

University of Pennsylvania
The Wharton School

Department of Operations and Information Management

OPIM 613: Managing the Productive Core of the Firm: Information Technology and Business Transformation

Note: This is the syllabus for the version of the course taught in Q3 by Kartik Hosanagar. The Q4 version, while similar in flavor, will cover slightly different topics.

Course Description

Information technology has transformed many industries, including media, financial services, and retailing, among others. These technologies have changed not only how we produce services (e.g., outsourcing and offshoring, and their newest extension, cloud computing) but what services we offer (virtual experiences, online advertising, long tail products and services, and social networking). The purpose of this course is to improve understanding of how information technologies enable transformation of business models within existing organizations as well as the development of completely new business models and new organizational forms.

The course has the following key learning objectives:

- Enable students to evaluate the likely impact of IT innovations on their firm and industry.
- Identify key drivers of technology's impact on the business ecosystem.
- Formulate appropriate frameworks to categorize technological innovation and its impact along a variety of metrics including business model disruption, first mover advantages and channel alignment.
- Develop skills to effectively "speak the language" of the technology industry.

The course will serve as an introductory course on information technologies and as a foundation on which students can explore more advanced technology concepts. There are no pre-requisites and all students are welcome to register for the course.

Lecture Topics

Session	Topic
1	New patterns and paradigms: How IT changes corporate strategy: (i) disrupts existing markets, (ii) creates new markets.
2	Disruptive technologies
3	Channel conflicts and challenges with new business models
4	Industry case study on newly vulnerable markets (higher education)
5	Consumer informedness and changes in consumer behavior: long tail
6	Case study on information aggregators (Milo, Livelovely)
7	E-commerce testing platforms (Guest lecture)

8	Analysis of first movers in technology markets
9	Managing platforms: platform strategies and envelopment (mobile platforms)
10	Hit-driven Industries: Music, movies, gaming, Venture Capital (VC)
11	Digital media industry: Impact of IT on media production and distribution
12	The global perspective: similarities and differences between the world's largest online markets

Grading

The course grade will be based on a weighted average of homework exercises, final examination, and class participation. The weights are as follows:

Homeworks and Cases	50%
Final examination	30%
Class participation	20%

Homeworks and cases will require students to engage in both technical and managerial problem solving. The technical component of the analysis requires students to understand high-level technology details of products and firms highlighted in the case. The managerial component of the analysis requires students to analyze the business value of the proposed solution and address the challenges in implementing any digital transformation initiative.

Readings

To be Announced