
**Note:** This is an intensive course that meets four times over two weekends. For this reason, you must do the readings from the book and the cases prior to class so that class 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 across industries, creating new markets, enabling new functionalities, and creating 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. These technologies can cause major disruptions in business models in a very short time. Decisions about information technology are thus increasingly central to business success.

The central premise of this course is that an organization will not succeed with IT investments unless these investments are aligned and integrated with a sensible business model. This is a crucial premise for industries transformed by IT. 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. We also consider Google and the potential
impacts of its business model – to organize the world’s information and make it easily accessible – on society and business. (The cases and their associated 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, namely WiMAX and RFID, 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. You are required to choose one of these two topics and analyze it using the questions in Appendix 2.

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.

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 appreciation of the many organizational consequences resulting alignment (or lack thereof) of IT strategy and business models
- Familiarity with some of the more effective approaches for managing successful information systems projects
- Awareness of the challenges faced by those managing the operation, development, deployment, and utilization of IT

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 prep (40%)**: You must answer assigned questions from the book prior to January 21, 2005. Your answers will be analyzed during the first class on January 28. The questions are listed in detail in Appendix 3.

2. **Emerging technology analysis (20%)**: Prior to class, try to perform an analysis of the impact of the WiMAX technology on business models in the telecommunications industry. Using Porter’s framework (and any others you may wish to choose) describe what you see as the potential impacts on business models. This should be roughly a 3-5 page analysis (see Emerging Technology Appendix for details).

3. **In Class Case analyses (30%)**: 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.

4. **Post-class analysis (10%)**: Summarize crisply the main takeaways from the course. In not more than five pages, describe the main themes or insights you derived from the course, perhaps in order of significance to you personally.
Pre-class prep questions (requirement 1 above, see Appendix 3): Students are required to submit answers to the questions in Appendix 3. Please answer the questions as they relate to your organization’s situation. Please limit you answer to no more than 2-3 typed pages per question. Choose the six questions which are of most interest or importance to you. Please be prepared to discuss your answers in class. The page numbers and chapters might not correspond to the edition you are using, but don’t worry about that. Just answer the questions!

The answers to the chosen questions are due by January 21, 2007 on Blackboard.

Begin by reading the text and answering the questions (pre-class prep requirement #1). Then work on requirement #2. Hardcopies of the case materials will be available at the NYU bookstore. Come prepared to discuss these cases in class by addressing the questions assigned for each case.
Appendix 1: Cases and Questions

1. Paypal (Stanford)
   1. Study PayPal's business model and describe the key drivers of the company's profitability. What are the key revenue drivers? Cost drivers?
   2. What are the different factors that helped PayPal grow as fast as it did in the different growth phases?
   3. What factors provide PayPal competitive advantage? Is it sustainable?
   4. What should PayPal do next? What areas should it grow into?
   5. Does the acquisition of PayPal by eBay make sense? Overall, does it create value for eBay? How?

2. Amazon/Ebay/WalMart (Stanford)
   1. How do the above companies illustrate the value disciplines?
   2. Are their technology infrastructures aligned with their business models? How?
   3. Do their technology platforms position them for growth? Why?
   4. How important is security for each of them? How do they manage security?

3. Netflix (Stanford)

4. AOL

5. Harrah’s (Harvard)

6. IBM’S Decade of Transformation (A): The Turnaround (Harvard)
   1. What factors led to IBM’s problems in the early 1990s?
   2. What did Lou Gerstner do when he assumed the role of CEO in April 1993? How well did Gerstner perform as a turnaround manager? What value did he create? What challenges did he face as he attempted to position the company for growth?
   3. Why do large established companies like IBM find it so difficult to successfully build new businesses?
   4. What challenges did Palmisano face as he assumed control of IBM in March 2002? Assume you are on the board of directors. What advice would you give to Palmisano as he takes charge of IBM?

7. Google (Articles)
   1. Why did Google beat competing search engines?
   2. What are the implications for the commoditization of search on business and society?
   3. Is Google’s business strategy clear?
   4. What markets should Google pursue and why?
Appendix 2: Transformational Technologies

Choose one of the two emerging information technologies for your assignment.

WiMax
1. What is it? How is it different from WiFi?
2. Why is it important? I.e. What functionality will it enable? What markets will it create?
3. What does Porter’s forces analysis look like for the cellular industry?
4. How will it change the valuation model of a cellular provider? What other industry business models could it disrupt?

RFID
1. What is it?
2. What functionality will it enable? What markets will it create?
3. Pick an industry that you think RFID will disrupt and analyze the Porter framework for it.
4. How will it change the valuation model in this industry?

Regardless of which technology you choose to focus on, describe whether the two technologies are different in any fundamental way in terms of their impact of business. Is it possible to determine which of the two will have a larger impact on the economy?
Appendix 3: Questions from Corporate Information Strategy and Management (7th edition)

Answer Chapter 1 Q1, one question from Chapter 9, plus any four questions, roughly 2-3 pages per question.

Chapter 1
Q1. (p. 55)
   a. What business are we in?
   b. Who are our customers, suppliers, and business partners?
   c. What value do we provide to these key constituencies (including employees and owners)?
   d. What are the competitive dynamics and balance of power within the industry?
   e. Can IT be used to create value and change the basis of competition?

Q4. (p.55)
   a. Are there any disruptive changes looming on the horizon?
   b. Are we in a position to capitalize on these changes?
   c. What is the risk/return profile and the window of opportunity?
   d. Do we want to lead the industry or be a fast follower?

Chapter 2
Q7. (p. 72)
Do we have the systems, structures and expertise needed to access, interpret, and communicate relevant timely information and then respond quickly and successfully to opportunities and threats?

Chapter 4
Q1 (p 135)
How well do you understand the linkages among your strategies, the capabilities and infrastructure built to execute those strategies, and the value that can be created for all stakeholders (i.e. customers, suppliers, partners, employees, investors)?

Q5 (p 136)
Create a list of IT-enabled business strategies and the solutions that could be developed that would leverage an open standard networked infrastructure (address a through g in book)

Chapter 5
Q1 (p. 303)
   a. What does the public infrastructure of the Internet mean to our business operations?
   b. Are we leveraging this infrastructure to maximum advantage?
c. How dependent are we still on proprietary technologies?

Chapter 6
Q1 (p. 329)
  a. How available do our systems need to be?
  b. Are our infrastructure investments in availability aligned with requirements?

Chapter 9 (answer one of the following two questions)
Q1 (p. 452)
  a. have you assessed the case for outsourcing some or all of your company’s IT activities? If past studies indicated that outsourcing did not make sense, how confident are you about the objectivity of those studies?

Q5 (p 452)
Do you have practices in place to nurture and maintain the health of the outsourcing relationship? What are they?