



RICARDO MONTOYA
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I. EDUCATION

- Graduate School of Business, Columbia University, Ph.D. Marketing, 2008
- Graduate School of Business, Columbia University, M.Phil. Marketing 2005
- School of Engineering, University of Chile,
Master in Operations Management 2002
- School of Engineering, University of Chile, Industrial Engineer 2002
- School of Engineering, University of Chile, Bachelor in Engineering Science 1998

II. ACADEMIC POSITIONS

- Associate Professor, School of Management,
Pontificia Universidad Católica de Chile 2020 – To date
- Associate Professor Industrial Engineering Department,
Universidad de Chile 2019 - 2020
- Assistant Professor, Industrial Engineering Department,
Universidad de Chile 2008 - 2019
- Lecturer, Columbia University 2008 - 2012

III. AREA OF SPECIALIZATION AND MAIN COURSES

- Development of methodologies to learn about consumer and firm behavior with applications to marketing, economics and operations management problems.
- Marketing: retailing, pricing, marketing/operations management interface, customer relationship management, reward programs, dynamic allocation of marketing resources, product design, eye-tracking, non-compensatory decision processes.
- Operations Management: optimal product design, feature selection, dynamic pricing, out of stocks, marketing/operations management interface.

IV. RESEARCH

Recent Publications

- Maldonado, S., Diaz, V., & Montoya, R. (2023). Preference estimation under bounded rationality: Identification of attribute non-attendance in stated-choice data using a support vector machines approach. *European Journal of Operational Research*.



- Goić, M., Levenier, C., & Montoya, R. (2021). Drivers of customer satisfaction in the grocery retail industry: A longitudinal analysis across store formats. *Journal of Retailing and Consumer Services*.
- Musalem, A., Meißner, M., Huber, J. & Montoya, R. (2021). Components of attentional effort for repeated tasks. *Journal of Behavioral Decision Making*. 34(1):99-115.
- Montoya, R. & González, C. (2019). A hidden Markov model to detect on-shelf out-of-stocks using point-of-sale data. *Manufacturing and Service Operations Management*. 21(4):932-948.
- Montoya, R. & Flores, C. (2019). Buying free rewards: the impact of a points-plus-cash promotion on purchase and reward redemption. *Marketing Letters*. 30, 107-118.
- Goic, M., Alvarez, R. & Montoya, R. (2018). The effect of house ads on multichannel sales. *Journal of Interactive Marketing*. 42, 32-45.
- Maldonado, S., López, J. & Montoya, R. (2017). Simultaneous preference estimation and heterogeneity control for choice-based conjoint via support vector machines. *Journal of the Operational Research Society*. 68 (1), 1323-1334.
- Maldonado, S., López, J. & Montoya, R. (2017). Embedded heterogeneous feature selection for conjoint analysis: a SVM approach using L1 penalty. *Applied Intelligence*. 46, 775-787.
- Correa, J., Thraves, CH. & Montoya, R. (2016). Contingent preannounced pricing policies with strategic consumers. *Operations Research*. 64 (1), 251-272.

Book Chapters

- Montoya, R., Co-authors: Kamel Jedidi & Oded Netzer. (2016). Dynamic marketing mix allocation for long-term profitability. In *From Little's Law to Marketing Science: Essays in Honor of John D.C. Little*.

Working Papers and Work in Progress

- "Structural Heterogeneity in HMMs: Allowing for heterogeneity in the number of states," with Nicolás Padilla & Oded Netzer.
- "Managing Profitability through Point Expiration in High-Value Low-Frequency Loyalty Programs," with Marcel Goic and Isamar Troncoso.
- "The effect of pregnancy and childbirth on consumption behavior," with Verónica Diaz and Oded Netzer.
- "Probabilistic lexicographic models," with Kamel Jedidi and Rajeev Kohli.
- "Probabilistic choice in optimal product design," with Rajeev Kohli.
- "The effects of reward programs," with Ran Kivetz and Oded Netzer.
- "Disentangling the short and long-term effects of marketing actions: An HMM approach," with Eva Ascarza, Oded Netzer, and Nicolás Padilla.



V. SELECTED SCIENTIFIC PRESENTATIONS

- Montoya, Ricardo, Verónica Diaz (UAI), Oded Netzer (Columbia University), “The Effect of Pregnancy and Childbirth on Consumption Behavior”, Marketing Dynamics Conference , Greece, 2024.
- Montoya, Ricardo, Verónica Diaz (UAI), Oded Netzer (Columbia University), “The Effect of Pregnancy and Childbirth on Consumption Behavior”, Marketing Science Conference, USA, 2023.
- Montoya, Ricardo, Andrés Elberg (PUC), Francisca Grandón (Universidad de Chile), Cristián Dagnino (Spike), “The Impact of the Covid-19 Pandemic on the Nutritional Quality of Food Purchases” Marketing Science Conference, USA, 2022.
- Montoya, Ricardo, EURO 2021, European Conference on Operational Research, “Optimal Pricing of Points in Points Plus Cash Reward Programs”, Greece, 2021.
- Montoya, Ricardo (2018), “Optimal pricing of points in points plus cash reward programs,” XL Marketing Science Conference, INFORMS, Temple University, Philadelphia, Pennsylvania.
- Montoya, Ricardo and Carlos Gonzalez (2017), “A hidden Markov model to detect on-shelf out-of-stocks using point-of-sales data,” XXXIX Marketing Science Conference, INFORMS, University of Southern California, Los Angeles, California.
- Montoya, Ricardo and Carlos Gonzalez (2016), “A hidden Markov model to detect on-shelf out-of-stocks using point-of-sales data,” XXXVIII Marketing Science Conference, INFORMS, Fudan University, Shanghai, China.
- Montoya, Ricardo, Andrés Musalem, and Marcelo Olivares (2015), “Stock-out detection system based on sales transaction data,” Informs Conference, Philadelphia, Pennsylvania.

VI. GRANTS AND AWARDS

- Fondecyt Project # 1211020 (2021-2025): “Advancing research on reward programs: point liability and implications of structural changes”. Role: Principal Investigator. Co-Investigator: Andres Musalem.
- Fondecyt Project # 1151395 (2015-2019): “Product design and assortment planning with non-compensatory preferences under competition”. Role: Principal Investigator. Co-Investigator: Denis Saure.
- Fondecyt Project # 11110173 (2011-2014): “Probabilistic non-compensatory choice models”. Role: Principal Investigator.
- Fondef Project # ID14I10388 (2015-2017): “Desarrollo de Tecnologías para Mejorar la Experiencia de Compra de los Clientes en un Ambiente Multicanal” (translation: “Development of technologies to improve customers’ purchase experience on a multichannel environment”)
- Fondecyt Project # 1120898 (2012-2016): “Estimating the Value of Customer Service in Retailing”. Role: Co-Investigator. Principal Investigator: Marcelo Olivares.



- Fondef Project # IT13I20031 (2014-2016): “Desarrollo de una herramienta para la evaluación económica de niveles de servicio al cliente en retail” (translation: “Development of a tool for the economic evaluation of service levels towards customers in retail”).
- Complex Engineering Systems Institute (ISCI, Basal #AFB180003). (2009-present) Role: Researcher. The institute has received funding from the Millenium Science Initiative (Ministry of Economics, Development and Tourism) and Conicyt/ANID.
- Teaching Excellence Award, Global MBA, University of Chile, 2012.
- Best Full-time Professor. Department of Industrial Engineering, University of Chile, 2010.
- Alden G. Clayton Doctoral Dissertation Proposal Competition, Honorable mention, 2006.
- AMA-Sheth Foundation Doctoral Consortium Fellow, 2006
- INFORMS Marketing Science Doctoral Consortium Fellow, 2006-2007
- Rudolph Fellow, Columbia Business School, 2005
- Doctoral Fellowship, Graduate School of Business, Columbia University, 2003.
- Presidente de la Republica, Fellowship, MIDEPLAN, Chile, 2003.

VII. ACADEMIC REFEREE

- Reviewer for: Marketing Science, Management Science, Manufacturing Service and Operations Management, Journal of Marketing Research, International Journal of Research in Marketing, European Journal of Operational Research, Naval Research Logistics, Quantitative Marketing and Economics, Annals of Operations Research, Journal of the Operational Research Society, Production and Operations Management, Journal of Choice Modelling, Alden G. Clayton Dissertation Proposal Award, FONDECYT (The Chilean Research Fund Council).

VIII. OTHER RELEVANT POSITIONS AND ACTIVITIES

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| - Member of Instituto Sistemas Complejos de Ingeniería (ISCI) | 2023-Present |
| - Committee Member of Fondecyt, Economics and Administration Study Group, | 2023-Present |
| - Visiting researcher, Columbia University, USA | 2023 |
| - Consultancy for Ministry of Economy, Development, and Tourism (SERNAC), Study on the Impact of Credit Card Statements on Consumer Financial Decisions | 2020 |



IX. OTHER RELEVANT POSITIONS AND ACTIVITIES

Administrative Service and Conference Organization

- Organizing Committee member of the 2024 University of Chile's Management Science Workshop, San Pedro de Atacama, Chile.
- Organizing Committee member of the 2020 University of Chile's Management Science Workshop, Puerto Varas, Chile.
- Organizing Committee member of the 2017 University of Chile's Management Science Workshop, Puerto Varas, Chile.
- Search and Hiring Committee, Industrial Engineering Department, University of Chile, 2017-present
- Organizing Committee member of the 2016 University of Chile's Management Science Workshop, San Pedro de Atacama, Chile.
- Advisory Board, Global MBA Program, University of Chile 2012-2016
- Director Center of Retailing (CERET), University of Chile (2011-2014)
- Elected Council Member, Industrial Engineering Department, University of Chile (2011-2015).
- Workshop Coordinator, "New Trends in Management Science and Economics", Department of Industrial Engineering, University of Chile, 2009 – 2013.

Industry Projects

- "Designing a new reward program at Domino restaurant". The company is determining the key elements of its new Reward Program. 2017-2018.
- "Methodology to determine the Breakage rate for Latam Airlines", with Marcel Goic. 2015.
- "Methodology for the pricing of TV advertising", with Marcel Goic. This methodology was developed for one of the largest Chilean TV networks. 2014.
- "Methodology to generate out of stock early warnings", with Andres Musalem and Marcelo Olivares. This methodology was developed for one of the largest global retailers. 2013-2014. Research coordinator, Administration department, Universidad de Chile.