The Wharton School
University of Pennsylvania

MKTG 754 (WEMBA - West): Pricing Policy
Spring 2017
Tentative – Subject to some change

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Course Objectives

This course provides an opportunity for the participants to develop a systematic framework for assessing and formulating pricing strategies. Pricing decisions are affected by economic, marketing, organizational, and psychological factors, and must be made within a prescribed legal framework. Each of these presents an interesting aspect of the pricing problem. The course revolves around understanding how one may go about making effective pricing decisions while keeping in mind these factors. To achieve this objective, we will learn appropriate concepts and methods and explore new approaches for formulating a pricing strategy and setting prices.

The course will use a combination of lectures, case discussions, and exercises. Assignments will be in the form of readings, case preparation for class discussion, problem sets, and case write-ups.

Required Materials

1. Bulkpack (hereafter referred to as **BP; see study.net link on Canvas**)
2. Nagle, Hogan, and Zale, Prentice Hall
3. Raju and Zhang, Smart Pricing, Wharton School Publishing

In addition, a number of problem sets and handouts will be distributed in class. Some readings will also be on Canvas.

Process

Case Discussions
For all case discussions, it will be assumed that each participant has read and is fully prepared to discuss the case in class. The objective is to play the role of the decision maker in the case and use only the data and information available in the case to do the relevant analyses and make recommendations.
Lecture/Discussions
These sessions will allow us to examine principles, models, theories, and their application to pricing decisions. I urge you to share with the class your previous experiences with the application of these principles (both successful and unsuccessful experiences) whenever possible.

GRADING

Class Participation	10%
Problem Sets/Case Write-ups	60%
Final Exam	30%

Class Participation: Effective class participation requires good preparation, listening to other points of view, and sharing your thoughts in class with others in a manner that enhances the overall learning. You cannot participate if you are not present. Therefore, you are expected to attend all classes.

Case Write-ups: The one page case write-ups will require you to focus on a particular aspect of the case. The question to focus on is described in the Course Schedule. The case write-ups are to be done individually and submitted individually. There are five cases. Singapore Metals, Tweeter, Dropbox, and Burroughs-Wellcome are 10 points each. Cambridge Software is 20 points.

Problem Sets: Problem sets give you an opportunity to apply some of the concepts and methodologies that will be developed in class lectures and case discussions. I shall hand out solutions to the problem sets in class and on Canvas. There are five problem sets. The purpose of these problem sets is to illustrate various techniques. The students are expected to attempt these problems sets often before the techniques are discussed in class. The purpose of this is to stimulate thinking and learning, and gain a greater appreciation for pricing methods. The evaluation of the problem sets will keep in mind this objective. **The problem sets are to be done individually, and submitted individually.** Problem sets carry different weights towards your grade depending on the level of complexity and work required to complete the problem set.

Grading
Please print your homework assignments and submit them at the beginning of each class. Any format is acceptable for the submission (Word, Excel, etc.). As a general rule, when you present calculated numbers, please show/explain your calculations to get full credit. This also holds for the exam.

Final Exam: The final examination will consist of problems that will test your ability to apply the concepts covered in the course. More details about the examination will be provided in the class.

Honor Code: Students taking the course are required to accept the following rules**.**

- I shall not share the materials distributed in MKTG754 class with anyone else.
- I shall not use materials obtained from others who have taken this course in the past.
- I agree with the rules set forth regarding case write-ups, problem sets, and the final exam.

Course Schedule

March 17: **1. Course Overview/ Role of Costs and Margins in Pricing Decisions**
2. Pricing a Radically New Product
Prepare: Singapore Metals Case [HBS Case: 9-709-434] in [BP]

Case Write-up Question: What price would you charge for the Singapore Metals Pad and why? Please focus only on the 11 inch pad.

DUE: Problem Set 1 [in BP and on Canvas]

Readings:
Nagle Chapter 2: value creation
Nagle Chapter 9: costs
See other supplementary readings on Canvas

March 18: **1. Measuring Elasticity**
2. Principles of Price Engineering

DUE: Problem Set 2 [in BP and on Canvas]

Readings:
Nagle Chapter 10: financial analysis
Nagle Chapter 3: price structure
See other supplementary readings on Canvas

March 31: **1. Product Line Pricing**
2. Measuring Maximum Willingness to Pay
Prepare: Cambridge Software Corporation[HBS Case 9-197-072] in [BP]

Case Write-up Questions:

- If Cambridge Software Corporation were to offer only one version of Modeler, which version should it offer? At what price?
- How many different versions of the Modeler should CSC offer? At what prices?

DUE: Problem Set 3 [on Canvas]

Readings:
Raju/Sajeesh: "Estimation of Consumer Reservation Price" [required reading; see Canvas]
Nagle Chapter 12: measurement of price sensitivity
Nagle Chapter 6, p. 131-136: estimating consumer response
See other supplementary readings on Canvas

April 1: **1. Temporal Pricing and Temporary Price Discounts**
2. Competitive Pricing
Prepare: Tweeter [HBS Case 9-597-028] in [BP]

Case Write-up Question: Should Tweeter continue to offer the price matching guarantee? Please justify your recommendation.

DUE: Problem Set 4 [on Canvas]

Readings:
Nagle Chapter 11: Competition
Showrooming at Best Buy [HBS Case: 9-515-019] in [BP]
See other supplementary readings on canvas

April 13: **1. Software Pricing**
Prepare: Freemium Pricing at Dropbox [HBS Case 9-514-053 in [BP]

Case Write-up Question: What role(s) does Freemium play in Dropbox's overall strategy? Should Dropbox continue with Freemium? What pricing test experiment will you design to help Dropbox concretize its pricing strategy?

2. Psychological Aspects of Pricing

DUE: Problem Set 5 [on Canvas]

Readings:
Nagle Chapter 4: Price and value communication
See other supplementary readings on Canvas

April 14: **1. Legal and Ethical Aspects of Pricing**
2. Course Summary
Prepare: Burroughs Wellcome and AZT (A) [HBS Case 9-792-004] in [BP]

Case Write-up Question: Take on the role of Mr. Shepperd and prepare a one page (250-300 words) opening statement for a press conference outlining Burroughs Wellcome's response to ACT UP's most recent demonstrations.

Please be prepared to present your opening statements to the class. This presentation should be no more than 3-4 minutes. At the end of the presentation, the presenter will take questions from the audience who will take on the roles of shareholders, the press, AIDS activists and others.

Readings:
Nagle Chapter 13: Ethics and the law
See other supplementary readings on Canvas

PROBLEM SET 1

As a pricing analyst for the VALUE SUPREME grocery chain, you are asked to prepare an analysis of a proposal to price frying chickens low in order to attract shoppers to VALUE SUPREME stores. The current price for whole fryers is 89¢ per pound. The proposal is to set a promotional price of 59¢ per pound. The wholesale cost of the fryers, prepackaged and ready for sale, is 55¢ per pound.

By tracking past changes in sales of chicken with changes in sales of other grocery products, you discover that each one pound change in the sales of whole fryers is associated with the following changes in the sales of other products:

Product	**Dollar Change**	**% Margin**
Fruits and Vegetables	+ $0.154	50%
Packaged Groceries	+ $0.692	20%
Frozen Foods	+ $0.114	33%
Other meat including Chicken parts	– $0.250	40%

[**Explanation of the table**: A one pound increase in sales of whole fryers results in an increase in sales of Fruits and Vegetables of 15.4 cents and the store makes a 50% margin on Fruits and Vegetables]

1. If this past relationship between sales of the whole fryers and increased sales of other goods holds, by how much must chicken sales increase in order to make this price promotion profitable?
2. Can you think of any reason why the historical relationship between changes in the sales of chicken and other products might not hold?
3. Could this store have profitably promoted whole fryers at 49¢ per pound? If so, what increase in chicken sales is required? Remember, 49¢ is below wholesale cost!

PROBLEM SET 2 (2 Questions)

Q1. Preference ranking data were obtained from 20 respondents for three brands of dishwashers: X, Y, and Z. Y and Z are existing brands selling for $225 and $175 respectively, while X is a proposed new brand. Table 1 provides the preference ranking data for 3 of the 20 respondents, (i.e., all 3 provided the identical preference ranking indicated in Table 1), Table 2 gives the data for 5 respondents, Table 3 for 4 respondents, and Tables 4 and 5 for 6 and 2 respondents respectively. A rank of 1 indicates the most- preferred product, while 15 indicates the least-preferred product.

1. Compute the proportion of first-place votes for brand X as a function of price when brands Y and Z are at their current prices. (First place is meant in a relative, not absolute sense.)

2. What proportion of first place votes will X receive if its price is $200 while brands Y and Z lower their prices to $200 and $150 respectively?

3. Which brand (Y or Z) suffers the greatest loss in first-place votes with the entry of brand X at $200? Assume for part (c) that brands Y and Z are selling at their regular price, i.e., $225 and $175 respectively.

	Table 1			**Table 2**			**Table 3**			**Table 4**			**Table 5**		
	X	**Y**	**Z**	**X**	**Y**	**Z**	**X**	**Y**	**Z**	**X**	**Y**	**Z**	**X**	**Y**	**Z**
$150	**2**	**1**	**5**	**4**	**1**	**6**	**4**	**2**	**1**	**1**	**3**	**6**	**2**	**1**	**3**
$175	**4**	**3**	**8**	**5**	**2**	**9**	**6**	**5**	**3**	**2**	**4**	**9**	**5**	**6**	**4**
$200	**7**	**6**	**11**	**8**	**3**	**12**	**9**	**8**	**7**	**5**	**7**	**10**	**9**	**8**	**7**
$225	**10**	**9**	**14**	**11**	**7**	**14**	**12**	**11**	**10**	**8**	**12**	**13**	**10**	**11**	**12**
$250	**13**	**12**	**15**	**13**	**10**	**15**	**15**	**14**	**13**	**11**	**14**	**15**	**15**	**13**	**14**

Q2. Sales and prices of a new package delivery service offered by a logistics company for the first 29 weeks are given below. Estimate the appropriate demand function for sales using regression analysis to obtain an estimate of price elasticity. The data file (ProblemSet2-Data.xls – Package delivery sheet) can be downloaded from the Canvas. What recommendation would you make to the company based on your estimation?

Package Delivery Service

Week	Unit Sales	Price
1	140	5.00
2	195	5.00
3	268	5.00
4	481	5.00
5	411	5.00
6	481	5.00
7	525	8.50
8	527	8.50
9	547	8.50
10	502	8.50
11	511	8.50
12	534	8.50
13	559	10.00
14	575	10.00
15	592	10.00
16	661	10.00
17	764	10.00
18	794	10.00
19	805	11.50
20	745	11.50
21	859	11.50
22	982	11.50
23	987	11.50
24	1034	11.50
25	1090	11.50
26	1156	11.50
27	1194	12.50
28	1370	12.50
29	1304	12.50