MARK 7362 Management of Marketing Information
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Instructor

Professor Sam K. Hui
375J Melcher (Office hours: By appointment)
Email: khui@bauer.uh.edu

Course Overview

This course discusses marketing research techniques to gather and manage marketing information. The main objective of this course is to understand the both the traditional methods (e.g., focus groups, surveys) and emerging approaches (e.g., social media, shopper tracking) that marketing researchers use to obtain marketing information, and learn how to apply those tools to solve real-life business problems. This course focuses equally on (i) technical competence and (ii) applications to real-life problems. We cover the technical aspects of marketing research (both qualitative and quantitative research methods) through lectures and short individual homework assignments. We also discuss real life applications using various mini-cases. The other important element of this course is a marketing research project (more details under the "Marketing Research Project" section below) where students identify and solve a real business problem using marketing research methods.

This course is divided into three sub-modules.

Module I —Basic concept and tools: We discuss the basic research process and briefly discuss the four main aspects of marketing research, which includes the followings.
- Problem definition: backward marketing research
- Research designs: qualitative, descriptive, and experimental research
- Data collection: survey design and sampling methods
- Data analysis: basic statistical analysis and formal hypothesis testing

Module II— Advanced methods: Having mastered the basic concepts and tools of marketing research, we move on to study three specialized statistical methods most commonly used in analyzing consumer data.. We study the application of these techniques to optimize the marketing mix (pricing, promotion, product design, positioning). The techniques that we cover include:
- Regression: forecasting consumer demand, analyzing test market experiment, and marketing mix analysis.
- Conjoint analysis: understanding consumer preferences and application to product design.
- Factor analysis and perceptual maps: understanding consumer perception and application to brand/product positioning.

The focus is on understanding the basic concepts behind these techniques and their real life applications. We will not go in depth into the technical aspects of these statistical techniques. For each technique, we will have a "computer workshop" session to go over the mechanics together.

Module III— Emerging trends and project presentations: In the third and final module, we explore some of the current developments in the management of marketing information, a constantly evolving field. In this semester, we will invite two guest speakers to discuss the following areas:

- In-store shopper marketing
- Marketing Research in the consulting industry

The course will conclude with student presentations of their group-based marketing research project.

Required Material

No textbook is required for this course. We will cover articles, notes, and selected textbook chapters, several cases.

Require software:

- IBM SPSS Statistics 18 or above (Student version cost about $42.99 for a 6-month license on www.onthehub.com)
- Microsoft EXCEL (version 2007 or newer)

Pre-requisites

A working knowledge of basic statistics is <u>essential</u> for understanding the quantitative aspects of marketing research covered in this class. Students who have not taken the pre-requisite course should talk to me before enrolling in this class.

Class Requirements & Grading

- Midterm I (covers Module I): 20%
- Midterm II (covers Module II): 20%
- Six individual assignments 20%
- Class participation: 10%
- Group project: 30%

Grading distribution:

92 to 100: A	72 to 75: C+
88 to 91: A-	68 to 71: C
84 to 87: B+	64 to 67: C-
80 to 83: B	60 to 63: D
76 to 79: B-	59 or below: F

Detailed Class Requirements

Exams (40%)

The purpose of the exams is to assess your analytic skills and technical competence. The exams are not cumulative: Midterm I covers only materials in Module I, and Midterm II covers only materials in Module II. The exam will cover material presented in (i) lectures, (ii) assigned readings, and (iii) articles given out in class.

Exams are closed book, but you are allowed to bring in one letter-size sheet with notes on only one side. I will provide you with some sample practice questions before the exams, and will go over them during the review sessions. The focus of the exam would be on understanding and interpretation, rather than rote memorization. The goal of the midterms is to ensure that students have acquired a basic level of competence with marketing research techniques and concepts.

Individual assignments (20%)

There will be six individual-based short assignments during the course of the semester. These homework assignments seek to reinforce the concepts and methods covered in the lectures by applying them to real-life situations. In addition, I may also give out some in-class exercises to provide some hands-on experience with the marketing research tools.

Class participation (10%)

Given that marketing research is an applied subject where participation and discussion is essential for learning, I encourage class participation and interaction as much as possible, especially for the case discussions. Class participation is mainly evaluated by the following criteria:

- *Attendance*: You are expected to attend every class on time and well-prepared.

    - **Electronic equipments (laptops, cell phones, PDA, MP3s, ipad, etc.) and other kinds of entertainment (e.g., newspaper) are not permitted in class unless I announce otherwise for a particular class session.**

- *Participation in case discussions*: You are expected to be thoroughly prepared for any assigned readings and cases before coming to class, and are expected to contribute in case discussions. I focus on the *quality* of your ideas, rather than the air time that you take.

Marketing Research Project (30%)

The objective of the research project is to provide students with experience in applying the concepts and methods learned in class to a real world problem. Students may choose any problem of their own. For example, past students have conducted marketing research studies to test a new product/service concept, or they may conduct a research study to offer

recommendations to existing product and services. Either way, the problem should be relevant to a business or governmental organization, and must involve the collection and analysis of consumer insights. The project is to be done in groups of four or five students. The project proposal must be discussed and approved by the instructor in its early stage (see course schedule for exact dates).

Guidelines for the course project and project report

1. When selecting a project, make sure you have a clear understanding of the research problem(s) at hand, a realization of the organizational constraints for dealing with such a problem (including time and budgetary restrictions), and an understanding of how the information provided by your research will facilitate decision making.
2. Identify the information needed to address the research problem.
3. Choose a research design and justify its choice (e.g., survey, experiment, focus group, or combination of methods)
4. Develop the data collection method(s). This should include a sampling plan and instrument design (e.g., questionnaire).
5. Collect data. For the purpose of this course, you are required to collect at least 30 completed responses (See the instructor if your research design does not permit this, or if this is irrelevant).
6. Analyze your data using appropriate statistical techniques.
7. Present your recommendations based on your findings and discuss the limitations of your research.

The entire final project report (excluding questionnaire, tables, figures, etc.) should not exceed 20 double-spaced pages. I will give out more details about the requirements of the group project later.

Group members can evaluate each other's performance on the project using a "peer review form" available on Blackboard. If no evaluation is turned in, I will assume that everybody in the group contributed equally. Individual project grades may be adjusted up or down depending on the evaluations.

Course Schedule

#	Date	Topic	Assigned Readings*
Module I: Basic Concepts and Tools			
1	Aug 25	Introduction to Marketing Research	"If you're creating ads…"
		Research Process and Problem Formulation **[HW #1 out]**	"Backward Marketing Research" "Cost-conscious marketing research" "The Coop" case
2	Sep 8	Research Design: Exploratory/Qualitative Research	"The Girl with the Gun" "How Netflix drop the ball…" "India's Mobile Phone Hitmaker" "Consumer Cartography"
		Research Design: Descriptive & Experimental Research **(Deadline for forming groups)** **[HW #2 out]**	"How to Survive in Vegas"
3	Sep 15	Data Collection: Survey design	"What the heck is a TV set?" "Maritim hotels survey" "Notes: Qualtrics tutorial"
		Project group meeting (problem definition) **(Research proposal due)** **[HW #1 due]**	
4	Sep 22	Data Collection: Sampling and Sample Size	
		Project group meeting (problem definition) **[HW #2 due; HW #3 out]**	
5	Sep 29	Data Analysis: Intro. To SPSS and basic analysis	"Notes: SPSS and Basic Analysis Tutorial"
		Data Analysis: Hypothesis testing **[HW #3 due]**	"Notes: Basic Hypothesis testing in SPSS"
6	Oct 6	Review of Module I	

		Midterm I (in class)	

Module II: Advanced Methods

7	Oct 13	Regression I: Review and Introduction	"Simple Regression Mathematics" "Notes: Regression (Introduction)"
		Regression II: Applications	"Notes: Regression (Applications)" "Newfood" case
		[HW #4 out]	
8	Oct 20	Conjoint Analysis	"Notes on Conjoint Analysis"
		Conjoint Analysis (Computer Session)	
		[HW #4 due; HW #5 out]	
9	Oct 27	Factor Analysis and Perceptual Maps	"Analyzing Consumer Perceptions"
		Factor Analysis and Perceptual Maps (Computer Session)	"Notes on Perceptual Mapping"
		[HW #5 due; HW #6 out]	
10	Nov 3	Review of Module II	
		Midterm II (in class)	
		[HW#6 due]	

Module III: Emerging Trends and Project Presentations

11	Nov 10	Guest speaker (Bill Bean, Colgate)	
		Project group meeting (methodology)	
		(Research method proposal due)	
12	Nov 17	Guest speaker (Dawn Zieren, NPD Group)	
		Project group meeting (methodology)	
13	Nov 24	Project Preparation & meetings	
14	Dec 1	Project Presentations	

Other Class Related Issues

Course Website: All relevant material related to the course will be posted on Blackboard. Schedules, reading material, cases, and class notes will be made available in class.

Due dates: All due dates are strictly enforced without valid reason and prior permission.

Detailed Description of Each Session

Module I: Basic Concepts and Tools

Session 1 (Aug 25)

(i) Introduction to Marketing Research

Overview: This session provides an overview of the entire course, which discusses marketing research with a focus on consumer insights. We discuss what marketing research is and its role in a business organization, and whether and when marketing research is preferred to educated guesses/gut feelings. We also provide a high-level overview of all the topics that will be covered in this semester, and how they fit into the framework of "marketing research process," a framework that aims to maximize the benefit and minimize the cost of conducting marketing research.

Readings: - "If you're creating ads, odds are you're talking to yourself"

(ii) Research Process and Problem Formulation

Overview: We describe the marketing research process, and argue that research is best done "from the end to the beginning" (i.e., "backward market research"). We also provide a modern example, through the use of social media, on how marketing research can be done in a cost-effective manner ("Cost conscious marketing research"). Finally, we go through the Coop case for a specific example of some of the issues involved in problem formulation.

Readings: - "Backward Market Research"
          - "Cost-Conscious Marketing Research"
          - "The Coop" case

Session 2 (Sep 8)

(i) Research Design: Exploratory/Qualitative

Overview: We begin by providing an overview of the three main research designs in marketing research for collecting consumer insights: qualitative, descriptive, and experimental research. We then discuss the two main methods of exploratory/qualitative research – (i) listening, and (ii) watching. We discuss both the "traditional" way of doing exploratory research as well as the "modern"/emerging approaches. Traditional ways of "listening to consumers" includes focus group and in-depth interviews, and the modern way to do so is through social media monitoring. Traditional way of "watching consumers" includes direct observation and shadowing, and modern ways includes various forms of consumer tracking (e.g., radio frequency identification tracking).

Readings: - "The girl with the gun"
          - "How Netflix drops the ball"

- "India's mobile phone hitmaker"
- "Consumer Cartography"

(ii) Research Design: Descriptive and Experimental

Overview: In this session we discuss the other two types of research design: descriptive and causal research. For descriptive research, we discuss various examples of secondary data that marketers collect to understand consumer behavior: internal records, website traffic data, media data, scanner data, and demographics data. We then move on to discuss experimental research in marketing, using taste test and website design testing as examples.

Readings: - "How to survive in Vegas"

Session 3 (Sep 15)

(i) Data Collection: Survey design

Overview: We focus on the design of questionnaires in this session. We discuss the differences between cross-sectional and longitudinal survey research. Next we discuss some specific issues of questionnaire design including the choice of measurement scales, attitudinal rating scales, open vs. closed ended questions, and question wording. We then discuss these issues using a real survey from Maritim hotel. Finally, we introduce Qualtrics, an online survey platform.

Readings: - "What the heck is a TV set?"
            - "Maritim hotels survey"
            - "Notes: Qualtrics tutorial"

(ii) Project group meeting (problem definition)

The second part of this class is reserved for project group meetings. I will meet with each group individually (for ~30 minutes each) to discuss the marketing research problem that they intend to study for the group project. We will work together to identify a problem (and expand/narrow down its scope) so that it is appropriate and feasible for the group project.

Session 4 (Sep 22)

(i) Data Collection: Sampling and Sample Size

Overview: From this session onward, we study the more quantitative aspects of collecting and analyzing consumer data. We discuss the use of different sampling methods: convenience sampling, snowball sampling, simple random sampling, and stratified sampling. We then review estimation theory from statistics, and demonstrate how to estimate population quantities (means and proportions) from a sample. We study how to determine an appropriate sample size for a marketing research project. Finally, we conclude with two real-life examples: (i) evaluating an advertisement using social media and (ii) estimating the market size of a healthcare product.

Readings: N/A

(ii) Project group meeting (problem definition)

The second part of this class is reserved for project group meetings. I will meet with each group individually (for ~30 minutes) to discuss the marketing research problem that they intend to study for the group project. We will work together to identify a problem (and expand/narrow down its scope) so that it is appropriate and feasible for the group project.

Session 5 (Sep29)

(i) Data Analysis: Introduction to SPSS and basic analysis

Overview: In this session and the next, we focus on conducting basic statistical analysis on consumer data and formally reporting statistical results using SPSS. We will use the Maritim survey as an example, and demonstrate how to conduct various statistical analyses to answer different managerial questions.

Readings: - "Notes: SPSS and Basic Analysis Tutorial"

(ii) Data Analysis: Hypothesis testing

Overview: For the formal reporting of marketing research results, p-values and the assessment of statistical significance is usually required. In this session, we cover the basic concept of hypothesis testing and "statistical significance", and demonstrate how we can formalize the analysis we did in the previous session by computing p-value using SPSS.

Readings: - "Notes: Basic Hypothesis Testing in SPSS"

Session 6 (Oct 6)

Review of Module I and Midterm I

Module II: Advanced Methods

Session 7 (Oct 13)

(i) Regression I: Review and Introduction

Overview: We start with an overview of the topics in Module II. We then cover the basic concepts of regression analysis, a technique that is widely used in analyzing consumer data. Much of this session is a review of the material covered in introductory statistical courses. We review the concepts and terminology of simple and multiple regression and demonstrate how to

run regression in EXCEL and SPSS, using an example where twitter data is used to predict box office revenue.

Readings: - "Simple Regression Mathematics"
                     - "Notes on Regression (Introduction)"

(ii) Regression II: Applications

Overview: We illustrate the application of regression analysis in marketing research through three real life examples: predicting the sales of DVD using pre-orders, estimating price elasticity in price experiments, and analyzing a test market.

Readings: - "Newfood" test market
                     - "Notes on Regression (Applications)"

Session 8 (Oct 20)

(i) Conjoint Analysis: Concepts

Overview: We cover conjoint analysis, a very popular marketing research tool designed to understand consumers' preferences for a product. We will discuss the underlying concepts of conjoint analysis and provide some hands-on demonstration with real life applications.

Readings: N/A

(ii) Conjoint Analysis: Computer session

Overview: We demonstrate how conjoint analysis is done in real life by analyzing a large dataset from a conjoint study using EXCEL.

Readings: - "Notes on Conjoint Analysis"

Session 9 (Oct 27)

(i) Factor Analysis and Perceptual Maps: Concepts

Overview: We study consumers' perceptions of different brands using factor analysis and perceptual maps. This session provides a conceptual overview of the methodology.

Readings: - "Analyzing consumer perceptions"

(ii) Factor Analysis and Perceptual Maps: Computer Session

Overview: We demonstrate how to produce a perceptual map using factor analysis, using SPSS & EXCEL.

Readings: - "Notes on Perceptual Mapping"

Session 10 (Nov 3)

Review of Module II and Midterm II

Module III: Emerging Trends and Project Presentations

Session 11 (Nov 10)

(i) Guest lecture: Bill Bean, Colgate

Overview: Guest lecture by Bill Bean, worldwide director of shopper insights at Colgate.

(ii) Project group meetings (methodology)

Overview: In the second half of this class, I will meet with each group individually (for ~30 minutes each) to discuss the research method that they intend to use for the group project. We will work together to ensure that the chosen research approach is appropriate to address the problem at hand.

Session 12 (Nov 17)

(i) Guest lecture: Dawn Zieren, the NPD Group

Overview: Guest lecture by Dawn Zieren, the NPD Group

(ii) Project group meetings (methodology)

Overview: In the second half of this class, I will meet with each group individually (for ~30 minutes each) to discuss the research method that they intend to use for the group project. We will work together to ensure that the chosen research approach is appropriate to address the problem at hand.

Session 13 (Nov 24)

This class session is intentionally left blank for students to prepare for project presentations. I will meet with groups to discuss the final analysis of their projects upon request.

Session 14 (Dec 1)

This session is reserved for student presentations.