

**MKT 615: Doctoral Seminar**  
**Fall 2023**  
**Critical Review of Marketing Models (3 units)**  
**Instructors: Profs Gerard J. Tellis (Part 1) and Lan Luo (Part 2)**

**OVERVIEW**

This course provides students with an overview of hot topics that quant researchers in marketing are studying today. The instructors will choose both classic articles from the field and recent advances. The purpose of the seminar is to educate students about picking interesting problems for research, positioning research in the literature, collecting suitable data, choosing the right model for the problem, and crafting the article for impact. Both quant and behavioral candidates can benefit from the course.

Substantive topics include innovation, market entry, incumbent defense, diffusion, quality, advertising, social media, returns to marketing, and creativity (in Part 1) and choice models, new product development, machine learning, Generative AI, platforms & sharing/gig economy in Part 2.

Models include Hazard, Diffusion, Functional Analysis, Diff-in-Diff, Synthetic Control, and Latent Dirichlet Allocation (in Part 1) and Logit/Tobit/Probit, Conjoint, Convolutional Neural Network, Generative Adversarial Network, Causal ML methods (in Part 2). The seminar will focus on the intuition of the model and insights derived from it rather than on algebraic derivation.

Methods of instruction include a mix of instructor presentations, student critiques of papers, and lively discussion of pros and cons of topics, models, and papers. The goal is critical appreciation of the rich literature in quant marketing on these topics.

Part 1: Strategic & Dynamic Models (Tellis)  
Course Syllabus and Schedule  
(Revised 18 August, 2023)

Instructor: Gerard J. Tellis  
Neely Chaired Professor in American Enterprise  
Director of the Institute for Outlier Research in Business  
(iORB)  
Director of Center for Global Innovation  
Professor of Marketing, Management, and Organization,  
USC Marshall School of Business  
614 HOH. Phone: 626-652-9941 email: tellis@usc.edu  
url: www.gtellis.net Social Media: LinkedIn, Facebook,

WhatsApp  
Schedule: **Fridays 1 to 4 PM, in HOH 506, from Aug 24 to Oct 6.**

Office Hours: By appointment

Readings: E-copy on Dropbox for MKT 615

References: Kuhn, The Structure of Scientific Revolutions (free online available)  
Lilien, Kotler, & Moorthy, Marketing Models

#### Description

This part of the seminar covers strategic dynamic models in marketing, focusing on how they solve strategic marketing problems. The instructor will provide an overview of articles in each session (see schedule at end) and an intuition of key models. Papers listed under “Discussion” will be presented and critiqued by students. Papers listed under “Background” give a sense of the literature on the topic but will not be explicitly discussed. Prior knowledge of econometrics, statistics, and time series would be helpful though not required.

One of the best ways for doctoral candidates to understand a research area is to critically review research articles in that area. While less efficient than lectures, this approach provides a deep understanding of research problems, an appreciation of the research process, and practice in presenting to academic audiences. So, the seminar will consist primarily of a discussion of key articles on each topic led by a student presenter. Students will be challenged to critique one of the articles listed for discussion each week and position it in the literature. Students in the audience should

contribute constructively to the discussion. For this purpose, students may refer to but not use laptops. Cellphones are not permitted in class.

More than half the papers covered in Part 1 of the seminar come from papers published by doctoral students who took the seminar in prior years. Most of these papers are based on doctoral dissertations. Many are highly cited and some have won awards. This selection of papers is meant to inspire PhD students and provide a template for their own research.

### Goals

Upon successful completion of this seminar, students will be able to:

- 1) Identify important problems in strategic marketing.
- 2) Describe how various dynamic models address these problems.
- 3) Summarize major findings in each area.
- 4) Critically review articles, integrate literature into their papers, and present research.

### Method

The sessions will involve a discussion of the readings assigned for the day. Students should read all papers and participate constructively in the discussion in every session, even if they are not responsible for the presentation. In addition, on each session, some students will have one of two assignments: 1) Prepare a summary and critique of a paper or 2) Prepare only a critique of a paper. Students will have to prepare these critiques on PowerPoint and present them to the class on the scheduled date. Students should email the presentation to the instructor ahead of class or bring it to class on a thumb drive. They should also email them to other participants ahead of the class or bring to class handouts of the presentation for students. Students should not consult notes, reviews, or answers of former students of this course, when preparing these assignments.

### Attendance

Students need to attend every session punctually and should inform the instructor ahead of time of any absence or late attendance.

### Grading

Grades will be based on the instructor's private assessment of a student's learning and contribution. Weights will be as follows:

Class Participation	10%
Critiques presented	20%

Partially open-book final exam 20%

## Final Exam

The final exam will consist of answering two of four questions in a 3-to-4-hour period. The exam is partially open-book. Students may bring their own handwritten or printed notes to the exam but not bring others' notes and printed or electronic material, articles, slides, or books. They should not use laptops, tablets, or smart phones. The date is on the USC Fall 2023 calendar.

### Legend for Schedule:

- FDA = Functional Data Analysis
- ADL = Autoregressive Distributed Lag model
- VAR = Vector Auto Regressive model
- DiD = Difference in Difference analysis
- SC = Synthetic Control
- LDA = Latent Dirichlet Allocation
- NLP = Natural Language Programming

## Part 1 Schedule: Strategic Dynamic Models (Tellis)

No	Date	Time	Room	Model/ Method	Guest Speaker	Topic	Authors (Highlights indicate readings not included in Course Reader or Dropbox)
0	8/17/23					Preparation	Syllabus Part 1; Reviewing articles; Tellis 2017
1	8/25/23	2:00 PM	HOH 505	Archival R., DiD		Market Entry	<b>Discussion:</b> Golder & Tellis 1993; Johnson & Tellis 2008; Zervas, Proserpio & Byers 2017
2	9/1/23	2:00 PM	HOH 505	Bass Model, FDA		Diffusion	<b>Background:</b> Chandrasekaran & Tellis 2006; Bass 1969; <b>Discussion:</b> Sood & James & Tellis 2009; Appel & Libai, & Muller 2019; Chandrasekaran & Tellis & and James 2023; Tellis et al 2019
3	9/8/23	2:00 PM	HOH 505	Hazard Models		Innovation, Takeoff, Disruption	<b>Background:</b> Hauser & Tellis & Griffin 2006; Bower & Christensen 1995; Golder & Tellis 1997 <b>Discussion:</b> Chandy & Tellis 2000; Tellis & Stremersch & Yin 2003; Sood & Tellis 2011; Zhang & Luo 2019
4	9/15/23	2:00 PM	HOH 505	Quasi Experiment, Koyck, ADL, DID, SC		Advertising Response	<b>Background:</b> Goldfarb & Tucker & Wang 2022 ; Sethuraman & Tellis & Briesch 2011; Tellis & Franses 2006 <b>Discussion:</b> Tellis & Chandy & Thaivanich 2000; Teixeira Wedel Pieters 2010; Liaukonyte, Teixeira & Wilbur 2015; Tirunillai & Tellis 2017
5	9/22/23	2:00 PM	HOH 505	Event Analysis; VAR		Returns to Marketing	<b>Background:</b> Srinivasan & Hanssens 2009; Mizik and Jacobson 2009a; 2009b <b>Discussion:</b> Fornell et al 2006; Sood & Tellis 2009; Tirunillai & Tellis 2012; Borah & Tellis 2014
6	9/29/23	2:00 PM	HOH 505	NLP		Creativity from Crowd	<b>Discussion:</b> Bayus 2012; Toubia & Netzer 2017; Wei & Hong & Tellis 2022; Bell & Pescher & Tellis & Fuller 2023
7	10/6/23	2:00 PM	HOH 505	LDA		Quality from Crowd	<b>Background:</b> Golder, Mitra, Moorman <b>Discussion:</b> Tellis & Yin & Niraj 2009; Borah & Tellis 2016; Tirunillai & Tellis 2014; Nair & Siddharth and Tellis 2023

### Readings

Author (Year)	Brief Title
Appel, Libai, & Muller (2019)	“Growth, Popularity. Long Tail,” Working Paper
Bass, F. M. (1969)	“A New Product Growth Model for Consumer Durables.” <i>Management Science</i> , 15(5): pp. 215-227
Bayus, Barry	“Crowdsourcing New Product Ideas Over Time: An Analysis of the Dell <i>IdeaStorm</i> Community,” <i>Management Science</i> .
Bell, Pescher, Tellis, Fuller (2023)	“Can AI Do Ideation? Idea Screening in Crowdsourcing Contests,” <i>Marketing Science</i> , forthcoming.
Borah & Tellis (2016)	“Halo (Spillover) Effects in Social Media: Do Recalls of One Brand Hurt or Help a Rival Brand?” <i>Journal of Marketing Research</i> .
Borah & Tellis (2015)	“Make Buy Ally: Choice of and Payoff to Announcements of Alternate Strategies for Innovation,” <i>Marketing Science</i> , 33, 1 (Jan-Feb), 114-133
Bower & Clay Christensen (1995)	Disruptive Technologies: Catching the Wave,” Harvard Business Review, January-February.
Chandrasekaran, D. and Tellis, G. J. (2007)	“A Critical Review of Marketing Research on Diffusion of New Products.” In <i>Review of Marketing Research</i> , vol. 3, Malhotra, N. K. (ed.). Armonk, NY: M. E. Sharp Chapter 2, pp. 39-80
Chandy, Rajesh & Gerard J. Tellis (2000)	“The Incumbent's Curse? Incumbency, Size & Radical Product Innovation,” <i>Journal of Marketing</i> , 64, 3 (July), 1 to 17.
Fader, Peter (2012)	“Marketing vs Economics: Gymnastics or High-Wire Act?” <i>Today, Knowledge @ Wharton</i>
Fornell et al (2006)	“Customer Satisfaction & Stock Prices: High Returns, Low Risk,” <i>Journal of Marketing</i> , 70 (January), 3-14
Golder Peter N. & Gerard J. Tellis (1993)	“Pioneering Advantage: Marketing Logic or Marketing Legend,” <i>Journal of Marketing Research</i> .
Golder, Peter N. & Gerard J. Tellis (1997)	“Will It Ever Fly? Modeling The Takeoff of New Consumer Durables,” <i>Marketing Science</i> , 16, 3, 256-270.
Hauser John, Gerard J. Tellis & Abbie Griffin (2007)	“Research on Innovation & New Products: A Review & Agenda for Marketing Science,” <i>Marketing Science</i> , 25, 6, 687-717.
Goldfarb, Avid, Catherine Tucker and Y. Wang (2022)	“Conducting Research in Marketing using Quasi-Experiments” <i>Journal of Marketing</i> , forthcoming.
Johnson, Joseph & Gerard J. Tellis (2008),	“Drivers of Success for Market Entry into China & India,” <i>Journal of Marketing</i> , 72 (May) 1-13.
Liaukonyte, Teixeira & Wilbur 2015	“Television Viewing and Online Shopping,” <i>Marketing Science</i> , 34, 3, May-June, 311-330.
Sethuraman, Raj, Gerard J. Tellis, & Richard Briesch (2011)	“How Well Does Advertising Work? Generalizations from a Meta-Analysis of Brand Advertising Elasticity,” <i>Journal of Marketing Research</i> , XLVIII, June, 457-471.
Sood, A. & Tellis, G. J. (2009)	“Do Innovations Really Payoff? Total Stock Market Returns to Innovation.” <i>Marketing Science</i> , 28(3): pp. 442-456
Sood, A., James, G. M. & Tellis, G. J. (2009)	“The Functional Regression: A New Model for Predicting the Market Penetration of New Products.” <i>Marketing Science</i> , 28(1): 1, 36-51
Sood, A. & Tellis, G. J. (2011)	“Demystifying Disruptions: A New Model for Understanding & Predicting Disruptive Technologies.” <i>Marketing Science</i> , 30(2): pp. 339-354
Srinivasan, S. & Hanssens, D.	“Marketing & Firm Value: Metrics, Methods, Findings, & Future

M. (2009)	Directions.” <i>Journal of Marketing Research</i> , 46(3): pp. 293-312
Tellis, Gerard J (2017)	“Interesting & Impactful Research,” <i>Journal of the Academy of Marketing Science</i> .
Tellis, Gerard J. (2023)	“Short is Sweet: How to Write Well.” Unpublished advice.
Tellis, G. J. & Franses, P. H. (2006)	“Optimal Data Interval for Advertising Response Models.” <i>Marketing Science</i> , 25(3): pp. 217-229
Tellis, G. J., Stremersch, S. & Yin, E. (2003)	“The International Takeoff of New Products: Economics, Culture & Country Innovativeness.” <i>Marketing Science</i> , 22(2): pp. 188-208
Tellis, G. J., Chandy, R. & Thaivanich, P. (2000)	“Which Ad Works, When, Where, & How Often? Modeling the Effects of Direct Television Advertising,” <i>Journal of Marketing Research</i> , 37 (1): pp. 32-46
Tellis, MacInnis, Tirunillai, Zhang (2017)	“Drivers of Virality,” <i>Journal of Marketing</i> .
Teixeira, T. S., Wedel, M. & Peters, R. (2010)	“Moment-to-Moment Optimal Branding in TV Commercials: Preventing Avoidance by Pulsing.” <i>Marketing Science</i> , 29(5): pp. 783-804
Tirunillai, S. & Tellis (2017)	“Does Offline Advertising Affect Online Chatter? Quasi-Experimental Analysis Using Synthetic Control.” <i>Marketing Science</i> , forthcoming.
Tirunillai, S. & Tellis (2014)	“Mining Marketing Meaning From Chatter: Strategic Brand Analysis of Big Data using Latent Dirichlet Allocation,” <i>Journal of Marketing Research</i> , 51, 4 (August).
Tirunillai, S. & Tellis (2012)	“Does Chatter Really Matter? Dynamics of User-Generated Content & Stock Performance.” <i>Marketing Science</i> , 31(2): pp. 198-215
Toubia & Netzer (2017)	“Idea Generation, Creativity, & Prototypicality,” <i>Marketing Science</i> , 26, 1, 1-20.
Varian, Hal R. (1997)	“How to Build an Economic Model in Your Spare Time,” in <i>Passion &amp; Craft: Economists at Work</i>
Zervas, Proserpio & Byers (2018)	“The Rise of the Sharing Economy: Estimating Impact of Airbnb on the Hotel Industry,” <i>Journal of Marketing Research</i> .
Zhang & Luo 2019	“Yelp Reviews and Restaurant Survival,” <i>Management Science</i>
Wei, Hong and Tellis (2022)	Machine Learning from Success,” <i>Journal of Marketing</i> .

## Statement on Academic Conduct and Support Systems

### Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on [Research and Scholarship Misconduct](#).

### Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office

of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](https://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### **Support Systems:**

*Counseling and Mental Health - (213) 740-9355 – 24/7 on call*  
[studenthealth.usc.edu/counseling](https://studenthealth.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call*  
[suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call*  
[studenthealth.usc.edu/sexual-assault](https://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086*  
[eotix.usc.edu](https://eotix.usc.edu)

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*  
[usc-advocate.symplicity.com/care\\_report](https://usc-advocate.symplicity.com/care_report)

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

*The Office of Student Accessibility Services (OSAS) - (213) 740-0776*  
[osas.usc.edu](https://osas.usc.edu)

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

*USC Campus Support and Intervention - (213) 821-4710*  
[campussupport.usc.edu](https://campussupport.usc.edu)

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity, Equity and Inclusion - (213) 740-2101*  
[diversity.usc.edu](https://diversity.usc.edu)

Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for



students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*  
[dps.usc.edu](https://dps.usc.edu), [emergency.usc.edu](https://emergency.usc.edu)

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*  
[dps.usc.edu](https://dps.usc.edu)

Non-emergency assistance or information.

*Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)*  
[ombuds.usc.edu](https://ombuds.usc.edu)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

*Occupational Therapy Faculty Practice - (323) 442-3340 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)*  
[chan.usc.edu/otfp](https://chan.usc.edu/otfp)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.