USC MARSHALL SCHOOL OF BUSINESS | COURSE SYLLABUS | FALL 2011
MKT 543: MARKET DEMAND AND SALES FORECASTING

INSTRUCTOR	Monic Sun	monic.sun@usc.edu
OFFICE HOUR	Wednesdays 5:20pm-6:20 pm	Hoffman Hall 802
CLASS MEETINGS	W 6:30 – 9:30 pm	JKP 102

● ● ● COURSE OVERVIEW

The goal of this course is to provide a well-rounded framework of how companies can use scientific methods to forecast sales and become more informed when making key managerial decisions. Such decision would include, among others, whether a product should be launched, at what price it should be offered, and what advertising and promotion strategies should accompany the launch. The course will equipt you with a comprehensive understanding of the key factors in demand forecast. Motivated by helping you formulate the go-to-market strategies, the specific objectives of the course are:

1. To familiarize you with several advanced, quantitatively oriented marketing tools that enhance demand forecasting ability.
2. Provide extensive experience in using these tools through computer exercises (i.e., dirtying your hands with the data).

To achieve the course objectives I will use a combination of lectures, guest lectures, case discussion, and exercises. Class sessions will be devoted to probing, extending, and applying the core methods. An important aspect of the course involves getting "hands-on" experience through frequent group presentations of business cases and in-class exercises. Discussion of these cases and exercises will form the basis for applying the concepts in real-world situations, and you are expected to come well prepared for these class discussions. The more you prepare, the better you will be able to participate in classes, and the better your peers and I will be able to learn from you!

Please note:

1. There is no required textbook for this class. All readings will be included in the course packet.
2. Besides Excel, we will need to use two other statistical softwares for the course. Each study group (3-5 members) needs to have access to a copy of both softwares, and costs should be shared among group members. No prior experience with the softwares is needed.
   - IBM® SPSS® Statistics Base, available for free in the MBA lab. You can also purchase a newer version for $35 at http://www.onthehub.com/spss but this is completely optional.
   - Marketing Engineering for Excel (ME>XL), available for $40 at http://www.mktgeng.com/student/store. The Download Password is dpro3579.

⬤ ⬤ ⬤ COURSE SCHEDULE

FIRST SESSION	SECOND SESSION
8/24 Course Introduction • Read : Regression Analysis	**Overview of Forecasting Techniques** • Exercise : Regression of MBA Rankings
8/31 Regressions: Causality and Interactions • Exercise : Click Ball Point Pen • Due : Study Group Member Names	**Forecasting for New Products** • Read : Forecasting Adoption of New Product • Exercise : Estimation of Bass model for Different Datasets
9/7 Bass Model Application • Case (GPD) : Forecasting the Adoption of E-books	**Forecasting for Established Products** • Read : The Case of the Test Market Toss-Up • Case (GPD) : Contadina Pasta & Pizza (A)
9/14 Questionnaire Design • Read : Questionnaire Design and Development; Backward Market Research • Case : The Harvard Housing Survey	**Hypothesis Testing** • Read : Hypothesis Testing • Exercise : Tulsa's Central Business District
9/21 Sampling Methods and Sample Size • Read : Sampling and Statistical Inference • Due (IA 1) : Survey Critique	**Conjoint Analysis** • Read : How Conjoint Analysis Works
9/28 Debate : Bellboy • Due (IA 2) : Precision Parts, Inc.	**Conjoint Analysis Application** • Case (GPD) : Forte Hotel Design
10/5 Guest Lecture • Russ Rubin, SVP at MarketTools	**Pricing New Products** • Case (GPD) : The Springfield Nor'easters
10/12 Guest Lecture • Brenda Ng, Principal at The Trio Group • Due (GA 1) : Spot Removers Design	**Factor & Cluster Analysis** • Read : Factor and Cluster Analysis

10/19 Guest Lecture • Preston McAfee, VP at Yahoo!	**Factor & Cluster Analysis Application** • Mini Case (GPD) : Daimler and Chrysler
10/26 Customer Lifetime Value • Read : Customer Profitability; Customer Profitability and Lifetime Value • Case : Tuscan Lifestyles: Assessing Customer Lifetime Value	**Multi-Dimensional Scaling** • Read : Geometric Representation of Objects
11/2 Perceptual Mapping Application (GP) • Mini Case (GPD) : Positioning the Infiniti G20	**Experimental Design** • Read : Boost Your Marketing ROI with Experimental Design; R&D Comes to Services
11/9 Field Experiments • Read (GPD) : Observational Learning: Evidence from a Randomized Natural Field Experiment • Due (GA 2) : Perceptual Mapping	**Natural Experiments** • Read (GPD) : Group Size and Incentives to Contribute : A Natural Experiment at Chinese Wikipedia
11/16 Guest Lecture • Brian Strachman, Strategic Account Manager at Frost & Sullivan	**RFM Analysis** • Read : Recency, Frequency and Monetary Analysis • Case : Assessing RFM at Tuscan Lifestyles
11/30 Experiment Design Presentations	**Course Review**

Notation:

IA: Individual Assignment. GA: Group Assignment. GPD: Group Presentation and Discussion.

● ● ● ASSESSMENT GUIDELINES

COMPONENT	%	DESCRIPTION	EVALUATION
Class Participation	5%	Every session will involve some interaction and discussion. I may randomly select (i.e., cold call) students at any time in class to contribute their ideas.	One absence is automatically granted. Two or more ungranted absences will lower your final grade considerably.
Individual Assignments "IA" in the schedule above	20%	• Survey Critique (10%) • Precision Parts (10%)	Due dates are in the schedule above. *No late assignments will be accepted. All written work is due at the beginning of class on the due date.*
Group Assignments "GA" in the schedule above	30%	• Perceptual Mapping Assignment (15%) • Spot Remover Design (15%)	Due dates are in the schedule above. *No late assignments will be accepted. All written work is due at the beginning of class on the due date.*
Group Presentation and Discussion "GPD" in the schedule above	30%	• Group Presentation (20%) Each group needs to pick two GPD cases to present, each accounting for 10% of the final grade. • Group Discussion (10%) Each group needs to pick two *other* GDP cases to discuss, each accounting for 5% of the grade.	Group presentations (roughly half an hour) will be evaluated along the lines of 3C's: Completeness, Correctness, and Clarity. The presenters should also prepare to handle questions on the case or paper. *Turn in your slides by email at the beginning of class.* Group discussions (roughly ten minutes) will be evaluted based on how much it improved the 3C's of the presentation in that class.
Experiment Design Presentation	15%	Find a question for which managers may have interest in. Present how you would design an experiment to help them answer the question, and how the answer can benefit them.	Credits will be given to (1) questions that are hard to answer with traditional forecasting methods such as regressions, and (2) designs that are creative, feasible, detail oriented, and have high internal and external validity.

● ● ● GUEST SPEAKER BIOS

Speaker	Short Biography
Russ Rubin	Russ Rubin is currently the Senior Vice President of Strategic Accounts at MarketTools (the leading online research company). He has been with MarketTools for just over 4 years. Prior to this, Russ worked at General Mills for over 30 years in a wide variety of roles in the Consumer Insights function, most recently as the Head of International Consumer Insights. Russ has seen the industry move from face-to-face interviewing to telephone interviewing to mall interviewing to postal interviewing and now to online surveys. Major highlights of Russ' contributions at General Mills was starting up Cereal Partners Worldwide (CPW), the joint venture between General Mills and Nestle, based in Lausanne, Switzerland, the launch of General Mills China and the creation and development of the International research function at General Mills. Russ received both his B.S. (Management Science) and M.S. from Carnegie-Mellon University/Tepper School of Business in Pittsburgh PA. He is a world traveler having visited over 70 countries. He resides in a suburb of Minneapolis, Minnesota with his wife of 31 years.
Brenda Ng	Brenda Ng is now the principal at The Trio Group. Prior to her Trio's endeavour, she served as the Vice President of Consumer & Competitive Insights at T-Mobile USA. She has over twenty years of consumer strategy and marketing experience in consumer packaged goods, high-tech entertainment products and services in intensely competitive categories. Her expertise in strategic planning, brand management and consumer insights was honed at Nestle S.A. and Microsoft Corporation where she successfully managed multinational consumer product lines ranging from emerging categories with nascent technology to mature products. At Microsoft, Brenda was handpicked to start the incubation team for the Xbox videogame system and was Director of Worldwide Consumer Insights and Strategy for Microsoft's Entertainment and Devices Division. At T-Mobile, she leads a team that drives the voice of the consumer into the product life cycle, from market opportunity analysis to product development, launch and post-launch. She enjoys the stimulating university environment as a visiting lecturer at Stanford Graduate School of Business, Cornell University Graduate School of Management, and UCLA Anderson School of Management. Brenda currently resides with her husband and daughter in Seattle, Washington.

Preston McAfee	Preston McAfee is Vice President and Research Fellow at Yahoo! Research in Burbank, CA, where he leads a group focused on microeconomics research. From 2004-2007, R. Preston McAfee was the J. Stanley Johnson Professor of Business, Economics and Management at the California Institute of Technology. McAfee wrote Introduction to Economic Analysis, a free, open-source text that spans both principles and intermediate microeconomics. McAfee is the author of over seventy articles published in scholarly economics journals, many of them on auctions and bidding, and co-author of a book Incentives in Government Procurement. McAfee taught business strategy at the University of Chicago's Graduate School of Business in 2000-1, and is the author of Competitive Solutions: The Strategist's Toolkit, published by Princeton University Press in 2003. McAfee is an authority on industrial organization, and has been hired as a consultant by the U.S. Department of Justice Antitrust Division, and the USA Federal Trade Commission (FTC). McAfee has advised on matters concerning mergers, collusion, price-fixing, electricity pricing, bidding, procurement, sales of government property. In 1994-5, McAfee extensively advised the USA Federal Communications Commission (FCC) on the design of auctions for spectrum to be used for personal communications services. McAfee advised the FTC on the mergers of Exxon and Mobil, and of British Petroleum and ARCO. He was an expert witness in FTC v. Rambus, and on the competitive effects of the proposed Peoplesoft-Oracle merger in USA v. Oracle Corporation. McAfee also serves as the business adviser to Miwok Airways.
Brian Strachman	Brian Strachman has over 15 years of experience in market research and consulting. Currently he is a strategic account manager at Frost and Sullivan, one of the largest management consulting and research firms in the world with over 40 global offices and 1800 analysts. His responsibilities include managing the relationships and research needs of Frost's largest clients such as Abbott Laboratories and GlaxoSmithKline. Previously he spent 5 years at the research and consulting firm of In-Stat (Reed Business) as an industry analyst, industry manager, and account manager. In the past Strachman held the title of product manager with P&L authority of a software product line with annual sales over $400M, spent 4 years in strategy consulting roles at an analytics/database marketing firm, and was a principal in the consulting firm of the MarkStrat Group. In his career Strachman has provided consulting services to such clients as Microsoft, Cisco, Autodesk, Credit Suisse, Intel, HP, Prudential, Dell, and IBM. He holds two Bachelor of Science degrees from ASU in Finance and Marketing, as well as an MBA from Arizona State.

PEER EVALUATION FORM

You do have to turn in this form if you think that all members of your group contributed equally to your group work. Otherwise, please use this form to evaluate the contribution of all of the members of your group by allocating 100 points across all members (including yourself). Please justify your unequal allocation in the comment section below. Please turn in this form before the end of the last class. These evaluation forms will be kept strictly confidential.

Points	Member name
	1 Your name:
	2
	3
	4
	5
100	

Comments