Professor Yannis Bakos
Tuesdays 4-5pm and By Appointment
bakos@stern.nyu.edu
Office (212) 998-0861

TBA


Group project: There will be a group project on technology and strategy analysis for an established company that either operates within or is about to enter a digital market. Student teams interested in startups will have the option for their project to put together the strategy and certain components of a business plan for a digital startup company, instead of the strategy analysis for an established company.

Summary and Objectives
We are in the midst 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 of the past, 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 both theory and 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, retailing, digital music, telecommunications, the IT industry, entertainment and gaming, and social networking. The objective is to end up with a framework that students will find useful in generalizing across contexts in which information technologies are changing the nature of business and the world. Considerable emphasis is placed on new emerging disruptions including social networks, platform competition, the long tail, data mining, crowdsourcing and the economic impact of search.
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 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 IT changes business models and how to anticipate these changes.
- An understanding of how IT transforms industries, and a framework for thinking about how to predict whether IT will transform yours.
- A perspective on how IT 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.

Readings
There is no textbook. The majority of the readings will be provided electronically via NYU classes as links or pdf files. Certain readings that may not be provided electronically will be handed out in paper form.

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. **Assignments and Discussion Questions**: Each week, you will typically be assigned pre-class work a week in advance of the class. You submit answers to discussion questions electronically before the class begins. In addition, there will be a mix of individual and group assignments.

2. **Group Project part 1: Technology Presentation**: For your group project you will be required to research a potentially disruptive technology, and develop a brief presentation of its strategic implications.

3. **Group Project part 2: Strategy Analysis**: The second part of your group project will involve analyzing and developing digital strategy for a company in the technology space you research in the first part. You will analyze the relevant market, identify disruptions the firm needs to face or may exploit, perform competitor analysis, develop an analysis of the firm’s strategy including any intellectual property development and defense, and assess the likelihood of success.

4. **Post-course analysis**: You will be asked to reflect on, abstract and summarize crisply the main themes, insights and intellectual takeaways from the course, perhaps in order of significance to you personally.

5. **There may be a midterm and/or final Exam (TBD)**

**Grading (TENTATIVE—I AM CONSIDERING ADDING AN EXAM)**

- Pre-Class Assignments: 25%
- Participation in Class Discussion: 20%
- Technology Presentation and Strategy Analysis: 40%
- Post Course Analysis: 15%
## INFO-GB.2318 Class Schedule
### Version of May 3, 2016
(Always Check NYU Classes for Latest Version)

<table>
<thead>
<tr>
<th>Date</th>
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| S1 9/20, 9/24 (sections 10, 00) | **The Technology of Transformation:**
|            | Introduction, Course Overview, Technology Basics, How to think about Digital Disruption |
| S2         | **Digital Markets I: Search:**
|            | Search costs in Markets, Search Technology, Search and Digital Business Strategy |
| S3         | **Digital Advertising:**
|            | The advertising ecosystem, ad-based revenue models, search and display advertising |
|            | **Big Data:**
|            | Data Mining, Business Analytics, Big Data |
| S4         | **The Long Tail:**
|            | From a market of millions to millions of markets. |
|            | **Social Marketing**
|            | Social Networks, Social Marketing and the role of “influentials” |
| S5         | **Intellectual Property and Business Strategy:**
|            | Part I: Patents in the Digital Domain |
|            | Part II: Copyrights and Trademarks |
| S6 | **Nowhere to Hide:**
Privacy and Anonymity in the Digital Age

**Keeping Safe:**
Security and Authentication Technologies |
| S7 | **Digital Markets II: Free?**
Digital Distribution and the Pricing of Digital Goods |
| S8 | **Digital Markets III: Platform Strategies**
Switching costs and lock-in, network effects, two-sided markets and platform competition. |
| S9 | **Digital Markets IV: P2P Markets and The Sharing Economy**
Collaborative action, crowdsourcing, crowdfunding, Peer-to-peer markets, Disintermediation/ reintermediation and the sharing economy |
| S10 | **Organizations in the Digital Age**
Managing knowledge work; the changing nature of work in the digital economy. Social Impacts. Implications for business models. |
| S11 | Student Team Presentations I
Lecture Topic TBA (based on student interests) |
| S12 | **Final Papers Due**, Student Team Presentations II,
Lecture topic TBA, Course Recap |