DATA-DRIVEN DYNAMIC MARKETING STRATEGY
(MKTG 612)

Fall 2021, Quarter 2

COURSE DESCRIPTION,
REQUIREMENTS AND ASSIGNMENTS

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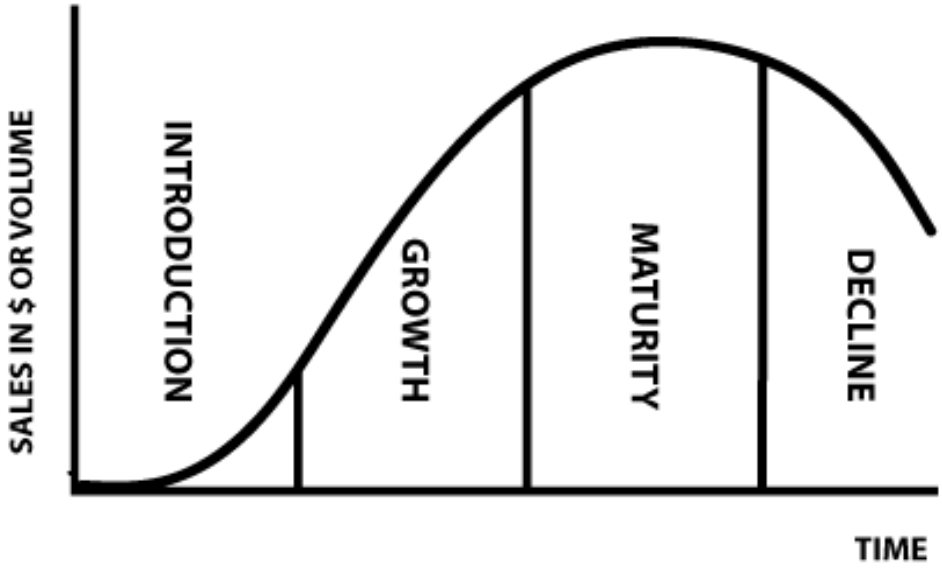

Objectives

This course focuses on helping you refine your skills in developing a marketing strategy and seeing how the marketing tactics selected need to be in alignment with that strategy. We will focus specifically on issues such as the selection of which businesses and segments to compete in, how to allocate resources across businesses, segments, and elements of the marketing mix, how to launch new products into the market, as well as other significant strategic issues facing today's managers in a dynamic competitive environment.

All of these issues will be discussed and couched in the context of *the dynamic nature of market evolution that occurs throughout the Product Life Cycle (PLC),* pictured above. Students will develop strategic thinking skills and learn to apply analytical and data science tools to help formulate effective marketing tactics in each phase of the PLC.

Outline of Each Class Session

While the exact structure of each class will vary depending on whether it is a case or lecture, in general each session will have three facets:

1) ***The real-world business problem.*** Most classes will begin with an example of a critical *current* issue that managers confront. This could be either a formal case (highlighted in green in the course schedule below that students read and prepare in advance), or a mini-case that I introduce in-class. For formal case discussions, we will assume that everyone has read and is prepared to discuss the case. It is not necessary to do any library work or bring in outside information about the company or the industry beyond what is described in the case. In fact, it will distract from the case discussion as we are learning how to make better strategic marketing decisions given the information available at the time of the case. We will focus on principles, theories, and basic applications of marketing strategy. Discussion and questions are strongly encouraged.

2) ***Analytical frameworks for thinking through the problem.*** For the business problem being discussed, the class will explore a range of general analytical frameworks through which the problem might be approached and evaluate their comparative strengths and weaknesses. The purpose of this is to provide a systematic basis for narrowing down the set of candidate options and choosing a best option in light of the available data.

3) ***Informing the decision through data.*** Given a general analytic framework, most classes will go on to explore how greater precision can be brought to the application through the use of data---both in the form of customer insights (marketing research), and secondary data.

Course Website

Many of the course's activities will involve the use of Wharton's Canvas software. Please bookmark this website and check it as often as necessary. This site will contain copies of class handouts, and other general information about the course.

Lectures and Recordings

All of the lectures will be delivered live in-class but also recorded for asynchronous online viewing. If you are unable to attend your assigned lecture spot, and there is room available in one of the other lecture times, you are free to attend. Make sure you make the TA, in the section you attend, aware for class participation purposes.

Data, Excel and R code

In most lectures, there is a "toolkit takeaway" part of the lecture where I discuss the use of data and statistical methods for data-driven marketing strategy. On each assignment page in

canvas, I have posted the data set (used in class) as well as the R code (or an Excel spreadsheet) that generated the output for those of you who want to reproduce the analyses.

Grading

The weighting of the inputs for the final course grade is:

Class Participation	**10%**
Four (Out-of-Class) Assignments	**40%**
Final Exam (take home)	**50%**

Each component of your grade (i.e. participation, assignments, quizzes, and final exam) is Z-scored, and then your grade is constructed from your weighted Z-score**.** Since each assignment is at the individual-level, you must each write up the assignment; however, learning is facilitated when you discuss things with your peers. So, while your write-up must be unique, discussing the concepts and calculations with classmates is encouraged.

Class Participation and Attendance:

Attendance in class is <u>not required</u> and is not graded; but poor attendance will affect your class participation grade as you can't get credit for (positive) participation (which is graded) if you are not there. However, for those of you that don't attend the class live, there are other ways to earn participation which includes: (1) submitting related real-world content on class material, (2) submitting data that can be used for the course, or (3) submitting slides/video that can be used in the course. Those can be submitted directly to me with an explanation of why it is related to the course.

For those classes that you attend, all course sessions involve active classroom discussion based on careful preparation of the readings and cases, with a focus on both theoretical questions and practical implications. You should be prepared both to share your ideas and to listen to and interpret issues presented by others. *The quality of your contribution counts for much more than the quantity*. Comments that move a discussion forward in a productive direction are particularly welcome.

Class Meeting Times:

I teach four sections (i.e. a block) of each lecture. One block is on Mondays 8:30-10:00, Mondays 10:15-11:45, Tuesday 8:30-10:00 and Tuesday 10:15-11:45. The other block is on Wednesday 8:30-10:00, Wednesday 10:15-11:45, Thursday 8:30-10:00 and Thursday 10:15-11:45. You should attend the lecture time you are assigned, however, if in a given week you need to attend a different one, you may attend whichever lecture time works best or watch the recording (if you can't attend any of the lectures).

Class Assignments

There are four (out-of-class) assignments (listed in RED below) with specific due dates. No late assignments will be accepted. These four assignments will be equally weighted (10%) towards the 40% Out-of-Class Assignment part of your grade. More details on the assignments are below.

Four Out-of-Class Assignments

The links for submitting:

- Assignment 1: Medicines Case Numbers and Analysis
- Assignment 2: CCC Case Numbers and Analysis
- Assignment 3: Blue Apron Case Questions
- Assignment 4: FutureView Experience and Assignment

are all on the course Canvas website. Each of these assignments will also be discussed in a lecture that follows their due date. All assignments should be submitted via Canvas, and/or the weblink on Canvas that provides a form for submitting the required materials.

Assignment 1: Medicines Case Numbers and Explanation (two pages maximum) due by Friday, October 29th at 5pm.

The Medicines company is typical of a start-up that has to decide what price to charge at product launch as well as forecast year 1 and year 2 sales. Your assignment has two parts:

- There is a link on the Medicines Canvas Assignment page that you click on that brings you to an online form where you should enter your recommended price per dose and your forecasts of year 1 and year 2 sales.

- Through canvas, submit a no more than 2-page (single-spaced) explanation of how you computed your numbers, what assumptions you made, and how you might empirically validate those assumptions.

Answers that rigorously lay out their assumptions, even if those assumptions may be speculative, and tie those assumptions to specific recommendations and forecasts will receive highest credit.

Assignment 2: CCC Case Numbers and Assignment (two pages maximum) due by Wednesday, November 10th at 5pm

Making strategic decisions in highly competitive and mature markets provides significant challenges to marketing managers. The CCC case is such an example. Your assignment here has two parts:

- Using the Canvas link that takes you to the Wharton Learning Labs "Rules of Engagement" application, read the CCC case, and then enter your budget numbers for advertising, trade promotion and in-pack premiums for the current fiscal year as well as your "competition decision rules" for those budget numbers going forward.

- Through canvas, submit a no more than 2-page (single-spaced) explanation of why you chose those competition decision rules going forward to set budgets.

Assignments that thoroughly consider the role of competition and incorporate those beliefs about competitor action into ones' competition decision rules will receive the highest credit. There is also a simulation tool in the software that allows you to play "what if" games, in a game theoretic way to assess "If I do X and my competitor does Y" what will be the outcomes in the market.

Assignment 3: Blue Apron Case (two pages maximum) due by Friday November 19th at 5pm.

After reading the Blue Apron Case, please answer the following questions which we will discuss in class. The answers to these questions will help you apply the concepts of CLV to your business. Approximately, spend ½ page on your thoughts to each question.

The Blue Apron Case represents a general challenge that firms face: traditional metrics of success can lead to erroneous decision making. Based on your reading of the case, please answer the following questions (in two-pages or less) by submitting your responses via Canvas:

Q1: List 3 pros and 3 cons of a subscription versus a la carte revenue business from a CLV perspective. Be specific in terms of their likely impact on CAC, churn rate, and ultimately CLV. Based on your lists, "score" Blue Apron and which business model (subscription versus a la carte) would you recommend?

Q2: In the Shell Oil Case, we stressed the importance of segmentation as a product launch strategy. Is this a feasible strategy for Blue Apron (will it generate enough market share and scale), and relatedly, how would you utilize the data that they have (which suggests a two-segment (high and low value) world) to determine a target segment?

Q3: We see in the Blue Apron case that CAC goes up over time and revenue per customer (and certainly margin) is declining. Is this an almost tautological fact for most companies? If yes, suggest why that might be true and in either case, how can a company combat lessen the potential for lower CLV over time for acquired customers?

Q4: If you were the CMO of Blue Apron, how would you design an A/B test to assess the marketing effectiveness of different forms (e.g. print, TV, online) of spend? Be specific about what your: (i) A and B groups would be, (ii) the treatment and control, (iii) what outcomes you would measure, and (iv) over what time horizon.

Assignment 4: FutureView experience and write-up (two pages maximum)
due by Wednesday, December 1st at 5pm

Marketing research methods are well-established to estimate demand, optimally design products, and determine target segments when the product/service of interest is to be launched soon and/or is of an incremental change. However, many of you make take jobs at firms (e.g. Google, SpaceX, Tesla, Virgin Galactic etc…) that are building products for far off into the future for which customers have little to no familiarity. Yet, the needs of data-driven marketing strategy still exist. Your assignment here is two-fold:

- The Wharton Learning Labs will send you an email with instructions on how to register for FutureView. Click on the link in the email to register and participate in the experience. We will be utilizing your experiences in class, so come prepared to talk about it.

- The data that emerges from FutureView is valuable for dynamic marketing strategy decisions describe in the class. In two (single-spaced) pages or less, first, explicitly describe the data that you would capture from the FutureView clickstream data if you were going to utilize it as a business intelligence tool for marketing strategy. Second, be explicit about how you could use FutureView data (clickstream from a sample, e.g. of students) to determine target segment(s), price, demand, distribution, shape of the PLC, etc…

Assignments that are specific about the data that emerge from FutureView and how you would explicitly tie that to specific marketing strategy decisions will receive the highest score.

Final Examination (due Monday, December 13th by 5pm)

The multiple-choice final examination for this course will be a take-home examination. It will be made available on the course Canvas site on Thursday, December 9th at 5pm. The exam will consist of questions about marketing strategy and will also cover the cases and analysis methods that we have discussed in class. From the time that you start the examination (not download, but start), you have 90 minutes to complete it (canvas has a timer). The Wharton School and University of Pennsylvania Honor Code applies. This is an individual-level

examination. You are not allowed to discuss this exam with anyone, during or even after the examination period. You may use outside materials, and it is open-book and open-notes, but note that the 90 minute time limit includes any time you might use to do outside research, look at your notes, etc….

Contact Information

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Course Outline

Session

1. October 25-26 **M/TU** **Overview of Strategic Marketing Issues**
   *Case: **Kindle Fire***

2. October 27-28 **W/TH** **Market Research for New Product Design #1**
   *Case: **Shell Oil (mini-case + in-class)***
   Assignment 1: Medicines Case due Friday October 29th at 5pm

3. November 1-2 **M/TU** **Market Research for New Product Design #2**

4. November 3-4 **W/TH** **Pricing for New Product Launch**
   *Case: **The Medicines Company (A)***

5. November 8-9 **M/TU** **Pioneering v. Follower (Entry Strategy)**

6. November 10-11 **W/TH** **Competing in the Growth/Mature Phase**
   Assignment 2: CCC Case due Wednesday. November 10th at 5pm

7. November 15-16 **M/TU** **Dealing with Competition**
   Case: Canadian Children's Cereal

8. November 17-18 **W/TH** **Multi-Product Resource Allocation**
   Assignment 3: Blue Apron Case Answers due Friday November 19th at 5pm

9. November 29-30 **M/TU** **Customer Analytics for CLV growth**
   Case: Blue Apron

10. December 1-2 **W/TH** **Marketing in the Decline Stage**
    Assignment 4: FutureView Simulation due Wednesday, December 1st at 5pm

11. December 6-7 **M/TU** **Marketing for Products of the Future**

12. December 8-9 **W/TH** **Selecting the Entire Marketing Mix/Course Wrap-Up**
    Case: Aqualisa Quartz

TAKE-HOME FINAL EXAM POSTED THURSDAY DECEMBER 9TH AT 5PM
DUE BY MONDAY DECEMBER 13TH AT 5PM

Week Starting	Monday	Tuesday	Wednesday	Thursday	Friday
October 24th	25 Lecture 1: Overview of Marketing Strategy: Kindle Fire Case	26 Lecture 1: Overview of Marketing Strategy: Kindle Fire Case	27 Lecture 2: Market Research for New Product Design #1: Shell Oil Case	28 Lecture 2: Market Research for New Product Design #1: Shell Oil Case	29 Assignment 1: Medicines numbers due by 5pm
October 31st	1 Lecture 3: Market Research for New Product Design #2	2 Lecture 3: Market Research for New Product Design #2	3 Lecture 4: Pricing for New Product Launch: Medicines Company Case	4 Lecture 4: Pricing for New Product Launch: Medicines Company Case	5
November 7th	8 Lecture 5: Pioneering v Follower (Entry Strategy)	9 Lecture 5: Pioneering v Follower (Entry Strategy)	10 Lecture 6: Competing in the Growth/Mature Phase Assignment 2: CCC numbers due by 5pm	11 Lecture 6: Competing in the Growth/Mature Phase	12
November 14th	15 Lecture 7: Dealing with Competition: CCC Case	16 Lecture 7: Dealing with Competition: CCC Case	17 Lecture 8: Multi-product Resource Allocation	18 Lecture 8: Multi-product Resource Allocation	19 Assignment 3: Blue Apron Case Answers due by 5pm
November 21st	22	23	24	25	26
November 28th	29 Lecture 9: Customer Analytics for CLV growth *Case: Blue Apron*	30 Lecture 9: Customer Analytics for CLV growth *Case: Blue Apron*	1 Lecture 10: Marketing in the Decline Stage Assignment 4: Future View Simulation due by 5pm	2 Lecture 10: Marketing in the Decline Stage	3

December 5th	**6** Lecture 11: Marketing for Products of the Future (FutureView Simulation)	**7** Lecture 11: Marketing for Products of the Future (FutureView Simulation)	**8** Lecture 12: Selecting the Marketing Mix and Course Wrap-Up: Aqualisa Quartz Case	9 Lecture 12: Selecting Marketing Mix and Course Wrap-Up Aqualisa Quartz Case FINAL EXAM POSTED AT 5PM	**10**
December 12th	**13** FINAL EXAM DUE BY 5PM	**14**	**15**	16	**17**