Note: This is an intensive course that meets six times over three weekends. For this reason, you must do the readings and the cases prior to each class so that classroom time can be used productively, for discussion and analysis.

Summary and Objectives

We are at the early stages of an information revolution where information technologies are redefining business models, transforming industries, creating new markets, and generating a whole new “space” where new human communities, behaviors, norms, and regulation are just beginning to emerge. Information technologies are an increasing part of developing new products and services, of integrating business functions, and of managing customer relationships. IT-driven disruptions in business models are frequent.

In such a business environment, decisions about information technologies are increasingly central to business success. In more stable, “industrial age” industries, business models were relatively stable, and the central basis for success with IT investments involved aligning them with complementary organizational and process changes. However, when IT transforms an industry, it realigns the industry’s structure and boundaries, and changes the fundamental business models that work.

The course is case oriented. The cases have been chosen to cover a range of industries and transformations of business models over the last ten years, and span search advertising, financial intermediation, retailing, digital music, telecommunications, the IT industry, entertainment and gaming, and social networking. (Sample cases and questions are listed in Appendix 1.) Since the emphasis of the course is on information technologies in business, the course includes a module on the impacts of emerging technologies to force us to think through issues of industry and business transformation induced by currently emerging technologies. The objective here is to end up with a framework that you will find useful in generalizing to other information technologies.
This course will not make you an IS technical specialist; its emphasis is on industry and managerial issues. However, through an overview of the technologies, activities, and applications of IS, this course will help you to acquire an appreciation for the possibilities created by IT in tomorrow’s markets, organizations and society. We personally believe that every future executive needs to learn how to think about how IT transforms business, so recommend it to you independent of your planned career path.

Upon completion of this course you should have:

- An understanding of the major information technology enabled business models that have emerged over the past decade.
- An understanding of how information technologies change business models and how to anticipate these changes.
- An understanding of how information technologies transform industries, and a framework for thinking about how to predict whether IT will transform yours.
- A perspective on how information technology can create new markets and social structures.
- An appreciation of the many organizational consequences resulting from alignment (or lack thereof) of IT strategy and business models.

**Expectations**

Students are expected to be properly prepared for the class and to have thoroughly read the assigned readings and cases. Students are expected to participate actively in class discussion.

**Course requirements**

There are four requirements in this course:

1. **Pre-class preparation:** You will be assigned pre-class work a week in advance of the session. Your pre-class work for the first weekend (1/20, 1/21) is at the end of this document.
2. **In-class case analyses:** Students will be broken into their teams in class and will prepare answers to several questions handed out in class. Each team should be prepared to present their analyses and answers to the whole class. Student groups will hand in their flipcharts for each case analysis which will be graded. The class will be given only 30 minutes to prepare answers to the questions so make sure you have carefully read each case in advance.
3. **Group project:** Your project will involve analyzing how IT has transformed and will transform a specific industry sector in the S&P 500. It will involve industry analysis, evaluating how business models have been changed by IT, analyzing how this changes valuation, and creating a sector-specific index fund of companies from the S&P 500. We will provide further guidance on the first day of class along with a list of industries to choose from. Each group will spend about 45 minutes presenting its findings in class, on the mornings of Saturday 2/3 and Sunday 2/4.
4. **Post-class analysis:** You will abstract and summarize crisply the main themes, insights and intellectual takeaways from the course, perhaps in order of significance to you personally.
Appendix 1: Cases and Pre-Class Preparation for Saturday January 20th, 2007

9am-12noon

(A) Read through the case “Harrah’s Entertainment, Inc.” and prepare a brief (1-page) write-up responding to the following questions.

1. What kinds of data does Harrah’s collect about its customers?
2. What kinds of questions can Harrah’s address about its customers from the data it collects?
3. Why is customer retention (or capturing larger share of wallet) so important to Harrah’s?

After we form groups at the beginning of the first session, you will spend 30 minutes during this session on further analysis of the case, based on an additional set of questions we will distribute in class.

1pm-4pm

(B) Using the Web (and any other information sources of your choosing), prepare a brief (1-page) write-up responding to the following questions.

1. What is VOIP (voice-over-IP)?
2. What is WiMAX? In your opinion, what are its most relevant differences from WiFi?
3. Is WiMAX service available in the United States today? Are any incumbent mobile service providers building out WiMAX networks?

(B) Review and be prepared to apply Porter’s competitive forces framework for the analysis of industry profitability (the “five forces” framework that was covered in your core Strategy course). You will spend 30 minutes during this session analyzing how the widespread (future) adoption of WiMAX could transform the structure and profitability of the mobile telephony industry, based on an additional set of questions we will distribute on Sunday.
Appendix 2: Cases and Pre-Class Preparation for Sunday January 21st. 2007

9am-12noon

(A) Read through the case “PayPal” and prepare a brief (1-page) write-up responding to the following questions.
1. What characteristics do consumers value in a payment system? How did PayPal score on these?
2. What innovations did PayPal adopt to address risk?
3. What characteristics of the Internet did PayPal exploit?
4. Who were the major players prior to PayPal in the payments industry and who were their customers?

You will spend 30 minutes during this session on further analysis of the case based on an additional set of questions we will distribute in class.

1pm-4pm

(A) Read through the case “Apple Computer, Inc.: iPods and iTunes” and prepare a brief (1-page) write-up responding to the following questions.
1. What is digital rights management (DRM)? What choices has Apple made towards managing digital rights? (an example of a digital right is ‘the right to render a song as many times as the user wants’).
2. Who are iTunes’ major competitors, and how do their technological/DRM differ from those of Apple?
3. Can music downloaded from iTunes be played on digital music players other than the iPod? Can the iPod play music purchased from other online music stores? Can it play music downloaded illegally? Can it play music purchased legally on CD’s?

(B) Review the material in the chapter “Networks and Positive Feedback” (chapter 7 from Information Rules by Carl Shapiro and Hal Varian, through page 650) and prepare to apply its ideas to analyze Apple’s choices. You will spend 30 minutes during this session analyzing these choices, based on an additional set of questions we will distribute in class.