Yale SCHOOL OF MANAGEMENT

COURSE INFORMATION

Course Number:	**MGT 857**
Course Title:	**Digital Strategy**
Term and Year:	**Fall-1 2020**
Class Meeting Time, Day:	**Section G1 (MMS GBS):**
	Tue / Thu 8:30 am – 9:50 am
	Section 01 (MBA / MAM):
	Tue / Thu 3:20 pm – 4:40 pm
	Note: Zoom times on Canvas may start a little earlier, but we will always start at the times noted above.

CONTACT INFORMATION

Professor(s)	TA(s)
Name: *Vineet Kumar*	Hortense Fong (G1)
Office Location: 5455	hortense.fong@yale.edu
Telephone Number: 203.436.9657	
E-mail Address: vineet.kumar@yale.edu	
Office Hours: Tuesday at Noon – 1 pm (zoom)	Seung Yoon Lee (01)
(see Canvas for Link)	seungyoon.lee@yale.edu
Review Sessions: *As Needed*	

COURSE MATERIALS

Textbook(s): None required
Recommended Books: Instructor will provide required book chapters via Canvas
Readings: *See Detailed Outline of Class Sessions*
Software: *Excel may be used for assignments and project if needed*

COURSE DESCRIPTION AND OBJECTIVES

Disclaimer: Syllabus is tentative. Please check latest version on Canvas by "Last Updated" date.

Course Description:
Digital Strategy is a course that builds upon topics in strategy, marketing and economics to understand issues in markets where digital technology plays an important role. Through a mix of case studies and lectures, the course brings together a variety of issues unique to markets significantly impacted by technologies. The course is divided into 4 modules. Each module will feature a lecture session laying out the conceptual foundations followed by 2-3 case studies.

We study the essential elements of *business models*, the principles of hypothesis-driven choices. We investigate reasons that we observe a variety of business models in the market for digital products and services, and identify outcomes to assess the performance of business models and

the challenges in implementing them. Second, we focus on understanding strategies and how business models can be used by *disruptors and complementors*, with a view to evaluating drivers of success in the marketplace. Third, we study *platforms* to understand the primary issues in developing multi-sided platforms as well as the perspective of participants on each side. Fourth, we examine *technology-driven transformation* both from a technology perspective (with AI and blockchain as key emerging technologies), as well as from a firm perspective (with The New York Times).

Course Objectives:
The course is designed to provide a strategic perspective on digital technologies, but given the broad scope of the topic, aiming for comprehensive coverage in a few sessions does not seem feasible. I've had to make tradeoffs in selecting areas to examine in depth. My goal is that a student who completes the course successfully should be able to:

- Understand growth and monetization tradeoffs in adopting business models
- Determine whether a disruptor or complementor strategy is more appropriate
- Evaluate design and governance decisions for platforms
- Develop a perspective regarding new emerging technologies and how they could reshape markets and firms
- Understand challenges and opportunities involved in undertaking a digital transformation

Note: This is NOT a digital marketing course, and will not focus on social media or digital marketing or advertising, Search Engine Optimization, Google / Facebook Analytics etc.

COURSE REQUIREMENTS

Course Component	Details	Points
Assignments (Individual and Group)	See details below	50
Project Paper (Group)	See details below	25
Attendance and Participation (Individual)	Every class	20
"I need to deal with a Pandemic" bonus	5 points for everyone	5

Please see the Yale SOM Grading Policy at http://portal.som.yale.edu/page/grading-policy

Class Participation: You will be encouraged, and likely cold-called to air your views in class. Evaluation will be on the quality and to a lesser degree, the number of comments you make. Please come prepared to each class by reading the assigned material and thinking carefully about the preparation questions.

DESCRIPTIONS OF ASSIGNMENTS/PROJECTS/PROBLEM SETS
You will be required to form a group of 5 people within your section for the group assignment and project. Groups need to be within section since we have a group presentation. If you need help forming a group, the TAs will help.

Project: After forming a group, submit a one-slide with project proposal idea on canvas. Then, you'll set up a meeting with Professor and TAs to go over the idea and obtain feedback and approval.

The final deliverable will be a written report with a 12-page maximum (double spaced, 12-point text). Assignment groups CAN overlap with project groups. There is no need to include a cover page, and if you include one it will not be counted against the limit.

While I have in mind specific types of projects detailed below, I'm open to custom projects if you send me a carefully thought out one-paragraph written proposal if you want to do something different. **However, note that the *same or similar project(s) cannot be submitted or presented in multiple courses.*** The types of projects I have in mind are detailed below:

A) Developing a new business proposal based on "emerging" digital technologies (We'll define this as "something not in widespread use but has a reasonable chance of becoming widely adopted in a few years"). Please check with the instructor if you have questions. The focus here will be on identifying how the technology can create value, and how the value can be taken to market.

B) Examine the transformative impact of "emerging" digital technologies on the business of an incumbent provider, taking the perspective of both the disruptor and complementor.

C) The product and company you evaluate will originate from TechCrunch's Startup Battle Field Leaderboard (https://techcrunch.com/startup-battlefield/leaderboard/). The overall focus will be will be to identify a new product or service that adds value at the intersection of technology and finance, health, education, automotive, etc. and present its business model analysis in depth, including alignment and considering counterfactual analysis for choices made by the firm.

D) Undertake an in-depth examination of how a firm has used digital technologies to transform its business to deal with the impact of the COVID-19 pandemic.

Projects will be evaluated on the following aspects: (a) creativity, (b) clarity of thought and writing, (c) quality of argument and (d) insights obtained. Depth is valued more than breadth or comprehensive coverage. The instructor will provide suggested topics and discuss project details in class.

NOTE: ALL Project ideas must be submitted for pre-approval to instructor by Sep 18, 2020.

Assignments: Group assignments can be done in groups of 5 students, whereas **Individual assignments** must be submitted by each person. Please indicate the contribution of each person for group assignments. Everyone in the group is expected to make a significant contribution to **each** assignment, so please budget time to discuss assignments. No extensions or exceptions to any due dates should be expected. We don't have any makeup assignments for missed classes or assignments. However, if you have an extenuating circumstance, please contact **AASL**, and they will determine an appropriate course of action.

For the presentation assignment, groups will be chosen to present in class, based on quality of analysis and insights, as well as differential contributions relative to other groups. It is important

to submit slides in PowerPoint format through Canvas, so we can load them up before class. Except the Group presentation, all assignments should be submitted as a PDF document.

Your individual assignment submissions must be **4 pages or fewer** (excluding any exhibits), in 11 or 12-point text font and double-spaced text. Please convert everything to one PDF file before submission and submit through Canvas. Please name the file in the following format:
Group04.pdf
For individual assignments,
LastName_FirstName.pdf

Details of Assignments will be posted on Canvas. Due dates are listed in "Outline of Class Sessions" below. If you have any questions at all, please don't hesitate to check with the professor or TAs.

YALE SOM POLICIES

Please see the Yale School of Management Bulletin at
http://www.yale.edu/printer/bulletin/htmlfiles/som/rights-and-responsibilities-of-students.html for Rights and Responsibilities of students and for information on requesting a course recording.

Laptop/Device Policy
This is an online course, so if you're attending in person please do bring your laptops / devices to the classroom. You might be required to discuss in small groups with other students. Small groups will be formed on zoom as needed for class discussions.

OUTLINE OF CLASS SESSIONS (All Dates 2020)

Session	Date	Topic	Assignment Due (Time Due: 8:30 am)
Module 1: Digital Strategy and Business Models			
1	Sep 01 (Tue)	Course Introduction Overview of Business Models	
2	Sep 03 (Thu)	Hubspot (CASE)	
3	Sep 08 (Tue)	Dropbox: It Just Works (CASE)	A1 (Individual)
Module 2: Disrupting and Complementing			
4	Sep 10 (Thu)	Entry in Existing Markets In-class Exercise on "Disrupt and Complement"	
5	Sep 15 (Tue)	Apple Pay (CASE)	
6	Sep 17 (Thu)	Zillow and Redfin (Dual CASE Presentations)	A2 (Group Presentation, submit **PPT Slides** on Canvas)
Module 3: Platform Thinking			
7	Sep 22 (Tue)	Platform Thinking	
8	Sep 24 (Thu)	American Well (CASE)	A3 (Individual)
9	Sep 29 (Tue)	Flipkart or Michelin (CASE)	
Module 4: Transformation through Technology			
10	Oct 01 (Thu)	Blockchain (In-class Exercise)	
11	Oct 06 (Tue)	Economics of AI (In-class Exercise)	
12	Oct 08 (Thu)	Firm Transformation with Technology The New York Times Paywall (CASE)	A4 (Individual)
13	Oct 13 (Tue)	Course Summary & Digital Future	

Project *Proposal* (Group) Due on **Sep 18**
Project *Report* (Group) Due on **Oct 19**

DETAILED OUTLINE OF CLASS SESSIONS

Please note that "**Preparation Questions**" are provided to help you prepare better for class discussion. These are NOT assignment questions and do not need to be turned in.
Assignment questions will be posted separately on Canvas.

Readings available only on Canvas are marked with a (*)

Session 1: Introduction to Digital Strategy

(a)* [Background Reading] The Five Competitive Forces That Shape Strategy, by M. Porter [VIDEO] https://www.youtube.com/watch?v=mYF2_FBCvXw
(b)* What is Strategy? By M. Porter, HBR
(My guess is you've probably read Porter in other courses or elsewhere, I'm listing it for reference)
(c) What is a Business Model?, A. Ovans, HBR
https://hbr.org/2015/01/what-is-a-business-model
(d) Rethinking Strategy in a Networked World, D. Tapscott
https://www.strategy-business.com/article/19911
(e) Why Software Is Eating the World, by M. Andreessen
https://a16z.com/2016/08/20/why-software-is-eating-the-world/
(f) [Optional] From Strategy to Business Models and onto Tactics, R. Casadesus-Masanell and J.E. Ricart. (A more academic take on the distinction between Strategy, Tactics and Business Model)
https://www.dropbox.com/s/3bep9b3vfmwqyjk/From%20Strategy%20to%20Business%20Models%20and%20to%20Tactics.pdf?dl=1

Preparation Questions:
(1) What is Strategy? What are the differences between Strategy and Tactics? Is there a clear boundary or is this a gray zone?
(2) What is the difference between a strategy and a business model? Which do you begin with when faced with a new market opportunity?
(3) Look up the cumulative market value of the large technology companies (Microsoft, Apple, Google, Facebook, Netflix). Think about factors that have contributed to their success. Can you articulate the strategy for each of these companies? What choices have they made?
(4) How has Digital has changed the nature of strategy? To what extent is the 5-forces view useful? Do we miss anything if we restrict ourselves to this perspective / theoretical lens?

Session 2: Understanding and Evaluating Business Models

Readings & Content:
(a)*CASE: HubSpot: Inbound Marketing and Web 2.0
(b)* Steenburgh, T., & Avery, J. (2011, August 12). Marketing analysis toolkit: Customer lifetime value analysis. Harvard Business School 9-511-029.

Preparation Questions:
(1) Detail Hubspot's Business Model.
(2) Does Hubspot have any "secret sauce" resources or is it succeeding because it faces no good competition?
(3) Is HubSpot finding and serving the right set of customers? Should it widen its focus to serve any customer that comes its way? Or should it narrow its target, by focusing exclusively on either Owner Ollies or Marketer Marys? Can you do a quantitative analysis to help Hubspot evaluate the value of these types of customers over the long run? (Reading (b) should help)
(4) Evaluate the consistency / alignment between different elements of the business model.
(5) HubSpot has begun to differentiate its products as it has learned more about its customers. Should it do more? Should its pricing strategy change too?

Session 3: Understanding and Evaluating Business Models – Dropbox and Freemium

Readings & Content:
(a)*CASE: Dropbox
(b)*Making "Freemium" Work, V. Kumar, HBR
(c) [Optional Academic Article] Creating Social Contagion Through Viral Product Design: A Randomized Trial of Peer Influence in Networks, S. Aral and D. Walker
https://www.dropbox.com/s/56qjnc7nsrxfc9n/Creating%20Social%20Contagion%20through%20Viral%20Product%20Design.pdf?dl=1

Preparation Questions:
  (1) Dropbox is a late mover in a crowded space. What opportunity did Houston see?
  (2) What are the key elements of Dropbox's current business model? How does it compare to Box? (Check external sources to identify Box's model)
  (3) When he applied to Y Combinator (see case Exhibit 2), what hypotheses did Houston hold about key elements of Dropbox's business model? As of June 2010, which of these hypotheses have been confirmed, and which have been discarded? Did you expect this?
  (4) Do a quantitative analysis to evaluate the economics of the business. Is the business currently profitable? Freemium firms track the conversion rate (ratio of free to premium users) to evaluate whether they can monetize users. What conversion rate would tip the firm from profit to loss during the current year of the case (call this the "tipping conversion rate")?
  (5) If you're advising a freemium startup and find that their conversion rate is significantly below the tipping conversion rate, what action(s) would you recommend?

Session 4: Introduction to Disruptors and Complementors (Lecture)

Readings & Content:
(a) [VIDEO] Disruptive Innovation Explained by C. Christensen
[8 min] https://www.youtube.com/watch?v=qDrMAzCHFUU
[60 min] https://www.youtube.com/watch?v=rpkoCZ4vBSI
(b)*Disruptive Technologies: Catching the Wave, by J. Bower and C. Christensen, Harvard Business Review
(c) [VIDEO] Navigating Digital Disruption, McKinsey
https://www.youtube.com/watch?v=CtWZnr3AuWY
(d) (I'd suggest reading this after class)
Clayton Christensen on What He Got Wrong About Disruptive Innovation, Forbes.
https://www.forbes.com/sites/forbestreptalks/2016/10/03/clayton-christensen-on-what-he-got-wrong-about-disruptive-innovation/

Preparation Questions:
(1) What is a disruptive innovation? How is it different from a sustaining innovation?
(2) Describe the disruption process.
(3) What are the barriers to disruption succeeding?
(4) What is surprising about disruption?
(5) Did disruption typically come from within the industry or from the outside?