USC Marshall
School of Business

MGT 512 – Marketing and Consumer Research

Syllabus – Fall 2014 – Tuesday/Thursday – 3:30 – 4:50

Professor: Dina Mayzlin
Office: HOH 619
Office Phone: 213-740-3360
Office Hours: Tuesday 9:00 – 10:00

E-mail: mayzlin@marshall.usc.edu

Course Description

In the *Core* Course, you learned about the importance of market segmentation, targeting and positioning in formulating marketing strategies. But as a marketing strategy consultant or as a brand manager, you are faced with the question: How does one implement these strategies in practice?

This course will introduce you to qualitative and quantitative research methodologies that are critical in obtaining the relevant market information to aid managerial decision-making. The first part of the course focuses on the data-collection process: both exploratory methods (such as focus groups) and descriptive methods (survey design). The second part of the course covers methods of data analysis, such as logit analysis, cluster analysis, factor analysis and conjoint analysis. All the methods are presented in the context of business problems: 1) how to gather qualitative data, 2) how to gather survey data, 3) analyzing survey data, and 4) analyzing secondary and experimental data.

The final project involves all aspects of the market research process: conducting focus groups, designing a questionnaire, collecting and analyzing the data.

Learning Objectives

- Students will gain factual, conceptual, and procedural knowledge of strategic market measurement.
- Students will understand the market research process and how it applies in practice.
- Students will apply methods and frameworks introduced in class to form market research questions, collect and analyze data, and form business recommendations based on the findings.
- Students will gather, categorize, analyze, interpret, and evaluate relevant qualitative and quantitative information through case discussions, assignments and final project.
- Students will critically question problems, competing priorities and points of view in situations characterized by ambiguity and/or uncertainty.
- Students will demonstrate the ability to be creative and innovative in seeking solutions to market research dilemmas.
- Students will demonstrate the ability to communicate their ideas clearly and precisely through frequent in-class case discussions and group project presentation.

Required Materials

- Lecture Notes (posted on course website) – required
- Reading packet – required
- Aaker, Kumar, Leone, and Day (2012), *Marketing Research (11th Edition)*, John Wiley & Sons – optional

- The students are required to bring a laptop to some classes (you will be told in advance which ones) in order to perform statistical analysis in class.
- Students will be asked to use Excel and Minitab software. Minitab is available to Marshall community through Business Virtual Lab.
- Students will also need to use Qualtrics survey software available to Marshall community at http://www.qualtrics.com/academic-solutions/usc/. (Please register using your USC email account).

Prerequisites and/or Recommended Preparation:
It is recommended that the students be exposed to core marketing before taking the course.

Course Notes:
Please check the course postings on the Blackboard regularly for class lectures, announcements and instructions (http://blackboard.usc.edu). You should always check the postings here before coming to class.

Grading Policies:
Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Historically, the average grade for this class is about 3.5 (around B+).

Three items are considered when assigning final grades:

- Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible).
- The overall average percentage score within the class.
- Your ranking among all students in the class.

Assignments and Grading Detail

Assignments		Points	% of Grade
TESTS	**Test I**	50	16.5%
	Test II	50	16.5%
IN-CLASS DISCUSSION PARTICIPATION		50	16.5%
CASES		50	16.5%
GROUP PROJECT		100	33%
	TOTAL	300	100.0%

1) Tests
There are two in-class exams. The first exam will cover material in lectures 1-14. The second exam will cover the material in lectures 17-24. Both exams are closed-book and are paper and pencil (no software required).

2) In-Class Participation
In-class participation is a part of the course grade. This course includes some business cases and in-class lab work. In order to achieve a high participation score, the students are expected to do the following:
   a. Come to class on time and turn off all electronic devices.
   b. Come to class prepared to discuss the day's case (see Appendix I and II for case questions).
   c. Contribute meaningfully to the class discussion.
   d. Try their best in working alone or in groups on in-class lab exercises.

3) Case Write-Ups (See Appendix I for more detail).
   a. There are three case write-ups in the first part of the class that need to be handed in (hard copy) on the day that the case is discussed.
   b. The write-ups are evaluated on depth of analysis and completeness.

4) Group Project (See Appendix II for more detail).
    a. The course involves a hands-on group project in teams of four. Each group will be asked to complete all stages of the market research process from posing the question to making recommendations based on the data.
    b. The projects are meant to serve as ways for students to try out new ideas and techniques that they learn in class.
    c. The deliverables are the following:
        i. Students will make a brief presentation on September 23 to pitch their ideas to the class.
        ii. Students will have two chances to pre-test their surveys: on October 23 and October 30.
        iii. The final project presentations take place on December 2 and December 4.
        iv. The final project report is due (electronically) on the day of the scheduled final exam.

Assignment Submission Policy:
Assignments must be turned in on the due date in person (via hard copy). Any assignment turned in late will receive a grade deduction (for example, if your work is a B+ grade, you will be given a C+ grade). If you are unable to attend class on that day, please email me the assignment by the start of class. Late or not, however, you must complete all required assignments to pass this course.

MARSHALL GUIDELINES

Add/Drop Process
Example: If you are absent six or more times prior to Nov 14, 2014 (the last day to withdraw from a course with a grade of "W"), I may ask you to withdraw from the class by that date. These policies maintain professionalism and ensure a system that is fair to all students.

Retention of Graded Coursework
Final exams and all other graded work which affected the course grade will be retained for one year after the end of the course ***if*** the graded work has not been returned to the student (i.e., if I returned a graded paper to you, it is your responsibility to file it, not mine).

Technology Policy
Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY e-devices (cell phones, PDAs, I-Phones, Blackberries, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Statement for Students with Disabilities
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. For more information visit www.usc.edu/disability .

Statement on Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, (www.usc.edu/scampus or http://scampus.usc.edu) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/ . Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

Please activate your course in Blackboard with access to the course syllabus. Whether or not you use Blackboard regularly, these preparations will be crucial in an emergency. USC's Blackboard learning management system and support information is available at blackboard.usc.edu.

.

Schedule of Classes

			Class Prep	Class Topic	Post-Class Homework
1	Tue	8/26		Introduction	
Listening to the Customer					
2	Thu	8/28		Qualitative Research	
3	Tue	9/2	**Due**: Boston Fights Drugs	Traditional Focus Groups	
4	Thu	9/4	**Due**: Communispace	Online Focus Groups	
5	Tue	9/9		Questionnaire Design I	
6	Thu	9/11	**Due:** Springfield Nor'easters	Questionnaire Design II	
7	Tue	9/16		Attitude Measurement In-Class Office Hours	
8	Thu	9/18		Speaker: Adriann Cocker	
9	Tue	9/23		In-class Project Idea Presentations	
10	Thu	9/25		NO CLASS RH	
Strategic Market Measurement					
Analyzing Survey Data					
11	Tue	9/30		Review of Key Statistical Concepts	Finish lab write-up at home
12	Thu	10/2		Factor Analysis	Finish lab write-up at home
13	Tue	10/7		Perceptual Mapping	Finish lab write-up at home
14	Thu	10/9		Cluster Analysis	Finish lab write-up at home
15	Tue	10/14		Review	
16	Thu	10/16		Test I	
Analyzing Secondary and Experimental Data					
17	Tue	10/21		Store Sales	Finish lab write-up at home
18	Thu	10/23		In-class Survey Pre-test I	
19	Tue	10/28		Logistic Regression	Finish lab write-up at home
20	Thu	10/30		In-class Survey Pre-test II	
21	Tue	11/4	**Prep**: Star Digital Case	Online Experiments	Finish lab write-up at home
22	Thu	11/6		Speaker	
23	Tue	11/11	**Prep**: Air France	Air France	Finish lab write-up at home
24	Thu	11/13	**Prep**: Engage	Clickstream	Finish lab write-up at home
25	Tue	11/18		Review	
26	Thu	11/20		Test II	
27	Tue	11/25		In – Class Survey Analysis	
28	Thu	11/27		No class – Thanksgiving	
29	Tue	12/2		Project Presentations	
30	Thu	12/4		Project Presentations	

Appendix I (Case Write-Up Questions)

Case write-ups should be done individually. (Discussing cases with classmates is acceptable). There is no required format – I am looking for depth of analysis. Please limit your write-ups to 4 pages, not including Appendices.

1) **Boston Fights Drugs**
    1) What did you think of the team's model to fight drug abuse?
    2) What do you think of the design of the pre-screening questionnaire and focus group interview protocols?
    3) Do you agree with the team's conclusions on page 10, given the data?
    4) Are there alternative conclusions to be drawn from the same exhibits?

2) **Communispace**
    1) As a brand manager would you use Communispace's service? When would you use it? When wouldn't you use it? What are the advantages/disadvantages of this market research tool compared to alternative methods?
    2) What is Communispace's competitive advantage? How are they creating value?
    3) What do you think about Communispace's business model? How is it different from traditional market research companies?
    4) If you were Diane Hessan, would you launch a WOM product? What impact would this launch have on the company brand?

3) **The Springfield Nor'easters**
    1) What is the MDP and MRP of the case?
    2) What do you consider to be the key findings of the research survey? Comment on what Buckingham learned about a prospective customer profile, pricing, and single-ticket versus season-ticket packages. What considerations should the Nor'easters take into account in establishing a price policy?
    3) Design a ticket pricing plan for the Nor'easter's first season. Be very specific, and be prepared to explain the assumptions. How should ticket pricing vary by package type?
    4) Using the price plan you have designed and given Buckingham's assumptions about concession sales (i.e., 39% profit margin on page 4), will the team reach breakeven in the first year? If not, what options does Buckingham have to reach his target?

Appendix II (Case Prep Questions)

Please complete the exercises prior to coming to class. These do not have to be handed in.

1) <u>Star Digital Prep Questions</u>

a) Why can't you measure the effectiveness of advertising by simply looking at the clickthrough rate?

Describe the experiment conducted by Star Digital.

b) Take a look at the accompanying Star Digital spreadsheet.

Please answer the following:

- For how many consumers do we have data?
- How many people purchased at Star Digital?
- How many people in the test condition purchased at Star Digital?
- How many people in the control condition purchased at Star Digital?
- What was the largest number of ad impressions that a consumer saw at website #3?

2) <u>Study Guide for Air France Case</u> (please print out the table, fill it in, and bring it to class)

Here are some metrics ("Key Performance Indicators" or KPIs) to use to evaluate publisher performance. First go through this list and fill in the missing formulas, using the column names from the DoubleClick data tab on the Air France data spreadsheet. Also, answer the questions about abbreviations.

KPI	Formula
Avg. CPC What does that stand for?	
CTR What does that stand for?	
Transaction Conversion Rate (TCR)	# of Bookings/Clicks
Net Revenue	Total Revenue from Bookings – Total Cost of Clicks
Return on Ad $ Spent (ROA)	
Average Revenue per Booking	Total Revenue from Bookings/# of Bookings
Overall Probability of Booking (i.e., the chance that someone books a trip given that they **were shown** an ad)	

a) Use a pivot table to calculate each of these metrics for each of the seven publishers in the DoubleClick data.
b) Which of these metrics do you have Kayak data for? Do those calculations.
c) Create a scatter plot that shows a point for each of the seven publishers in the DoubleClick data: Net Revenue on the horizontal axis and ROA on the vertical axis.

d) Looking just at Google-US, calculate the KPIs for each of the campaigns for that publisher.

In our next class, we will discuss

- How can the set of KPIs be used to evaluate the publishers?
- What do the results of your data analysis suggest for changes to the use of the different publishers? (For example, should the use of different publishers be expanded or reduced; should changes be made in the search ads; should other campaign tactics be adjusted?)
- What other suggestions do you have about managing their search ad campaigns?

3) **Study Guide for Engage**)

The purpose of this exercise is to show how data mining and simple models based on visitor interests can greatly improve the targeting of advertising.

Susan Smiley had graduated from USC and settled into her new job. As she skimmed the web for the latest stock prices, a banner ad for a sports car appeared on a page. She thought, "why not?" and clicked on it to see if anything interesting might appear. Across town Andy Angst was just starting school. As he checked the web for a weather forecast to decide whether he should surf on the weekend, the same banner came up. He did not click on the ad.

Clearly the car advertiser was happy to have placed the ad on Susan's page and probably would rather not have paid for the one that appeared on Andy's. In this exercise we go behind the scenes to see how the information gathering and processing power of the Internet can increase the efficiency of targeting advertising to potential customers. We may also be able to see, at least in one example, that efficiency increases may have limits.

How does a banner reach your computer screen? Somewhere an advertiser wishes to send people messages about its product and has chosen banner ads on the web as a media vehicle. Typically, an advertiser works with an advertising agency to develop a campaign for a product, say, the sports car. The agency and advertiser work out details of the creative content of the ads, the number of viewings (called exposures or impressions) to be served, the type of visitors desired, and the budget.

To deliver the ads, the agency deals with one or more ad networks or large sites. An ad network is a space aggregator and broker that has contractual arrangements with a set of sites offering advertising space on their pages. When the time comes to place a banner, a piece of software called an ad manager, does the heavy lifting. The ad network will have an ad manager, or a big portal site may have its own.

Mechanically, when you ask for a page by clicking on a hyperlink, a message goes to the URL that is imbedded in the hyperlink to deliver a page. The page is designed, usually on the fly, and sent to you as a series of files that are assembled by your browser and displayed on your screen. If there is a place on the page for an ad, a message goes out to the ad manager, which decides whether one of the campaigns it is scheduling has an appropriate ad for this time slot, site, and visitor. If so, it dispatches sufficient information to identify your computer and the page being built to an ad server, which holds the actual ad file. The ad server then dispatches the ad file to your computer.

Note that the site you are visiting, the ad manager, and the ad server may be on entirely different computers at different physical locations, or, of course, may be all on one server. One might have a concern that the ad dispatching process would introduce excessive waiting time, but, by and large, it does not, because most of the messages and files are quite small.

Interest profiles. If we know something about the visitors, we are better equipped to show ads to people who might be interested in them and avoid people who are not. But how can we determine people's interests? A number of companies have built "interest profiles" of web users. DoubleClick and Company X Technologies are examples. Profiles are built through the cooperation of one or more ad networks or large portals. Each page generated by these sites is classified for the interests represented, e.g, news, sports (subdivided many ways), financial services, etc. and carries a tag to that effect. Several hundred categories are typical. Visitors to the cooperating sites are identified by Company X or DoubleClick through a cookie.

Log files from the servers are then analyzed offline to generate an interest profile for each visitor the tags on the pages that the visitor downloaded.

In the exercise that follows, we have a database of visitors who received one or more exposures to a particular ad campaign. Let us suppose that the product being advertised is a Jeep Cherokee and the ad campaign is on Yahoo. We shall think of the data we have as a test sample. From this we want to develop rules for whom to target in an extended campaign for Cherokee on Yahoo. The data tell whether the visitor clicked on the banner ad during the test (a clickthrough). In addition we have the visitor's interest profile (or, actually, a small but relevant segment of it). The profile entries are numbers between 0 and 1 indicating the relative degree of interest to that visitor of such topics as Games, Arts, Fashion, Snowboarding, etc.

We take clickthroughs as an important and easily accessible measure of effectiveness of the ad. Our goal will be to build a simple predictive model of clickthroughs as a function of interest scores and such other variables we may be able to develop. Further we wish to evaluate the quality of the predictive model. The model we shall use is linear regression, although other techniques are also possible. This assignment will lead you through building such a model. The manipulations in this problem set can be done in Excel.

The clickthrough and profile data are contained in an Excel file – "engage_data.xls." Each row in the spreadsheet represents a person who was exposed to the campaign. The first column indicates whether the person did or did not click on the Jeep ad. The next set of the columns shows the visitor's profile: they consist of different categories. Each column is a different category which contains a number between 0 and 1. The higher the number, the higher the interest that the person displayed in this category in his previous travels on the Net. The profile is not complete since we can only track the person's travels in sites that participate with the firm constructing the profiles. Also, the same visitor can be exposed a number of times. Thus we have the column and variable log(number of visits) which keeps track of how many times the visitor was exposed to the ad in the test campaign.

Please answer the following questions about your data:

1) How many different profiles do you have?
2) How many clicks are there?
3) What is the clickthrough rate in your data?
4) Do you see any patterns – which profiles (people) are more likely to click? How can you tell?

Appendix III – Group Projects

The course involves a group project conducted in teams of four. Each group will work on a modest-sized marketing research study for their project. The primary objective of the project is to provide you with experience in applying the concepts and methods of marketing research to a real marketing problem.

The project will be completed in four stages:

Stage 1 *Defining the Decision Problem and Research Problem*: This will involve defining the marketing decision problem faced by the manager (e.g., what market to enter, what features to offer in a product) and the research problem (what information will be needed to help answer the manager's question). You should also outline your broad research strategy (e.g., segmentation study, perceptual map) for this project.

Stage 2 *Exploratory Research*: Develop a discussion guide for the focus group or in-depth interviews for your exploratory research;

Stage 3 *Questionnaire Design*: This will involve developing a questionnaire (this will be based on your exploratory research findings), pre-testing it and refining the questionnaire based on your pretests.

Stage 4 *Data Collection, Analysis and Recommendations*: This will involve collecting the data, analyzing the data and submitting the final report with recommendations.

The deliverables (see syllabus for exact timing) are:

- A 5-minute idea pitch presentation
- A 15-minute final presentation
- A 10-page report (double-spaced) – due the day when the final exam is scheduled

Please see Blackboard for further guidelines.