31C01000 Economics of Strategy for Online and Digital Markets

Topics in Economic Theory and Policy

Practicalities for 2019

Teaching: Iivo Vehviläinen / Department of Economics, Aalto BIZ

Lectures, period III, from 8 Jan 2019: Tue 17-19 U7 / U135a, Thu 15-17 U5 / U147.

Guest lecture: Janne Peltola / Supercell Oy

Course contents

Most valuable firms in the world are platforms that operate online and offer digital market channels. This course introduces the students to the economic analysis of platform design, pricing, and policy.

The course is divided into two parts. As an introduction to the first part, we review the economic approach to analyzing firm strategies, and go through the basic workhorse models of competition. We use these tools to understand what has made online and digital market places so successful. The key concepts are preferences and data on it (what people want to do) and efficiency of using the data (how to achieve what people want to do). Particular attention is on auctions, a popular method for selling goods in online markets.

The second part of the course covers the economics of platforms that serve two sides of a market (for example consumers and advertisers). A requisite to understanding how such a platform can be successful is the analysis of the network effects that additional participants bring to the platform. We study the two most important strategies that a platform firm chooses: pricing and openness. We conclude by an overview of the policy and regulatory issues, such as the role of privacy, the market power of platform giants, and discrimination and other externalities.

Each lecture will be backed up by a reading material assigned during the course (there is no fitting current textbook). The course uses several real-world examples to illustrate the underlying concepts, and we will have a guest lecture. Assignments (both paper reviews and exercises) are an integral part of passing the course.

The course is intended for economics majors and other students with sufficient quantitative background interested in understanding how the environment in which firms operate affects their strategies. The course makes use of game theory and mechanism design, but no prior knowledge of either is required. The Intermediate Microeconomics course (31C00100) and Mathematical Methods for Economists (30C00300) would constitute a useful background knowledge.

Learning outcomes

At the end of the course the student has learned how to use the tools of economic analysis to analyze firm decisions and strategies, and competition in online and digital markets. The student has learned how the special features of such markets affect the strategic decisions. A key objective is to introduce the students to applications of game theory and mechanism design by connecting these tools to practical applications.