MGMT 701 Strategy and Competitive Advantage – Spring 2012

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This class is designed to be an upper-level course in strategy. It provides some new concepts as well as a reinforcement of core strategy. We start out with the question of how value can be created and, more importantly, appropriated. This leads to the general issue of how competitive advantages are built. Class discussions will often center on notions of complementarities and fit. We will carefully lay out choices that decisions managers can make to sustain advantage. We will also look at the challenged posed by industry, environmental/external changes.

Students will be asked to form groups in which to work on some of the course deliverables. More information will be provided on the first day of class.

Your grade will be composed of a few components and you have options on which and how many components to complete:

- Attendance and participation (10%)
- "Pop" quizzes (20%)
- An in class exam on April 16th (30%)
- Group case analyses done in class on April 9th (20%)
- Group project due April 30th (20%) – See Appendix 1 to this Syllabus

If you are taking this course pass/fail you may not have more than two absences and you need only take the pop quizzes and the in class exam – pass/fail students should not participate in group work. Although your grade could not exceed a B+, you need not work on the group project – you will need to work on a team to generate a group case analysis – but you can skip the group project if you are content with a grade that is a B+ or below.

Please consider this syllabus a draft. I may alter the topics and readings in response to a survey I will distribute in the first class meeting.

All overheads will be posted after each class in the webCafé room set up for this class. I also generally post a discussion summary.

The TA for this class is TBA.

A short note on proper citations

To most of you this will be probably self-evident, but I want to make sure that we all understand: Copying paragraphs from sources (magazine, newspaper articles, analyst reports etc.) without properly citing them is a SERIOUS offense! Properly citing means: if you copy word-by-word, you have to mark this by enclosing the copied text with quotation marks " " and citing the source. Even if you don't copy word-by-word, but you take someone else's idea, you have to indicate in a citation the source of that idea. This citation has to follow directly the idea (attach a footnote or an endnote). At the end of the paper, you should then list all sources that you have cited in the text.

Let me re-iterate: Non-proper citing is a very serious academic offense that in other courses has led professors to fail students and bring these students to the attention of the academic review board of the University. I think all of us want to avoid any such incident – and it is really easy to avoid such problems. Simply be careful in your papers that you attribute ideas/frameworks etc. that you use to their respective sources.

INDUSTRY ATTRACTIVENESS/STRUCTURE AND ADVANTAGE

1/23 Session 1: Course Logistics, What is Strategy? Five-Force Analysis

1. Porter, Michael E. 2008. "The Five Competitive Forces that Shape Strategy." *Harvard Business Review*, January, pp. 79-93.
2. *Strategy Essentials* (posted on webcafe), Chapter 4

Case: Progressive Corporation, 9-797-109

- What is the value of car insurance to the consumer?
- What are the economics of supply?
- Why does the industry make underwriting losses most years?
- How has Progressive's strategy evolved over time?
- What challenges does Progressive face in 2007?
- What would you recommend to CEO Glenn Renwick?

1/30 Session 2: Reviews of Market Structure and Positioning, What is low cost?

1. Milgrom, Paul, and John Roberts. 1992. Economics, Organization, and Management Chapter 4, pp. 108–116.
2. Collis, David J. and Michael G. Rukstad. 2008. "Can You Say What Your Strategy Is?" *Harvard Business Review*, April, pp. 82-90.
3. *Strategy Essentials*, Chapter 5

Cases: Review Nucor at a Crossroads, 9-793-039 and prepare Crown Cork and Seal, 9-378-024

- Perform a Five Forces analysis on the tin-plated can industry
- The intensity of rivalry suggests that can makers are willing to cut prices. Why do customers backward integrate anyway?
- Explain how Connelly was able to increase the margins Crown earned on its output during his tenure. Address the following:
  - Product Line
  - Cost Reduction Activities
  - Plant Locations
  - Investment and R&D
  - Various Aspects of Customer Service
- Does Crown have an overall cost advantage or disadvantage relative to other can makers? Stated simply, Crown gave customer service. Given how competitive this industry was, it is likely that Crown's competitors also attempted to give good service. What is the meaning of customer service in this industry? Why is Crown able to succeed where other fail? How is Crown rewarded for giving customer service? (That is, where on the financials does the reward for customer service show up?)
- Is Crown's strategy imitable?

2/6: Session 3: Positioning and Tradeoffs

1. Porter, Michael E. 1996. “What is Strategy?” *Harvard Business Review* (November-December): 61–70.
2. *Strategy Essentials*, Chapter 6

Case: American Connector Company (A), 9-693-035

- How serious is the threat of DJC to American Connector Company?
- How big are the cost differences between DJC’s plant and American Connector’s Sunnyvale plant? Consider both DJC’s performance in Kawasaki and its potential in the United States. Create a table such as the following:

ITEM	**DJC**	**INDEX**	**DJC @US**	**ACC**
Raw Mat Product		0.6		
Raw Mat Packaging		0.6		
Labor (total)		1.1		
Electricity		0.8		
Depreciation		1.0		
Other		1.0		
Total				

- What do you learn from the above table?
- Diagnose the basis of ACC cost disadvantage. What factors is it due to (for example, product mix)
- How worrisome is the cost disadvantage?
- What should ACC do?

VALUE CREATION AND CAPTURE

2/13 Session 4: Competitor Analysis, Competitor Reactions and Value Creation, Value Appropriation, Components of Firm Value

1. Brandenburger, Adam M., and Barry J. Nalebuff. 1996. Co-opetition pp. 11–34.
2. Brandenburger, Adam, and Harborne Stuart. 1996. "Value-Based Business Strategy."
3. *Journal of Economics and Management Strategy* 5 (1): 5–24.
4. *Strategy Essentials*, Chapters 2 and 3
5. *Game Theory Notes* posted on web cafe

Other preparation:
- Read excerpt on Coke and Pepsi "Concentrate" war (posted to webcafe).
- Research what happened to Dreamworks movie studio – at the very least "wiki" it.

2/20 Session 5: Appropriating value created

Case: De Beers in the Millennium, 9-706-518

- The De Beers organization was successful at monopolizing the trade of gem quality rough stones for over a century. Please explain the mechanisms by which the firm managed to sustain its central position in the diamond trade for as long as it did.
- Why has De Beers given up monopolizing rough stones? That is, De Beers had a strategy that served it well for decades. What caused this strategy to lose consonance ("fit" with the conditions in its environment)?
- Evaluate De Beers' branding strategy.

2/27: Session 6: Appropriating value created

Case: eHarmony, 9-709-424

Are you enthusiastic about eHarmony's long run prospects? Why or why not?

SUSTAINABILITY OF COMPETITIVE ADVANTAGE

3/12 Session 7: Strategic Inflection Points, Increasing Returns

1. *Strategy Essentials*, Chapter 8
2. Arthur, Brian W. 1996. "Increasing Returns and the New World of Business." *Harvard Business Review* (July-August): 101–109
3. *Case*: Watch the documentary "Triumph of the Nerds" . You can purchase this 3 part documentary (programs 1, 2 and 3) and watch it streaming at http://www.ambrosedigital.com/index.php?page=shop.product_details&flypage=shop.flypage_freebie&product_id=16898&Itemid=59&vmcchk=1

You are also likely to find it on youtube if you search for "Triumph of the Nerds" – be sure to watch all three parts – each part is about 50 minutes long.

Case: Google, Inc. 9-910-036

- What were the key factors behind Google's early success?
- Do you expect the search business to become more concentrated (i.e., dominated by fewer firms)? Is search a winner-take-all business?
- In renewing its deal with AOL, could Google afford to pay AOL more than 100% of the revenue generated from AOL searches? How did Microsoft's maximum affordable bid for AOL's search traffic compare to Google's?

3/19 Session 8: The Decision to Commit to Large Irreversible Investments

1. Ghemawat, Pankaj. 1991. Commitment Chapter 5: pp. 81–103.
2. Ghemawat, Pankaj, and Patricio del Sol. 1998. "Commitment versus Flexibility?" *California Management Review* (Summer): 26–42.

Case: Du Pont's Titanium Dioxide Business (A), 9-390-112

3/26 Session 9: Complementarities and firm boundaries

1. Hubbard, "Affiliation, Integration, and Information: Ownership Incentives and Industry Structure," Journal of Industrial Economics 52(2): 201-227
2. *Strategy Essentials*, Chapter 7 and 10

Case: The Walt Disney Company and Pixar Inc.: To Acquire or Not to Acquire? 9-709-462

- Which is greater: the value of Pixar and Disney in an exclusive relationship or the sum of the value that each could independently generate (making deals with companies each chose to along the way)?
- If the value is greater in an exclusive relationship – why ownership rather than contracting? What ongoing challenges do you perceive as likely?

4/2: Session 10: Is the music industry obsolete?

1. Bower, Joseph L., and Clayton Christensen. 1994. "Disruptive Technologies: Catching the Wave." *Harvard Business Review*, January-February: 43–53.
2. Henderson, Rebecca M. and Kim B. Clark. 1990. "Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms." *Administrative Science Quarterly* 35: 9–30.

Case: BMG Entertainment (HBS 9-701-003)

Do you think the music business has fundamentally changed since the time of the case? Be as specific as you can about the difference between the industry at the time of the case and the present. My inclination is that this business has been grappling with essentially the same issues for decades – feel free to agree or disagree—but please do have an opinion.

4/9: Session 11: You will have class time to work on a group assignment that has 4 parts. This assignment is due in hard copy on April 16th . You can prepare before class:

1. One case will be on a large regional beer maker – consider what are the sources of advantage that a beer maker might enjoy. Consider why beer has gone from regional to national to global over time. Inform yourself about the economics of mass marketed vs. micro brews.
2. Leveraging your discussion of Disney in strategy and our discussion of Disney and Pixar – evaluate Disney's decision to enter the cruise line business. Why has the ownership structured of Disney Cruise Lines (DCL) been altered over time? What constrains earnings in this business generally? What could you learn about Disney generally by looking at how its cruise line business has performed over the years?
3. Consider the value chain for HVAC industry – heating and cooling equipment. At the top sits "innovators" – firms such as Emerson in the US, but now mainly Asian competitors who pioneer ever more efficient equipment. Below innovators sits manufacturers – these firms assemble equipment and sell it to the next stage, distributors. Contactors make up the stage after distributors and they sell to end customers. Focusing only on the US, how does a typical US customer decide whether to get a new system or repair their existing system? When systems are replaced, what drives the customers decision? Is there value in HVAC becoming more consolidated? Is there value in contracting becoming more consolidated?
4. You will be given a "value added" computation. There is an explanation of dong a value added computation in appendix two of this syllabus.

4/16 Session 12: Recap and In class exam

4/23 Session 13: Group Presentations

APPENDIX 1: GROUP PROJECT DESCRIPTION

Logistics:
Final project are April 30th, 2012 – upload to webcafe. Final projects will not be accepted by fax or email. Late papers will be downgraded by one grade per day.

Assignment: Perform the following 12 steps culminating in a 10-11 page paper. Certainly, this "to do" list needs to be adapted by circumstance—you may "tweak" the questions to fit the firm/industry you are analyzing. The 12 steps are:

1. What does the industry produce? What need or needs does this output satisfy?

2. What is the size and state of the industry? What are the industry's revenues, operating margins/profits, etc.? Choose a few key industry players and determine their ROIC and a few other key financial metrics that make sense for the industry. Is the industry large and growing or flat or shrinking? Overall, how well do firms in this industry seem to be doing based on your observation of financials?

3. Draw the entire "vertical" to which the industry belongs. Think of the industry as being part of an "assembly line" that leads to a final output…in the case of complex "ecosystems", draw a map of who sells what to whom – draw not only the "vertical" – also include complementors and substitutes as well.

4. What is the industry's value added? Both in words and relative to the "vertical" in which it operates – is the industry more or less vital (from the perspective of customers) than most players along the vertical? When we say "vital" we are referring to whether the industry's makes a large contribution to the end customer's WTP or to the overall efficiency of the value chain. Consider ideas like where is the uniqueness and Adam Brandenburger's "where is the scarcity"?

5. Perform an industry analysis: Which constituents are relatively well positioned to capture the majority of the value created by the industry?

6. Define the industry structure – industry structure refers to how "concentrated" is an industry and to the amount of product (or possibly process) differentiation we observe. Concentration means how many firms sell, say, 50% of industry sales. For example, in pharma, about 10 firms sell 50% of industry sales. This is fairly concentrated – but not as concentrated as a situation where 4 firms sell 50% of industry sales. Concentration ratios could be expressed in other forms – what number of firms sell, say, 30% or 80% of industry sales. The goal is to understand how spread out are the sales of the whole industry – are the sales concentrated in a few firms or diffused across many firms. The more diffused are sales, the more "competitive" is the industry. Many factors impact industry structure.

    a. Structure is closely related to MES to set up a firm in this industry. How many firms "fit" in the market (revenues/MES)? The higher is MES, the higher is the level of revenues (demand) necessary to support X-number of firms. Feel free to be very "back of the envelope" here – this data is not readily available in most cases.

    b. Does size generate significant reductions in unit costs (economies of scale and/or scope)?

c. Does size generate notable increases in WTP? (Demand side economies)

d. Can differentiation generate WTP? If “bigger is better” but there is scope for differentiation, the industry is a differentiated oligopoly as opposed to a homogeneous oligopoly.

e. If the firm is “bigger because it’s better” – it could be a monopolistic competitive firm but with high share…it could be so successful it’s part of an oligopoly.

f. Market structure results from endogenous and organic factors. That is, market structure results from choices made by firms inside of the industry – firms “choose” to enter, they “choose” capacity levels, they “choose” to differentiate. However, market structure is also a result of organic factors such as the nature of customer demand, the nature of the differentiation that is both feasible and demanded. Hence, while market structures are somewhat predictable based on observable factors, there is also a bit of alchemy in how a market looks when all is said and done.

7. Insights (beyond 5 forces) into factors that impact a “typical” firm’s revenues or costs – These insights can be generated using other course frameworks (such as the Resource Based View).

   a. Is there an “ownability” issue – for example, in the music label business the output is an artist …this is an example of low “ownability”.

   b. Are there idiosyncratic factors in the industry’s ecosystem that inhibit firms from turning product or service attributes into price premiums?

      i. For example, if the output is sold through intermediaries, it is often difficult to monetize some attributes if the intermediary lumps the firm’s output together with the output of other firms.

      ii. This is not a case where the intermediary is powerful, per se; it’s an issue with the “set up.” We might be looking at information frictions, or transactions costs issues or various misalignments.

   c. Are there factors that prevent the firm from using a cost advantage to grow share?

      i. For example, there may be regulatory constraints on selling outside of a given radius.

      ii. Plain and simple – what factors not related to the power of particular constituents (as per the 5 forces) that constrain the firm from thoroughly monetizing its advantage?

   d. Do you perceive opportunities for added value that have been ignored by industry players?

   e. Are there any notable and/or typical firm boundary decisions made (for example, are many firms in the industry vertically integrated, diversified or consolidated?)

8. Define one or more potentially successful positions (actual or theoretical)– how might firms generate a WTP – C gap and capture enough to earn attractive returns?

   a. Image an “ideal” position given the insights generated from the analysis above. Is there a firm close to this ideal position? If not, why?

b. How is the firm under consideration positioned relative to an "ideal" position?

9. Are any significant technological disruptions, taste/need shifts or regulations on the horizon that are likely to impact the distribution of value added and returns along the vertical? How might the "ecosystem" map be altered by these changes? You will likely have to conjecture here or cite some industry pundits…

10. What are the likely reactions of each constituent in the ecosystem – entrants, substitutes, competitors, customers, suppliers, and complementors? Here is where we often consider changes to the boundaries of the firm (horizontal growth, vertical integration).

11. How might the industry under consideration, in particular, react to defend its value added and returns?

12. Are there any notable asymmetries among the firm being analyzed and other firms in the industry? Is this firm better or more poorly positioned relative to the norm given the disruption occurs? What about governance and employee engagement at the firm level? Are employees highly engaged because expectancy and equity theory are at work here? How about the firm's organizational structure relative to its needs?

Goals:
The main goal of the exercise is to make you think carefully about applying the concepts of competitive strategy in a firm scenario that interests you and where you have to decide for yourself what the important issues are. If you have any doubts about your topic, please talk to me.

Who?:
Students may work in groups of up to 4 people. If you choose to work alone, your work will be held to the same standard as people who choose to work in groups. Thus, it is to your advantage to work in a group.

How you will be graded:
You should try execute the above in a creative, enlightening, and somewhat nuanced way. Go much deeper beyond the platitudes and shallow analysis that is often found in the press and equity analyst reports. A company in an industry with a small number of firms is usually a good place to start – there is much more interesting stuff going on in these industries. A list of suggested topics is attached. You are free to choose from this list, although that is by no means required.

Some research on the details is essential, but the key to a successful paper is to analyze, not just describe. You will be graded on how you answer the relevant questions such as, "why is the firm doing what it is doing?" or "why is competition in the industry evolving the way it is?" rather than on how much effort went into the research. The biggest mistake which students make is devoting the vast majority of their page allocation to a description of the industry or company and providing very little in the way of analysis.

Restrictions:
The paper should be no more than 3800 words (that would be about 10-11 pages)—don't exceed this

length. You may include as many relevant exhibits as you wish (not counted in the page total). Be sure to include references.

Do not choose an industry or strategic situation that is featured in a case that has been used in a course at Wharton.

You may not submit a paper that has been written for a different course.

Possible Topics (you may, but need not, choose from this list. I am listing topic ideas that you may find interesting. All paper should analyze an particular firm and the context in which it competes. Always check on HBS publishing to see if there is a case on the topic you select, whether from this list or not. A case is sometimes a convenient way to get started on your project.

- Greeting Card Manufacturers: assess the current state of competition/coopetition between American Greetings and Hallmark, perhaps focusing on the interplay between online and offline activities.
- Examine future strategic options for Regal Cinemas, or another major player in the movie theater industry.
- Examine Toys R Us poor financial performance in recent years, and evaluate strategies for the future.
- Evaluate NetFlix's market strategies, and consider possible strategies for the future.
- Recording industry: evaluate the strategies and performance of a "minor" record label (one possibility is Righteous Babe Records). How are changes in the industry environment likely to improve/hurt the viability of smaller players?
- Radio: Examine a significant radio station owner (one example is Cumulus). How big are economies of scale in this industry? Can they compete successfully with ClearChannel?
- Apple iPod: How can Apple continue to make money on this product in the future, as there are many competing portable music players?
- Apple/Laptop industry or MP3 player industry
- Should Apple be in the retail electronics industry?
- Droid or Windows CE in the Smartphone operating system industry
- Zappo/online shoe and apparel business
- Zynga/online gaming industry
- Exxon invested heavily to build CSR into its operations. BP invested significantly less, but concentrated its CSR on external communication – arguably "window dressing". Which firm's investment was more NPV positive?
- Roll-up strategies: evaluate a roll-up strategy in a previously fragmented industry.
- Develop a "primer" on the economics of the broadway show industry
- Can learning go from a social enterprise to a for profit entity? Aravind Eye Hospital in India has impressive unit costs per operation. What could a US/European hospital internalize from Aravind, and what elements of Aravind's model are not portable to the US or Europe?

APPENDIX 2: VALUE ADDED

What You Should Take Away

1. What Value Added analysis is, and why it is relevant
2. How to set-up and solve a VA problem

What Value Added Analysis Is

- Value added analysis (VA) quantifies the incremental *economic* profit (loss) generated by each stage of production for a given good or service
    - VA can be thought of as the incremental economic profit (loss) generated by production stage X, over and above production stage (X-1)
    - The aggregate sum of the value addeds for each stage of production yields the *operating profit* of the firm.

Why Value Added Analysis is Relevant

1. *Industry analysis*: identify and quantify where economic value is being created along a vertical chain of production
    - Application: market entry or acquisition
2. *Portfolio analysis*: within a multi-stage/product company, quantify economic profit generated by each of the firm's activities
    - Application: outsourcing and capacity expansion
3. *Cost analysis*: cost disaggregation and quantification
    - Application: operational effectiveness initiatives

How to Execute Value Added Analysis

1. Diagram the production process; define the process as a series of discrete *stages*
2. Determine how many *units of output* go through each stage
3. Determine unit *prices* for all products manufactured
4. Allocate costs to each stage of production and derive *unit costs*
5. Calculate *VA per unit* for each stage = Price – Unit Cost
    - Unit cost of stage X includes unit price of output of stage X-1
6. Calculate *total VA* for each production stage = (VA/unit for stage X) * (total volume of units produced in stage X)
7. Check that the *operating profit* of the firm = sum of VAs

Sample Value Added Problem:

Your firm produces widgets. To make a widget, you attach one gizmo to a motherboard. To make a gizmo, you attach a semiconductor chip to a polyhedron. Your firm produces widgets and makes all of the necessary gizmos and polyhedrons that are needed to assemble these widgets. You also make some additional gizmos and polyhedrons that you sell to other widget producers. The gizmos and polyhedron markets are perfectly competitive --- i.e., each consists of many small sellers and buyers, no one of which is very powerful. Competition in each market is intense and is thought to result in prices that generate zero economic profits for the typical seller in each market. You purchase motherboards and chips from outside vendors.

Here is some data about your firm's widget business.

Revenues

15,000 widgets @ \$300 per widget =	\$4,500,000
10,000 gizmos @ \$30 per gizmo =	\$300,000
25,000 polyhedrons @ \$20 per polyhedron =	\$500,000
	\$5,300,000

Costs

Labor	
Widget assembly	\$450,000
Gizmo fabrication	\$ 50,000
Polyhedron fabrication	\$200,000
Components	
Motherboards	\$600,000
Chips	\$100,000
Materials	
Zinc (Gizmo production)	\$ 25,000
Fiberglass (Polyhedron production)	\$ 50,000
Factory Overhead	
Widget assembly department	\$ 600,000

Gizmo fabrication department	$ 50,000	
Polyhedron fabrication department	$100,000	
TOTAL COST OF GOODS SOLD	$2,225,000	
OPERATING PROFIT		$3,075,000

TASK ONE:

Think of the firm's value chain as consisting of three stages: polyhedron fabrication, gizmo production, and widget assembly. What is the value added of each stage of production *per widget produced*?

TASK TWO:
What is difference between the operating profit of a Gizmo vs. the value added?

ANSWER BELOW:

Polyhedron		
Total Produced	25,000	for sale
	10,000	for gizmos
	15,000	for widgets
	50,000	
Revenue	$20.00	
Fabrication	($4.00)	
Fiberglass	($1.00)	
Dpt	($2.00)	
Value Added	**$13.00**	

Gizmo		
Total Produced	10,000	for sale
	15,000	for widgets
	25,000	
Revenue	$30.00	
Polyhedron	($20.00)	
Fabrication	($2.00)	
Zinc	($1.00)	
Dpt	($2.00)	
Chip	($4.00)	
Value Added	**$1.00**	

Widgets	15,000
Revenue	$300.00
Gizmo	($30.00)
W assembly	($30.00)
Motherboard	($40.00)
Overhead	($40.00)
Value Added	**$160.00**

The operating profit subtracts out the actual cost of the input vs. the "opportunity cost" of the input.