

**STRAMGT374: STRATEGY IN
INFORMATION GOODS MARKETS**

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 explores the unique aspects of creating an effective strategy in information-intensive industries. The focus is on a set of tools and frameworks for developing firm and corporate 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 and visits by practitioners. 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: STRAMGT290.

Grading:

Class Participation: 50%

Group Project: 50%

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

The first section of the course introduces the most important features of information goods markets and how these affect your ability to compete. The high fixed and low marginal cost structure of these industries can lead to intense price competition but also allow firms to compete by serving a very small slice of customer demand. The effect of network externalities in these industries places particular importance on ensuring that a standard favorable to your firm is adopted. The importance of complementary goods to your firm's product makes managing producers of them crucial to your success. We will address these features, and others, in the first section.

1. Cost Structure of Information Goods (Tuesday, April 3)

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

Reading: S&V, Chapter 1.
S&V 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 (Thursday, April 5)

Reading: "From Niches to Riches: Anatomy of the Long Tail," *Sloan Management Review*, Summer 2006, Brynjolfsson, E., Y. J. Hu, and M. D. Smith.

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 (Tuesday, April 10)

Reading: S&V Chapter 7.

Case: PalmSource, Inc., HBS Case 9-704-473.

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 (Thursday, April 12)

Note: Team members for final project due.

Reading: S&V, Chapter 8 (pages 227 – 255 only).

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. Perspective of an Information Goods Startup (Tuesday, April 17)

Speaker: Ashwin Navin, President, COO and Co-Founder, BitTorrent
(www.bittorrent.com)

Case: Warner Bros. Embraces BitTorrent, HBS Case N9-807-012.

Objectives:

In this class we will hear from the founder of a peer-to-peer film distribution startup on the unique challenges that a startup faces in monetizing its product and negotiating with established complementors.

6. Social Networks (Thursday, April 19)

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.

7. Managing Complementary Goods Firms (Tuesday, April 24)

Note: Target organization and issue(s) to be addressed in final project due.

Reading: “With Friends Like These: The Art of Managing Complementors,”
Harvard Business Review, September 2006, Yoffie, D. B. and M.
Kwak (to be distributed).

Case: Wintel (A): Cooperation or Conflict?, HBS Case 9-704-419.

Objectives:

Information goods often require compatible hardware or software for distribution. 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.

II. DEFINING AND PRICING INFORMATION GOODS

In this section of the course we study approaches to avoiding the intense price competition often encountered in information goods markets. Because most information goods are experience goods, use of your product builds consumers' switching costs, which you can manage to your advantage. Information goods are also highly malleable, giving you significant flexibility in designing your product and bundling it with other products. We discuss how firms can take advantage of these methods to design their products in a way that lowers price competition.

8. Versioning Information Goods (Thursday, April 26)

Readings: S&V Chapter 3 (pages 53 – 73 only).

Case: Electronic Arts Introduces *The Sims Online*, HBS Case 9-503-008.

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 designing (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. Using “Lock-In” Strategically (Tuesday, May 1)

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 create them (e.g., loyalty programs). We will consider how to use “lock-in” strategically, including:

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

10. Bundling Information Goods (Thursday, May 3)

Reading: S&V, Chapter 3 (pages 73 – 81 only).
“Bundling – New Products, New Markets, Low Risk,” *Sloan Management Review*, Summer 1991, Eppen, G. D., W. A. Hanson and R. K. Martin.

Case: To be distributed.

Objectives:

Bundling two or more information goods together is a common practice. In this session we evaluate the use of bundling including:

1. When is it profitable to bundle information goods together? When is it not?

2. What ramifications does bundling have for the design and pricing of information goods?
3. How can a firm use its transaction history to design optimal bundles of its products?

11. Pricing Information Goods I (Tuesday, May 8)

Readings: S&V Chapter 2 (pages 32 – 51 only).

Case: Yahoo!: Pricing Search Engine Advertising, INSEAD Case 506-056-1.

Objectives:

The pricing of information goods is easily tailored to particular customers or customer segments. In this session we apply this principle to search engine advertising to understand:

1. How can pricing be used to naturally segment customers and increase profits?
2. What are the constraints on segmenting customers through pricing?
3. How do bundling and versioning affect the pricing of information goods?

12. Pricing Information Goods II (Thursday, May 10)

Speaker: Robert Labatt, Chief Executive Officer, Ezboard
(www.ezboard.com)

Case: Ezboard: Making Customers Pay, Stanford GSB Case SM-142.

Objectives:

In this session we develop a strategy for an online bulletin board company attempting to transition from a primarily free to a primarily paid service. Applying the techniques covered thus far in class, we will examine methods to break out of the “death spiral” of giving away information goods for free. After our discussion, we will hear from the CEO of the company to get his perspective.

13. Introducing New Information Goods (Tuesday, May 15)

Reading: “Players,” in *Co-opetition* by Brandenburger, A. M. and B. J. 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

Information policy plays a significant role in information goods markets. Because the primary product in these markets is information, managing intellectual property is critical. As we discussed earlier in the course, customizing your product to customers’ needs often increases the firm’s profits. Because this requires information about customers, it is important to understand and manage their privacy. In this section of the course we consider these issues of intellectual property and privacy.

14. Managing Intellectual Property (Thursday, May 17)

Reading: S&V Chapter 4.

Case: The Music Industry and the Internet, HBS Case 9-703-513.
BMG Entertainment, HBS Case 9-701-003 (pages 1 – 8 only).
“iTunes: The Best Digital Jukebox,” Apple Computer, 2005.

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?

15. Managing Intellectual Property – Legal Alternatives (Tuesday, May 22)

Speaker: Paul Grewal, Partner, Day, Casebeer, Madrid & Batchelder LLP
(<http://www.daycasebeer.com/>).

Case: Blizzard v. bnetd.org: Managing Intellectual Property (A),
Stanford GSB Case SM-154A.

Objectives:

In this class we consider whether and how to negotiate a settlement to an actual legal dispute over rights to video game software. After discussing the case we will hear from an attorney specializing in technology litigation who was involved in the case. The goal is to discuss legal and non-legal alternatives for protecting intellectual property for an information goods firm.

16. Managing Intellectual Property – Open Source Software (Thursday, May 24)

Reading: S&V, Chapter 8 (pages 255 – 258 only).
A Managerial Overview of Open Source Software, HBS Business Horizons BH095.

Case: Linux in 2004, HBS Case 9-705-407.

Objectives:

A key decision in managing intellectual property is how open to make proprietary content. In this session we evaluate the phenomenon of open source software including:

1. When is it optimal to make software open source?
2. How does a firm earn profits from open source technology?
3. What motivates contributors to open source projects and how does that affect an information good firm's strategy?

17. Course Review – Guest Speaker (Tuesday, May 29)

Speakers: Raj Sandhu, Senior Advisor and Co-Founder, Modulus Video (www.modulusvideo.com)
Bob Wilson, Chairman and CEO, Modulus Video, (www.modulusvideo.com).

Case: To be distributed.

Objectives:

In this class we will hear from a founder and the CEO of a video data compression technology used in Internet-protocol television (IPTV). We will discuss the company's strategy and some of the issues it faces as a means of reviewing the course material.

18. Managing Privacy (Thursday, May 31)

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?

19. Project Discussions (Tuesday, June 5)

Note: Final project due.

Evaluation

Performance evaluation will be based on class participation (50%) and a group project (50%).

Class Participation

You are a co-producer of the class discussions. It is crucial that you listen carefully to the questions that are posed and that the class collectively attempts to answer them. For this to happen, class members need to listen carefully to one another and to extend or critique prior comments. The discussion should be a conversation in which all participants recognize that they have an obligation to advance our understanding of the issue at hand. The extent of your contribution to this learning process will be appraised in addition to the content of what you contribute.

Consider the following questions when assessing the effectiveness of your own participation:

1. Are the points relevant to the discussion? Are they linked to the comments of others and to the themes that the class is exploring together? Do they significantly advance the discussion?
2. 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.
3. 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.
4. Do the comments integrate material from past classes and reflect cumulative learning over the course?

Final Project

Assignment:

For the project, your group should select a firm competing in an information goods market that faces one or more of the strategic issues that we address in the class. This could be a for-profit firm or a non-profit organization. You should choose a single organization for the object of your analysis so that you can develop specific recommendations from its standpoint. Of course, you will need to assess the positions of actual, or potential, competitors in performing your assessment.

If you have contacts at the organization of interest it is useful to engage them in your project, however this is not necessary – your project can be based entirely on publicly available information.

Your project should clearly define the issue(s) facing the organization of interest, analyze the situation using the concepts and tools of the course and develop a specific plan of action for the organization.

Goals:

The main goal of the project is to make you think carefully about applying the strategic concepts that we cover in the course to an industry setting that interests you and where you have to decide for yourself what the important issues are and what the course of action should be. Remember that you should choose a topic related to ideas covered in the course. If you have any doubts about your topic, please talk to me.

Deadlines:

The project will be due on the last day of class but I will ask that you meet a couple checkpoints to get you started:

- Thursday, April 12: Submit member(s) of your group.
- Tuesday, April 24: Provide target organization and issue(s) to be addressed (one paragraph). I encourage you to talk with me before finalizing your topic.
- Tuesday, June 5: Final project due at beginning of class.

I am happy to meet with your group at any point during the quarter to discuss your project.

Grading:

You should try to choose something creative, enlightening and somewhat complex for your topic. I will hand out some possible topics early in the quarter to provide a sense of the appropriate level of complexity. Your paper should clearly state the issue you are addressing.

Some research on the details is essential, but the key to a successful paper is to analyze, not just describe. You will be graded on how well you answer the relevant questions such as:

- What is the precise issue facing the firm?
- What underlying industry or firm factors are creating the issue?
- How will the firms in the industry lose or gain from the issue as they are currently positioned?
- What specific actions should the focal firm take to respond to the issue and why?
- How are the competing firms likely to respond to the focal firm's actions?

rather than on how much effort went into the research. The biggest mistake that students make is devoting the vast majority of their write-up to a description of the situation and providing very little in the way of analysis or recommendations.

Restrictions:

You may work individually or with one or two other people. Note that I will expect proportionally more from larger groups than from smaller groups when evaluating the quality of your papers. I will provide detailed length restrictions early in the class. Be sure to include references in your paper where necessary.

Do not choose a strategic issue that is featured in a case that has been used in a course at the GSB. You may not submit a paper that has been written for a different course.

Classroom Dynamics

Evaluation and Feedback

1. Classroom performance constitutes 50% of the overall course grade.
2. The following factors are considered in evaluating classroom performance: attendance, tardiness, preparedness and contributions to class discussion as discussed above.
3. Feedback about classroom performance will be provided when specifically requested by a student near the middle of the quarter.
4. In addition, I will be happy to discuss the course, your progress, or any other issue of concern to you on an individual basis.

Class Preparation and Participation

1. I expect you to be prepared for every class. Please let me know before the start of class if for some reason you were not able to prepare adequately for that class. This will adversely affect your participation grade but not as much as being unprepared without having notified me.
2. I reserve the right to call on students whose hands are not raised (“cold call”).
3. Given the importance of class participation, I will learn your names as quickly as possible. To facilitate that, please use a name card during class.

Attendance

1. Because a case-oriented course relies on class participation for its success, attendance at every class is considered extremely important. Missing classes will adversely affect your participation grade.
2. I do not allow or require “make-up” work for a missed class.
3. Please arrive on time and stay from beginning to end. It is extremely disruptive to your classmates (and me) if you arrive late or leave while the class is in session. Absence during any part of class adversely affects your participation grade.

Other Logistics

1. Please do not use laptops, cellular phones or other electronic devices during class.
2. Please do not eat during class. Beverages are fine.

Honor Code

My goal is that each individual student gains valuable learning through this course. Since most of the assignments in this course may be accomplished in groups (if you so choose), I will rely upon your adherence to these guidelines, under the Honor Code, to help support individual learning and appropriate collaboration:

1. I encourage you to discuss the cases in preparing for class. However, I expect you to present in class case analyses that you personally participated in preparing.
2. I will distribute early in the course a description of how the honor code applies to the graded group project.

Assignment Questions

1. Introduction to Information Goods Markets (Tuesday, April 3)

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?