

OIDD6130 - ONLINE BUSINESS MODELS AND THE INFORMATION-BASED FIRM

Spring 2023 Q3
Profs. Rock and Hitt

Professor Daniel Rock

rockdi@wharton.upenn.edu

<https://oid.wharton.upenn.edu/profile/rockdi>

JMHH 553

Professor Lorin Hitt

lhitt@wharton.upenn.edu

<https://oid.wharton.upenn.edu/profile/lhitt>

JMHH 571

Course Overview

This course is devoted to the study of the strategic use of information and the related role of information technology. It is designed for students who want to manage and compete in technology-intensive businesses. Heavy emphasis is placed on applying information economics principles and theoretical rigor to analyze businesses in information-intensive industries using both qualitative and quantitative techniques. Technology skills are not required, although a background in information technology management, strategic management or managerial economics is helpful.

If “software is eating the world”, then a new view of economics is needed to understand how pricing, competition, and markets will change as more of the economy is digitized. We will study information-based industries like digital media, social networks, financial services, and online retail as well as traditional businesses that are being changed by new digital capabilities. There are four broad themes for the course: the economics of information goods and services, information and consumer behavior, markets and market design, and network economics. Each day we will discuss a core topic in one or more of these themes, with an emphasis on bridging theoretical ideas to real world applications. Application topics might include applying artificial intelligence, platform economics, and cryptocurrencies.

The course is likely to be especially useful for students interested in working in the information economy. For those interested in becoming consultants, business technologists and analysts (e.g., product managers or technology management roles), analysts of various types, and entrepreneurs this course will introduce critical frameworks for understanding the economics of competing in digital business.

Course Format

Preparation and Readings: Most of the work in the course is preparing by doing the readings and coming to class ready to discuss the ideas in the readings. For each session there will be a reading guide posted on Canvas listing required (and in some cases, optional) readings from academic, trade, and popular sources. There will also be a couple guest speakers and exercises derived from the readings. There is no required textbook.

To guide some of the discussion, each “topic”-based session (most sessions except for the first and last days of class) will have a short, graded memo assignment due the evening before the start of class at 11:59pm. Each student is required to complete at least 5 memos. Only the top 5 memo scores will be counted.

There will also be a final quiz to provide an opportunity to demonstrate your mastery of the material – it will be a mix of straightforward factual questions derived from the class discussion and business scenarios we would like you to analyze using class techniques.

(Note that in the past we had a class project but that proved challenging given the half-semester format. If you have a specific interest in doing an application project, we can discuss how that could be integrated into the class).

The course grade will be based roughly on a) memos (25%), b) final quiz (50%), c) class participation (25%)

Topics

A preliminary topic list is as follows (this will be adjusted based on the schedule and student interest):

- Pricing Information Goods, Bundling and Versioning
- Markets and Market Design
- Information Economics Fundamentals: Moral Hazard and Adverse Selection
- Network Economics
- Platforms
- Auctions
- Automation and Artificial Intelligence
- Macroeconomics of Technological Change
- Future of Work
- Privacy and Security
- Competition in the Digital Economy/Antitrust
- Research Topics in Economics of Digitization

Office Hours and Course Support

We will be using Canvas for dissemination of readings and submission of assignments, as well as course announcements. We will also have a class Slack for interested students to have ongoing discussions and share materials of interest.

Scheduled office hours are Wednesdays from 3-4:30pm for Professor Rock and Tuesdays from 12-1:30pm for Professor Hitt.