# UNIVERSITY OF PENNSYLVANIA WHARTON SCHOOL

# MANAGEMENT 2110 COMPETITIVE STRATEGY AND INDUSTRIAL STRUCTURE

(Version November 1, 2023)

Spring, 2024, T/R 10:15am-11:45am

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#### **ADMINISTRATIVE ISSUES**

#### Course Overview

This is a course in competitive strategy. We will apply some basic tools from economics and game theory to examine the strategic decisions that managers make. We will examine those decisions concerning pricing, advertising, new product introductions and organizational design. We will also apply these concepts to everyday life decisions like career management, relationships and happiness. The course will be based on traditional case studies. While we will use some basic economic theory, this should not be considered a traditional course in either economics or game theory.

# **Course Materials**

- Course Pack
- Class Handouts

#### Evaluation

Weights of the components are as follows:

Written Industry Analysis (Due May 7<sup>th</sup>)
Class participation
20%

# I. Course Introduction

# January 18th: Session 1 – Course Introduction

#### Readings:

Dark Knight video viewed in class Beautiful Mind video viewed in class

#### Questions:

1. How does the Joker get all the money even though he is working with several other robbers?

# **II. Competitive Pricing**

# January 23<sup>rd</sup>: Session 2 – Pricing to Deter Entry

#### Readings:

Dogfight over Europe: Ryan Air (A) (HBS# 9-700-115), Ryan air (B) (HBS # 9-700-116)

#### Questions:

- 1. What are Ryan Air's options?
- 2. Options for British Air?

# January 25th: Session 3 – Extensive Form Games and Backward Induction

### Readings:

Ryan Air

#### Questions:

- 1. What is the Nash equilibrium solution for Ryan Air?
- 2. Does that strategy make sense?

# January 30th: Session 4 – Anticipating Rival Response and Credible Commitment

#### Readings:

"The Mother of All (Pricing) Battles": The 1992 Airline Price War (KEL006) The Dooms Days Device video in class

#### Questions:

- 1. Under what conditions will American Airlines pricing scheme restore higher industry price levels?
- 2. Why do you think scheme failed?

# February 1st: Session 5 – Mixed Strategies and Pricing

#### Readings:

Simultaneous Move Games with Mixed Strategies

#### **Questions:**

- 1. Was American Airlines Value Pricing a mixed strategy?
- 2. Why did it fail?
- 3. How could American Airlines have made it more successful?

# February 6th: Session 6 – Competitive Pricing: Repeated Games

#### Readings:

The Coffee Wars
Can anyone win the Coffee War?
How to Escape a Price War
Repeated Games

#### Questions:

- 1. Evaluate General Food's Strategy to deter P&G. In light of the models discuss the results of this strategy.
- 2. There are only two or three major competitors in this industry. Generally, one would think that few players imply greater profitability. Why isn't this true for the coffee industry?

# February 8th: Session 7 – Strategies to Lessen Price Competition

#### Readings:

Practices that Credibly Facilitate Oligopoly Coordination Reconsider "Mother of All Pricing Battles."

#### Questions:

1. Reconsider American Airlines value pricing scheme. Would a facilitating practice have improved the outcome?

# III. Capabilities and Market Structure

#### February 13th: Session 8 – Sunk Costs and Market Structure

#### Readings:

Sunk Costs and Market Structure

#### Questions:

- 1. What is the effect of large sunk and fixed costs on the average cost curve?
- 2. How does the shape of the average cost curve affect market structure?
- 3. What is the relationship between sunk cost and capabilities?

# February 15th: Session 9 – Brewing Industry / Leader

#### Readings:

Sunk Costs and Market Structure

Anheuser-Busch and the U.S. Brewing Industry (HBS # 9-799-026)

#### Questions:

- 1. Why has Anheuser-Busch dominated the brewing industry so long?
- 2. What capabilities does Anheuser-Busch have?
- 3. What is the importance of advertising in the brewing industry?

# February 20th: Session 10 – Brewing Industry / Follower

### Readings:

Case: Coors (9-388-014)

#### Questions:

- 1. Why did the brewing industry consolidate?
- 2. What factors accounted for Coors's advantage in the mid-70's?
- 3. Why has Coors's performance since then deteriorated?

# February 22<sup>nd</sup>: Session 11 – Proliferation, Spatial Pre-emption and Product Differentiation

#### Readings:

Competition and Product variety (9-190-100)

Product Proliferation and Preemption (9-190-117)

Questions to be Discussed in Class (Do not perform any calculations)

- 1. Which product types will managers at firms A and B decide to manufacture? State the logic underlying your beliefs?
- 2. Assume that firm A enters the market first. If A's managers wish to deter entry by B, which products should they produce and why?
- 3. Assume A has a monopoly position. What products should A's managers produce and why? Do A's managers want to serve the entire market?

# February 27th: Session 12 – Credible Spatial Preemption

#### Readings:

Case: The Ready-to-Eat Cereal Industry (9-795-191,9-796-122)

#### Questions:

- 1. Why has RTE cereals been such a profitable business?
- 2. Why has there been no new entry?
- 3. How has Kellogg's been able to dominate the industry for so long?
- 4. Why have private labels been able to enter this industry successfully? How do the cost structures of private label and branded cereal manufacturers differ?

# February 29th: Session 13 – Diversification through New Product Entry

#### Readings:

Fox News: We Report, We Decide

#### Questions:

- 1. In the game CNN moves first. Where does it locate along the line?
- 2. MSNBC is the likely second mover. How does this affect FNC location decision?
- 3. What do you believe the long run structure will be?

# March 12<sup>th</sup>: Session 14 – Credible Spatial Preemption in the Very Large Aircraft Market A380 vs 747X

#### Readings:

Airbus A380: Developing the World's Largest Commercial Jet (A) (HBS 9-201-028)

#### Questions:

- 1. Which firm Boeing or Airbus would you predict based on Game Theory to be the first to introduce a product in the VLA segment
- 2. How do you explain the apparent outcome?

# March 14th: Session 15 – Pre-emption in Movie Release Dates

### Readings:

Case: Paramount Pictures: The Transformers Dilemma (HBS # W12144-PDF-ENG)

#### Questions:

- 1. When should Warner Brothers release Harry Potter?
- 2. How does Warner Brothers decision affect Paramount's?

# March 19th: Session 16 – Escalating Sunk Cost and Market Structure

#### Readings:

Case: Gillette Launch of Sensor (9-792-028)

#### Questions:

- 1. How does Gillette's launch of Sensor affect the market structure of the wet shaving industry?
- 2. How does this affect the ability of other rivals to enter?
- 3. How should Gillette's rivals respond to the escalation?
- 4. This strategy made Gillette and Schick very profitable for a while. What is the limitation of this strategy? Why did it ultimately fail?

# March 21<sup>st</sup>: Session 17 – Streaming Wars

### Readings:

"TBD"

#### **Questions:**

- 1. Will the market for streaming be concentrated with a few players or will it be fragmented with many competing players?
- 2. What are the organizational capabilities related to the streaming industry? What do managers need to understand well to effectively compete?

# March 26<sup>th</sup>: Session 18 – Disintermediation in the Telecommunications and Media Industry

### Readings TBD

#### **Questions:**

- 1. Why is this industry consolidating?
- 2. Who do you think will be the winners and why?
- 3. Can a firm survive in this market in only one sector or must they compete in all sectors? How does this affect market structure?

# March 28th: Session 19 – Judo Entry / Attacker's Advantage

#### Readings:

ValuJet Airlines (KEL043)

# Questions:

- 1. How is ValueJet able to enter the market against the more advantaged Delta Airlines?
- 2. Why can't Delta respond by lowering its prices to keep ValueJet out of the market?

# **April 2<sup>nd</sup>: Session 20 – Judo Entry / Incumbent Defense**

#### Readings:

ValuJet Airlines (KEL043)

#### Questions:

- 1. How does Delta respond to ValueJet?
- 2. Will Song work?

# IV. Organizational Capabilities and Market Structure

# April 4th: Session 21 - The Cravath System and Market Structure

#### Readings:

"How does McKinsey do It?"

#### Questions:

- 1. How does the Cravath system give firms an advantage?
- 2. What happens to market share when demand rises in the market?
- 3. What happens to firms utilizing the Cravath system when demand falls in the market?

### **April 9th**: Session 22 – Vertical Competition

# Readings:

Vertical Restrictions

#### Questions:

1. How do vertical contracts help managers compete?

# **April 11th**: Session 23 – Organizational Culture and Market Structure

#### Readings:

Johnson & Johnson (A) (384-053) Marriott Corporation

#### Questions:

- 1. What is the purpose of the Credo and how does it give J&J an advantage?
- 2. Marriott also has a very strong corporate culture centered on its founder, Bill Marriott. How does this give Marriott an advantage in the hoteling industry?

# V. Games of Life

### April 16th: Session 24 – How to Get Promoted / The Art of Schmoozing

#### Readings:

Baron and Kreps, "Internal Labor Markets"
Kreps and Baron, "Promotion and Career Concerns"
View Video Clip "Sex and the City: Season 1, Episode 3, "Bay of Married Pigs" "Bain & Co., Inc.: Making Partner (HBS # 899066)

#### Questions:

- 1. What is the best strategy of the associate in the game?
- 2. How is the partner decision made?

# April 18th: Session 25 – Signaling Price and Quality

#### Readings

Signaling Costs (9-793-125)

### Questions

- 1. Might player A want to try to signal its cost position to player B?
- 2. Is there a way for it to do so? In answering, pay particular attention to the question of the credibility of any signal that A might send B.

#### Other Questions:

- 1. Is marriage a signal? If so, what does it signal?
- 2. Diversity and profitability
  - a. Consider pooling vs separating equillibria

# **April 23<sup>rd</sup>: Session 26 – Leadership**

#### Readings:

An Economic Perspective on Leadership

#### Questions

- 1. What does does game theory say about the role of the leader in an organization?
- 2. Is it better to be right or consistent as a leader?
- 3. As a leader, do you commit on values or metrics?

# April 25th: Session 27 – Relationships, Happiness and Love

#### Readings:

TBD

#### Questions:

- 1. How can you use the intertemporal discount rate to manage relationships, both personal and professional?
- 2. What does game theory say about happiness? Consider a simultaneous move game.
- 3. What does game theory say about love? Consider a repeated game.

# **April 30<sup>th</sup>: Session 28 – Choking and Panicking / Decision Making under Uncertainty**

#### Readings:

Fog of War Video ( to be viewed in class)

#### Questions:

- 1. What are the challenges when making decisions under uncertainty?
- 2. How do managers prevent choking and panic?

### **Instructions on Written Analysis:**

The written analysis should be based on a strategic situation of your choice. Your chosen situation must be one where a manager or other individual must take into account the strategy of rivals before making his/her strategic choice. You should then apply some of the economic models discussed in class to analyze the strategic choices made.

Your paper should include the following:

Depict the strategic setting as described in your paper as a game in either extensive or simultaneous moves as the situation warrants. Use the game structure in discussing the strategies of the players. In your game be sure to discuss each of the following:

- 1. Who are the players?
- 2. What is the sequence of strategic moves / decisions?
- 3. What information do the players have at any given time?

You are not required to calculate or find any actual numbered payoffs.

General background: 2-3 pages: You should provide some general description of the key decision makers (e.g., firms). You should also describe the strategic choices (e.g., price, market entry, new products, advertising) available to the decision makers/managers and what options they ultimately chose.

8-10 pages of Analysis of strategic decisions made in light of the economic models from class

<u>Suggested Paper Length including all exhibits</u>: 12-15 pages, doubled spaced, 12 point font, One inch margin, header( team member names)

Team size: 3-5 students

Date Due: by 5pm, May 7<sup>th</sup>

# **Example of Prior Paper Topics:**

#### Big Tech

- Artificial Intelligence (AI) Microsoft vs. Google
- Smart Phones (iPhone vs Android)
- Social Media (X, Facebook, Tik Tok, YouTube)
- Cloud Computing (Amazon, Microsoft, IBM)
- Electric Vehicles

#### Historical Examples

• Wars (Gettysburg, Iraqi)

# Literature

- Romeo and Juliet
- Pride and Prejudice

# Political or Policy Debates

- Elections
- Government Shutdown
- Debt Ceiling

# TV Shows

- Billions
- Game of Thrones
- Sex and the City
- The Wire
- House of Cards