

MIT SLOAN SCHOOL OF MANAGEMENT

**15.358
Spring 2017**

STRATEGY IN THE NETWORKED ECONOMY

(listed as Software and Internet Entrepreneurship)

SYLLABUS

**E62-233
Tuesdays 08.30-11.30am**

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Overview

This course explores the unique aspects of creating effective management and investment strategies in technology-intensive businesses. What does it take to win in markets with strong network effects? Why are marketplaces and multi-sided platforms such powerful business models and what are the unique strategic challenges that they face? Is it possible to build successful intermediation models for intellectual property assets? What are the strategic drivers of mergers and acquisitions in the technology sector?

The course provides a series of useful concepts and frameworks which can directly be applied by managers to solve real-world strategic and investment problems. Although most of the company and industry examples we will discuss are drawn from technology-intensive industries, the concepts and frameworks covered (e.g. network effects, multi-sided platforms) apply well beyond the technology sector.

The course consists of four modules (see list of sessions on the last page of this syllabus):

Strategy in the Presence of Network Effects: Many modern products/services are more valuable if more customers buy them or if more complements become available. What are the implications of network effects for pricing and growth strategies? Under what conditions do network effects lead to market tipping, i.e. dominance by 1-2 firms?

Multi-Sided Platforms: Today's most valuable technology companies do not offer standalone products or services, but multi-sided platforms (MSPs), which enable direct interactions or transactions between multiple customer groups. What makes MSPs special? What are the key strategic challenges that need to be overcome in building successful MSPs? How can regular products and services be turned into MSPs?

Intellectual Property Intermediaries: A defining characteristic of technology industries is the large share of value which resides in intellectual property (IP) assets. We will focus on the strategic challenges faced by firms which attempt to become intermediaries facilitating IP transactions: what are the viable business models for IP intermediaries?

Mergers and Acquisitions in Technology: What are the strategic drivers of M&A deals between technology firms? We will answer this question in the context of several recent and prominent M&A deals in tech.

Strategy at Technology's Bleeding Edge: In this last module we will apply the concepts and frameworks discussed throughout the course in the context of two emerging and exciting areas of tech – blockchain technologies (including bitcoin) and autonomous driving.

Career Focus

This course will be particularly valuable to two types of students: 1) those who anticipate taking management positions in businesses where technology plays an important role; 2) those who anticipate consulting or investing in technology industries and must analyze firm strategies. However, given the broad applicability of the concepts and frameworks covered in the course, it may also be relevant for students who do not necessarily plan to pursue a career related to technology.

Course Website

All slides used in class, reading materials, assignments and course information will be posted on the MIT Stellar website for the course. Please check it often.

Grading

Class participation	30%
Group homework & class presentation assignment	30%
Final project	30%
Completion of pre-class online polls	10%

Class Preparation and Participation

The best way to prepare for each class is to read the assigned materials with the objective of answering the assignment questions. Those questions will always form the backbone of the class discussion. The class participation grade takes into account both the quantity and the quality of a student's comments throughout the semester, with a larger weight placed on quality. Good quality comments are typically those that help move the discussion forward by building upon previous comments made by other students. Missing more than one class session will seriously impact the class participation grade.

Pre-Class Online Polls

The assignment for most class sessions will require you to answer one or two questions in an online poll (also found on Stellar). Please come to class prepared to defend your poll answers. We will use the poll results in class discussion as a way to get a sense of the overall stance of the class on specific questions. Each poll should be completed by 7am the day of the corresponding class.

Group Homework and Class Presentation Assignment

In several sessions throughout the course we will ask 2-3 groups of students to prepare and deliver a short presentation on the topic of the corresponding session. For instance, in the session on "turning products/services into multi-sided platforms" we would ask each group to choose an actual or potential example of such a transformation, explain how they would go about implementing it and why it makes sense to do so. Each group will then answer questions from the rest of the class.

We will announce the class sessions and topics for these assignments after the first week of the course. At that point, you will have to form teams of 3-4 students and each team will have to commit to presenting at least once throughout the semester (we will make sure there are enough slots). The output should be in the form of a PowerPoint presentation of no more than 5 slides. You will have 5-10 minutes to present in class. You can send your presentation for feedback the week before the session you will present in.

Final Project

Like the homework assignments, the final project should be done in groups of 3-4 students. The purpose of the final project is to apply one (or several) of the conceptual frameworks developed in the course to addressing a strategy problem faced by a company of your choosing (start-up or well-established company, U.S. or international).

Guidelines for the final project:

- The final paper should clearly identify one key and well-defined strategy problem (not a list of tactical questions) and 2-3 distinct and reasonable strategic options for dealing with that problem. The options can be yes/no (e.g. should LinkedIn expand to non-professional social networking?).
- The paper should not be descriptive, i.e. about an industry or a technology *per se*. Everything should be centered around the main problem and options for dealing with it. Please keep description to the minimum needed for setting up the problem and solving it.
- The core of the paper should analyze the key strategic and economic tradeoffs among the various options you have identified and make a strong case for one of those options. This is very similar to the structure of most of our class discussions.
- Please do not feel compelled to apply as many course frameworks as possible: one can be enough, provided it is judiciously applied. Aim for depth rather than breadth.
- The final paper should be 5-8 pages, 1.5-spaced, with 12-point font and 1-inch margin, and up to 5 pages of supporting data/exhibits. It should include a short (half a page at most) executive summary upfront along with total word count.

Grading criteria for the final project:

- 40 points (mastery and application of course concepts)
- 20 points (quality and depth of research)
- 20 points (creativity of ideas)
- 20 points (style – clear, effective argument)

We strongly recommend that each group sends us their final project proposals before the end of April so that we can make sure everyone is on the right track. Each group will have an opportunity to briefly present their final project in the final session of the course.

MODULE	SESSION	ASSIGNMENTS
Strategy in the Presence of Network Effects	1) <i>Network effects</i> and course introduction	None – just come to class.
	2) <i>Browser wars</i> and <i>LinkedIn</i>	Case studies and other reading materials on browser wars and LinkedIn.
Multi-Sided Platforms (MSPs)	3) <i>Marketplaces – the perfect business model?</i> Class guest: Simon Rothman (Greylock partner)	“Network Effects Aren’t Enough,” <i>Harvard Business Review</i> , April 2016, https://hbr.org/2016/04/network-effects-arent-enough
	4) <i>Strategy for MSPs</i>	“Strategic Decisions for MSPs,” <i>MIT Sloan Management Review</i> , Winter 2014, http://sloanreview.mit.edu/article/strategic-decisions-for-multisided-platforms/ Case studies on Brightcove.
	5) <i>Marketplace or reseller?</i>	“Do You Really Want to Be an eBay?” <i>Harvard Business Review</i> , March 2013, https://hbr.org/2013/03/do-you-really-want-to-be-an-ebay Reading materials on Beepi, Carvana, Gazelle, ThredUp, Upwork.
	6) <i>Transforming products or services into MSPs</i>	Case study on Intuit, Stevey’s Google platforms rant (https://plus.google.com/+RipRowan/posts/eVeouesvaVX)
	7) <i>Platforms on top of platforms</i>	“How Facebook Can Undermine Apple and Google in the Platform Games,” <i>Wired</i> , February 2013, https://www.wired.com/2013/02/facebooks-the-winner-in-the-platform-hunger-games/ Reading materials on GREE and instant messaging apps (Kakao, Messenger, WeChat, Whatsapp, etc.)
Intellectual Property Intermediaries	8) <i>Strategy for intellectual property intermediaries</i>	“The New Patent Intermediaries,” <i>Journal of Economic Perspectives</i> , Winter 2013, http://pubs.acaweb.org/doi/pdfplus/10.1257/jep.27.1.45 Case studies on Intellectual Ventures and Getty Images.
M&A’s in Tech	9) <i>Strategic drivers of M&A’s in tech</i>	Reading materials on recent tech M&A deals and potential tech acquisition targets.
Strategy at Technology’s Bleeding Edge	10) <i>Autonomous driving and Mobileye</i>	Reading materials on autonomous driving and case study on Mobileye.
	11) <i>Bitcoin and Blockchain</i> Class guest: Jeremy Allaire (CEO of Circle)	Case study and other reading materials on bitcoin, blockchain and Circle.