approve the campaign and distribute fund to your Adword account

- **March 27 to Apr 24:**
  - You campaign should start no later than Apr 3rd.
  - Campaign must run at least 2 weeks.

- **May 1st:**
  - Final Project Presentation
  - Post-campaign Report submit to Google
Session Details

Session #1 (1/24)
- Content:
  - Course overview; Introduction to information, digital and network goods
  - Overview of pricing and other economic strategies
- Group Projects Introduction:
  - Impact of User Generated Content
  - Google Online Marketing Challenge

Session #2 (1/31)
- Content:
  - Introduction to strategies for e-Markets through Google
  - Introduction to User Generated Content and Social Media
  - Introduction to Prediction Markets and demonstrate how to use that to predict Oscar.
- Bring laptop to class
- Demonstration:
  - How to use prediction markets demo
  - A small class exercise on prediction markets
- Prepare for Discussion in Class:
  - Google Inc., HBS case 9-806-105

Some questions to think about:
1. What explains Google's early success?
2. Is search a Winner take all business?
3. Could Google pay more than 100% of the revenue generated from AOL searches? how did Microsoft's bid compare with Google's?
4. Should Google branch out to additional areas like: i) Portals (think Yahoo!) ii) Software products like Microsoft iii) E-commerce intermediaries like EBay?
5. Do you see Google's distinctive corporate governance, culture, organizational processes as strengths or weaknesses?
6. WHERE DOES ANDROID FIT IN?

- Background Reading:
  - Decisions 2.0: The Power of Collective Intelligence, MIT Sloan Management Review

- Reminder:
  - Setup your team for Group Projects (due next class)
Session #3 (2/7)

- **Content:**
  - Digital goods analytics: Versioning and pricing strategies

- **Due in Class:**
  - Group information due (send to 556–Sp12 TAs BEFORE class)

- **Background Reading:**
  - Pricing Information: How to Customize Both the Product and Its Price, HBS 2596BC
  - Versioning Information: How to Segment Information Markets, HBS 2574BC

- **Take-Home Case Assignment #1 Assigned:**
  - Will be announced in class and case will be available on Study.net
  - Case analysis due next class (2/14)

- **Reminder:**
  - Trade in online prediction market for Oscars

Session 4 (2/14)

- **Content:**
  - Analytics of bundling

- **Bring laptop to class**

- **Due in Class:**
  - Hardcopy of take-home Case Assignment #1
  - Case assignment will be briefly discussed (be prepared with your Excel in a thumb drive – you may called to the board)

- **In Class Assignment:**
  - Bundling of Office Suites: An Economic Analysis, HBS case- 9-707-423 (to be handed out in class)

- **Reminder:**
  - Impact of UGC project proposal due next week
  - Trade in online prediction market for Oscars
Session 5 (2/21)

- Content:
  - Contract pricing and tariff structure
  - Strategies for Internet and mobile services

- Due in Class:
  - Impact of UGC project proposal due. Send to 556-Sp12 TAs.

- Prepare for Discussion in Class:
  - Virgin Mobile USA: Pricing for the Very First Time, HBS case 9-504-028

Synopsis
Dan Schulman, The CEO of Virgin Mobile USA, must develop a pricing strategy for a new wireless phone service targeted toward consumers in their teens and twenties. Contrary to conventional industry wisdom, Schulman is convinced that he can build a profitable business based on this under-represented target segment. The key is pricing. Schulman is currently debating three pricing options: (1) adopting a pricing approach that is roughly equivalent to the major carriers; (2) adopting a similar pricing structure, but with actual prices below the major carriers; or (3) coming up with a radically different pricing approach. With respect to the third option, Schulman is considering various alternatives including a reliance on pre-paid (as opposed to post-paid) plans, and the total elimination of contracts.

Some questions to think about:
1. Given Virgin Mobile’s target market (14 to 24-year olds), how should it structure its pricing? The case lays out three pricing options. Which option would you choose and why? In designing your pricing plan, be as specific as possible with respect to the various elements under considerations (e.g., contracts, the size of the subsidies, hidden fees, average per-minute charges, etc.).
2. How confident are you that the plan you have designed will be profitable? Provide evidence of the financial viability of your pricing strategy. Calculate & show.
3. The cellular industry is notorious for high customer dissatisfaction. Despite the existence of service contracts, the big carriers churn roughly 24% of their customers each year. Clearly, there is very little loyalty in this market. What is the source of all this dissatisfaction? How have the various pricing variables (contracts, pricing buckets, hidden fees, of-peak hours, etc.) affected the consumer experience? Why haven’t the big carriers responded more aggressively to customer dissatisfaction?
4. How do the major carriers make money in this industry? Is there a financial logic underlying their pricing approach? Do you agree with Virgin Mobile’s target market selection? What are the risks associated with targeting this segment? Why have the major carriers been slow to target this segment?

- Reminder:
  - GOMC pre-campaign report due (should submit to Google and also send to TA)
  - Start to collect data on a weekly basis for UGC Impact Project
  - Trade in online prediction market for Oscars
Session 6 (2/28)

- Content:
  - Prediction market
  - Discuss the Oscar prediction market results

- Due in Class:
  - GOMC Pre-campaign Report (Submit to Google and also send to 556–Sp12 TAs)
  - Each student comes with one example of a prediction market

- Read Cases and Prepare for Discussion in Class:
  - Prediction Markets at Google, HBS case 9-607-088

Some questions to think about:
1. What are the best ways to encourage more traders and trading within internal company prediction markets? Are you more in favor of using “hard” incentives (e.g., cash rewards) or “soft” ones (e.g, t-shirts and “bragging rights”)?
2. Is it a good idea to encourage ALL employees to trade in these markets? Should insiders and/or highly uninformed people be allowed to trade? Do they help the market or hurt it?
3. What kind of decisions are prediction markets useful for?
4. How useful are corporate prediction markets? If they prove to be accurate and decisive, how can they be put to use most effectively?
5. Will most managers welcome prediction markets within their companies? Why or why not? Will they welcome a prediction market about a project or outcome that they are responsible for?

- Threadless: The Business of Community, HBS case: 5-608-169

Some questions to think about:
1. What are the similarities and differences between a community-driven product development process and a traditional product development process within a firm?
2. What motivates community members to participate? What is Threadless offering its community members?
3. How are winning designs selected? Fig 1 and Table 1 show sample designs and their respective scores. How would you go about selecting winning designs?
4. What are the barriers to entry for this kind of business?
5. In what other areas might this model work? How might you leverage or exploit this model for innovation and product development in your business?

- Reminder:
  - Continue to collect data for Social Media Impact Project during break.
  - The data collection is due the first week after break!

NO CLASSES ON 3/6 AND 3/13
Session 7 (3/20)

- Content:
  - Introduction to Platform-Mediated Networks; Network effects
  - Platform Control; Two-sided networks
- Due in Class:
  - UGC Impact Data Collection. Send collected data to 556-Sp12 TAs.
- Background Reading:
  - Platform-Mediated Networks: Definitions and Core Concepts, HBS case 807-049
  - Winner-Take-All in Network Markets, HBS case 807-131
- Take-Home Case Assignment #2 Assigned:
  - Will be announced in class and case will be available on Study.net
  - Case analysis due next class (3/27)

Session 8 (3/27)

- Content:
  - Strategies for Two-sided markets
- Due in Class:
  - Hardcopy of take-home Case Assignment #2
  - Case assignment will be briefly discussed (be prepared with your Excel in a thumb drive – you may called to the board)
- Background Reading:
- Reminder:
  - Good time to start GOMC campaign
Session 9 (4/3)
- Midterm Exam (6:30 – 8:30pm)
- Project q&a (8:45 – 9:15pm)
- Reminder:
  - Your GOMC campaign should start no later than in this week

Session 10 (4/10)
- Content:
  - Network Mobilization Challenges
- Background Reading:
  - Cooperation and Compatibility: How to Approach Standards Setting, HBS 2579BC
  - Waging a Standards War, HBS 2597BC
- Read Cases and Prepare for Discussion in Class:
  - Adobe Systems, HBS case 801-199

Some questions to think about:
1. How was Postscript established as a de facto standard? How did Adobe make money despite Postscript being an “open” standard?
2. Which firm is in a stronger position to control de facto standards in the eBook space: Adobe or Microsoft?
3. What should Adobe do? How can they win the standards war? Should they focus on eDocs or eBooks? Will the eBooks market tip or will there be multiple standards? How can Adobe make money in this market?

- Reminder:
  - User Generated Content Impact Project presentation next week
  - Keep running your campaign until you exhaust all your funds
Session 11 (4/17)
- User Generated Content Impact Project Group Presentation

Session 12 (4/24)
- Content:
  - Optional Assignment
Each group is eligible to do an optional industry analysis for 5 extra points. This is optional, i.e. you do it only if you want to try for the extra 5 points. For this assignment, I would like to test your overall understanding of the course material to study the tablet market. There are at least 3 types of tablets out in the market – each type pursuing a different strategy and different strategic focus. They are:
  1. Apple iPad
  2. Amazon Kindle
  3. Android tablets

Specifically I would like see an analysis that demonstrates your understanding of
  a. Pricing (different price points employed?)
  b. Versioning (different models?)
  c. Bundling (product + services combinations different?)
  d. Standards (are different standards being pursued/emphasized? E.g., books? music?)

Deliverable
I am looking for a set of 10-12 slides per group (be ready to present/discuss in class) that should cover (and reflect your understanding of our course material)
  i. Current state of the market for each tablet type
  ii. The different pricing, versioning, bundling and standards pursued in each type
  iii. Your rationale for how these choices were made
  iv. Your take on the potential success/failure of these strategies

- Course wrap-up

Reminder:
  - GOMC final presentation next week

Session 13 (May 1st– Final Exam date)
- GOMC Final Group Presentation
# Activity Schedule

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<th>Date</th>
<th>UGC Project</th>
<th>GOMC Project</th>
<th>Cases</th>
<th>Class Topic</th>
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<td>1</td>
<td>24-Jan</td>
<td>Introduction</td>
<td>Introduction</td>
<td>- Prepare Google Inc. Case</td>
<td>Introduction</td>
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<td>2</td>
<td>31-Jan</td>
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<td></td>
<td>- Prepare Google Inc. Case</td>
<td>Online strategies, UGC, Social Media and Introduction to</td>
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<td>3</td>
<td>7-Feb</td>
<td>Group info due</td>
<td>Group info due</td>
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<td>Versioning and Pricing</td>
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<td>14-Feb</td>
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<td>- Take Home Assignment #1 Due</td>
<td>Bundling and Pricing</td>
<td>Maggie Tucker <em>(IHG)</em> 6:30-7:30pm</td>
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<td>5</td>
<td>21-Feb</td>
<td>Project Proposal Due</td>
<td>Project Proposal Due</td>
<td>- Prepare Virgin Mobile Case</td>
<td>Pricing of Mobile Services and Online Content</td>
<td>Mitch Scharf <em>(LivingSocial)</em> 6:30-7:30pm</td>
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<td>Ongoing Data Collection</td>
<td>Pre-campaign Report Due</td>
<td>- Prepare Google prediction markets</td>
<td>Wisdom of the Crowds and Prediction Markets (discussion)</td>
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<td>7</td>
<td>20-Mar</td>
<td>Data Collection Due</td>
<td>Run Campaign</td>
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<td>Network effects and Platform-mediated networks</td>
<td>Cathy Ryan <em>(Yahoo!)</em> 8:15-9:15pm</td>
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<td>27-Mar</td>
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<td>Run Campaign</td>
<td>- Take Home Assignment #2 Due</td>
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<td>Run Campaign</td>
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<td>10-Apr</td>
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<td>Run Campaign</td>
<td>- Prepare Adobe Case</td>
<td>Open standards and competition</td>
<td>Kathy Daly-Jennings <em>(Google)</em> 6:30-7:30pm</td>
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<td>11</td>
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<td>FINAL PRESENTATION</td>
<td>Run Campaign</td>
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<td>- Optional Industry Analysis</td>
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