Akshay Mutha

The University of Vermont School of Business Administration Email: akshay.mutha@uvm.edu

Education

Ph D, Pennsylvania State University, 2018.

Major: Business Administration

Supporting Areas of Emphasis: Supply Chain & Information Systems

Dissertation Title: Essays in Product Acquisition in Closed Loop Supply Chains

MS, Nanyang Technological University, 2008.

Major: Supply Chain Management

Dissertation Title: Strategic Network Design for Reverse Logistics

BSE, Government College of Engineering, 2004.

Major: Production Engineering

TEACHING

Teaching Experience

The University of Vermont (only includes courses taught since 2001)

BSAD 030, Decision Analysis, 11 courses.

BSAD 173, Operations Management, 13 courses.

BSAD 299, Business Admin Honors Thesis, 2 courses.

BUS 2130, Decision Analysis, 2 courses.

BUS 2700, Operations Management, 4 courses.

Directed Student Learning

Honors Thesis Advisor, "Analysis of Retailer Inventory and Financial Performance," BSAD-

Finance. (May 13, 2019 - 2020).

Advised: Maria Pitari

Awards and Honors

2019 Kroepsch-Maurice Excellence in Teaching Award, UVM. (November 8, 2019). This University-wide award recognizes outstanding faculty for their excellence in instruction, advising, and ability to motivate and challenge students.

RESEARCH

Published Intellectual Contributions

Refereed Journal Articles

- Mutha, A., Bansal, S. (2023). Determining Assortments of Used Products for B2B Transactions in Reverse Supply Chain. *IISE Transactions*, *55*(10), 1035-1048.
- Mutha, A., Bansal, S., Guide, V. Daniel R. (2021). ReCellular Inc: Managing Demand Uncertainty By Quality Diversification in Closed-Loop Remanufacturing. *To appear in INFORMS Transcations on Education*.
- Mutha, A., Bansal, S., Guide, V. Daniel R. (2021). Managing the inter-functional tension between accounting- and financial-profits in remanufacturing multiple-usecycle products. *Production and Operations Management*.
- Mutha, A., Pokharel, S. (2009). Strategic network design for reverse logistics and remanufacturing using new and old product modules. *Computers and Industrial Engineering*, 56, 334-346.

Journal Articles

- Petropoulos, F., Laporte, G., Mutha, A. (2004). Operational Research: Methods and Applications. *To appear in Journal of the Operational Research Society*, *75*(3), 423-617.
- Mutha, A., Bansal, S., Guide, V. Daniel R. What Servicizing Demands of a Company: The Need for Inter-Functional Coordination. *Journal of Operations Management*, 68(4), 408-420.
- Mutha, A., Bansal, S., Guide, V. Daniel R. Selling assortments of used products to third-party remanufacturers. *Production and Operations Management*, *28*(7), 1792-1817.
- Mutha, A., Bansal, S., Guide, V. Daniel R. (2016). Managing demand uncertainty through core acquisition in remanufacturing. *Production and Operations Management*, 25, 1449-1464.

Presentations Given

- Li, Z. (Author), Mutha, A. (Author & Presenter), Ryan, J. (Author), Sun, D. (Author), POMS 2025, "Products Acquisition for Remanufacturing," Atlanta, Georgia, United States. (May 10, 2025).
- Li, Z. (Author), Mutha, A. (Author & Presenter), Ryan, J. (Author), Sun, D. (Author), INFORM 2024, "Products Acquisition for Remanufacturing," Seattle, Washington, United States. (October 22, 2024).
- Li, Z. (Author), Mutha, A. (Author & Presenter), Ryan, J. (Author), Sun, D. (Author), POMS 2024, "Products Acquisition for Remanufacturing," Minneapolis, Minnesota, United States. (April 26, 2024).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), POMS 2023, "Acquisition of Used Products for Remanufacturing," Orlando, Florida, United States. (May 22, 2023).

- Mutha, A. (Author & Presenter), Bansal, S. (Author), INFORMS 2022, "Acquisition of Used Products for Remanufacturing," Indianapolis, Indiana, United States. (October 18, 2022).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), POMS 2022 (online), "Acquisition of Used Products for Remanufacturing," United States. (April 22, 2022).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), INFORMS 2021 (online), "Acquisition of Used Products for Remanufacturing," United States. (October 25, 2021).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), POMS 2021 (online), "Acquisition of Used Products for Remanufacturing," United States. (May 2, 2021).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), INFORMS 2020 (online), "Acquisition of Used Products for Remanufacturing," United States. (November 9, 2020).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), INFORMS 2019, "Evaluating Profitability of Remanufacturing Operations," Seattle, Washington, United States. (October 23, 2019).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), POMS 2019, "Evaluating Profitability of Remanufacturing Operations," Washington, District Of Columbia, United States. (May 4, 2019).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), POMS 2019, "Pricing models in remanufacturing," Washington, District Of Columbia, United States. (May 4, 2019).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), INFORMS 2018, "Evaluating Profitability of Remanufacturing Operations," Phoenix, Arizona, United States. (November 6, 2018).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), POMS 2018, "Pricing models in remanufacturing," Houston, Texas, United States. (May 5, 2018).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), POMS 2018, "Evaluating Profitability of Remanufacturing Operations," Houston, Texas, United States. (May 4, 2018).
- Mutha, A. (Author & Presenter), Bansal, S. (Author), Guide, V. Daniel R. (Author), INFORMS 2017, "Pricing models in remanufacturing," Houston, Texas, United States. (October 24, 2017).

Research Currently in Progress

"Contracting in reverse supply chain" (Writing Results). Co-Author(s): Mutha, Akshay, Erick (Zhaolin) Li (The University of Sydney), Daewon Sun (University of Notre Dame), Jennifer K. Ryan (University of Nebraska)

This paper analyzes the contracting mechanisms between a broker and remanufacturer selling used products that have a short lifecycle.

Current Status: We are preparing to submit this paper to *European Journal of Operational Research* (ABS4, GSB Top-tier).

"Market segmentation using remanufacturing" (Writing Results). Co-Author(s): Mutha, Akshay, Omkar Palsule-Desai (Indian Institute of Management, Indore)

This paper analyzes a firm's decision on whether to replace (i.e. upgrade) or remanufacture a (capital-intensive) product for a customer. We find conditions when the firm prefers to replace the product which enables market-segmentation opportunities.

Current Status: Writing results.

"Mechanism design under asymmetric information regarding demand for remanufactured products." (Writing Results). Co-Author(s): Mutha, Akshay, Erick (Zhaolin) Li (The University of Sydney), Daewon Sun (University of Notre Dame), Jennifer K. Ryan (University of Nebraska)

This paper analyzes the adverse selection problem between two entities in remanufacturing operations.

Current Status: Received major revision. Revising to resubmit to at *Production and Service Operations Management* (FT50, ABS4, GSB Top-tier).

"Understanding the levers of textile recycling" (On-Going). Co-Author(s): Mutha, Akshay, Omkar Palsule-Desai (Indian Institute of Management, Indore), V. Daniel R. Guide (Pennsylvania State University)

We formulate an analytical model to analyze the different levers (e.g. prices, production cost, blending cost, and blending percentage) in textile recycling. We have empirical data from a large apparel contract manufacturer on their manufacturing processes involving recycled materials (fibers).

Current Status: Writing results.

SERVICE

College Service

Committee Member, Assurance of Learning. (September 2022 - May 2024).

Committee Member, Dean's Faculty Research Award. (March 2023 - May 2023).

Committee Member, Dean's Staff Excellence Award. (March 2023 - May 2023).

Committee Member, Accounting Lecturer Search. (January 2023 - May 2023).

Committee Member, Graduate Program Redesign (Ad-hoc). (January 2023 - May 2023).

University Service

Committee Member, Navigate Advisory Committee. (October 2019 - Present).

Committee Member, Faculty Senate Student Affairs Committee. (January 1, 2022 - May 15, 2022).

Professional Service

- Editorial Review Board Member, Production and Operations Management. (July 1, 2024 June 30, 2026).
- Editorial Review Board Member, Decision Sciences. (July 1, 2023 June 30, 2025).
- Reviewer, Journal Article, Production and Operations Management. (May 17, 2024 January 3, 2025).
- Workshop Organizer, Business Aspects of Closed-Loop Supply Chains (20th) The Building Blocks of a Circular Economy, State College, Pennsylvania. (November 16, 2024).
- Reviewer, Journal Article, Manufacturing and Service Operations Management. (March 30, 2023 September 18, 2024).
- Reviewer, Journal Article, Production and Operations Management. (March 30, 2023 January 16, 2024).
- Reviewer, Journal Article, Decision Sciences. (September 27, 2023 November 15, 2023).
- Reviewer, Journal Article, Journal of Operations Management. (September 5, 2023 March 13, 2023).
- Reviewer, Journal Article, IISE Transactions. (July 19, 2022 September 13, 2022).
- Reviewer, Journal Article, Production and Operations Management. (October 1, 2021 February 15, 2022).
- Reviewer, Journal Article, IISE Transactions. (December 13, 2020 January 24, 2022).
- Reviewer, Journal Article, International Journal of Production Economics. (October 10, 2021 December 10, 2021).
- Session Chair, 2021 Annual Production and Operations Management Society Conference (Online). (April 30, 2021 May 5, 2021).
- Reviewer, Journal Article, International Journal of Production Economics. (November 1, 2020 January 15, 2021).
- Reviewer, Journal Article, Production and Operations Management. (April 1, 2020 January 15, 2021).
- Reviewer, Journal Article, Computers & Operations Research. (April 1, 2020 June 15, 2020).
- Reviewer, Journal Article, Decision Sciences. (January 15, 2020 March 15, 2020).
- Reviewer, Journal Article, Production and Operations Management. (July 1, 2019 March 15, 2020).

- Reviewer, Journal Article, International Journal of Sustainable Transportation. (November 12, 2019 January 15, 2020).
- Judge for the 2019 POMS College of Sustainable Operations Student Paper Competition, Production and Operations Management Society. (February 1, 2019 March 1, 2019).
- Reviewer, Journal Article, Production and Operations Management. (July 1, 2017 February 15, 2019).
- Reviewer, Journal Article, Decision Sciences. (August 1, 2018 December 1, 2018).
- Session Chair, 2018 Annual Production and Operations Management Society Conference. (May 4, 2018 May 7, 2018).