

Karthik Ramachandran

Dunn Family Professor
Operations Management
Scheller College of Business
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Academic Experience

2012 –	Scheller College of Business, Georgia Institute of Technology; Atlanta, GA Dunn Family Professor, Operations Management
2014 – 2022	Scheller College of Business, Georgia Institute of Technology; Atlanta, GA Associate Professor, Operations Management
2012 – 2014	Scheller College of Business, Georgia Institute of Technology; Atlanta, GA Assistant Professor, Operations Management
2007-2012	Cox School of Business; Southern Methodist University; Dallas, TX Assistant Professor, Information Technology & Operations Management
2005-2007	The Rady School of Management; University of California; San Diego Visiting Research Scholar

Education

2007	McCombs School of Business, University of Texas at Austin. Ph.D. Supply Chain and Operations Management Program.
2002	The University of Texas at Austin M.S. Operations Research.
2000	Indian Institute of Technology; Madras, India Bachelor of Technology, Mechanical Engineering.

Publications

- Can Zhang, Atalay Atasul and Karthik Ramachandran (2021). “**Partial Completion as a Non-Profit Strategy**”, *Manufacturing and Service Operations Management*.
- Atalay Atasul, Karthik Ramachandran and Can Zhang (2021). “**How NGOs can Help More People with DIY Solutions**”, *Harvard Business Review*.
- C.R. Forest, R. Sivakumar, R.P. Vito, R. Saxena, J. Harris, R. Perkins, D. Davidson, K. Ramachandran, K. McGregor, O. Olufisayo, S.W. Mclaughlin (2021). “**CREATE-X: Transforming a university culture towards student entrepreneurial confidence**”, *IEEE Potentials*.
- Narendra Singh, Karthik Ramachandran and Ravi Subramanian (2021). “**The Value of Product Returns: Intertemporal Product Management with Strategic Consumers**”. *Manufacturing and Service Operations Management*.

- Priyank Arora, Morvarid Rahmani and Karthik Ramachandran (2021). **"Doing Less to Do More? Optimal Service Portfolio of Non-profits that Serve Distressed Individuals"**. *Manufacturing and Service Operations Management*.
- Cheryl Gaimon and Karthik Ramachandran (2021). **"The Knowledge Value Chain: An Operational Perspective"**. *Production and Operations Management*.
- Morvarid Rahmani and Karthik Ramachandran (2020). **"Delegating Innovation Projects with Deadline: Committed versus Flexible Stopping"**. *Management Science*.
- Sreekumar R. Bhaskaran, Sinan Erzurumlu and Karthik Ramachandran (2020). **"Sequential Innovation by Start-ups"**. *Manufacturing and Service Operations Management*.
- Aydin Alptekinoglu and Karthik Ramachandran (2019). **"Flexible Products for Dynamic Needs"**. *Production and Operations Management*.
- Karthik Ramachandran, Necati Tereyagoglu and Yusen Xia (2018). **"Multi-Dimensional Decision Making in Operations: An Experimental Investigation of Joint Pricing and Quantity Decisions"**. *Management Science*.
- Cheryl Gaimon, Manpreet Hora and Karthik Ramachandran (2017). **"Towards Building Multidisciplinary Knowledge on Management of Technology"**. *Production and Operations Management*.
- Haresh Gurnani, Karthik Ramachandran, Saibal Ray and Yusen Xia (2015), **"Ordering Behavior under Supply Risk: An Experimental Investigation"**. *Manufacturing and Service Operations Management*.
- Yaozhong Wu, Karthik Ramachandran and Vish V. Krishnan (2014), **"Managing Projects with Present-Biased Agents"**. *Production & Operations Management*.
- Vish V. Krishnan and Karthik Ramachandran (2011), **"Integrated Product Architecture and Pricing for Managing Sequential Innovation"**. *Management Science* 57 (11), 2040-2053.
- Sreekumar R. Bhaskaran and Karthik Ramachandran (2011), **"Managing Technology Selection and Development Risk in Competitive Environments"**. *Production & Operations Management* 20 (4), 541-555.
- Yusen Xia, Karthik Ramachandran and Haresh Gurnani (2011), **"Sharing Demand and Supply Risk in a Supply Chain"**. *IIE Transactions* 43 (6), 451-46.
- Sinan Erzurumlu, Stephen M. Gilbert and Karthik Ramachandran (2011), **"To Share or To Compete: Managing Revenue Streams for Innovations in Markets with Network Effects"**. *Technology & Operations Management*.
- Sreekumar R. Bhaskaran, Karthik Ramachandran and John Semple (2010), **"A Dynamic Inventory Model with the Right of Refusal"**. *Management Science* 56 (12), 2265-2281.
- Ramachandran, Karthik and Vish V. Krishnan (2008). **"Design Architecture and Introduction Timing for Rapidly Improving Industrial Products"**. *Manufacturing and Service Operations Management* 10 (1), 149-171.

Book Chapters, Conference Proceedings, and Other Publications

- Priyank Arora, Morvarid Rahmani and Karthik Ramachandran (2020). "The Impact of Scalability on Advisory and Service Delivery Efforts of Nonprofits." in Advances in Service Science. INFORMS-CSS 2020. Springer Proceedings in Business and Economics.
- Priyank Arora, Morvarid Rahmani and Karthik Ramachandran (2018). "Balancing Advisory and Service Delivery Efforts in Nonprofits: A Service Design Perspective". Proceedings of the MSOM 2018 Conference.
- Morvarid Rahmani and Karthik Ramachandran (2017). "Delegating Search for Innovative Solutions: The Effects of Flexibility and Transparency". Proceedings of the MSOM 2017 Conference.
- Cheryl Gaimon, Manpreet Hora and Karthik Ramachandran (2016). "Process Capabilities and Advances in Science and Technology." in Routledge Companion for Production and Operations Management. Editors: Martin Starr and Sushil Gupta.
- Krishnan, Vish V. and Karthik Ramachandran (2008), "Economic Models of Product Family-Based Design and Development", in Managing New Product Development: A Framework. Editors: Christoph H. Loch and Stylianos Kavadias.

Working Papers

- Jaeseok Lee, Cheryl Gaimon and Karthik Ramachandran, "An Economic Model of Knowledge Outsourcing".
- Karthik Ramachandran, Necati Tereyagolu, and Murat Unal. "Help or Hindrance? The Role of Familiarity in Collaborative Product Development".
- Param Chhabra, Manpreet Hora and Karthik Ramachandran, "Designing Reward Structure for Crowdfunding Campaigns".
- Karthik Natarajan, Karthik Ramachandran and Natalie Huang, "The Impact of Prosocial Inclination on Product Positioning and Pricing".
- Sreekumar R. Bhaskaran, Ankur Goel and Karthik Ramachandran, "Sequential Innovation under Development Uncertainty".
- Sreekumar R. Bhaskaran, Priyali Rajagopal and Karthik Ramachandran, "Quality Consciousness, Perceived Quality and Product Design".
- Saurabh Bansal and Karthik Ramachandran, "Designing Graded Products".
- Zeya Wang, Morvarid Rahmani and Karthik Ramachandran, "Optimal Presentation of Alternatives".

Research Projects

- Param Chhabra, Manpreet Hora and Karthik Ramachandran, "Patent Grant Delays and Inventors' Future Patenting".

- Christopher Green, Morvarid Rahmani, and Karthik Ramachandran. 2020. The Effect of Sequential Decision Making on Performance Management: An Experimental Investigation.

Patent

- Mohit Gupta, Aarohi Shah and Karthik Ramachandran, "Method for Optimizing the Placement of Check-In Bags in Aircraft". U.S. Patent 9,988,161.

Awards and Grants

- 2010. "Educational Tool for Simulation of a Distribution Supply Chain". Provost Instructional Technology Grant, Southern Methodist University.
- 2019. Georgia Institute of Technology **Curriculum Innovation Award** (as part of CREATE-X faculty)
- 2021. Brady Family **Award for Faculty Research Excellence**, Scheller College of Business.

Pedagogical Material

- Case Study: "Growing Pains at Highview Rec" (2019).
- Case Study: "FIXD: Your Car is Talking" (2018).
- Case Study. "Innovation-Driven Growth at Amylin Pharmaceuticals, Inc." (2009).

Presentations¹

- "Optimal Presentation of Alternatives", invited talk at George Mason University (2022).
- "Dynamics of Delegated Search", invited talks at George Washington University (2018), University of Texas at Dallas (2016), INFORMS Annual Conference (2016).
- "Multi-Dimensional Decision Making in Operations: An Experimental Investigation of Joint Pricing and Quantity Decisions", POMS Annual Meeting 2015.
- "Flexible Products for Dynamic Preferences", invited talks at the Indian School of Business (2013); Johns Hopkins Carey Business School (2014).
- "Ordering Behavior under Supply Risk: An Experimental Investigation", INFORMS Annual Meeting 2012, Phoenix, AZ.
- "Quality Consciousness, Perceived Value and Product Design", INFORMS Annual Meeting 2012, Phoenix, AZ.
- "Distribution of Novel Products", POMS Annual Conference 2012, Chicago, IL.
- "Flexible Products for Dynamic Needs", invited talks at Product and Service Innovations Conference 2012, Salt Lake City, UT; Georgia Institute of Technology (2012); Pennsylvania State University (2012).
- "Democratic Innovation in Business Models", invited talk at SRM University, Chennai, India (2012).

¹ Last updated: 2018

- “Introduction of Innovations by Start-up Firms”, INFORMS Annual Meeting 2011, Charlotte, NC.
- “Managing Product Transition under Technology Uncertainty”, POMS Annual Conference 2011, Reno, NV.
- “An Experimental Study of Optimal Ordering Behavior with Risk of Supply Disruption”, INFORMS Annual Meeting 2010, Austin, TX.
- “A Dynamic Inventory Model with the Right of Refusal”, INFORMS Annual Meeting 2009, San Diego, CA.
- “A Dynamic Inventory Model with the Right of Refusal”, invited talks at University of California San Diego (2008), and National University of Singapore (2009).
- “Managing End-of-Life Inventory and Launch of New Products”, Product and Service Innovations Conference 2008, Salt Lake City, UT.
- “Sequential Innovation with Strategic Consumers and Suppliers”, INFORMS Annual Meeting 2007, Seattle, WA.
- “Product Design for Rapidly Improving Industrial Goods”, invited talks at Indian School of Business, Southern Methodist University, Boston University, McGill University, University of North Carolina, Northwestern University and Singapore Management University (2007).
- “Sourcing, Segmentation and Sequential Innovation”, Seventeenth Annual POMS Conference 2006, Boston, MA.
- “Technological Evolution and Launch Timing”, Seventeenth Annual POMS Conference 2006, Boston, MA.
- “Distribution-Channel Design to Manage Production Disruptions”, Seventeenth Annual POMS Conference 2006, Boston, MA.
- “Product Design and Sourcing for Sequential Innovations”, Annual Conference of the Society of Operations Management 2005, Pondicherry, India. Winner of the Best Student Paper Award.
- “A Product Architecture-Based Solution to Rapid Sequential Innovation”, INFORMS Annual Meeting 2004, Denver, CO.
- “Modular Upgradability and Rapid Sequential Innovation”, M&SOM Conference 2004, Eindhoven, Netherlands.
- “A Product-Architecture Based Approach for Alleviating Consumer Regret in Rapid Sequential Innovation”, SCOM Seminar 2004, McCombs School of Business, Austin, TX.
- “Modular Design and Sequential Product Introduction”, INFORMS Annual Meeting Atlanta 2003, Atlanta, GA.

Teaching Experience

Courses Taught

- 2012 – Scheller Executive Education:
 Faculty Director for CMA CGM Lead Program
 Innovation Management Consortium Program
 Bank of America Technology Development Program
 Coca Cola Leadership Development Program
- Scheller MBA, Executive MBA, BBA, T&M:
 Various courses and modules on Innovation, Product Development, and Product Strategy.
- CREATE-X:
 Startup mentoring, teaching Startup Lab, mentoring Idea-2-Prototype projects for the CREATE-X Initiative at Georgia Tech.
- 2007-2012 Cox School of Business, Southern Methodist University, Dallas.
 MBA Courses in *Operations Management* and *Operations Strategy*.
 Undergraduate Course in *Operations Management*.
- 2001-2007 Various Instruction and Teaching Assistance roles at The Rady School of Management (UCSD) and McCombs School of Business (Univ of Texas).
 Topics included *Venture Creation*, *Lab-to-Market*, *Supply Chain*, and *Operations Management* for MBA, Executive, BBA, Engineering students.

Doctoral Students

- Advisor/Co-Advisor:
 - Narendra Singh (2015): Scheller College of Business, Georgia Tech.
 - Jaeseok Lee (2019): Scheller College of Business, Georgia Tech.
 - Mahdi Mahmoudzadeh (2020): Scheller College of Business, Georgia Tech.
 - Param Chhabra (expected 2021): Scheller College of Business, Georgia Tech.
 - Zeya Wang (expected 2023): Scheller College of Business, Georgia Tech.
- Dissertation Committee Member:
 - Priyank Arora (2019): Scheller College of Business, Georgia Tech.
 - Jan Vlachy (2020): Industrial and Systems Engineering, Georgia Tech.
 - Chao-Fang Shih (2016): Electrical and Computer Engineering, Georgia Tech.
 - Uma Parthavi Moravapalle (2019): Electrical & Computer Eng, Georgia Tech.
 - Yubing Jian (2020): Electrical and Computer Engineering, Georgia Tech.
 - Mohit Agarwal (2020): Electrical and Computer Engineering, Georgia Tech.

Service and Professional Activities

- 2019 – present: Area Coordinator, *Operations Management*, Scheller College.
- 2016 – present: CREATE-X Core Leadership Team.
- 2014 – present: Senior Editor, *Production and Operations Management*.
- 2017 – present: Associate Editor, *Decision Sciences*.

- 2019 – 2022: President, *PITM College of POMS*.
- Ad-hoc reviewer: Management Science, Marketing Science, Manufacturing & Service Operations Management, Production & Operations Management, IIE Transactions, European Journal of Operational Research, IEEE Transactions on Engineering Management, Decision Sciences.
- 2018 *Management Science* Distinguished Service Award
- 2015, 2018 *M&SOM* Meritorious Service Award
- 2015 – 2018: Co-editor, *POMS Chronicle*