MGT524: E-COMMERCE STRATEGY

COURSE OVERVIEW

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Note that there is an assignment for the first class. In addition, please read this document carefully. It contains important information about assignments and norms. We will not cover all of this material in class.

Course Perspective

This course applies microeconomic concepts to creating an effective strategy in information-intensive industries. The focus is on a set of tools and frameworks for developing firm strategy in markets for content and content delivery. These tools are useful for deciding which technologies to invest in and shaping firm strategy to effectively respond to the behavior of competitors, customers, suppliers and complementors in these industries. The emphasis will be on applying these tools to practical business situations through case studies. Both emerging and established technologies will be considered.

The course is divided into three major sections. The first section focuses on understanding the unique aspects of information goods markets and how this affects the formation of strategy. The second focuses on pricing and product decisions that take advantage of the characteristics of information goods to increase profits. The final section of the course concerns information policy and its impact on strategy formulation.

Course Requirements

Textbooks: *Information Rules*, Shapiro, C. and H. Varian, 1999 (S&V).

Prerequisites: MGT525 or equivalent.

Grading:

| Class Participation: | 40% |
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| Written Exercises: | 20% |
| Final Exam: | 40% |

More information on each of these requirements is provided after the course schedule. The assignment questions for the first class appear at the end of the syllabus.

Course Schedule

I. STRUCTURE OF INFORMATION GOODS MARKETS

1. Cost Structure of Information Goods (Monday, March 30)

Note: Assignment questions for today's class are at the end of the syllabus.

Reading: S&V, Chapter 1, Chapter 2 (pages 19 – 32 only).

Case: AOL Europe vs. Freeserve (A), HBS Case 9-703-409.

Objectives:

Today's case introduces the cost structure of information goods and how this can lead to a "death spiral" of firms pricing at or near marginal cost. The objectives today are to understand:

- 1. Why does the cost structure of information goods naturally lead to pricing pressure for firms?
- 2. What are some ways to avoid the "death spiral" of low prices experienced in many information goods markets?

3. What are the two main models of competing in information goods markets?

2. The "Long Tail" of Information Goods (Wednesday, April 1)

| Reading: | "From Niches to Riches: Anatomy of the Long Tail," <i>Sloan Management Review</i> , Summer 2006, Brynjolfsson, E., Y. J. Hu, and M. D. Smith. |
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| Case: | Blockbuster, Inc. & Technological Substitution (A): Achieving |

Dominance in the Video Rental Industry, HBS Case 9-704-404 (skip pages 4 – 6, "The Making of a Blockbuster"). Blockbuster, Inc. & Technological Substitution (D): The Threat of Direct Digital Distribution, HBS Case 9-704-463.

Objectives:

The cost structure of information goods also makes it possible for firms to viably compete by serving a very small slice of customers – in the so-called "long tail." We consider this effect in this session with the objectives of understanding:

- 1. How the cost structure of information goods affects firms' ability to offer variety.
- 2. When is competing in the "long tail" viable and when is it not?
- 3. How does the cost structure of information goods affect content distributors' relationships with content creators?

3. Building a Standard (Monday, April 6)

Reading: S&V Chapter 7.

Case: Cellular Service, HBS Case 9-707-424. DVD War, HBS Case 9-706-504. Music Downloads, HBS Case 9-704-503.

Objectives:

Network effects and standards are crucial for most information goods both for the product itself and for complementary goods, such as hardware, needed to deliver the content. This makes it crucial to understand:

- 1. What steps a firm can take to establish a standard favorable to its business.
- 2. How a firm can identify vulnerabilities in a competitor's established standard.
- 3. When is licensing a proprietary software standard to hardware manufacturers advantageous?

4. Winning Standards Wars (Wednesday, April 8)

- **Reading:** S&V, Chapter 8, S&V, Chapter 9 (pages 261 289 only).
- Case: The Long Battle for an Instant Messaging Standard, Stanford GSB Case SM-138.

Objectives:

Last class we discussed methods to use in establishing a standard favorable to your firm. Because of its value, competition for a dominant standard is often intense. In this class we talk more about:

- 1. How a firm can defend its standard against competitors.
- 2. How a firm can undermine or diminish the power of a competitor's standard.
- 3. When, and when not to, cooperate with standards-setting committees.

5. Managing Complementary Goods Firms (Monday, April 13)

- **Reading:** "With Friends Like These: The Art of Managing Complementors," *Harvard Business Review*, September 2006, Yoffie, D. B. and M. Kwak, HBR Reprint 0609E (to be distributed).
- **Case:** Wintel (A): Cooperation or Conflict?, HBS Case 9-704-419.

Objectives:

Information goods often require compatible hardware or software for delivery. An effective strategy must take account of these complementary goods firms (complementors). To this end, we aim to understand:

- 1. What effect complementors have on a firm's strategy?
- 2. Pricing and product dynamics in the presence of complementary goods.
- 3. When a firm should cooperate and when it should compete with complementors.

6. Social Networks (Wednesday, April 15)

Case: LinkedIn (A), HBS Case 9-707-406.

Objectives:

A new type of network has gained prominence with the Internet – the social network. In this session our goal is to understand competition in social networks, in particular:

- 1. How a firm can build and sustain a social network.
- 2. How a firm should extract value from a social network who should pay and who should not?
- 3. What are the different types of social networks and how can a firm best monetize each type.

II. DEFINING AND PRICING INFORMATION GOODS

7. Using "Lock-In" Strategically (Monday, April 20)

Readings: S&V, Chapter 5, S&V, Chapter 6. "Do Customer Loyalty Programs Really Work?," *Sloan*

Management Review, Summer 1997, Dowling, G. R. and M. Uncles.

Case: Upromise 2002, HBS Case 9-804-058.

Objectives:

In this session we look at how you can use "lock-in" to your advantage as a producer of information goods. "Lock-in," or switching costs, can arise naturally or you can attempt to create them (e.g., reward programs). We will consider how to use "lock-in" strategically, including:

- 1. Under what circumstances are reward programs effective?
- 2. How can a firm design a reward program to be more effective?
- 3. What are the parameters of a reward program that a firm can manipulate to its advantage?

8. Versioning Information Goods (Wednesday, April 22)

Readings:S&V Chapter 3.Case:Yahoo!: Pricing Search Engine Advertising, INSEAD Case 506-
056-1.

Objectives:

Because information goods are supplied in a digital format, firms can customize them significantly to meet the needs of different demand segments. In this class, we discuss methods for customizing (versioning) information products to maximize profits including:

- 1. How to identify possible dimensions along which the firm can version its product to increase profits.
- 2. How to determine the appropriate number of versions for an information good.
- 3. How to price different versions of an information good.

9. Pricing Information Goods (Monday, April 27)

| Readings: | S&V Chapter 2 (pages 32 – 51 only). |
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| Speaker: | Robert Labatt, former Chief Executive Officer, ezboard. |
| Case: | Ezboard: Making Customers Pay, Stanford GSB Case SM-142 (to be distributed). |

Objectives:

The pricing of information goods is easily tailored to particular customers or customer segments. In this session we apply this principle to an online bulletin board company to understand:

- 1. How to price to different segments of customers to increase profits?
- 2. What are the constraints on targeting customers through pricing?
- 3. When users both supply and use content, which users should be subsidized and which should pay?

10. Introducing New Information Goods (Wednesday, April 29)

| Reading: | "Players," in Co-opetition by Brandenburger, A. M. and B. J. |
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| | Nalebuff, Doubleday, New York, pages 71 – 109. |

Case: Performance Indicator, HBS Case 9-702-480.

Objectives:

Because of short product life cycles, information goods firms frequently introduce new products. The nature of information goods poses unique challenges to their introduction. We discuss some of these in this class including:

- 1. What are the unique challenges posed by network externalities and complementary goods in introducing new or upgraded information goods?
- 2. What steps can a firm take to facilitate the introduction of information goods?
- 3. How can a firm make use of the detailed information available on its customers to better plan product introductions, including pricing?

III. INFORMATION POLICY AND STRATEGY

11. Managing Intellectual Property – Market Alternatives (Monday, May 4)

| Reading: | S&V Chapter 4. |
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| Case: | Rockonomics: The Economics of Popular Music, accessible at <u>www.irs.princeton.edu/pubs/pdfs/499.pdf</u> , "The Players" (Section 2), pages 5 – 10. |
| | Update: The Music Industry in 2006, HBS Case 9-707-531. |

Objectives:

In managing an information goods firm, your key asset is usually easy for others to copy. In this class we discuss ways to protect your investment, including:

- 1. When does maximizing your intellectual property differ from protecting your intellectual property?
- 2. What business practices can you use to protect your intellectual property outside of legal measures?

3. When should a firm attempt to exploit its intellectual property versus selling or leasing it to others?

12. Managing Intellectual Property – Legal Alternatives (Wednesday, May 6)

- **Speaker:** Paul Grewal, Partner, Day, Casebeer, Madrid & Batchelder LLP (<u>http://www.daycasebeer.com/</u>).
- Case: Blizzard v. bnetd.org: Managing Intellectual Property (A), Stanford GSB Case SM-154A.

Objectives:

In this class we discuss the legal alternatives for protecting intellectual property. In doing so, we consider:

- 1. What are the costs and benefits of pursuing legal alternatives to protecting intellectual property?
- 2. What kinds of legal arguments are effective in winning an intellectual property case?
- 3. What factors should you consider in deciding whether to settle a case?

13. Managing Privacy (Monday, May 11)

Case: ChoicePoint (A), HBS Case 9-306-001.

Objectives:

During the course, we have talked about customizing your product to increase profits. Information goods lend themselves to customization and the platforms over which information goods are delivered often allow the firm to gather detailed data on households. In this class we discuss some of the privacy issues this raises:

- 1. What kind of information about your customers should you collect?
- 2. What measures do you need to take to protect the privacy of the information you gather about your customers?
- 3. When is protecting your customers' privacy not just a legal necessity but also a good business decision?

Evaluation

Class Participation: (individual)

You are responsible for the material in each case. I will cold call students to discuss the case, but will also seek volunteers to speak in class. Quality of class participation is more important than quantity. Consider the following questions when assessing the quality of your participation:

- 1. Are the points relevant to the discussion? Are they linked to the comments of others and to the themes of the class? Do they significantly advance the discussion?
- 2. Does the speaker sustain a line of argument or point of view or make an isolated comment?
- 3. Do the comments add to our understanding of the situation? Are they incisive? Do they cut to the core of the problem? Comments that simply repeat case facts get no credit.
- 4. Is there a willingness to challenge, in a constructive way, the ideas that are being expressed? Playing "devil's advocate" often exposes new perspectives and provokes interesting debate. Such contributions are particularly valued.

Preparation for a case study involves more than just having read the case. You should be prepared to offer original and thoughtful analysis in which your claims are supported by evidence, logic, and possible calculations. Many students find it helpful – and I encourage you – to discuss the case with your classmates prior to the class. The most effective way to prepare for class is to try to answer the preparation questions for each class after you have read the case and the textbook material.

Because a case-oriented course relies on class participation for its success, attendance at every class is extremely important. Students who miss class will not receive class participation credit for that class. I do not allow or require "make-up" work for a missed class. If you must miss class, most handouts will be available at the class website. School of Management YALE UNIVERSITY

Written Exercises: (groups of three or fewer)

Choose a "lab" company or non-profit organization whose strategy you are interested in examining. The firm or organization should compete in an information-intensive business and must be an organization that you have not studied in another course at SOM. Read enough about the organization to gain a basic understanding of whether it has a competitive advantage and, if so, what it is. If the organization does not have a competitive advantage, think about how it might gain one.

Each student must submit two write-ups during the course describing how that day's topic pertains to their "lab" company. The write-ups should be a maximum of three pages in length, single-spaced using 12 point font and one-inch margins. These are due at the beginning of the following class after which the topic is discussed. For example, if you decide to discuss how building a standard applies to your firm (a topic we will discuss on April 6) your write-up will be at the beginning of the April 8 class. The idea is to apply the concepts that we have just discussed in class to your "lab" firm.

You may work in groups of three or fewer on the written assignments. If you decide to work with other people please maintain the same group for each assignment and choose a single "lab" company for the group. All group sizes will be held to the same standard. Thus, it is to your advantage to work in a larger group if you can do so efficiently.

You must submit your group members and "lab" company at the beginning of the second class (April 1). Before the third class, topics for the written exercises will be allocated to groups.

Final Exam: (individual)

The final exam will cover all the material in the course. It will occur on May 15.

Honor Code Issues

My goal is that each individual student gains valuable learning through this course. Since some of the assignments in this course may be accomplished in groups (if you so choose), here is my policy on group work for my class:

- 1. I encourage you to discuss the cases in preparing for class with any student. However, I expect you to present in class case analyses that you personally participated in preparing.
- 2. For the written assignments, it is important that you demonstrate how well you and your group members understand the course concepts. For this reason, do not consult with students outside of your group for these.

Assignment Questions

1. Cost Structure of Information Goods (Monday, March 30)

Assignment:

After reading the AOL Europe vs. Freeserve case, please prepare the following for class discussion:

- 1. What are AOL's main sources of competitive advantage in the U.S.? How well do these transfer to the U.K. market?
- 2. What is Freeserve's business model? Why was Freeserve initially so successful?
- 3. How viable is Freeserve's business model in the long-term?
- 4. How should AOL respond to Freeserve and other free ISPs?