Nikolay Osadchiy

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Education

New York University Leonard N. Stern School of Business

 Ph.D., Operations Management, 2010.
 Thesis: Forecasting and Revenue Management in Retailing Committee: Sridhar Seshadri (Chair), Vishal Gaur, Gustavo Vulcano
 M.Phil., Operations Management, 2008.

Moscow Institute of Physics and Technology

M.S. (with honors), Applied Mathematics and Physics, 2002. B.S. (with honors), Applied Mathematics and Physics, 2000.

Academic Appointments

Emory University, Goizueta Business School

Associate Professor of Information Systems and Operations Management (tenured), 2017present

Assistant Professor of Information Systems and Operations Management, 2010-2017

Editorial Appointments

Senior Editor, Production and Operations Management, 2019 - present

Associate Editor, Service Science, 2019 - present

Guest Associate Editor, Management Science, 2019-2020

Research Interests

Production networks, Supply chain management, Supply chain visibility, OM-Finance interface, Behavioral regularities and pricing, Retail operations.

Publications

- 1. "Inventory Productivity and Stock Returns in Manufacturing Networks", with D.Agrawal, 2023, *Manufacturing and Service Operations Management*, forthcoming.
- "Sourcing for Online Retail Marketplaces with Demand and Price Uncertainty", with V.Gaur, S.Seshadri, and M.Subrahmanyam, 2023, *Production and Operations Management*, 32(10), 3062-3080.
- 3. "Why It Is So Hard to Map Global Supply Chains", with V.Gaur and M.Udenio, *Harvard Business Review*, Oct. 2022, digital article
- 4. "The Bullwhip Effect in Supply Networks", with W.Schmidt and J.Wu, 2021. *Management Science*, Vol. 67, No. 10.

Featured Management Science article.

- 5. "The Right Way to Mix and Match Your Customers", with W.Schmidt and J.Wu, *MIT Sloan Management Review*, Summer 2021
- 6. "Are Patients Patient? The Role of Time to Appointment in Patient Flow", with D.Singh KC, 2017. *Production and Operations Management*, Vol. 26, No. 3, March 2017, pp. 469-490.
- 7. "Systematic Risk in Supply Chain Networks", with V. Gaur and S. Seshadri. *Management Science*, Vol.62, No. 6, June 2016, pp. 1755-1777.

Media coverage: "Taming the Bullwhip Effect in Supply Chains", *Strategy+Business*, Booz&Co, Winter 2011, Issue 65.

 "Behavioral Anomalies in Consumer Wait-or-Buy Decisions and Their Implications for Markdown Management", with M.Baucells and A.Ovchinnikov, 2016, *Operations Research*, Vol. 65, No. 2, pp. 357-378.

Media coverage: "Customer Focused Retail Strategy", *IEDP Delevoping Leaders*, 2016. "Science Behind Retail Markdowns", *The Dana Barrett Show*, Biz 1190 Wall Street Business Network, 2016.

 "Sales Forecasting with Financial Indicators and Experts' Input", with V. Gaur and S. Seshadri. *Production and Operations Management*, Vol. 22, No. 5, September-October 2013, pp. 1056-1076.

The Inaugural M&SOM/iFORM Best Paper Award, Runner-Up, 2014.

10. "Selling with Binding Reservations in the Presence of Strategic Consumers", with G. Vulcano. *Management Science*, Vol.56, No.12, December 2010, pp. 2173-2190.

Other Journal Publications

 "The Centroidal Algorithm in Molecular Similarity and Diversity Calculations on Confidential Datasets", with S.Trepalin, *Journal of Computer-Aided Molecular Design*, Vol. 19, No. 9, pp. 715-729, 2005.

Media coverage: "Share and Share Alike", *Nature Reviews Drug Discovery*, Vol .4, No. 3, March 2005.

Book Chapters

12. "Supply Network Drivers of Risk and Performance", with M.Bellamy, in *Oxford Handbook of Supply Chain Management* Eds. Tom Choi, 2019.

Working Papers

- 13. "Fragmentation and Visibility in Supply Networks", with V.Gaur and M.Udenio, 2023.
- 14. "Optimal Design and Pricing of Sequenced Bundles in the Presence of Satiation", with R.Gurlek and M.Baucells 2023.
- 15. "The Lost Decade for U.S. Manufacturing Jobs: A Story of Cost and Risk", with S.Seshadri and S. Qiu 2023.
- 16. "Portfolio Approach to Cash Flow Variability", 2023, with W. Schmidt and J.Wu, *M&SOM*, Major revision
- 17. "Dealer Inventory and the Linkage between Primary and Secondary Markets for Eurozone Sovereign Debt", with A.Eisl, C.Ochs, and M.Subrahmanyam, 2020.
- 18. "Are Consumers Really Strategic? Implications from an Experimental Study", with E.Bendoly, 2010, revised 2015.

Work in Progress

- 19. "On the Benefits of Supplier and Customer Diversification", with D.Agrawal.
- 20. "Value Chain Smile", with D.Agrawal
- 21. "Microfoundations of Link Formation in Production Networks".

Refereed Conference Proceedings

- 22. "The Correlation of Supply Chain Risk and Financial Market Returns", with V.Gaur and S.Seshadri, 2009 NSF CMMI Research and Innovation Conference Proceedings, Honolulu, HI.
- 23. "Systematic Risk in Supply Chain Networks", with V.Gaur and S.Seshadri, 2013 M&SOM Supply Chain Operations SIG Conference Proceedings, INSEAD, France.
- 24. "Impact of Waiting Time on Patient Throughput: An Econometric Analysis of Outpatient Clinics", with Diwas KC, 2013 M&SOM Healthcare Operations SIG Conference Proceedings, INSEAD, France.

Teaching Materials

"CaLNG: Peak Shaving to Alleviate a Supply-Demand Bottleneck", with S.Chopra, Kellogg case 5-319-500, 2019.

Teaching

Emory University Goizueta Business School, Instructor

ISOM 599R Supply Chain Analytics (MSBA elective), Spring 2024

ISOM 553G Supply Chain Management (MBA elective), Spring 2017-2024

ISOM 553P Supply Chain Management (EvMBA elective), Spring 2017-2024

ISOM 353G Supply Chain Management (BBA elective), Spring 2017-2024

ISOM 754 Advanced Topics in Operations Management (PhD seminar), Spring 2019, 2021, 2023

Strategy and Execution, Emory Executive Education, co-taught with Steve Walton, 2018-2019

ISOM 490 BBA Capstone, "Demand Analytics in Automotive Industry", Spring 2017-2018 BUS 351 Process and Systems Management (BBA core), Spring 2011-2016

BUS 490 BBA Capstone, Operations Management refresher course (online), Fall 2015

New York University Leonard N. Stern School of Business, Instructor

C60.0001 Competitive Advantage from Operations (undergraduate core), Fall 2008 Ph.D. Teaching Excellence Award

New York University Leonard N. Stern School of Business, Teaching Assistant

C60.0001 Competitive Advantage from Operations (undergraduate core), Fall 2009.B01.2314 Competitive Advantage from Operations (MBA core), Spring 2006, Spring 2007, Spring 2008, Spring 2009.B60.2330 Retail Operations (MBA elective), Spring 2007.

PhD Student Supervision

- 1. Deepak Agrawal, advisor (exp. graduation 2024)
- 2. Ragip Gurlek, committee member (exp. graduation 2025)
- 3. Shi Qiu (UIUC), committee member (exp. graduation 2025)
- 4. Sokol Tushe, committee member

Invited Talks

2024: Indian School of Business (scheduled)

2023: Utah Winter Operations Conference, University of California at Irvine, University of Washington

2022: Cornell University

2021: University of Michigan, Wharton Workshop on Empirical Research in Operations Management

2019: Vanderbilt University, Chinese University of Hong Kong, University of Hong Kong, Wharton Workshop on Empirical Research in Operations Management, McGill University

2018: UNC Kenan Institute of Private Enterprise, Boston College, Boston University

2017: Technical University of Eindhoven, Queen's University

2016: University of Rochester, Center of the Economic Analysis of Risk at Georgia State University

2015: Utah Winter Operations Conference, University of Texas at Dallas, Georgia Institute of Technology, INSEAD, NYU

2014: POMS College of Behavioral Operations, Pricing with a Human Element Mini-Conference; Wharton Workshop on Empirical Research in Operations Management

2013: Indian School of Business

2012: Oracle Global Retail

2010: University of Chicago, Emory University, University of Houston, London Business School, Northwestern University

2009: Cornell University, Loyola University Chicago

2008: IBM Research

Invited Conference Presentations

Inventory Productivity and Stock Returns in Manufacturing Networks, MSOM IFORM SIG 2023, Montreal Canada

Portfolio Approach to Cash Flow Variability, MSOM IFORM SIG 2023, Montreal Canada

Have Supply Networks Become More Fragmented Over Time?, Wharton Empirical OM Workshop, 2021

The Lost Decade for U.S. Manufacturing Jobs: A Story of Cost and Risk, INFORMS 2019 Seattle, WA.

The Bullwhip Effect in Supply Networks, MSOM 2019 Singapore, Wharton Empirical OM workshop, 2019

Dealer Inventory and the Linkage between Primary and Secondary Markets for Eurozone Sovereign Debt, MSOM IFORM SIG 2019 (Singapore), INFORMS 2019

Optimal Timing of Inventory Decisions with Price Uncertainty, INFORMS 2017 (Houston, TX), INFORMS 2019 (Seattle, WA)

Evolution of Supply Networks, POMS 2016 (Orlando, FL), INFORMS 2016 (Nashville, TN), INFORMS 2017(Houston, TX)

Optimal Timing of Inventory Decisions with Price Uncertainty, INFORMS 2016 (Nashville, TN), POMS 2017 (Seattle, WA)

Systematic Risk And Mass Layoffs in U.S. Manufacturing, INFORMS 2015 (Philadelphia, PA), International INFORMS 2016 (Waikoloa, HI).

Behavioral Anomalies in Consumer Wait-or-Buy Decisions and Their Implications for Markdown Management, POMS 2014 (Atlanta, GA), iFORS 2014 (Barcelona, Spain), INFORMS 2014 (San Francisco, CA), POMS 2015 (Washington, DC), MSOM 2015 (Toronto, Canada), INFORMS 2015 (Philadelphia, PA).

Systematic Risk in Supply Chain Networks, M&SOM Supply Chain Special Interest Group, IN-SEAD, France, 2013, INFORMS 2014 (San Francisco, CA), POMS 2015 (Washington, DC).

Are Patients Patient? The Role of Waiting Time in Patient Flow, POMS 2015 (Washington, DC), POMS 2016 (Orlando, FL).

An Econometric Analysis of Black Friday Sales in Retail. INFORMS 2012 (Phoenix, AZ).

Estimating the Effect of Capacity Constraints on Throughput: Evidence from an Outpatient Clinic. POMS 2012 Annual Meeting (Chicago, IL), MSOM 2012 (New York, NY), INFORMS 2012 (Phoenix, AZ).

Are Consumers Really Strategic? Implications from an Experimental Study. 2011 POMS Annual Meeting (Reno, NV), INFORMS 2011, INFORMS Revenue Management Section 2012 (Berlin, Germany).

Systematic Risk in and Bullwhip Effect in Supply Chains 2010 INFORMS Annual Meeting (Austin, TX), 2011 POMS Annual Meeting (Reno, NV), INFORMS 2011, MSOM 2011.

Network Revenue Management with Uncertain Capacity: Application for Online Ad Sales. 2010 INFORMS Annual Meeting (Austin, TX).

Are Financial Markets Important for Your Supply Chain? 2009 INFORMS Annual Meeting (San Diego, CA).

Sales Forecasting with Financial Indicators and Experts' Input. 2009 INFORMS Annual Meeting (San Diego, CA), 9th Annual Trans-Atlantic Doctoral Conference (London, UK), 2008 IN-FORMS Annual Meeting (Washington, DC), 2007 INFORMS Annual Meeting (Seattle, WA).

Selling with Binding Reservations in the Presence of Strategic Consumers. 2009 INFORMS Applied Probability Society Conference (Ithaca, NY), 2008 INFORMS Annual Meeting (Washington, DC), 2008 INFORMS Revenue Management and Pricing Section Meeting (Montreal, Canada).

The Correlation of Supply Chain Risk and Financial Market Returns. 2009 NSF Engineering Research and Innovation Conference (Honolulu, HI), 2009 POMS Annual Meeting (Orlando, FL).

Media Appearances

WABE Atlanta (11/3/2023), Atlanta News First (8/30/2023), MarketScale (02/07/2023), 11Alive (12/16/2022), WTOP News (9/14/2022), Nextstar(9/14/2022), CBS46 (9/13/2022), 11Alive (9/13/2022), WABE Atlanta (9/13/2022), Cobb Business Journal (12/01/2021) The Champion(11/25/2021), Hypepotamus (11/23/2021), Atlanta Journal Constitution (11/19/2021, 09/29/2021), NBCLX (01/22/2021), WABE (01/13/2021), CBS46 (12/8/2020), The Future Factory (08/20/2020), CNN International (03/31/2020), Inbound Logistics (03/18/2020), Biz 1190 Wall Street Business Network (07/15/2016), WSB Atlanta (07/11/2016), Emory Business (multiple appearances from 2011 to 2022).

Professional Experience

IBM T.J. Watson Research Center, Yorktown Heights, NY

Research Intern, Department of Mathematical Sciences, 2008.

ChemDiv, Inc., San Diego, CA

Scientist, Chemoinformatics, 2003-2005.

FORS, Moscow, Russia

Software Engineer/Group Leader, 2000-2003.

Moscow Institute of Physics and Technology, Moscow, Russia

Research Fellow, 2001-2003.

Professional Societies

Institute for Operations Research and Management Sciences (INFORMS)

Manufacturing and Service Operations Management Society (M&SOM)

Production and Operations Management Society (POMS)

Service to the Profession

Referee for Management Science, Manufacturing and Service Operations Management, Operations Research, Production and Operations Management, Journal of Operations Management, Decision Sciences, Decision Analysis, Naval Research Logistics, Operations Research Letters

INFORMS Annual Conference IFORM Track Chair, 2021
POMS College of Behavioral Operations (CBOM), President, 2019-2021
POMS College of Behavioral Operations (CBOM), Treasurer, 2017-2019
POMS CBOM Junior Scholar Paper Competition Co-organizer, 2018-2020

INFORMS JFIG Paper Competition, Judge, 2018, 2020 Buffa Doctoral Dissertation Award, Judge, 2018 POMS CBOM Mini-Conference, Houston TX, Co-organizer, 2018 MSOM IFORM SIG Conference, Dallas TX, Co-organizer, 2018 POMS Supply Chain Management College Best Paper Competition, Judge, 2015-2018, 2020 MSOM Service Operations Management SIG conference, reviewer, 2016 MSOM Supply Chain Management SIG conference, reviewer, 2015 POMS Supply Network Analytics Mini-Series, organizer, 2015, 2016 POMS Healthcare Operations Management Best Paper Competition, Judge, 2013 INFORMS 2010 Future Academician Colloquium, panelist Organizer of numerous invited sessions at INFORMS and POMS conferences

Service to the School

Goizueta ISOM-OM PhD track curriculum development, 2017 Goizueta Business School ISOM Faculty Search Committee, 2013, 2015, 2016, 2017 Goizueta Business School ISOM PhD Recruitment Committee, 2017-2019 Emory Data Analytics Club, faculty advisor, 2013-2018 Goizueta Day One Challenge, MBA program, judge, 2016 ISOM Predictive Analytics Competition, organizer, 2016 HackATL, judge, 2015 Goizueta Development Program, Guest Lecturer, Emory University, 2015 Goizueta Business School BBA Program Committee, Emory University, 2014-2015 Goizueta Business School Research Committee, Emory University, 2012-2013 Goizueta Business School ISOM Hightower Lecture Series, co-organizer, Emory University, 2012-present NYU Stern Operations Management Informal Seminar Series organizer, New York University, 2007-2009

Awards

Meritorious Service Award, Manufacturing and Service Operations Management, 2011, 2015, 2017, 2018, 2023

Goizueta Research Award, 2013, 2018

The Inaugural M&SOM/iFORM Best Paper Award, Runner-Up, 2014.

Goizueta Global Perspectives Research Grant, 2014.

Meritorious Service Award, Management Science, 2012, 2014.

Distinguished Service Award, Management Science, 2013.

NYU Stern Ph.D. Teaching Excellence Award, New York University, 2009.

INFORMS Applied Probability Society Student and Young Faculty Travel Grant, 2009.

W. Edwards Deming Fellowship, New York University, 2009-2010.

NYU Stern Fellowship, New York University, 2005-2009.

Presidential Fellowship, Moscow Institute of Physics and Technology, 2001.

Russian National Physics Olympiad, Final Round, 3rd-Degree Diploma, 1996, 1994.

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