

FREEMAN SCHOOL OF BUSINESS Course Syllabus INFO 7300 – Spring 2013

Platform Strategy

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Required Materials:

- Cases and Readings: Study.net course pack.
- Additional readings will be posted to Blackboard.
- Course Discussion Forum

This course is aimed at managers, executives, investors, and entrepreneurs interested in creating, managing, or understanding business platforms. Firms such as Facebook, Amazon, SalesForce, and Apple operate as ecosystems in which third parties add value. Topics include startup, converting existing businesses, openness, network effects, innovation, cannibalization, pricing, governance, and competition. The course will combine rigorous theory with real-world experience. Case studies will emphasize practical approaches and draw from social media, healthcare, entrepreneurship, enterprise software, mobile services, and consumer products to provide foundations and definitions. This course will also demonstrate established economic principles from the literature on industrial organization, two-sided network effects, information asymmetry, pricing, and game theory. A basic background in microeconomics is recommended as a prerequisite.

Business Platform Definitions

- 1) A set of business and technology building blocks that serve as the foundation for building complementary products and services.
- 2) A set of resources used in common across a product family that are also subject to network
- 3) An open standard, facilitating 3rd party participation, together with a contractual or reputational governance model.
- 4) A business ecosystem that matches buyers with suppliers, who transact directly with each other using system resources.

Platforms are economically important and widely observed in modern economies. For example HMOs match patients and physicians. Real estate and auction networks match buyers and sellers. Airline reservation systems match travelers to airline flights. However, thanks largely to technology, platforms are becoming much more prevalent. New platforms are being created e.g. DropBox, Yammer, and KickStarter. Traditional businesses are being reconceived as platforms e.g. U.S. Postal Service, newspapers (Huffington Post). Retail electric markets are evolving into platforms that match consumers

with specific power producers, allowing them to express their preferences for cheaper coal or more costly renewable power. In creating strategies for platform markets, managers have typically relied on assumptions and paradigms that apply to businesses without network effects. As a result, they have made decisions in pricing, supply chains, product design, and strategy that are inappropriate for the economics of their changing industries.

This course is designed to prepare MBA students to operate effectively in platform business environments by providing a set of theory, frameworks, and tools to analyze and manage existing businesses and to develop launch strategies for new ventures. The diversity of industry coverage will provide tools for students from diverse backgrounds such as finance, marketing, and operations.

By the End of This Course, Students will be able to:

- Define platform businesses, distinguishing among input suppliers, markets, and true platforms, and why these differences matter.
- Recognize and know how to compete in winner-take-all markets, one and two sided networks, and the context of multi-homing. Know how to win standards battles.
- Understand how traditional pricing models break down in the context of platforms, choosing from an array of freemium, bundled, and two-sided pricing.
- Address the barriers that firms face in trying to organize themselves as platform firms.
- Develop strategies for launching new platforms when critical mass is important. Learn the process of making markets.
- Develop recovery strategies in declining platform markets. Understanding timing in the cannibalization of an old platform by a new one.
- Understand the anti-trust implications of platform strategies and safe harbor defenses.

Grading:

In-Class Participation	25%
Outside Participation (Wiki)*	15%
Case write-ups / Homework	20%
Final project (paper & presentation)	40%

^{*} plus up to 5% individual extra credit for bringing platform news and opportunities to class.

The Final Project will be a hands-on blueprint for solving a real platform problem with an existing business. This will include a team developed 20 page paper and 20 minute presentation. Executives from Cisco, IBM, Microsoft, Polycom, Receivables Exchange, SAP, and the United States Postal Service have already committed to describing platform problems critical to their businesses. For example, Cisco wants to learn how to create a platform in electric power smart grids; Polycom wants to transition from a product company to a platform company; SAP wants to navigate organizational structural problems where their internal application developers compete with external application developers; USPS wants to implement a digital services platform, involving households and businesses, to minimize cannibalization of their physical delivery service; Thomson Reuters wants to rationalize infrastructure across vertical business units. These projects will give students both real world practical expertise and points of contact for finding jobs.

Class Attendance: Attendance at all class sessions is expected.

Statement about Academic Integrity: This class will be conducted in full accordance with Tulane's policies about academic integrity including, but not limited to, the Unified Code of Graduate Student Academic Conduct (http://tulane.edu/provost/upload/Unified_Code_of_GS_Academic_Conduct_11-14-07.pdf) and the Tulane University Code of Student Conduct (http://studentconduct.tulane.edu).

Norms and Expectations: This class will be conducted in full accordance with published Norms and Expectations for Students in Freeman Classes. Please review the your program handbook.

Learning Disabilities: Under the Americans with Disability Act and Section 504 of the Rehabilitation Act, if you have a disability, you may have the right to an accommodation; however, the right is contingent upon your taking certain steps. You should review the steps that you need to take, as well as Tulane's policy concerning accommodations at http://erc.tulane.edu/disability/index.html.

Any student with a disability, in need of course or examination accommodation, should request an accommodation through the University's Goldman Office of Disability Services (ODS) located on the first floor of the Mechanical Engineering Building. At the beginning of the semester, please provide me with a copy of your approved ODS accommodation form. I am committed to working with ODS to ensure that I provide you with all approved accommodations. If you do not deliver the approved accommodation form to me, I will not know that ODS approved your accommodation and I will have no basis to provide those accommodations.

Participation: Everyone is expected to actively and constructively participate in class discussions, especially when we analyze the assigned cases. Your rich experiences and backgrounds should make it possible to consider multiple ideas and examine the issues from a wide variety of perspectives. A list of topics and associated readings is given in the course schedule attached to this syllabus. More detailed information will be provided during the semester. You will be expected to read the listed materials before class. Materials should be read at the level of comprehension at which it is possible to give coherent analyses or, failing that, be able to ask informed questions.

Your careful reading and analysis of the assigned cases is even more important. You should understand fully the situation, the pertinent facts, and the central issues for the case of the day. We will discuss each case in class, and *individual students will be called randomly* to provide their own opinions. Please do not hesitate to ask questions or to challenge the ideas being presented. One of the primary vehicles to achieve this goal—as well as a key managerial skill in general—is careful listening, questioning, and building upon what other participants in the discussion have to say. You are encouraged to discuss the cases with other students prior to class discussions. A set of questions to guide your reading and analysis will be provided for each case. It is important to note that these questions are meant to help you focus your thinking about the case rather than completely guide the in-class discussion.

Your ability to write clear and concise reports will be developed through case write-ups. Most managers, especially in operations roles, spend little time reading and writing reports. Hence, a premium is placed on being able to summarize and communicate complex information and analysis results.

Detailed Course Outline

Class 01 January 15, 2013

- 1. Platform Definitions & Foundations
 - a) Intro: Importance of platforms. Theories of why they matter
 - b) Participants

Note: Session 1 is a ½ session during which we will cover course background and introductions.

Rich, Motoko, "With Kindle, Publishers Give Away E-Books to Spur Sales" - NYTimes.com, January 22, 2010 [3 pages]

Another Game of Thrones. The Economist. Dec 1st, 2012.

Apple vs. Google vs. Facebook vs. Amazon – WSJ. Dec 26, 2012.

Class 02 January 22, 2013

- 2. Platform Definitions & Foundations
 - a) Growth Illustrations-why platforms are different
 - b) Platforms versus standards

Readings

The Architecture of Platforms, Baldwin and Woodard, (Book Chapter, 2009) (Blackboard)

Platforms not just Products, Cusumano (Chapter 1 of Staying Power 2010) (Blackboard)

Case: Twitter (Study.net)

Case Goal: Analyze whether Twitter is really a platform and what strategies would make it a platform. Learn what possible business models might help monetize the network.

Twitter - Case Questions to prepare for class:

- 1. When we say that Twitter may be considered an emerging "industry-wide" platform, what do we mean by this term? What evidence is there that Twitter is not simply a standalone internet service?
- 2. What are the "common problems" that Facebook, LinkedIn, and Twitter "solve" for their users? How are these problems similar and different across the three platforms?
- 3. How many potential ways are there for Twitter to make money given its market focus and user base?

Class 03 January 29, 2013

- 3. Market Environment and Structure
 - a) Network Effects: One & Two sided networks
 - b) Pricing Simulation Game (mathematica)

Readings

Platform-Mediated Networks: Definitions and Core Concepts, Eisenmann (2008) (Study.net)

The Art of Standards Wars (Shapiro & Varian, 1999) (Study.net)

Case: Electronic Arts (Study.net)

Case Goal: Discuss the tradeoffs in a developer's decision to develop exclusively for one platform and the platform owner's decision to limit multi-homing.

EA Case Assignment Questions

The following assignment questions are suggested to guide students in their preparation for class discussion:

- 1. Microsoft's Xbox unit has accrued cumulative operating losses of \$3.5 billion through mid-2004. Is this investment justified? Why do video game platform providers choose to sell consoles at breakeven or loss-making prices, profiting instead from royalties charged to game publishers?
- 2. Analyze the economics of title exclusivity, i.e., an agreement that limits a game's availability to a single console. How much could Sony and Microsoft each afford to pay for exclusivity? How much would publishers demand from each platform provider? For purposes of analysis, assume: (a) A game costs \$6 million to produce, and \$1 million to port to each additional platform. (b) A publisher realizes a \$20 variable contribution margin on each unit sold (reflecting a \$40 wholesale price, less a 10% IP licensing fee, 12.5% console royalty, 5% manufacturing cost, 12.5% royalty to studio, and 10% marketing cost; assume for convenience that these expenses are fully variable, regardless of sales volume). (c) If the game is not exclusive, its publisher expects to sell 500,000 units, with 75% share to PS2 and 12.5% share each to Xbox and GameCube. (d) If offered on exclusive basis, a console maker's extra marketing "push" would result in 400,000 unit sales for PS2 or 100,000 units for either Xbox or GameCube.
- 3. Will console-based online gaming emerge as a mass-market phenomenon? How important will network effects be?
- 4. What are the advantages and disadvantages to the approaches adopted by Microsoft and Sony for managing relationships with third-party providers of online-enabled console games? Why are their strategies so different? Is one strategy flawed?
- 5. How important is EA to Microsoft's success in online gaming? How important is Microsoft to EA?
- 6. Should either/both Microsoft and/or EA seek to end their dispute? If so, under what terms?

Class 04 February 5, 2013

- 4. Business Models & Pricing
 - a) Competition
 - b) WTA; Switching Costs/Multi-homing
 - c) Mistakes of traditional marginal cost pricing
 - d) Perpetual Licenses (on premise/PC style software) vs. Freemium/Subscriptions

Readings

Strategies for Two-Sided Markets Eisenmann, Parker, Van Alstyne (HBR, 2006) (Study.net)

Case: Adobe (Study.net)

Case Goal: Understand competition, determinants of winner-take-all markets, standard setting, and how to detect and correct pricing mistakes.

Adobe Systems Incorporated - Suggested Case Preparation

Students should be prepared to open the case discussion. Some of the following questions might guide this preparation:

- 1. What is the industry that Adobe is competing in? Hardware? Software?
- 2. Who are the major players? What are their strategies?
- 3. What are the trends in the industry (threats and opportunities)?

Additional issues to consider include:

- 1. What is the architecture of Adobe's product? (If you are unfamiliar with the term product architecture, you will probably want to read Ulrich's paper, The Role of Product Architecture in the Manufacturing Firm opim.wharton.upenn.edu/~ulrich/publications.html)
- 2. How was postscript established as a de facto standard?
- 3. Is postscript proprietary or open?
- 4. How does Adobe make money on Postscript?
- 5. Which firm is currently in a stronger position to control de facto standards in the eBook space: Adobe or Microsoft?
- 6. What should Adobe do? How can they win the standards war? Should they focus on eDocs or eBooks? Will the eBooks market tip, or will there be multiple standards? How can Adobe make money in this market?

Class 05 February 19, 2013

- 5. Platform Lifecycle I Launch
 - a) Creating & Organizing Markets
 - b) Platform Birth

- i) No prior platform: Entrepreneurs meet lean startup
- ii) Transitioning established businesses, cannibalization
- c) Market referral model (Mercateo)

Readings

Staging Two-sided Platforms (Eisenmann, Hagiu 2008)

How Catalysts Ignite: Economics of Platform Based Startups (Evans 2009, in Gawer 2009)

Case: The Smart Grid

Case Goal: Discuss successful launch strategies in energy markets.

Case Preparation Questions – CISCO Smart Grid

- 1. What is the "Smart Grid" and what is it supposed to do?
- 2. Who are the key players in the Smart Grid case?
- 3. What business models are likely to succeed?
- 4. What strategies should Cisco employ to become a leader in this industry?
- 5. What obstacles and challenges must Cisco overcome to compete successfully in this new industry?

Class 06 February 23, 2013 (Saturday class)

- 6. Platform Lifecycle II –Expansion
 - a) Building new markets
 - b) Taking existing markets
 - c) Bundling and Envelopment
 - d) Open Business models

Readings

Platform Envelopment, Eisenmann, Parker, Van Alstyne, (SMJ 2011)---optional (Blackboard)

How companies become platform leaders (Gawer & Cusumano 2008) (Study.net)

Dethroning an Established Platform (Suarez & Kirtley 2012) (Study.net)

Failure to Launch: Various news reports on Google Health, MS Health Vault, and WebMD.

Case: PatientsLikeMe (Study.net)

Case Goal: Discuss expansion strategies and community building for a small but moderately successful platform. Apply platform strategies to healthcare.

Case Preparation Questions-Patients Like Me

- 1. Why do patients and doctors join PLM?
 - a. Who gets value?
- 2. What is the business model?
- 3. What challenges does PLM face in growing the community vs. generating revenue?
- 4. Should PLM launch the General Platform? If yes, how does it ensure that it is as successful in engaging patients as its current platform? If no, how does PLM grow?
- 5. For example, so far, PLM has generated revenues by providing market research to pharmaceutical companies. Should it expand its business model to insurance companies and research institutions? Does it have the potential of becoming the "Bloomberg of medical data"?

Class 07 February 26, 2013

- 7. Platform Lifecycle III Maturity, Exit, Decline
 - i) Looking for blind spots
 - ii) Recovery

Guest Speaker

Eric Garland, BigChampagne Media Measurement

Readings

Opening Platforms: How, When & Why (Eisenmann, Parker, Van Alstyne 2009)

What is a Free Customer Worth? (study.net)

The Rise & Ignominious Fall of MySpace (Gilette 2011) (Blackboard)

Case: RIM: The Mobile OS Platform War (new: Blackboard)

Case Goal: Describe how the business environment can shift rapidly, as for MySpace, and what strategic options exist for firms that are in trouble.

Case Preparation Questions-RIM

- 1. How do smart phone customers decide which phone (and operating system) to adopt?
- 2. Which is more important for an operating system platform, a variety of application choices or the availability of the single most popular app in a category?

- 3. What advantages would there be for RIM to develop BlackBerry to adopt a more "open" architecture?
- 4. For technology products, is it generally inevitable that multi-purpose devices will drive single-purpose devices from the market? Justify your answer.
- 5. Should RIM pursue a strategy to remain a highly profitable niche player within the broader mobile device market or should it focus instead on becoming the market share-leading standard?

Class 08 March 5, 2013

- 8. Ecosystem Governance I
 - i) External: Information asymmetry organizing to help partners without stealing ideas
 - ii) Multilateral bargaining problem
 - iii) Managing external conflicts
 - iv) absorption

Readings

Platform Rules: multi-sided platforms as regulators, Boudreau and Hagiu (Book Chapter, 2009) (Blackboard)

Match your innovation strategy to your innovation ecosystem (Adner, 2006) (Study.net)

Case: SAP AG: Orchestrating the Ecosystem (Study.net)

Case Goal: Directly focus on the critical developer ecosystem and how to ensure its support for your platform.

Class 09 March 12, 2013

- 9. Ecosystem Governance II
 - i) Internal: Align incentives to promote reuse and shared infrastructure
 - ii) External: Fairness in Licensing

Readings

How Intel Manages Conflicts of Interest (Ch 4 Platform Leadership – Gawer & Cusumano 2002)

Case: Is Sony Turning Around? (Study.net)

Case Goal: Learn how to overcome the "Galapagos-ization" (garapagosu-ka) that has prevented Sony from becoming a successful platform.

Class 10 March 19, 2013

10. Social Networks and Platforms

Readings

Coase's Penguin, (Benkler 2002)

Six Challenges in Platform Licensing (Parker & Van Alstyne, 2008) (Blackboard)

Case: Nettwerk: Digital Marketing in the Music Industry

Case Goals: Examine the 'long tail' argument as it pertains to the digital music marketplace - to compare and contrast the relationship of old media/broadcast media to the mass market with new media and fragmented, niche markets.

Class 11 April 9, 2013

- 11. Open/Decentralized Innovation
 - i) Intellectual Property
 - ii) Absorption
 - iii) Distributed project coordination/management

Readings

The Era of Open Innovation (Chesbrough 2006) (Study.net)

Finding Answers within your company, Benbya and Van Alstyne, (SMR 2011) (Study.net)

Does IP Strategy Have to Cripple Open Innovation (Alexy, Criscuolo, Salter 2009) (Study.net)

Case: OpenIDEO

Case Goal: To compare and contrast traditional and open innovation-based designing processes. Investigate the Impact of a traditional firm going open.

Class 12 April 16, 2013

- 12. Policy Implications
 - i) Antitrust
 - ii) Copyright, Patent & Private Ordering

Readings

The Antitrust Analysis of Multi-Sided Platform Businesses. (Evans & Schmalansee, 2013)

How Market Smarts can Protect Property Rights (Anand & Galetovic, 2004) (Study.net)

Case: EU Verdict Against Microsoft (Study.net)

Class Goals: Understand regulatory definitions of market power and legitimate strategies for navigating platform markets with network effects. Understand how the appropriation of IP from ecosystem partners affects incentives, investment, and growth. Understand how different industry clockspeeds can alter optimal platform governance decisions.

Class 13 April 23, 2013 Student Presentations I

Class 14 April 30, 2013 Student Presentations II