

Mark A. Jacobs, Ph.D.

Education

Michigan State University, Eli Broad Graduate School of Management

Doctor of Philosophy, Operations and Sourcing Management

Emphasis in New Product Development

University of Minnesota, Carlson School of Management

Master of Business Administration

Concentrations: Supply Chain Management, Entrepreneurship, Finance

California Polytechnic State University, San Luis Obispo

Bachelor of Science, Industrial Engineering

Concentration: Production Management

Research

Journal Publications

Chavez, R., Yu, W., Wong, C., Jacobs, M., “Surfing with the tides: How digitization creates firm performance through supply chain entrainment”, forthcoming at *International Journal of Operations and Production Management*

Yu, W., Chavez, R., Jacobs, M., Wong, C., “Openness to technological innovation, supply chain resilience and operational performance: Exploring the role of information processing capabilities” *IEEE Transactions on Engineering Management*, 2024, 71, 1258 – 1270

Yu, W., Wong, C., Chavez, R., Jacobs, M., Nittala, L., “Exploring the effects of intellectual capital on operational excellence and supply chain resilience: An intellectual capital knowledge-based view” forthcoming at *Supply Chain Management*, 2023, 28(6), 1060 – 1074

Lee, B., Nittala, L., Jacobs, M., Yu, W., “Impact of Psychological Safety on Supply Chain Operational Performance”, *International Journal of Production Research*, 2023, 61(3), 754 – 773

Yu, W., Jacobs, M., Chavez, R., “Exploring the effect of business environment on supply chain integration and financial performance: An environment-system-performance paradigm”, *IEEE Transactions on Engineering Management*, 2022, 69(6), 3197 – 3211

Yu, W., Wong, C. Y., Chavez, R., & Jacobs, M. A., “Integrating big data analytics into supply chain finance: The roles of information processing and data-driven culture”, *International Journal of Production Economics*, 2021, 236(1), 108135

Yu, W., Chavez, R., Jacobs, M., Wong, C., “Innovativeness and Lean Practices for Triple Bottom Line: Testing of Fit-as-Mediation versus Fit-as-Moderation Models”, *International Journal of Operations and Production Management*, 2020, 40(10), 1623 – 1647

- Yu, W., Chavez, R., Jacobs, M., Wong, C., Yuan., C., “Environmental scanning, supply chain integration, responsiveness, and financial performance: An integrative framework” *International Journal of Operations and Production Management*, 2019, 39(5), 787 – 814
- Yu, W., Jacobs, M., Chavez, R., Yang, J., “Dynamism, disruption orientation, and resilience in the supply chain and the impacts on financial performance: A dynamic capabilities perspective”, *International Journal of Production Economics*, 2019, 218(2), 352 – 362
- Yu, W., Jacobs, M., Chavez, R., Feng, M., “Data driven supply chain and financial performance: The moderating effect of innovation focused complementary assets” *The British Journal of Management*, 2019, 30 (2), 299 – 314
- Jacobs, M., Lyons, G., Rademacher, B.; “Using Excel to build dedicated routes from ad hoc routes”, *Interfaces*, 2018, 48(6), 591 – 595
- Yu, W., Chavez, R., Jacobs, M., Feng, M., “Data-driven supply chain capabilities and performance: A resource-based view”, *Transportation Research Part E*, 2018, 114, 371 – 385
- Chavez, R., Jacobs, M., Yu, W., “Data-driven supply chains, manufacturing capability and customer satisfaction”, *Production Planning and Control*, 2017, 28(11), 906 – 918
- Yu, W., Jacobs, M., Chavez, R., Feng, M., “The impacts of IT capability and marketing capability on supply chain integration: A resource-based perspective”, *International Journal of Production Research*, 2017, 55(14), 4196 – 4211
- Chavez, R., Jacobs, M., Yu, W., “Manufacturing capability and organizational performance: The role of entrepreneurial orientation” , *International Journal of Production Economics*, 2017, 184(1), 33 – 46
- Jacobs, M., Yu, W., Chavez, R.; “The effect of internal communication and employee satisfaction on supply chain integration”, *International Journal of Production Economics*, 2016, 171(1), 60 – 70
- Chavez, R., Yu, W., Jacobs, M., Fynes, B., & Lecuna, A.; “Internal Lean Practices and Performance: The Role of Technological Turbulence”, *International Journal of Production Economics*, 2015, 160(1), 157 – 171
- Durmusoglu, S., Jacobs, M., Nayir, D., Khilji, S., & Wang, X.; “The Quasi-Moderating Role of Organizational Culture in the Relationship between Rewards and Knowledge Shared and Gained”, *The Journal of Knowledge Management*, 2014, 18(1), 19 – 37
- Yu, W., Jacobs, M., Salisbury, W., & Enns, H.; “The effects of supply chain integration on customer satisfaction and financial performance: An organizational learning perspective”, *International Journal of Production Economics*, 2013, 146(1), 346 – 358
- Jacobs, M.; “Complexity: Toward an empirical measure”, *Technovation*, 2013, 33(4), 111 – 118
- Droge, C., Jacobs, M., & Vickery, S.; “An empirical study: Does supply chain integration mediate the relationship between product/process strategy and service performance?”, *International Journal of Production Economics*, 2012, 137(2), 250 – 262

Jacobs, M., & Swink, M.; “Product portfolio architectural complexity and operational performance: Incorporating the roles of learning and fixed assets”, *Journal of Operations Management*, 2011, 29(8), 677 - 691

Jacobs, M., Droge, C., Vickery, S., & Calantone, R.; “The effect of product and process modularity on agility and firm growth performance”, *Journal of Product Innovation Management*, 2011, 28(1), 124 – 138

Closs, D., Jacobs, M., Swink, M., & Webb, G. S.; “Toward a theory of competencies for the management of product complexity: Six case studies”, *Journal of Operations Management*, 2008, 26(5), 590 – 610

Jacobs, M., Vickery, S., & Droge, C.; “The effects of product modularity on competitive performance: Do integration strategies mediate the relationship?”, *International Journal of Operations and Production Management*, 2007, 27(10), 1046 – 1068

Other Publications

Keyte, B., Jacobs, M., “Running on empty: Losing the safety net in a crisis”, forthcoming at *Sage Business Cases*

Jacobs, M.; “Volume and cost implications of product portfolio complexity”, VDM, Saarbrücken, 142 pgs., 2009

Jacobs, M.; “Product complexity: A definition and impacts on organizations”, *Decision Line*, 2007, 38(5)

Texbooks

Jacobs, M., Berg, C., Opata, R., Bodeman, C., Walker, M., “Open for Business: Fundamentals for Today's Business”, Kendall-Hunt, Dubuque, ISBN 9781792492426

Jacobs, M., Keyte, B., Gorman, M., Wagner, P., “Introduction to Operations Management”, under contract and development with Kendall-Hunt

Invited Presentations

Jacobs, M., “Revisiting Global Supply Chain Assumptions in the Age of Sustainability: Is Less More?”, World Production Operations Management Conference, Nara Japan, 2022

Jacobs, M.; “Supply Chain Strategy”, Air Force Institute of Technology, Dayton Ohio, 2021

Jacobs M.; “Trends in Supply Chain Management”, Air Force Institute of Technology, Dayton Ohio, 2018

Jacobs, M.; “Cost implications of supply base structure”, Keynote address at the International Conference of Operations and Supply Chain Management, Henan University, Kaifeng China, 2017

Jacobs, M. & Swink, M.; “The cost implications of product and supply chain complexity”, Decision Sciences annual conference, Baltimore, 2013

Jacobs, M. & Swink, M.; “The cost implications of product and supply chain complexity”, INFORMS annual conference, Minneapolis, 2013

Jacobs, M.; “Panel member on the topic of empirical research methods”, Midwest Decision Sciences Institute, Indiana University, Indianapolis, 2011

Jacobs, M.; “The Interface of Product and Supply Chain Design: The Effects of Complexity”, Annual Purchasing and Supply Management Executive Seminar, East Lansing, 2009

Jacobs, M.; “Product complexity: Theoretical implications and relationship to cost”, Academy of Management Doctoral Consortium, Philadelphia, 2007

Jacobs, M., & Swink, M.; “At the interface of product design and supply chain design: Direct and interacting effects of complexity”, Supply Chain Design Conference, Indiana University, 2007

Jacobs, M., Swink, M., Closs, D., & Webb, G. S.; “Commonality in the product portfolio: Six case studies”, Innovation Research Network Conference, Northeastern University, 2006

Jacobs, M.; “Niche marketing”, Environmental Laboratory Executive Forum, Washington D.C., 1999

Presentations

Jacobs, M., & Wells, C.; “Less is More: Determining the optimal number of suppliers”, European Operations Management Society, Leuven Belgium, 2023

Mahapatra, S., Barbieri, P., & Jacobs, M.; “A Contingent Assessment of Capability Building in Manufacturing Firms”, Decision Sciences Annual Conference, Washington D.C., 2017

Yu, W., Jacobs, M., & Chavez, R., Feng, M.; “Data-driven supply chain management, Manufacturing capability and customer satisfaction”, Academy of Management Annual Conference, Atlanta, 2017

Mahapatra, S., Jacobs, M.; “Supply chain integration and performance: A multi-country study”, Production Operations Management Society, Annual Conference, Seattle, 2017

Yu, W., Jacobs, M., & Chavez, R.; “The Impacts of IT and marketing capabilities on supply chain integration: A resource-based perspective”, Production Operations Management Society, Annual Conference, Seattle, 2017

Yu, W., Jacobs, M., & Chavez, R., Feng, M.; “Data-driven supply chain capabilities and performance: A resource-based view”, European Operations Management Association Annual Conference, Trondheim, 2016

Yu, W., Jacobs, M., & Chavez, R.; “Operations, IT and marketing capabilities and performance: The moderating effects of business environment”, European Operations Management Association Annual Conference, Amsterdam, 2012

Yu, W., Jacobs, M., & Chavez, R.; "Operations, IT and marketing capabilities and performance: The moderating effects of business environment", Production Operations Management Annual Conference, Chicago, 2012

Jacobs, M.; "The measure of modularity", Decision Sciences Annual Conference, Boston, 2011

Jacobs, M., Vickery, S., & Droge, C.; "The influence of product/process strategy on logistics performance in the presence of supply chain integration", Production Operations Management Annual Conference, Reno, 2011

Jacobs, M., & Swink, M.; "When a little is a lot: The influence of product portfolio complexion on learning", Decision Sciences Annual Conference, San Diego, 2010

Jacobs, M., & Swink, M.; "The influence of portfolio complexion on learning", Production Operations Management Annual Conference, Vancouver, 2010

Jacobs, M., Droge, C., & Vickery, S.; "Does supply chain integration mediate the impact of product and process modularity on service performance?", Decision Sciences Annual Conference, New Orleans, 2009

Jacobs, M., & Swink, M.; "Product complexity: Theory and relationships to demand and supply chain costs", Production Operations Management Annual Conference, Orlando, 2009

Jacobs, M., & Swink, M.; "Product complexity: Theory and relationships to demand and supply chain costs", Decision Sciences Annual Conference, Baltimore, 2008

Jacobs, M., & Swink, M.; "Direct and interaction effects of complexity in product and supply chain design", Decision Sciences Annual Conference, Phoenix, 2007

Swink, M., & Jacobs, M.; "Studying the true cost of product complexity, and what companies can do about it", Production Operations Management Annual Conference, Dallas, 2007

Jacobs, M., Droge, C., Vickery, S., & Calantone, R.; "The effect of product and process modularity on agility and firm financial performance", Decision Sciences Annual Conference, San Antonio, 2006

Jacobs, M., Swink, M., Closs, D., & Webb, G. S.; "Complexity in the product portfolio: Six case studies", Decision Sciences Annual Conference, San Antonio, 2006

Jacobs, M., Vickery, S., & Droge, C.; "The effects of modularity on competitive performance", Production Operations Management Annual Conference, Boston, 2006

Jacobs, M., & Calantone, R.; "Cost impact of product platforms", Decision Sciences Annual Conference, San Francisco, 2005

Academic Experience

Appointments

University of Dayton, School of Business

- 2020 – now Chair, Department of MIS, Operations & Supply Chain Management, Business Analytics
- 2019 – now Professor, Operations and Supply Management
- 2015 – 2019 Associate Professor, Operations and Supply Management
- 2009 – 2015 Assistant Professor, Operations and Supply Management

Ohio State University

- 2017 – 2017 Visiting Associate Professor, Management Science

Henan University

- 2017 – 2022 Visiting Professor, Supply Chain Management

Helsinki School of Economics (Aalto University)

- 2011 – 2012 Lecturer, Operations Management

Michigan State University, Eli Broad Graduate School of Management

- 2008 – 2009 Visiting Assistant Professor, Supply Chain Management
- 2004 – 2008 Research Assistant

University of Minnesota, Carlson School of Management

- 2001 – 2003 Research Assistant

Teaching

Undergraduate

- | | | |
|---------|--|-------------|
| MSC 317 | Quantitative Business Research Methods | 2005 – 2006 |
| MSC 372 | Manufacturing Planning & Control | 2007 – 2008 |
| OPS 301 | Survey of Operations and Supply Management | 2009 – now |
| OPS 480 | Supply Chain Management | 2010 – 2019 |
| DSC 211 | Statistics II | 2015 |
| OPS 495 | Operations Management Capstone | 2016 – 2021 |
| OPS 481 | Procurement Processes | 2017 – 2019 |
| MS 2321 | Business Analytics | 2017 |

Graduate

- | | | |
|---------|---|-------------|
| MSC 842 | Total Quality Management | 2009 |
| MBA 793 | Operational Effectiveness | 2011 – now |
| HSE MBA | Operations Management | 2011 |
| MBA 656 | Business in South America | 2015 – 2018 |
| MBA 619 | Technology & Innovation in Silicon Valley | 2018 – now |
| MBA 613 | Supply Chain Analytics | 2020 – now |
| BAN 611 | Statistical Analysis for Business Decisions | 2023 |

International

- | | | |
|---------|--|-------------|
| OPS 301 | Survey of Operations and Supply Management
China, England, Germany, Ireland,
Scotland, Spain, Portugal | 2011 – 2019 |
| DSC 211 | Statistics II
China | 2015 |
| MBA 656 | Business in South America
Chile | 2016 – 2018 |

Session chair for European Operations Management annual conference, 2023
Session chair for Production Operations Management annual conference, 2010 – 2015
Session chair for Decision Sciences annual conference, 2007 – 2014

University level roles

President, Academic Senate, 2019 – 2020
Co-Chair, University Educational Leadership Council, 2019 – 2020
Chair, University Faculty Affairs Committee, 2018 – 2019
Member, 6-year Program Review committee for Air Force Institute of Technology, 2023
Member, Cybersecurity Center Director search committee, 2023
Member, University Budget Alignment Steering Committee, 2020 – now
Member, President’s Council, 2019 – 2020
Member, Provost’s Council, 2019 – 2020
Member, University Educational Leadership Council, 2016 – 2021
Member, University Strategic Visioning Steering Committee, 2016 – 2017
Member, University Human Resources Advisory Council, 2016 – 2019
Member, Executive Council of the Academic Senate, 2016 – 2021
Member, Academic Senate, 2015 – 2021
Member, University Faculty Affairs Committee, 2015 – 2021
Member, University Nominating and Recruitment Committee, 2015 – 2018
Graduate student representative to the University Academic Council, MSU, 2007 – 2008
Graduate student representative to the University Committee on Faculty Tenure, MSU, 2007 – 2008

School level roles

Chair, Faculty Search committees for Operations & Supply Management, 2021-2022
Chair, Graduate Programs Committee, School of Business, 2015 – 2018
Co-Chair, Operations Management Faculty Search committee, 2016
Member, Leadership Committee, 2020 – now
Member, School of Business Promotion & Tenure committee, 2019
Member, School of Business Dean search committee, 2016, 2017, 2021
Member, Faculty Search committees for operations and MIS faculty, 2014 – 2020
Member, Graduate Programs Committee, School of Business, 2014 – 2018
Department representative to Council of Graduate Students, Michigan State University, 2007 – 2008

Honors and Awards

Top 2% of Operations Research faculty for citations 2021, DOI: 10.17632/btchxktyw.5
University of Dayton SBA “Faculty Excellence Award for Research”, 2019
University of Dayton Teaching Fellow, 2014
Journal of Operations Management “Reviewer Service Award, 2013 – 2016”
Journal of Operations Management “Best Reviewer, 2013”
University of Dayton Research Fellow, 2013
Carlson School of Management Fellowship, University of Minnesota, 2001 – 2003
Member, Omega Rho (Operations Research honor society)
Member, Alpha Pi Mu (Industrial Engineering honor society)
Matriculation Scholarship, Stanislaus State University
Honors at Entrance, Stanislaus State University

Professional Organizations

Academy of Management
Decision Sciences Institute
Institute of Industrial Engineers
Institute of Supply Management
Production Operations Management Society
International Trumpet Guild
T.E.C. International (now Vistage), Alumnus

Corporate Experience

Positions

Accent Management Consulting Services Principal	Dayton, OH
Cap Gemini Ernst & Young Supply Chain Management Consultant	San Francisco, CA
3M Product Development Team Lead	Minneapolis, MN
Cummins Engine Financial Analyst	Minneapolis, MN
JL Analytical Services, Inc. Chief Operating Officer	Modesto, CA
International Business Machines (IBM) Industrial Engineer	San Jose, CA

Board experience

Capitol Cleaners Board member	Moraine, OH
JL Analytical Services, Inc. Officer and Board member	Modesto, CA