

Marcelo Olivares AcuÃ±a

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EDUCATION

- Ph.D. Operations Management, The Wharton School, University of Pennsylvania, 2007
M.S. Statistics, University of Pennsylvania, 2006
B.S. Industrial Engineering, Universidad de Chile, 2000

APPOINTMENTS

- 2012– Universidad de Chile
Associate Professor, Department of Industrial Engineering, 2018–
Assistant Professor, Department of Industrial Engineering, 2012–2018
- 2007– Columbia University
Associate Professor, Columbia Business School, 2011–2012
Assistant Professor, Columbia Business School, 2007–2011
- 2017 Stanford University
Visiting Professor, Stanford Graduate School of Business

Visiting positions

- 2021– Columbia University
Adjunct Associate Professor, Columbia Business School
- 2017 Stanford University
Visiting Professor, Stanford Graduate School of Business

PUBLICATIONS

Journal Articles

- 2022 Basso, L., Goic, M., Olivares, M., Saure, D., Thraves, C., Weintraub, G., et al. “Analytics Saves Lives during the Covid-19 Crisis in Chile.” *Forthcoming in INFORMS Journal of Applied Analytics*, Franz Edelman Special issue.
- 2022 Olivares, M., Musalem, A., and Yung, D. “Balancing Agent Retention and Waiting Time in Service Platforms.” *Forthcoming in Operations Research*, Special Issue on Behavioral Queuing Science.
- 2022 Magga, L., Maturana, S., Olivares, M., Valdevenito, M., Cabezas, J., Chapochnick, J., González, F., Kompatzki, A., Muller, H., Pefaur, J., Ulloa, C., Valjalo, R. “Identifying Factors Predicting Kidney Graft Survival in Chile Using Elastic-Net-Regularized Cox Regression.” *Medicina*, 58(10), 1348. doi:10.3390/medicina58101348

- 2022 Foncea, P., Mondschein, S., Olivares, M., “Replacing quarantine of COVID-19 contacts with periodic testing is also effective in mitigating the risk of transmission.” *Scientific Reports*, 12, 3620. doi:10.1038/s41598-022-07447-2
- 2022 Carranza, A., Goic, M., Lara, E., Olivares, M., Weintraub, G.Y., Covarrubia, J., Escobedo, C., Jara, N. and Basso, L.J. “The social divide of social distancing: Shelter-in-place behavior in Santiago during the COVID-19 pandemic” *Management Science*, 68(3), pp.2016–2027. doi:10.1287/mnsc.2021.4240
- 2022 Mondschein, S., Olivares, M., Ordonez, F., Schwartz, D., Weintraub, A., Torres-Ulloa, I., Aguayo, C. and Canessa, G. “Service design to balance waiting time and infection risk: An application for elections during the COVID-19 pandemic” *Service Science*, 14(2),90–109. doi:10.1287/serv.2021.0290
- 2021 Altman, D., Yom-Tov, G.B., Olivares, M., Ashtar, S. and Rafaeli, A. “Do customer emotions affect agent speed? An empirical study of emotional load in online customer contact centers.” *Manufacturing & Service Operations Management*, 23(4), 854–875. doi:10.1287/msom.2020.0897
- 2021 Musalem, A., Olivares, M. and Schilkрут, A. “Retail in High Definition: Monitoring customer assistance through video analytics.” *Manufacturing & Service Operations Management*, 23(5), 1025–1042. doi:10.1287/msom.2020.0865
- 2020 Rudi, N., Olivares, M. and Shetty, A. “Ordering sequential competitions to reduce order relevance: Soccer penalty shootouts.” *PloS one* 15(12), e0243786. doi:10.1371/journal.pone.0243786
- 2020 Fisher, M., Olivares, M. and Staats, B.R. “Why empirical research is good for Operations Management, and what is good empirical Operations Management?” *Manufacturing & Service Operations Management*, 22(1), 170–178. doi:10.1287/msom.2019.0812
- 2020 Terwiesch, C., Olivares, M., Staats, B. R., and Gaur, V. “Empirical Operations Management in MS and M&SOM: A Review of the Last Two Decades.” *Manufacturing & Service Operations Management*, 22(4), 645–867. doi:10.1287/msom.2018.0755
- 2019 Cachon, G., Gallino, S., Olivares, M. “Does Adding Inventory Increase Sales? Evidence of a Scarcity Effect in U.S. Automobile Dealerships” *Management Science*, 65(4), 1455–1947. doi:10.1287/mnsc.2017.3014
- 2016 Kim, S.H., Chan, C., Olivares, M. and Escobar, G. “Association among Intensive Care Unit Congestion, Intensive Care Unit Admission Decision, and Patient Outcomes” *Critical Care Medicine*, 44(10) 1814–1821. doi:10.1097/CCM.0000000000001850
- 2015 Kim, S.H., Chan, C., Olivares, M. and Escobar, G. “ICU Admission Control: An Empirical Study of Capacity Allocation and Its Implication for Patient Outcomes” *Management Science*, 61(1): 19-38. doi:10.1287/mnsc.2014.2057.
- 2014 Kim, S.W., Olivares, M., Weintraub, G. “Measuring the Performance of Large-Scale Combinatorial Auctions: A Structural Estimation Approach” *Management Science* 60(5), 1180–1201. hrefhttps://doi.org/10.1287/mnsc.2013.1814doi:10.1287/mnsc.2013.1814
- 2013 Lu, Y., Musalem, A., Olivares, M. and Schilkрут, A. “Measuring the Effect of Queues on Customer Purchases” *Management Science* 59(8), 1743-1763.
- 2012 Olivares, M., Weintraub, G., Yung, D. and Epstein, R. “Combinatorial Auctions for Procurement: An Empirical Study of the Chilean School Meals Auction” *Management*

- Science*, 58(8), 1458–1481. doi:10.1287/mnsc.1110.1496
- 2010 Cachon, G. and Olivares, M. “Drivers of finished-goods inventory in the U.S. automotive industry” *Management Science*, 56(1), 202–216.
- 2010 Musalem, A., Olivares, M., Bradlow, E., Terwiesch, C. and Corsten D. “Structural estimation of the effect of stock-outs” *Management Science* 56(7), 1127–1145.
- 2009 Olivares, M. and Cachon, G. “Competing retailers and inventory: An empirical investigation of General Motors’ dealerships in isolated markets” *Management Science* 55(9), 1586–1604
- 2008 Olivares, M., Terwiesch, C. and Cassorla, L. “Structural estimation of the Newsvendor model: An Application to Reserving Operating Room Time” *Management Science* 54(1), 41–55.

Book Chapters

- 2019 Goic, M. and Olivares, M. “Omnichannel analytics.” In: *Operations in an Omnichannel World* 115–150, edited by S. Gallino and A. Moreno. Springer, Cham. doi: 10.1007/978-3-030-20119-7-6.

Conference Proceedings

- 2020 Olivares, M., Musalem, A., and Yung, D. “Balancing Agent Retention and Waiting Time in Service Platforms” *Proceedings of the 21st ACM Conference on Economics and Computation*, 295–313. doi:10.1145/3391403.3399464

INVITED TALKS

- 2022 “Analytics saves lives during the Covid Crisis in Chile.” INSEAD, Technology and Operations Seminar. Fontainebleau, France (April).
- 2018 “Managing Worker Utilization in Service Platforms: An Empirical Study of an Outbound Call-Center.” Yale School of Management, New Haven (December). Georgetown University, Washington D.C. (November). Wharton, Operations, Information and Decisions, Philadelphia (April).
- 2017 “Measuring Customer Assistance through Video Analytics.” Stanford Graduate School of Business, Operations, Information and Technology, Palo Alto (February).
- 2015 “Retailing in High Definition: Using Video Analytics in Store Salesforce Management” Boston University (March). Kenan-Flagler School of Business, University of North Carolina, Chapel Hill (January).
- 2014 “Retailing in High Definition: Using Video Analytics in Store Salesforce Management” University of Michigan, Ross School of Management, Ann Arbor (November).
- 2013 “ICU Admission Control: An Empirical Study of Capacity Allocation and Its Implication for Patient Outcomes” Pontificia Universidad Catolica, Facultad de Ciencias Economicas y Administrativas, Santiago (November). Universidad Adolfo Ibañez, Santiago (November).
- 2012 “Measuring the performance of large-scale combinatorial auctions.” Duke University, Fuqua School of Business, Durham (April).
- 2011 “Measuring the Effect of Queues on Customer Purchases.” Harvard Business School, Technology and Operations Management, Boston (December).

- 2010 “Combinatorial Auctions for Procurement: An Empirical Analysis of the Chilean School Meals Auction” Cornell University, Johnson College of Business, Ithaca (October). Penn State University, Smeal School of Business (April). MIT, Sloan School of Business, Boston (September).
- 2007 “Competing retailers and inventory: An empirical investigation of U.S. auto dealerships” University of California, Los Angeles, Anderson School of Business, Los Angeles (March).

Campus Talks

- 2022 “Analytics saves lives during the Covid Crisis in Chile.” Universidad de Chile, Facultad de Ciencias Físicas y Matemáticas (April).
- 2010 “Combinatorial Auctions for Procurement: An Empirical Analysis of the Chilean School Meals Auction” Columbia University, Industrial Organization and Strategy Seminar (May).

CONFERENCE ACTIVITY

Sessions Organized

- 2016 “Choice Modeling In The Marketing-Operations Management Interface: Relevance, State Of The Art And Directions For Future Research.”. Co-Chair in the 10th Triennial Invitational Choice Symposium, May 2016, Lake Louise, Canada.
- 2014-19 Workshop in Management Science, Chile, Organizing Committee.
- 2013 Supply Chain Management Special Interest Group, M&SOM, Co-organizer (July).
- 2012 M&SOM Conference, Columbia University, Organizing Committee (June).
- 2010– Empirical Workshop in Operations Management, Wharton School, Philadelphia, Organizing Committee.
- 2009-14 Conference on Innovation in Operations, London Business School, Organizing Committee.

Selected Conference Presentations

- 2022 “Analytics saves lives during the Covid Crisis in Chile.” INFORMS Business Analytics Conference, Edelman Finalist Presentations, Houston TX (April).
- 2020 “Balancing Agent Retention and Waiting Time in Service Platforms”. ACM Conference in Economics & Computation (June).
- 2019 “Capacity Management in Service Platforms: Balancing responsiveness with employee retention.” Workshop on Empirical Research in Operations Management (September).
- 2019 “Inferring Checkout Queues from Transaction Data” Inform's Annual Conference, Seattle WA (October).
- 2018 “Labor Planning and Shift Scheduling in Retail Stores using Customer Traffic Data” M&SOM Conference, Dallas TX (July).
- 2017 “Prioritizing Time Sensitive Customers in an Outbound Call Center.” M&SOM Conference, Chapel Hill NC (June).
- 2016 “Using Real-Time Operational Data to Increase Labor Productivity in Retail.” M&SOM Conference, Auckland (June).

- 2014 “Does adding inventory increase sales? Evidence of Scarcity effect in the U.S. Automobile Dealerships” International Industrial Organization Conference, Chicago, (April).
- 2014 “Retail in High Definition: Using Video Analytics in Staffing and Salesforce Planning” LBS Innovation in Operations Conference, London (July).
- 2013 “Measuring the Performance of Large Scale Combinatorial Auctions: A Structural Estimation Approach” ACM Conference on Electronic Commerce, Philadelphia (June).
- 2012 “Measuring the Performance of Large Scale Combinatorial Auctions: A Structural Estimation Approach” NBER Summer Institute Industrial Organization Workshop, Boston (June).
- 2011 “Measuring the effect of queues on customer purchases” M&SOM Service Operations SIG, Ann Arbor, MI (June).
- 2010 “Designing Combinatorial Auctions: An Empirical Analysis of the Chilean School Meals Auction”, M&SOM Supply Chain Management SIG, Technion University, Haifa, Israel (June).
- 2010 “The effect of Waiting Time on Customer Purchasing Behavior”, Production and Operations Management Conference, Vancouver BC (May).

GRANTS AND AWARDS

Awards and Honors

- 2022 Winner, Franz Edelman Award, “Analytics Saves Lives during the Covid-19 Crisis in Chile” (part of the research team from Instituto Sistemas Complejos de Ingenieria).
- 2018 Winner, Management Science Best Paper Award, “ICU Admission Control: An Empirical Study of Capacity Allocation and Its Implication for Patient Outcomes”.
- 2017 Finalist, Management Science Best Paper Award, “Measuring the Effect of Queues on Customer Purchases”.
- 2015 Service Operations Special Interest Group Best Paper Award, “Measuring the Effect of Queues on Customer Purchases”.
- 2012 Management Science Meritorious Service Award.
- 2010 Management Science Distinguished Service Award.
- 2009-10 M&SOM Meritorious Service Award.
- 2007 Winner of Student Paper Competition, Production and Operations Management Society, for the paper “Competing retailers and inventory: An empirical investigation of General Motors’ dealerships in isolated markets”.
- 2005 OPIM Outstanding Scholar Award, The Wharton School, University of Pennsylvania.
- 2002 Presidente de la Republica, Fellowship, MIDEPLAN, Chile.
- 2001 Best undergraduate thesis, ICHIO (Chilean OR Society).
- 2001 Second place in undergraduate thesis competition, SADIO (Argentinean OR Society).

Grants and Fellowships

- 2019-21 “Diseño y evaluación de nudges para incentivar ahorro en las compras publicas”, Proyecto Evaluacion Impacto DIPRES, PI.

- 2019–21 “Desarrollo de un sistema integrado de gestión de trasplantes basado en aprendizaje automático y diseño de mercado”, Fondef Project ID1910303, PI.
- 2019–21 “Managing Capacity Utilization in Service Platforms”, Fondecyt Project 1181201, PI.
- 2019–21 “Desarrollo de una Plataforma Software-as-a-Service para Apoyar Decisiones de Dotación de Personal en Cadenas de Retail”, Fondef Project IT1710066 (2018-2020), co-PI.
- 2016–21 “Platform design for the implementation of competitive framework agreements in public procurement” Fondef Project ID1610122, PI.
- 2016–21 “Desarrollo de una herramienta para la evaluación económica de niveles de servicio al cliente en retail”, Fondef Project IT13120031, PI.
- 2016–21 “Public Procurement Mechanisms: From Practice to Research (and Back Again)”, Columbia-Chile grant, PI.
- 2012–16 “Measuring the Value of Customer Service in Retailing”, Fondecyt Project 1120898.
- 2010 “Procurement auctions for School Meals” CIBER/Chazen Research Grant, PI.
- 2008-09 “Combinatorial Auctions for Procurement” Columbia Business School, Social Enterprise Center.
- 2006 “Structural Estimation of Stock-out based Substitution” The Wharton School, Baker Retailing Initiative.

Teaching Awards

- 2015-18 Best Professor Award, MBA Version Minera, Universidad de Chile, 2012-2018.
- 2016 Best Professor, Universidad de Chile (Awarded to the top professors throughout the university).
- 2012-13 Best Professor Award, Global MBA, Universidad de Chile, 2012-2018.
- 2018 Best Professor Award, Departamento de Ingenieria Industrial, Universidad de Chile.
- 2013-14 Best Professor Award, Departamento de Ingenieria Industrial, Universidad de Chile.

COURSES TAUGHT

Universidad de Chile

- Statistics and Data Analysis (2012–14)
- Operations Management, Undegraduate and MBA (2012–)
- Introduction to Economics (2018–)
- Data-driven Decision Making, Data Analytics Certificate (2018–21)
- Empirical Methods in Management Science, PhD and MSc programs (2015–18)

Columbia Business School

- Operations Management, core MBA and Executive MBA (2008–11, 2021–22).
- Empirical Methods in Management Science (2015,2018).
- Applied Statistics and Data Analysis, MSc (2015).
- Mathematical Statistics, PhD (2008–11).

Stanford Graduate School of Business

Empirical Methods in Operations Management (2017).

Executive Education

**** COMPLETE **** Entrepreneurship and Competitiveness in Latin America (ECLA), Columbia Business School 2010-present. Student advisor in process improvement projects. National Retail Federation Convention, Big Ideas session, "Video Communications: Evolving Your Relationship with Customers, Employees and the Bottom Line", (with CISCO-IBM). New York, Jan 11, 2011. Stifel Summer School (at Columbia Business School), "Measuring the Effect of Customer Service Levels", New York, August 4, 2010. Indian Institute of Management-Ahmedabad (at Columbia Business School), November 9-13, 2009, four sessions on Operations Management.

Teaching material

**** COMPLETE **** "Beleza Natural", with Omar Besbes, Nelson Fraiman, Maria Jose Quinteros and Gabriel Weintraub. Columbia Case Works, September 2011. Case used in the Operations Management MBA core at Columbia Business School (CBS), Stanford GSB, NYU and Purdue.
"Improving Customer Engagement", with Andrew Shin. Columbia Case Works September 2011. Case used in the Operations Management MBA core at CBS and Dartmouth.

SERVICE

Academic Journal Editorial Boards

Manufacturing & Service Operations Management, Department Editor 2020–, Associate Editor 2014–2020.

Management Science, Associate Editor, 2014–

Production and Operations Management, Senior Editor, 2014–2018.

Academic Journal Peer Review

American Behavioral Scientist

American Journal of Sociology

Academic Press Peer Review

Management Science

Manufacturing and Service Operations Management

Operations Research

Production and Operations Management

American Economic Review

Marketing Science

Journal of Operations Management

Mathematical Programming

Journal of Econometrics

Scientific Data

California Management Review

Revista Medica de Chile

Funding Agency Peer Review

Agencia Nacional de Investigaci3n y Desarrollo (Chile's NSF)

Israel Science Foundation

Service to Field

Fondecyt Advisory Board, Economics and Management group, 2015–2018.

Practice-oriented research M&SOM award evaluation committee, 2016–2020.

Dantzig Award evaluation committee, 2014–2015.

Pierskalla Award evaluation committee, 2015-2021.

Service Management Best Paper Award evaluation committee, 2016.

Service to Department

Universidad de Chile

Ph.D. program coordinator, Doctorado Sistemas de Ingenieria, 2017–.

Board member of the Institute of Complex Engineering Systems, 2016–.

Academic Committee, MBA Program, 2012–present.

Academic Evaluation Committee, Industrial Engineering, 2019–.

Hiring Search Committee, Industrial Engineering, 2013–2019.

Executive Committee, Industrial Engineering, 2015.

Columbia Business School

Recruiting Committee, Decisions, Risk and Operations, 2010–12.

Research Database Committee, 2011–12.

Department Seminar Organizer, Decisions, Risk and Operations, 2008-2011.

Teaching Mentor, 2009.

Doctoral student supervision

Advisor

Daniel Yung, Universidad de Chile, School of Engineering.

Yina Lu, Columbia University, Decisions, Risk and Operations.

Sang-Won Kim, Columbia University, Decisions, Risk and Operations.

Doctoral committee

Valeria Scapini, Universidad de Chile, School of Engineering.
 Jaime Carrasco, Universidad de Chile, School of Engineering.
 Dana Pizarro, Universidad de Chile, School of Engineering.
 Veronica Diaz, Universidad de Chile, School of Engineering.
 Serdar Simsek, Columbia University, Decisions, Risk and Operations.
 Roger Lederman, Columbia University, Decisions, Risk and Operations.
 Margaret Pierson, Columbia University, Decisions, Risk and Operations.
 Song-Hee Kim, Columbia University, Industrial Engineering and Operations Research.
 Carlos Montes, Columbia University, Economics.
 Santiago Gallino, Wharton School, Univ. of Pennsylvania, Operations, Informations and Decisions.
 Antonio Moreno, Wharton School, Univ. of Pennsylvania, Operations, Informations and Decisions.

MEMBERSHIPS

Institute of Operations Research and Management Science (INFORMS), 2007–.
 Production and Operations Management Society, 2007–2014.

TECHNICAL REPORTS AND CONSULTING PROJECTS

2020-22 “Public Spending Monitoring System”, Chilecompra and DIPRES, Ministry of Finance, Chile.
 2020-21 “Expert assesment and research to improve public procurement of pharmaceutical products in Chile”. Open Contracting Partnership and Central de Abastecimiento (CENABAST).
 2020-21 “Predicting checkout queues with transaction data”. Walmart Chile.
 2018 “Auction Design and Procurement Strategies for Framework Agreements and e-Commerce Platform”, Dirección Chilecompra.
 2018 “Efficiency Analysis of Alternative Auction Designs for the new terminals of the Large-scale Port in San Antonio”, Empresa Portuaria de San Antonio (EPSA).
 2017-18 “Economic Report for the Estimation of Damages for the Chicken collusion case in Chile”, Servicio Nacional del Consumidor (SERNAC).
 2016 “Estimation of Damages for the Toilet paper collusion case in Chile”, Fiscalía Nacional Economica, Chile.
 2016–17 “Evaluating overcharges in a bidding ring for public procurement auctions of injectable pharma drugs”, Fiscalía Nacional Economica, Chile.
 2015–18 “Labor allocation system for judges and supporting staff in Chilean courts”. Poder Judicial de Chile.
 2013-14 “Stock-out detection systems based on transaction data”. Walmart Chile.

SELECTED MEDIA COVERAGE

** COMPLETE **

2009-13 Diario El Mercurio, May 29, 2018 "Estimaci3n de multas y compensaciones en casos de colusi3n". Revista Portafolio de Retail, Diario Financiero, May 2013, pgs 80-83. "El decisivo factor 10", summary of the research article "Measuring the Effect of Queues on Customer Purchases". BusinessWeek, October 7 2013. "Are You Too Rich to Wait in Line?". Reference to article "Measuring the Effect of Queues in Customer Purchases". Harvard Business Review "The Daily Stat" October 4, 2013. "Customers Care More About a Line's Length than How Fast It Moves". Reference to article "Measuring the Effect of Queues in Customer Purchases" Strategy+Business, September 19, 2013, "Variety, no quantity, drives car sales". Reference to article "Does Inventory Affect Sales?".

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