

## 95-732 — Marketing Digital Media

Carnegie Mellon University  
Heinz College  
Masters of Information Systems Management

Spring 2017, Mini 4

### **Instructor:**

Michael D. Smith  
Hamburg Hall 2204  
412-268-5978  
mds@cmu.edu

Office Hours: By Appointment

To be clear, when I say “by appointment,” that *doesn’t* mean “please don’t bother me.” What it means is, “I’m around and if there’s anything I can do to help, I’ll make time for you.”

For quick questions, feel free to e-mail or call; I will do my best to respond quickly. If you would like to meet in person, feel free to drop by my office, or e-mail Kristen Olinski or myself to set up an appointment and I’ll make sure we find a time.

### **Faculty Assistant:**

Kristen Olinski  
Hamburg Hall 2250 (right outside of my office)  
412-268-7148  
kolinski@andrew.cmu.edu

### **Teaching Assistants:**

Section A: Yingjie Zhang (yingjie2@andrew.cmu.edu)  
Section B: Xiaoying Tu (xiaoying@cmu.edu)  
Section C: Uttara Ananthakrishnan (umadurai@andrew.cmu.edu)

### **Course Information:**

Section A:  
TuTh 1:30-2:50  
Room: HBH 1204

Section B:  
TuTh 10:30-11:50  
Room: HBH 1204

Section C:  
TuTh 3:00-4:20  
Room: HBH 1204

### **Course Schedule:**

Class Discussions: March 21 – May 4

Final Exam: Take Home, Available May 4, Due May 11

### **Course Description and Objectives:**

In this course we will analyze how cheap and powerful computers and communication networks can change both marketing practice and the structure of industries. We will analyze these issues in the context of the entertainment industries — publishing, music, and movies — but my goal is that the underlying principles will be generalizable to other industries.

This course focuses on several areas where the presence of computers and networks are likely to have the most profound affect on marketing and on strategy. These areas include pricing digital products, distributing digital content, leveraging new digital distribution channels, managing intellectual property, understanding the drivers of industry power, and analyzing how technology can change power and the structure of industries.

The objectives of this course are to

- Analyze how the presence of computer mediated markets will alter marketing and marketing practice in the entertainment industries,
- Explore current examples of excellence in applying marketing principles to entertainment goods and other digital products,
- Expose students to relevant marketing and strategic theory that will aid them in making strategic and tactical decisions about digital marketing,
- Develop a set of marketing and strategic principles that will help students evaluate the competitive positioning of firms.

To achieve these objectives we will use a combination of lectures, cases, class discussion, and market research.

Assignments will be in the form of readings, exercises, case preparation, and presentations.

### **Recording of Classroom Activities:**

My policy on recording classroom activities is that no student may record or tape any classroom activity without my express written consent. If a student needs to record or tape classroom activities, he/she should discuss this with me prior to recording any classes to ensure that we can find an appropriate accommodation.

### **Student Expectations:**

This course is different than a typical course in the sense that there are no accepted “answers” to how technology will affect marketing and strategy in the entertainment industries. Many of the

early predictions about these markets have been wrong, and many of the current predictions are not well grounded in theory.

Because of this, the course will require a commitment on the part of students to complete the readings and come to class prepared to participate in discussions. I will reinforce this in three ways:

1. I will “cold call” students regarding class readings. However, note my policy is *not* to cold call students who are sitting in the front row. If something prevented you from being prepared for class on a particular day, you are invited to sit in the front row.
2. **Laptops should be turned off during class** (lectures, cases, and student presentations).
3. Class participation is 30% of your grade. Because of this, attendance is extremely important. (If something keeps you from coming to class such as an illness or a family emergency, please contact me by e-mail as soon as possible.)

***We will form groups of 3-5 students to work on the case write-ups and assignments.*** Each student is expected to fully participate in their respective case/assignment group. Because of this, I do not allow a pass-fail grading option for the class: all registered students must take the class for grade. In addition, if you are aware of any circumstances that will impact your ability to contribute to the group (e.g., interview schedule, unusually heavy course load) you should share these with the instructor and your group members as soon as the group forms.

I plan to evaluate the relative participation of group members using “group self-evaluation” questions and revise individual student’s grades accordingly. *Failing to participate in your group work can result in a failing grade for the class.*

### **Cheating, Plagiarism, and Academic Integrity:**

Students at CMU are engaged in preparation for professional activity of the highest standards. Each profession constrains its members with both ethical responsibilities and disciplinary limits. To assure the validity of the learning experience Carnegie Mellon establishes clear standards for student work. You are required to be familiar with all university policies on this subject (see <http://www.cmu.edu/policies/documents/Cheating.html>). An extract of these policies is reproduced here:

In any presentation, creative, artistic, or research, it is the ethical responsibility of each student to identify the conceptual sources of the work submitted. Failure to do so is dishonest and is the basis for a charge of cheating or plagiarism, which is subject to disciplinary action.

Cheating includes but is not necessarily limited to:

- Plagiarism, explained below.

- Submission of work that is not the student's own for papers, assignments or exams.
- Submission or use of falsified data.
- Theft of or unauthorized access to an exam.
- Use of an alternate, stand-in or proxy during an examination.
- Use of unauthorized material including textbooks, notes or computer programs in the preparation of an assignment or during an examination.
- Supplying or communicating in any way unauthorized information to another student for the preparation of an assignment or during an examination.
- Collaboration in the preparation of an assignment. Unless specifically permitted or required by the instructor, collaboration will usually be viewed by the university as cheating. Each student, therefore, is responsible for understanding the policies of the department offering any course as they refer to the amount of help and collaboration permitted in preparation of assignments.
- Submission of the same work for credit in two courses without obtaining the permission of the instructors beforehand.

Plagiarism includes, but is not limited to, failure to indicate the source with quotation marks or footnotes where appropriate if any of the following are reproduced in the work submitted by a student:

- A phrase, written or musical.
- A graphic element.
- A proof.
- Specific language.
- An idea derived from the work, published or unpublished, of another person.

*Note that one application of this policy for our class is that if you re-use an assignment that you or someone else originally produced in another class, you must clearly identify which elements of the assignment came from the previous class and which elements are your work for this class.*

Penalties for academic dishonesty will be severe and may include a zero grade for the assignment or a failing grade for the course.

### **Course Prerequisites:**

While there are no formal prerequisites for the class, the course will draw on concepts from introductory marketing, strategy, economics, and technology. In each case, we will review the relevant theory before applying it to our setting. Students without background coursework in marketing may have to work harder to review the supporting material, but this does not preclude you from taking the course.

### **Course Web Site:**

<http://blackboard.andrew.cmu.edu>

We will use the blackboard site for course information and announcements. If you are registered in the class you should already have access. Your login id is your andrew id and password.

If you are on the wait list, you should still be able to access the site with your Andrew login (with the exception of the student's resources section). If this does not work, please e-mail a Teaching Assistant to obtain temporary access.

The web site has an up-to-date copy of the syllabus, schedule, and any class announcements. While I will try to make announcements both in class and on the web site, it is a good idea for you to check the web site regularly. Additionally, the web site has links to class readings and relevant sites mentioned in class and more extensive background material.

### **Reading Materials:**

A digital reading packet containing most of the cases and readings for this course is available from HBS Publishing at this link:

<http://cb.hbsp.harvard.edu/cbmp/access/62668693>

You should have received an email from Harvard with details and a link to a set of HBS case studies. If you did not receive this email, please send me an email (mds@cmu.edu).

In addition, we will be using as our textbook a recent book Rahul Telang and I have written "Streaming, Sharing, Stealing: Big Data and the Future of Entertainment." It is available from Amazon and most online retailers.

### **Grading and Course Requirements:**

The final grade for the course is distributed among various assignments and activities as follows:

1. Class Contribution: 30%
2. Assignments / Case Write-ups: 45%
3. Exam 25%

Class Contribution: The quality of our learning environment is contingent on effective and informed participation of each class member. The goal here is not to dazzle us with your individual brilliance or with the number of comments you make, but rather to help make the class smarter. Note that, in addition to providing new insights to the discussion, it is possible to make the class smarter by asking the right question or by assimilating comments from other students or sources. It is even possible to contribute to the class by giving a short presentation related to your professional experience as it relates to the class material (such presentations should be discussed with me in advance).

Accordingly, the class contribution grade is based on the quality (as opposed to the quantity) of your contribution to the classroom discussion. Contribution is graded based on (in increasing order of quality): demonstrating that you understood the readings, applying the concepts in the

readings to the marketing and industry applications discussed in class, integrating multiple readings (including outside readings) to develop novel solutions to industry applications or cases.

Case Write-ups and Assignments: Assignments should be posted to Blackboard by midnight the night before they are discussed in class. (This will allow me to read them before class.) Assignments turned in after that time will incur a 10% penalty. No assignments will be accepted after the beginning of class.

Instructions on writing up cases will be handed out in class and will be available on the course web site.

Take Home Exam: The take home exam will be distributed in the last week of class and will cover material discussed in the lectures and cases.

**A Note on Regrade Requests:** We will make every effort to return graded assignments within 1 week of their submission. If you believe that your grade is inaccurate, you may request a regrade under the following conditions:

1. Regrade requests must be submitted within 1 week of the date when the grade was returned.
2. Regrade requests must be in writing and must include a copy of the original assignment.
3. Regrade requests must outline the reasons you deserve a higher grade. These will typically be that the grader misread or misunderstood your answer, or didn't take something into account that they should have. For this, you should use the written comments on the assignment as your reference point. Referencing another student's grade is inappropriate and irrelevant. While we do our best to apply an even standard across students, we can't discuss anyone else's grade with you, so we need to deal with the merits of your particular case.
4. I will regrade the assignment myself and I reserve the right to regrade the entire assignment and your grade may go up or down.
5. Class participation grades are inherently subjective. I make notes on participation at the end of each class and will assign grades at the end of the semester based on these notes. They are not subject to regrade requests. However, I would be happy to discuss my notes on your participation with you at any point in the semester.

**Course Schedule:**

*This schedule is subject to change during the semester. All changes will be announced in class or posted to Blackboard.*

*Unless otherwise announced, all assignments are due to Blackboard by midnight the night before the assignment is discussed in class. There is a 10% penalty for late assignments. No assignments are accepted after the start of class.*

Readings marked with (HBS) are in the reading pack available from Harvard Business School Publishing. Readings marked (S3) come from the book “Streaming, Sharing, Stealing.” Readings marked with (BB) are available on Blackboard. Hyperlinks are provided below for readings available on the web.

**March 21 — Introduction:** We will begin with an overview of the course: grading, student expectations, and topics.

**March 23 — Industry Background & House of Cards:** In this class period, I want to discuss how technological change is impacting marketing practices and distribution strategies for entertainment goods. My goal is to get us all on the same page about the size and scope of this industry, how technology is changing industry practice, and use this to motivate our discussion in our next class period: the potential for technology to change the drivers of market power within the industry.

***Required Reading***

- Chapter 1: House of Cards (S3)

**March 28 — Back in Time: Structure and Competition in the Entertainment Industry:** As we discuss in Chapter 2, in the spring 2015 semester an executive from a “Big 6” studio came to our class to discuss how technology was changing his business. At one point in the discussion, Professor Telang asked him whether the executive was worried about the competitive threat posed by large platform firms like Amazon, Netflix, and Google. The executive dismissed the threat posed by these platform companies by saying, in part, that “the original 6 players in this industry have been around for the last 100 years, and there’s a reason for that.”

In this class, I’d like to explore the historical and structural basis for that statement and then evaluate whether that market structure is likely to continue in light of recent technological trends. **(Assignment Due: The Future of the Motion Picture Industry)**

***Required Reading***

- Chapter 2: Back in Time (S3)

**Assignment — The Future of the Motion Picture Industry**

In this assignment it is April 2015 and you have been asked by a senior executive at a Big 6 studio to write a memo evaluating the studio's competitive positioning in light of the (then) recent success of Netflix, Amazon, and Google/YouTube.

In the memo, the executive would like for you to first explain why power in the studio business has been concentrated in the hands of 6 powerful studios for the last 100 years and why this structure has been so stable in spite of massive technological shifts in almost every aspect of how content is created, distributed, and consumed. Then the executive would like for you to evaluate whether recent technological shifts are likely to produce reduce the studios power in the market, and if so, why these technological shifts are different than the shifts that came before them.

Your memo should follow the standard format: 2 pages, double spaced, 1 inch margins, 12 point font, with up to 3 attachment figures or tables. In addition, please restrict yourself to facts that could reasonably be known to an industry observer in the April 2015 timeframe.

**March 30 — For a Few Dollars More: Pricing and Marketing Information Goods:** At its core, the Internet is a tool for transmitting information. Because of this, information goods markets are one of the most important product markets on the Internet. In this session, we discuss some of the marketing challenges facing sellers of information goods, with a particular focus on entertainment products. Our discussion will cover pricing, bundling, and versioning strategies common in these markets.

**Required Articles**

- Chapter 3: For a Few Dollars More (S3)
- Hu, Yu, Michael D. Smith. 2012. The Impact of eBook Distribution on Print Sales: Analysis of a Natural Experiment. (BB)
- “Bundling and Competition on the Internet: Aggregation Strategies for Information Goods,” Yannis Bakos and Erik Brynjolfsson. (<http://tinyurl.com/4664t>) (Don't worry about the detailed math in this paper. I'm just interested in making sure you understand the high level marketing and strategic issues associated with bundling, which are covered in the abstract, introduction, and conclusion sections.)

**Supporting resources**

- “Versioning: The Smart Way to Sell Information,” Carl Shapiro and Hal Varian, Harvard Business Review, November-December 1998. (HBS)
- Kumar, Anuj, Michael D. Smith, Rahul Telang. 2014. “Information Discovery and the Long Tail of Motion Picture Content.” *Management Information Systems Quarterly*. **38**(4) 1057-1078. (BB)
- “Bundling Information Goods: Pricing, Profits and Efficiency, Yannis Bakos and Erik Brynjolfsson. (<http://www.stern.nyu.edu/~bakos/big.pdf>)

**April 4 — The Perfect Storm: Disruptive Change and The Crisis at Encyclopædia**

**Britannica:** In this class we will discuss how new technologies, particularly information technologies, can disrupt competitive power in industries. We will illustrate our discussion in the context of the decline of Encyclopædia Britannica’s business model, and then apply our discussion in the context of the rise of Hulu.com in 2007. (**Assignment Due: Hulu.com and Disruptive Change**)

**Required Articles**

- Chapter 4: The Perfect Storm (S3)
- “Disruptive Technologies: Catching the Wave,” Joseph L. Bower and Clayton Christensen, Harvard Business Review, January-February 1995. (HBS)

**Supporting Articles**

- “Hulu: An Evil Plot to Destroy the World?” Anita Elberse; Sunil Gupta, Harvard Business School Case 9-510-005, June 29, 2010.

**Assignment — Hulu.com and Disruptive Change**

In this assignment, it is March 2007 and three major studios—21st Century Fox, NBC Universal, and Walt Disney Studios/ABC Television—have just announced a partnership to create “the largest Internet video distribution network ever assembled with the most sought after content from television and film” in the Hulu.com platform.

Based on your understanding of the entertainment industry and the principles of disruptive change, the executives from these three studios have asked your team to evaluate some of the risks that Hulu will likely face in achieving its goals, and to provide recommendations about how it should position itself to best minimize those risks.

Your memo should follow the standard format: 2 pages, double spaced, 1 inch margins, 12 point font, with up to 3 attachment figures or tables. As before, please limit yourself to facts that could reasonably be known to someone in the case timeframe.

**April 6 — Guest Lecture: Rick Lane:** Rick Lane spent 15 years in government and public policy with 21<sup>st</sup> Century Fox before retiring last year as the Senior Vice President of Government Affairs. He has been a loyal supporter of our research here at Carnegie Mellon and I am honored that he has agreed to share his years of industry and policy experience with our class this semester regarding how technology has changed and is changing the policy landscape for entertainment firms.

**April 11 — Blockbusters and the Long Tail:** In this class, I’d like to analyze two very different theories about the future of marketing entertainment content. On one hand, Chris Anderson, the former editor of *Wired* magazine, argues that the future of the entertainment industries lies in selling niche products instead of blockbuster products. On the other hand, Anita Elberse, a

professor at the Harvard Business School, argues that digital technologies will make the blockbuster business model even more dominant.

### **Required Articles**

- Chapter 5: Blockbusters and the Long Tail (S3)
- Anderson, Chris. 2004. The Long Tail. Wired Magazine, October. (Available at <http://www.changethis.com/10.LongTail> or <http://www.wired.com/wired/archive/12.10/tail.html>)
- “Should You Invest in the Long Tail?” Anita Elberse, Harvard Business Review, July 1, 2008. (HBS)

### **Supporting Articles**

- Brynjolfsson, Erik, Yu Hu, Michael D. Smith. 2003. Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety. *Management Science*, **49**(11) 1580-1596. (BB or <http://ssrn.com/abstract=400940>).
- “From Niches to Riches: The Anatomy of the Long Tail,” by Erik Brynjolfsson, Jeffrey Hu, and Michael D. Smith, *Sloan Management Review*, Summer 2006. (BB)
- “Debating the Long Tail,” Chris Anderson, HBR Blog ([http://blogs.hbr.org/cs/2008/06/debating\\_the\\_long\\_tail.html](http://blogs.hbr.org/cs/2008/06/debating_the_long_tail.html))
- “The Long Tail Debate: A Response to Chris Anderson,” Anita Elberse, HBR Blog, ([http://blogs.hbr.org/cs/2008/07/the\\_long\\_tail\\_debate\\_a\\_respons.html](http://blogs.hbr.org/cs/2008/07/the_long_tail_debate_a_respons.html))
- Zentner, Alejandro, Michael D. Smith, Cuneyd Kaya. 2013. How Video Rental Patterns Change as Consumers Move Online. *Management Science*. **59**(11) 2622-2634. (BB or <http://ssrn.com/abstract=1989614>)
- Kumar, Anuj, Michael D. Smith, Rahul Telang. 2012. Information Discovery and the Long Tail of Motion Picture Content. (<http://ssrn.com/abstract=1871090>)

**April 13 — Raised on Robbery: Piracy and Digital Entertainment:** In this class, I’d like to discuss the latest research on how digital piracy impacts sales of entertainment goods, why piracy represents a significant threat to the entertainment industries, and what companies can do to “fight back” against this threat. (**Assignment Due: Responding to piracy**)

### **Required Articles**

- Chapter 6: Raised on Robbery (S3)
- “Copyright Enforcement in the Digital Age: Empirical Evidence and Policy Implications,” Brett Danaher, Michael D. Smith, Rahul Telang. *Communications of the ACM*, **60**(2), pp. 68-75. (<http://cacm.acm.org/magazines/2017/2/212432-copyright-enforcement-in-the-digital-age/pdf>)

### **Supporting resources**

- Danaher, Brett, Samita Dhanasobhon, Michael D. Smith, Rahul Telang. 2010. Converting Pirates without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy. *Marketing Science*. **29**(6) 1138-1151. (BB)
- Smith, Michael D. 2012. Does Piracy Harm Sales? (<http://www.digitopoly.org/2012/09/13/piracy-harm/>)

- Smith, Michael D. 2012. Anti-Piracy Regulation and Competing with Free. (<http://www.digitopoly.org/2012/08/20/anti-piracy-regulation-and-competing-with-free/>)
- Smith, Michael D., Rahul Telang. 2011. Delaying Content Leaves Money on the Table. Opinion and Editorial Page. *The Hill*. November 11. (<http://thehill.com/opinion/oped/196051-delaying-content-leaves-money-on-the-table>)
- Bilton, Nick. 2012. Internet Pirates Will Always Win. *New York Times*, August 4. (<http://www.nytimes.com/2012/08/05/sunday-review/internet-pirates-will-always-win.html>)

### ***Assignment — Responding to piracy:***

In this assignment, you have been asked by a major studio, music label, or publisher (of your choice) to provide recommendations about how their firm can go beyond their current anti-piracy measures to use marketing strategy and public policy measures to respond to the widespread availability of digital pirated copies of their content available on the Internet.

Your memo should follow the standard format: 2 pages, double spaced, 1 inch margins, 12 point font, with up to 3 attachment figures or tables.

**April 18 — Guest Lecture: Derek Thompson:** Derek Thompson is a Senior Editor at The Atlantic Magazine and author of the book “Hit Makers: The Science of Popularity in an Age of Distraction.” He has agreed to come speak to our class about his findings in the book, particularly as it pertains to the recent rise in creation.

***This lecture will be held from 12:00-1:20 in Hamburg A301 and is open to the CMU community.***

### ***Required Articles***

- Chapter 7: Power to the People. (S3)

### **April 20 — Class Cancelled: Spring Carnival**

**April 25 — Guest Lecture: Rhod Shaw:** Rhod Shaw has over 20 years of high-level government experience. He has served as a chief of staff to several Members of Congress and as a lobbyist to a variety of entertainment industry clients including the American Cable Association, the Recording Industry Association of America, and a variety of technology and communication firms including the Business Software Alliance and Microsoft. He is uniquely qualified to discuss how technology is changing the nature of policy and strategy in entertainment industry and I am honored that he has agreed to share his expertise with our class.

**April 27 — Revenge of the Nerds and Moneyball:** In this class, I’d like to discuss how the market power of downstream retailer platforms has changed in recent years, how customer data

has played a role in this power shift, and what this shift might mean for the major studios, labels, and publishers.

One fascinating aspect of distributor market power is the ability of some firms (notably Netflix, Amazon, and Google) to observe detailed information about customer behavior, and their ability to use their customer-driven platform to vertically integrate into the production of their own content. In this class, we will talk about how the ability to access detailed customer data has become a significant source of competitive advantage in the entertainment industries, and the cultural and structural difficulties that the entertainment companies face in adapting to this reality.

### ***Required Articles***

- Chapter 8: Revenge of the Nerds (S3)
- Chapter 9: Moneyball (S3)

### ***Supporting resources***

- “Netflix Analyzes a Lot of Data About Your Viewing Habits,” June 14, 2012. (<http://gigaom.com/2012/06/14/netflix-analyzes-a-lot-of-data-about-your-viewing-habits/>)

**May 2 — Pride and Prejudice & Harrah’s Entertainment:** Perhaps the greatest technological opportunity presented by the Internet to a marketer is the ability to develop an individual relationship with the consumer. However, this also creates one of the largest challenges to entertainment industry firms, because these firms established their organizational designs and incentive structures in an era long before customer data were available.

We will illustrate these opportunities and challenges in the context of Harrah’s Entertainment. The Harrah’s case highlights how the company transformed its bottom line by adopting Database Marketing programs and focusing on customer profitability.

### ***Required Articles***

- Chapter 10: Pride and Prejudice (S3)
- “Harrah’s Entertainment Inc.,” Harvard Business School Case 9-502-011. (HBS)

### ***Supporting resources***

- “Diamonds in the Datamine,” Gary Loveman, Harvard Business Review, May 2003. (Reprint R0305H) (HBS)

**May 4 — Recommendations to the Entertainment Industry:** In this class, I’d like to synthesize what we have learned into a set of recommendations for the entertainment industries about how to respond to the changes in their industry.

**Assignment — Recommendations:**

In this assignment, you have been asked by a major studio, music label, or publisher (of your choice) to provide recommendations about how their firm should respond to technological changes in their industry.

Your memo should follow the standard format: 2 pages, double spaced, 1 inch margins, 12 point font, with up to 3 attachment figures or tables.

This isn't much space of course, so I am expecting that you will focus on the 1-2 most important things you believe the firm should do to respond to change in their industry. Please make your recommendations from the current time period.

**May 11 — Take Home Final Exam:** The final exam will be handed out on May 4 and is due to Blackboard by 11:59PM on May 11.