

Marketing Strategy & Technology

MKTG 777



Professor Pinar Yildirim

MARKETING STRATEGY & TECHNOLOGY

MKTG 777

Spring 2018

Professor Pinar Yildirim

748 Huntsman Hall

(215) 746-2369

pyild@wharton.upenn.edu

pinaryildirim.com

Office hours:

Fridays 9am to noon (or by appointment)

Class meetings:

Session 277_001: T/ TH 10:30am – 11:50am GMHH G92

Session 277_002: T/ TH 1:30pm – 2:50pm SHDH 215

Session 777_001: T/ TH 3:00pm – 4:20pm SHDH 215

Teaching Assistants:

Kate Parker (ksparker@wharton.upenn.edu, e-mail for appointment)

Kening Tan (kening@wharton.upenn.edu, e-mail for appointment)

Overview

What is this course about? This course focuses on the unique aspects of creating effective marketing and management strategies for technology-intensive online and offline businesses. We will discuss the effective competitive marketing strategies for winning in markets which are powered by technology. Specifically, we will discuss how firms create value for customers and how they can integrate technology in delivering a better consumer experience.

What can I expect to learn? The course provides a series of useful concepts and frameworks which students can directly apply to strategic marketing problems they will encounter post-graduation. Throughout the course, there will be an emphasis on going from concepts and market analysis all the way to the formulation of concrete strategies and applications from recent research.

What industries will be covered? Matching markets, sharing platforms, online retail and e-commerce, advertising, financial technology, social networks, media and content providers, and virtual currencies.

What do I need to do? The course relies on case discussions, industry facts and independent reading. The readings are primarily drawn from the marketing and economics literature. The case studies provide extensive opportunities to integrate and apply these abstract tools in practical, competitive marketing strategy contexts. Course outcome is determined by active class participation, case write ups, short presentations, and a class project. (See “Grading” for details.)

Who is this course designed for? While competitive marketing strategy is important for all managers, it will be particularly useful to students who are planning to accept a position in leading technology companies, and marketing firms in which technology is likely to play an important role. In addition, the course will provide value to those who expect to work in consulting or investing in technology industries, and must analyze firm strategies. But it may also be valuable for students who do not necessarily plan to pursue a career related to technology or even marketing.

Assignments and Grading

There will be in-class discussions, case-write ups, short presentations focusing on competitive marketing strategies and a final project which requires a short presentation and a group report. All assignments should be submitted before the class (by 9am on the due date) on Canvas. Cases and presentation evaluations will be returned in class the following week. Below is the distribution of the weights of each assignment on your final grade:

- ✓ 4 Short case briefs (Turn it in, pass or fail grade – $4 \times 5\% = 20\%$)
- ✓ 2 Detailed case write-ups (20%)
- ✓ 2 Short-idea presentations (20%)
- ✓ Final project (%25)
 - Presentation (10%)
 - Report (15%)
- ✓ Participation (15%)
 - Professor's assessment (10%)
 - Self-assessment (5%)

The assignments for case write-ups will be a set of short questions and they will be posted on Canvas.

Formation of Groups:

- ✓ Students must organize themselves into groups of 3-4 for the short presentations and the final project. Please email me the names of members of your team (one email per group) by **January 25, 5:00pm EST**.
- ✓ You are expected to sit with your group members throughout the semester to accommodate group discussions.
- ✓ I encourage active group work and strongly recommend that you form a study group with your team or friends to discuss the readings before each session.

[Individual] Short case briefs (4 cases x 5% = 20%)

For 4 cases / class discussions, there will be a series of 1-3 short questions posted on Canvas (at least a week before the session). You are expected to answer the questions and turn in your answers.

- ✓ Case briefs are designed to prepare you for the discussion in class, rather than measuring your knowledge. These short responses will only be graded as pass or fail (checked for relevance but not for quality of content.)
- ✓ The briefs shall not exceed 1 page (300 words max, 12pt font).
- ✓ You should post your case briefs to Canvas by 9am on their due date. Late work will not be accepted since cases will be discussed in class.

[Group] Detailed Case Analysis (2 cases x 10% = 20%)

For two cases indicated on the syllabus, students are expected to provide a detailed case analysis as a group. Detailed analyses will be graded based on the quality of the content. The write-up should not exceed 5 pages (1500 words max, 12pt font, double-spaced), plus up to four (4) exhibits. Assignments will be posted on Canvas a week or more in advance.

[Group] Short Idea Presentations (2 presentations x 10% = 20%)

For two specific industries, your group will be asked to take a position to disrupt an existing market (as a competitor or third party) or defend the incumbent. You will be asked to give a short (5-10 slide, 5 minute max) presentation

on an idea for product or service which is aimed at competing with the successful incumbent in the company, to save the incumbent.

[Group] Final project (10% presentation + 15% report = 25%)

For your final project, I expect you and your team to consider the conceptual frameworks we develop in class to identify a market opportunity, an unmet customer need, or weakness of an existing brand. You should propose a product/company/service to address the unmet or poorly-met consumer need. Details about the final project are provided at the end of the syllabus.

- ✓ By **March 1st, 2018** you should come up with a one page proposal of your final project. This proposal will not be graded, but you will receive an informal feedback on your idea with 1-2 weeks following your submission with comments and/or suggestions. The document should be posted before class on Canvas by due date.
- ✓ We will spend one session with presentations of the ideas at the end of the semester. The presentation slides are due by 9am on **April 19th, 2018**.
- ✓ You will also be expected to write a report on your idea and submit it by 9am on **April 24th, 2018**.

Participation: Contribution to Class Discussion and Self-assessment (10% + 5% =15%)

Everyone in the class has some valuable idea to contribute. I encourage you to openly share ideas and ask questions. Every session will involve interaction in the form of in-class discussion about the topic covered that week. I expect each class member to be prepared at all times to comment in any class session.

My assessment: 10% of your grade will be assessed by me as a combination of the following factors:

- ✓ Regular and punctual class attendance
- ✓ Class preparation: engagement in class discussions
- ✓ Attendance and engagement in guest lectures
- ✓ Your peer's appreciation of you

Your assessment: 5% of your grade will be assessment of your own performance. I will ask you to assign yourself a participation grade at the end of the semester. Your evaluation should consider the elements listed above and should be scored on a scale such that 1 = worst possible participation and 10 = highest possible participation. Your assessment should be uploaded on canvas by **April 27th, 2018**.

Assessment of Contributors: You will also be asked to write a paragraph about one student who has enhanced your learning in this course. (This can be a student who was particularly insightful and helpful in a group project, someone who helped you think about an issue in a new way in class, etc.). These comments will be taken into consideration when final participation grades are assigned. **Note:** I will not share these comments, but you are welcome to share them with one another.

Canvas & Readings

All slides used in class, links to points of interest and optional readings, assignments, announcements and critical course information will be posted online on Canvas. Please check it often. Some readings in the course will be recommended, but not required. The recommended readings will give you a chance to go into more depth on particular subjects if you are interested. All readings will be linked from Canvas.

Session	Date		AGENDA
Welcome	11-Jan-18	TH	Welcome and Course Introduction Creating and Finding Market Failures and Opportunities
Creating a value proposition	16-Jan-18	T	Multisided platforms: What makes matchmakers and disruptors work? Recommended Reading: Hagiu, Andrei. "Strategic decisions for multisided platforms." MIT Sloan Management Review 55.2 (2014): 71.
	18-Jan-18	TH	Competitive Strategy in Online Platforms: Competing through Governance Case Study: eHarmony Recommended Reading: Halaburda, Hanna, Mikolaj Jan Piskorski, and Pinar Yildirim. "Competing by restricting choice: the case of search platforms." (2017). Forthcoming, Management Science.
	23-Jan-18	T	Online Social Networks: Network Effects and Market Tipping How do traditional firms compete with social networks? Case Study: LinkedIn Corporation, 2012 (Case Brief #1 Due)
	25-Jan-18	TH	Selecting a Monetization Strategy and Pricing: Freemium, Referral Marketing Case Study: Angie's list (Group formation due)
Driving user adoption and engagement	30-Jan-18	T	Sharing Economy: Competition in Ride Sharing Industry Case Study: Uber: Changing the Way the world Moves
	1-Feb-18	TH	Sharing Economy and Role of Reviews and Reputation: Product Reviews, recommendations, and reputation Case Study: Airbnb (Case Brief #2 Due)
	6-Feb-18	T	Sharing Economy: Managing public and governmental affairs Short Student Idea Presentations #1
Communication and Information Campaigns: Advertising and Social Media Strategy	8-Feb-18	TH	Developing brand communication: Strategies for Online Advertising and Social Media Communication – I Case Study: Rocket Fuel (Detailed Case Analysis #1)
	13-Feb-18	T	Developing brand communication: Strategies for Online Advertising and Social Media Communication – II Case Examples from Successful Social Media Campaigns, methods, metrics

	15-Feb-18	TH	Disrupting the Taxi-market & Brand Differentiation & Communication GUEST SPEAKER: Ann Ferracane (LYFT)
Business Channels	20-Feb-18	T	Selecting the Business Channels of Competition: Omnichannel vs. brick-and-mortar vs. online pure-play Case Study: Showrooming at Best Buy
Developing the Brand	22-Feb-18	TH	Developing your product: Product Line Extension, Brand Differentiation, Luxury branding Case Study: Burberry
	27-Feb-18	T	Competitive Marketing Strategy in Retail GUEST SPEAKER: CANDAN ERENGUC (Lululemon) (NOTE: speaker will attend 277 Sessions)
Managing Growth	1-Mar-18	TH	Marketing Resource Allocation: Online and Offline Communication and Advertising, Customer Lifetime Value Case Study: BBVA (Detailed Case Analysis #2) Recommended Reading: Pepsi-Lipton Brisk Case One page proposal for the final project idea due
	13-Mar-18	T	Measuring product growth How to plan for effective media communication at various stages of growth?
Marketing Strategy in Media and Entertainment Industry	15-Mar-18	TH	State of the Media and Entertainment Industry Competition in Online Media and Entertainment Case Study: Comcast
	20-Mar-18	T	Competition in Media Industry: Traditional and Digital Media: trends and future GUEST SPEAKER: Eric Kessler, Media Consultant, (Formerly at HBO)
	22-Mar-18	TH	Designing and Delivering Products -I Value and Design of Online Experiments Short Student Presentations #2
Learning about how Marketing Strategy works, what consumers want	27-Mar-18	T	Designing and Delivering Products: Value and Design of Online Experiments Case Study: Advertising Experiments at RestaurantGrades (Case Brief #3 Due) Recommended Reading: Blake, T., Nosko, C., Tadelis, S. "Consumer heterogeneity and paid search effectiveness: A large-scale field experiment." <i>Econometrica</i> 83.1 (2015): 155-174. Hauser, O., and Luca, M. "How to Design (and Analyze) a Business Experiment." <i>Harvard Business Review</i> (2015).

	29-Mar-18	TH	Learning about consumers & connecting online and offline GUEST SPEAKER: Adriana Crespo Tenorio (Facebook)
	3-Apr-18	T	Consumer Targeting and Preferences Segmentation and Targeting consumers Methods, data sources, and tools
	5-Apr-18	TH	Payment Systems and Financial Technology Cryptocurrencies Case Study: Bitcoin Recommended Reading: Frick, W. "Why Your Business Might One Day Accept Bitcoin (or Something Like It)," Harvard Business Review
	10-Apr-18	T	Learning about consumers and their preferences: Using data from online social networks Case Study: Ant Financial GUEST SPEAKER: Naveen Agnihotri (Lenddo) Recommended Reading: Wei, Y., Yildirim, P., Van den Bulte, C., & Dellarocas, C. (2015). Credit scoring with social network data. Marketing Science, 35(2), 234-258.
Value of Data, AI and Machine Learning in Marketing Strategy	12-Apr-18	TH	Value of Big Data for Marketing Strategy Case Study: Predicting Consumer Tastes with Big Data at Gap (Case Brief #4 Due)
	17-Apr-18	T	Artificial Intelligence and Machine Learning for Marketing: Predicting the future of marketing/ developing emerging technologies Augmented/ virtual reality in retail Recommended Reading: Wellers, D., Elliott, T., Noga, M., 2017. "8 Ways Machine Learning Is Improving Companies' Work Processes," Harvard Business Review.
	19-Apr-18	TH	Predicting the future/ developing emerging technologies Using artificial intelligence, machine learning, and the future of marketing Final Project Presentations and post discussion
	24-Apr-18	T	Course Summary and takeaways Final Reports due

Guest Speakers

To discuss competitive marketing strategies in their own practice, multiple guest speakers from various companies will be speaking in class. Please note that speakers' schedules are subject to last minute changes. If there is a date change, it will be announced in advance. Here are the bios of some of the speakers we may have throughout the course.



Ann Ferracane, General Manager, Lyft Ann has an undergraduate degree from Wharton and holds an MLA degree in Information Systems from Harvard. Previously, she was a Product Operations Manager at LinkedIn and a Strategist at Google.

statistical analyses and tools like R, Python and SQL. Adriana holds a PhD in political science from Wash U St. Louis with a focus on applied statistics and Bayesian methods.

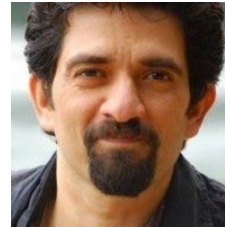


Candan Erenguc, Senior Vice President, Lululemon Athletica Candan has 15+ years of experience holding various positions in operations and management. Previously, she was at Deloitte, IBM and Ford. She is a brilliant marketing researcher.

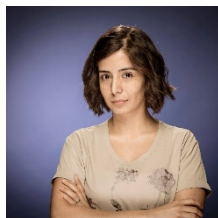
Eric Kessler, Former President and COO, HBO After graduating from Wharton, Eric spent seven years in marketing positions at Gillette and Lever Brothers. He joined HBO in 1986 as a marketing manager, ultimately serving as its president from 1989 to 1995. Kessler is the recipient of numerous high-profile industry honors including Promax's



Brand Builder of the Year, Brandweek's Marketer of the Year and was named a top 10 Innovator by Advertising Age.



Dr. Naveen Agnihotri, Chief Technology Officer at Lenddo.com Dr. Agnihotri previously served as Chief Technology Officer at Milabra Inc. They previously served as Member of Advisory Board at Dstillery, Inc.



Adriana Crespo Tenorio, Lead Researcher, Facebook Adriana is a statistician committed to translating sophisticated quantitative analyses into actionable business recommendations. She uses

Recommended Readings (Optional)

On Multi-sided Platforms and Matching Markets

1. Hagiu, Andrei, and Julian Wright. "Multi-sided platforms." *International Journal of Industrial Organization* 43 (2015): 162-174.
2. Hagiu, Andrei; Altman, Elizabeth J. (2017) "Finding the Platform in Your Product," *Harvard Business Review*

On Selecting a Monetization Strategy

1. Freemium Pricing at Dropbox, Teixeira, Thales S.; Watkins, Elizabeth Anne HBS Case (514053)
2. Launching Yelp Reservations (A), Luca, Michael; Mohan, Kevin; Rooney, Patrick, HBS Case (916003)

On Social Networks

1. LinkedIn (A & B), Piskorski, Mikolaj Jan, HBS Case (707406) and HBS Case (707406)

On Product Line Extension and Luxury Brands

1. Longchamp, Avery, Jill; Junker, Tonia; Beyersdorfer, Daniela, HBS Case (316086)

Competitive Marketing Strategy in Retail

1. Lululemon Athletica, Tybout, Alice M., Kellogg Case (KE1010)

On Viral Marketing, Advertising, Media and Branding

1. Mekanism: Engineering Viral Marketing, Teixeira, Thales S.; Caverly, Alison, HBS Case (512010)
2. Online Marketing at Big Skinny, Edelman, Benjamin; Kominers, Scott Duke, HBS Case (911033)

On Sharing Economy

1. Sundararajan Arun "From Zipcar to the sharing economy." *Harvard Business Review*. 2013 Jan 3;1.
2. Sundararajan, Arun "Peer-to-peer businesses and the sharing (collaborative) economy: Overview, economic effects and regulatory issues." Written testimony for the hearing titled *The Power of Connection: Peer to Peer Businesses* (2014).
3. HomeAway: Organizing the Vacation Rental Industry, McDonald, Rory; Zhu, Feng; Gao, Cheng, HBS Case (615036)
4. BlaBlaCar: The Road Ahead..., Lakhani, Karim R.; Sundararajan, Arun; Billaud, Emilie; Caltagirone, Caroline, HBS Case (617050)

On Online –offline competition

1. Lieber, Ethan, and Chad Syverson. "Online versus offline competition." *Oxford Handbook of the Digital Economy* (2012): 189-223.
2. Reinventing Best Buy, Wells, John R.; Ellsworth, Gabriel, HBS Case (716455)

Designing Online Experiments

3. Bakshy, Eytan, Dean Eckles, and Michael S. Bernstein. "Designing and deploying online field experiments." *Proceedings of the 23rd international conference on World wide web*. ACM, 2014.

Student-Faculty Lunches

A fun way for me to get to know you informally is to have lunch together. I would like to take groups of 2-4 students to lunch, perhaps multiple times this semester. There will be sign up dates available on Canvas and each student is expected to attend at least once.

Administrative and Classroom Policies

- Students who violate on academic dishonesty are subject to disciplinary penalties as determined by university policies. Since dishonesty harms the individual, fellow students and the integrity of the university, policies on academic dishonesty will be strictly enforced.
- If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact the Student Disability Services of Penn as early as possible in the term. SDS will verify your disability and determine reasonable accommodations for this course.
- Electronic devices are not welcome in class as they have been shown to have a negative impact on student learning. If you must use an electronic device for a specific reason, please see me.
- You must sit with your team at all times as there will be in-class group discussions and exercises.

Details of Class Assignments

Short in-class Presentations

You should use no more than 10 slides and only aim for a 5 minute presentation. Submit your presentation by 9am on the due date. Ideally, each member of the team should be involved in presentation. The presentations will be judged based on the creativity of the idea and the quality of your arguments for the need.

- **Topic for presentation 1:** Choose Uber, Airbnb or another firm operating in the sharing economy space. You are asked to come up with an idea for one of the following:
 1. A competitor entering the market of the firm you have chosen (for example, a competitor for Uber).
 2. A third party firm offering services to benefit from the success of the firm you have chosen (e.g, a provider for Uber)
 3. Choose the position of the incumbent whose market has been disrupted (e.g, taxi-drivers, hotels). Come up with an idea to revive the industry.
- **Topic for presentation 2:** For this presentation you are expected to consider the companies in the media space (cable TV providers, Netflix, HBO, Amazon Video, another firm operating in this space). Choose one of the positions:
 1. An entrant in competition with Netflix, Amazon Video and other content aggregators.
 2. A third party firm offering services to complement the growing trend of cord-cutting.
 3. Cable TV providers (incumbents) whose market has been disrupted. Come up with an idea to revive the industry.

Case Brief and Detailed Analysis

- **Case Briefs:** Please include the following
 1. Statement of decision to be made
 2. Recommended decision
 3. Justification for decision
- **Detailed Case Analyses:** Please include the following
 1. Statement of decision to be made
 2. Strategic options considered
 3. Recommended decision
 4. Justification for decision
 5. Four (4) exhibits maximum

Case briefs or analysis are not a research paper; it is an analysis of the facts. Do not use any outside information when producing written case analyses. (Outside sources of information include the library, mass media, the internet and corporate executives for the case in question.) Your decision should be based on the facts presented in the case.

How to Analyze a Case Study

A case study helps students learn by immersing them in a real-world business scenario where they can act as problem-solvers and decision-makers. The case presents facts about a particular organization. Students are asked to analyze the case by focusing on the most important facts and using this information to determine the opportunities and problems facing that organization. Students are then asked to identify alternative courses of action to deal with the problems they identify.

A case study analysis must not merely summarize the case. It should identify key issues and problems, outline and assess alternative courses of action, and draw appropriate conclusions. The case study analysis can be broken down into the following steps:

Identify the most important facts. Read the case several times to become familiar with the information it contains. Pay attention to the information in any accompanying exhibits, tables, or figures. Many case scenarios, as in real life, present a great deal of detailed information. Some of these facts are more relevant than others for problem identification. One can assume the facts and figures in the case are true, but statements, judgments, or decisions made by individuals should be questioned. If key facts and numbers are not available, you can make assumptions, but these assumptions should be reasonable given the situation.

Identify the key issues. Use the facts provided by the case to identify the key issue or issues facing the company. Many cases present multiple issues or problems. Identify the most important and separate them from more trivial issues. State the major problem or challenge facing the company. You should be able to describe the problem or challenge in one or two sentences. You should be able to explain how this problem affects the strategy or performance of the organization.

You will need to explain why the problem occurred. Does the problem or challenge facing the company come from a changing environment, new opportunities, a declining market share, or inefficient internal or external business processes?

Specify alternative courses of action. List the courses of action the company can take to solve its problem or meet the challenge it faces. Remember, there is a difference between what an organization "should do" and what that organization actually "can do". Some solutions are too expensive or operationally difficult to implement, and you should avoid solutions that are beyond the organization's resources. Identify the constraints that will limit the solutions available. Is each alternative executable given these constraints?

Evaluate each course of action. Evaluate each alternative using the facts and issues you identified earlier and given the conditions and information available. Identify the costs and benefits of each alternative. Ask yourself "what would be the likely outcome of this course of action? State the risks as well as the rewards associated with each course of action. Is your recommendation feasible from a technical, operational, and financial standpoint? Be sure to state any assumptions on which you have based your decision.

Make a decision. State your choice for the best course of action and provide a detailed explanation of why you made this selection. You may also want to provide an explanation of why other alternatives were not selected. Your final recommendation should flow logically from the rest of your case analysis and should clearly specify what assumptions were used to shape your conclusion. There is often no single "right" answer, and each option is likely to have risks as well as rewards.

Copyright © 1995 - 2010 Pearson Education. All rights reserved.

Final Project & Presentation

For your final project, I expect you and your team to consider the conceptual frameworks we develop in class to identify a market opportunity, an unmet customer need, or weakness of an existing company and propose a product / company / service to address the need. Your ideas may come from a combination of:

- ✓ Primary research. Observations or recounting personal experiences.
- ✓ Secondary research. Identify sources that might describe the customer experiences (provide cites)

Structure. The structure of your presentation and report should be as follows:

1. Write about the specific customer experience, or the market need identified from market research (1 page)
2. Identify gaps in the market where customer needs are unfulfilled or sub-optimally fulfilled (1 page)
3. Propose a promising new product or service opportunity, or a new go-to-market business model (1 page)
4. Develop a marketing plan (4-6 pages)
 - Revenue objective
 - Segment selection
 - Positioning
 - Go-to-market channels, pricing, promotion
 - Defense strategy assuming success

Submission Notes

1. Submit your presentation by **9am by April 19th**.
2. Submit report to Canvas by **9am by April 24th**.
3. Maximum length for the report is 10 pages, 2000 words max, 12pt, double spaced. You should use no more than 5 original exhibits.

Assessment of Presentation & Report

- ✓ Feasibility
- ✓ Creativity
- ✓ Rigor and logic
- ✓ Explicit use of course concepts
- ✓ Options explicitly considered and rejected
- ✓ Mastery and application of course concepts
- ✓ Quality and depth of research
- ✓ Would your classmates support your strategy?