

Oliver Yao

Interim Deputy Provost, Associate Dean and Professor
George N. Beckwith'32 Professor
Department of Decision and Technology Analytics
College of Business, Lehigh University
621 Taylor Street, Bethlehem, PA 18015
Phone: (610) 758-6726 (Office)
E-mail: yuy3@lehigh.edu

EDUCATION

Ph.D., University of Maryland, August 2002
College Park, Maryland
Dissertation: Measuring Impacts of Electronic Commerce on Supply Chain Management

MBA, Rensselaer Polytechnic Institute, May 1997
Troy, New York

BS in Mechanical Engineering, Shanghai Jiao Tong University, July 1995
Shanghai, China

ACADEMIC APPOINTMENTS

Interim Deputy Provost for Graduate Education February 2020 – Present
Lehigh University

Associate Dean and Professor July 2018 – Present
College of Business
Lehigh University

George N. Beckwith'32 Professor July 2012 – Present
College of Business
Lehigh University

Department Chair and Professor July 2015 – June 2018
College of Business & Economics
Lehigh University

Associate Professor May 2010 – May 2015
College of Business & Economics
Lehigh University

C. Scott Hartz '68 Term Professor July 2006 – June 2012
College of Business & Economics
Lehigh University

Assistant Professor
College of Business & Economics
Lehigh University

August 2003 – April 2010

Assistant Professor
College of Business Administration,
California State University, San Marcos

August 2002 – July 2003

EDITORIAL APPOINTMENTS

Associate Editor, Information Systems Research
Senior Editor, Productions and Operations Management

PROFESSIONAL EXPERIENCE

Production Planning Analyst, Bugle Boy Industries, Inc. **May 1997 - December 1998**
Duties include: production plan formulation and optimization, operation coordination, and global sourcing.

RESEARCH INTERESTS

Business Analytics, Business Value of Information Systems, Economics of Electronic Commerce, Supply Chain Collaborations, Bullwhip Effect

PUBLICATIONS

Refereed Articles

1. David Zhang, Gang Peng, Yuliang Yao and Tyson Browning. “Is a College Education Still Enough? The IT-Labor Relationship with Education Level, Task Routineness, and Artificial Intelligence.” Forthcoming, *Information Systems Research*.
2. Jia Gao, Ying Rong, Xin Tian and Yuliang Yao, “Save Time or Save Face? The Stage Fright Effect in Face Recognition Payment Adoption.” Forthcoming, *Information Systems Research*.
3. Luna Zhang, Ruomeng Cui, and Yuliang Yao. “The Version Effect of App and Operating Systems in Mobile Commerce.” *Production and Operations Management*. 32(2), 2023, 637-654.
4. Luna Zhang, Yuliang Yao, Jiantong Zhang, and Chencheng Fang. “Post-Promotion Redemption, Exposure, and Spillover Effects of Electronic Coupons: An Empirical Analysis.” *Production and Operations Management*. 32(2), 2023, 603-617.
5. Xingyue Zhang, James Dearden, and Yuliang Yao. “Should They Stay or Should They Go? Retailer Pricing to Retain or Release Customers Following Product Stockouts.” *Production and Operations Management*. 31(11), 2022, 4173-4190.

6. Yue Yuan, Mary E. Deily and Yuliang Yao. "Willingness to Pay for Status Signals in Online Luxury Markets." *Production and Operations Management*. 31(2), 2022, 668-680.
7. Yuliang Yao, Yongrui Duan, and Jiazhen Huo. "On Empirically Estimating Bullwhip Effects: Measurement, Aggregation and Impact." *Journal of Operations Management*, 67(1), 2021, 5-30. **(Lead Article)**
8. Xingyue Zhang and Yuliang Yao. "How Much is Too Much? The Effect of Call Intensity on Online Purchase." *Production and Operations Management*, 29(3), 2020, 509-525. **(Lead Article)**
9. Yan Dong, Sining Song, Sriram Venkataraman and Yuliang Yao. "Mobile Technology and Financial Service Bundling: A Structural Estimation of Mobile Money." *Information Systems Research*, 32(1), 2021, 18-34.
10. Yuliang Yao, Martin Dresner and Kevin Zhu, "'Monday Effect' on Performance Variations in Supply Chain Fulfillment: How IT-Enabled Procurement May Help." *Information Systems Research*, 30(4), 2019, 1402-1423.
 - Media Mentions: [The Telegraph](#); [International Business Times](#)
11. Robert Bray, Yuliang Yao, Yongrui Duan and Jiazhen Huo. "Ration Gaming and the Bullwhip Effect." *Operations Research*, 67 (2), 2019, 453-467.
12. Ling Xue, Ke Yang, and Yuliang Yao, "Examining the Effects of Interfirm Managerial Social Ties on IT Components Diversity: An Agency Perspective." *MIS Quarterly*, 42(2), 2018, 679-694.
13. Yan Dong, Kefeng Xu, and Tony Cai, and Yuliang Yao "Service Failure Recovery and Prevention: Managing Stockouts in Distribution Channels." *Marketing Science*, 34(5), 2015, pp. 689-701.
14. Yongrui Duan, Yuliang Yao and Jiazhen Huo. "Bullwhip Effect under Substitute Products." *Journal of Operations Management*, 36, 2015, 75-89.
15. Jian-yu Fisher Ke, Martin Dresner, Yuliang Yao, "An Empirical Analysis of the Impact of Fuel Costs on the Level and Distribution of Inventory in the U.S." *Transportation Journal*, 53(1), 2014, pp. 5-25.
16. Yan Dong, Martin Dresner and Yuliang Yao, "Information Sharing and Beyond: An Empirical Analysis of Vendor Managed Inventory." *Production and Operations Management*, 23(5), 2014, pp. 817-828.
17. Yuliang Yao, Rajiv Kohli, Susan Sherer, and Jerold Cederlund, "An Empirical Analysis of the Learning Curves in Collaborative Planning, Forecasting, and Replenishment." *Journal of Operations Management*, 31(6), 2013, pp. 285-297.
18. Yuliang Yao, Yan Dong, and Martin Dresner, "Supply Chain Learning and Spillovers in Vendor Managed Inventory." *Decision Sciences*, 43(6), 2012, pp. 979-1001.

19. Yuliang Yao and Jie Zhang, "Pricing for Shipping Services of Online Retailers: Analytical and Empirical Approaches," *Decision Support Systems*, 53(2), 2012, pp.368-380.
20. Yuliang Yao and Kevin Zhu, "Do Electronic Linkages Reduce the Bullwhip Effect? An Empirical Analysis of the U.S. Manufacturing Supply Chains," *Information Systems Research*, 23(3), 2012, pp.1042-1055.
21. Sherer, Sherer, Rajiv Kohli, Yuliang Yao, Jerry Cederlund. "Do Cultural Differences Matter in IT implementation: A Multi-National's Experience with CPFR." *Journal of Global Information Management*, 19(3), 2011, pp.1-17.
22. Yan Dong, Yuliang Yao, and Tony Cui, "When Acquisition Spoils Retention: Selling Direct vs. Delegation under CRM," *Management Science*, 57(7), 2011, pp.1288-1299.
23. Anindya Ghose and Yuliang Yao, "Using Transaction Prices to Re-Examine Price Dispersion in Electronic Markets," *Information Systems Research*, 22(2), 2011, pp.1-17.
24. Yuliang Yao, Yan Dong, and Martin Dresner, "Managing Supply Chain Backorders under Vendor Managed Inventory: An Incentive Approach and Empirical Analysis," *European Journal of Operational Research*, Vol.203, 2010, pp. 350-359. (An earlier version of this paper received CSCMP 2007 E. Grosvenor Plowman Award).
25. Yuliang Yao, Martin Dresner, and Jonathan Palmer, "The Impact of Boundary-Spanning Information Technology and Position in Chain on Firm performance," Vol. 45(4), 2009, pp. 3-16, *Journal of Supply Chain Management*.
26. Yuliang Yao, Martin Dresner, and Jonathan Palmer, "Private Network EDI vs. the Internet Electronic Markets: A Direct Comparison of Fulfillment Performance," *Management Science*, Vol. 55(5), 2009, pp. 843-852.
27. Yuliang Yao and Martin Dresner, "The Inventory Value of Information Sharing, Continuous Replenishment and Vendor-Managed Inventory," *Transportation Research Part E: Logistics and Transportation Review*, Vol. 44(3), 2008, pp. 361-378.
28. Yuliang Yao, Jonathan Palmer and Martin Dresner, "An Interorganizational Perspective on the Use of Electronic Supply Chains," *Decision Support Systems*, Vol. 43(3), 2007, pp. 884-896.
29. Joseph Bailey, Samer Faraj, and Yuliang Yao, "The Road More Traveled: Web Traffic and Price Competition in Internet Retailing" *Electronic Markets*, Vol. 17 (1), 2007, pp. 56-67.
30. Yuliang Yao, Yan Dong, and Martin Dresner, "Analyzing Information-Enabled Stockout Management under Vendor-Managed Inventory," *Information Technology and Management*, Vol. 8 (2), 2007, pp. 133-145.
31. Yuliang Yao, Philip Evers, and Martin Dresner, "Supply Chain Integration in Vendor-Managed Inventory," *Decision Support Systems*, Vol. 43 (2), 2007, pp. 663-674.

32. Susan Sherer and Yuliang Yao, "Which 'Move to the Middle': Industry Consortia or Private Exchanges?" *International Journal of E-Business Research*, Vol. 2 (2), 2006, pp.22-27.
33. Martin Dresner, Robert Windle, and Yuliang Yao, "Airport Barriers to Entry in the U.S.," *Journal of Transport Economics and Policy*, Vol. 36 (3), 2002, pp. 389-405.
34. Martin Dresner, Yuliang Yao, and Jonathan Palmer, "Internet Technology Use across the Food Industry Supply Chain," *Transportation Journal*, Vol. 40 (4), 2001, pp. 16-24.

Editorial Reviewed Articles

35. Jerry Cederlund, Rajiv Kohli, Susan Sherer, and Yuliang Yao, "Successful Implementation of Collaborative Planning, Forecasting and Replenishment: Lessons Learned at Motorola, Inc." *Supply Chain Management Review*, October 2007.
36. Yuliang Yao, Philip Evers, and Martin Dresner, "Response to Note on Supply Chain Integration in Vendor Managed Inventory," *Decision Support Systems*, Vol. 44 (1), 2007, pp. 366-367.

PAPERS UNDER REVIEW

1. Jordan He, Luna Zhang, David Zhang and Yuliang Yao. "Pre-login vs. Post-login Search: Evidence from a Mobile Commerce Platform." Submitted to MS 5/2/23
2. Yongrui Duan, Yuliang Yao, Xingyue Zhang and Jiazhen Huo. "Unraveling Cross Docking: Operations Performance, Demand Uncertainty and Fulfillment Mechanism." Major Revisions at JSCM.
3. Mengmeng Wang, Xiaojing Feng, Ying Rong, Xin Tian, Yuliang Yao. "When Persuasion Is Too Persuasive: An Empirical Analysis of Product Returns in Livestream E-Commerce." Major revisions at POM.

WORKING PAPERS

4. Yuliang Yao and Yan Dong, "Contracting Customer Retention under Pooled and Distributed Interorganizational Information Systems."
5. Chun-Yu Ho, Ying Rong, and Yuliang Yao, "The Effect of Ownership and Financing on Firm's Inventory and Profitability: An Empirical Analysis."
6. Hongyi Mao, Yeming Gong, Ryad Titah, and Yuliang Yao. "Towards A Theoretical Framework of IT-enabled Operations Strategy: An Integrated Analysis of Quantitative and Qualitative Data." Reject and Resubmit at *ISR*

CONFERENCE PRESENTATIONS

Refereed Conference Proceedings

1. Yuliang Yao, Philip Evers, and Martin Dresner, "Value of Information Sharing in Vendor-Managed Inventory," *the Proceedings of American Conference on Information Systems (AMCIS)*, Boston, 2001.
2. Yuliang Yao, Jonathan Palmer, and Martin Dresner, "Impacts of Electronic Commerce on Supply Chain Performance, Structure, and Pricing," *the Proceedings of International Conference on Information Systems (ICIS)*, Barcelona Spain, 2002.
3. Yuliang Yao, Yan Dong, and Martin Dresner, "Managing Supply Chain Backorders under Vendor Managed Inventory: A Principal-Agent Approach and Empirical Analysis," *the Proceedings of INFORMS Conference on Information Systems and Technology (CIST)*, Denver, 2004.
4. Yuliang Yao and Yan Dong, "Contracting Customer Retention under Centralized and Decentralized Inter-Organizational Information Systems," *the Proceedings of INFORMS Conference on Information Systems and Technology (CIST)*, San Francisco, 2005.
5. Yuliang Yao, Yan Dong, and Martin Dresner, "Managing Supply Chain Backorders under Vendor Managed Inventory: A Principal-Agent Approach and Empirical Analysis," *the Proceedings of CSCMP Annual Conference*, Philadelphia, 2007.
6. Yuliang Yao, "Do Information Technology and Electronic Market Use Still Matter? An Empirical Analysis of the U.S. Manufacturing Supply Chains," *The 6th Workshop on e-Business*, Montreal, 2007.
7. Yuliang Yao, Martin Dresner, and Kevin Zhu, "Searching for the "Monday Blues" in Order Fulfillment and its Cure." *the Proceedings of INFORMS Conference on Information Systems and Technology (CIST)*, San Diego, 2009.
8. Susan Sherer, Rajiv Kohli, Yuliang Yao. "Impact of Cultural Differences on CPFR," *the Proceedings of American Conference on Information Systems (AMCIS)*, San Francisco, 2009.
9. Xue Bai and Yuliang Yao, "Campus vs. Facebook: When Do Offline Communities Meet Online?" *The 8th Workshop on e-Business*, Phoenix, 2009.

Conference Presentations

1. Joseph P. Bailey, Yuliang Yao, and Samer Faraj, "Price Dispersion among Internet Retailers", Presented at Workshop on Information System Economics (WISE), 1999.
2. Yuliang Yao, Joseph P. Bailey, and Martin Dresner, "Electronic Supply Chains and Channel Competition," Presented at Workshop on Information System Economics (WISE), 2001.
3. Yuliang Yao, Jonathan Palmer, and Martin Dresner, "Impacts of Electronic Commerce on Supply Chain Performance, Structure, and Pricing," ICIS 2002, Barcelona, December 2002.

4. Yuliang Yao, and Martin Dresner, "Information Sharing and Continuous Replenishment in Vendor-Managed Inventory," Presented at Annual Conference of INFORMS, 2002.
5. Yuliang Yao, Jonathan Palmer, and Martin Dresner, "Can Electronic Commerce Technologies Improve Supply Chain Performance? An Empirical Examination in the Federal Supply Chain," Presented at Annual Conference of Decision Science Institution (DSI), 2002.
6. Yuliang Yao, Yan Dong, and Martin Dresner, "Beyond Information Sharing: The Value and Learning Process of Vendor Managed Inventory from Downstream Supply Chain Perspective," Invited to present at INFORMS Annual Conference, Denver, 2004.
7. Yuliang Yao, Yan Dong, and Martin Dresner, "Supply Chain Learning and Spillovers in Vendor Managed Inventory," Present at Workshop on Information System Economics (WISE), 2004.
8. Yuliang Yao and Yan Dong, "Contracting Customer Retention under Centralized and Decentralized Inter-Organizational Information Systems," *INFORMS Conference on Information Systems and Technology (CIST)*, San Francisco, 2005.
9. Yan Dong and Yuliang Yao, "Designing a RFID Pilot for Improved Supplier Management," *INFORMS Annual Conference*, San Francisco, 2005.
10. Anindya Ghose and Yuliang Yao, "Price Dispersion in Electronic Markets: New Evidence from Transaction Prices," INFORMS Annual Conference, Pittsburg, 2006
11. Anindya Ghose and Yuliang Yao, "Price Dispersion in Electronic Markets: New Evidence from Transaction Prices," Statistical Challenges in eCommerce Research Symposium (SCECR 07), Stamford, CT, May 2007.
12. Yan Dong, Yuliang Yao and Fred Riggins, "Designing a RFID Pilot for Improved Supplier Management," International Symposium on Information Systems & Management, Shanghai, China 2007.
13. Yuliang Yao, Yan Dong, and Martin Dresner, "Managing Supply Chain Backorders under Vendor Managed Inventory: A Principal-Agent Approach and Empirical Analysis," *the Proceedings of CSCMP Annual Conference*, Philadelphia, 2007.
14. Jerry Cederlund, Rajiv Kohli, Susan Sherer, and Yuliang Yao, "Inside the Blackbox of Collaborative Planning, Forecasting, and Replenishment (CPFR): An Empirical Analysis of the Learning Process," INFORMS Annual Conference, Seattle, November 2007.
15. Yuliang Yao, "Do Information Technology and Electronic Market Use Still Matter? An Empirical Analysis of the U.S. Manufacturing Supply Chains," The 6th Workshop on e-Business, Montreal, 2007
16. Yuliang Yao, Rajiv Kohli, Susan Sherer, and Jerold Cederlund, "Inside the Blackbox of Collaborative Planning, Forecasting, and Replenishment (CPFR): An Empirical Analysis of

- the Learning Process in a Dynamic Business Environment,” Manufacturing and Service Operations Management (MSOM) Conference, College Park, MD, 2008.
17. Yuliang Yao, Martin Dresner, and Kevin Zhu, “Searching for the “Monday Blues” in Order Fulfillment and its Cure.” INFORMS Conference on Information Systems and Technology (CIST), San Diego, CA, 2009.
 18. Xue Bai and Yuliang Yao, “Campus vs. Facebook: When Do Offline Communities Meet Online?” The 8th Workshop on e-Business, Phoenix, 2009.
 19. Xue Bai and Yuliang Yao, “An Empirical Analysis of the Adoption of Facebook on Campus.” INFORMS Annual Conference, Austin, November 2010
 20. Yan Dong, Martin Dresner, Yuliang Yao, “On and Beyond Information Sharing: An Empirical Analysis of Value of Vendor Managed Inventory.” INFORMS Annual Conference, Austin, November 2010
 21. Yongrui Duan, Yuliang Yao, and Jiazhen Huo, “Item Level Evidence: An Empirical Analysis of the Bullwhip Effect.” INFORMS International Conference, Beijing, June 2012.
 22. Yongrui Duan, Yuliang Yao, and Jiazhen Huo, “Item Level Evidence: An Empirical Analysis of the Bullwhip Effect.” POMS Annual Conference, Atlanta, May 2014.
 23. Ling Xue, Ke Yang, and Yuliang Yao, “Inter-Firm Managerial Social Ties, IT Supplier Selection and IS Complexity.” INFORMS Annual Conference, Philadelphia, November 2015
 24. Xingyue Zhang and Yuliang Yao. “How Much is Too Much? The Effect of Call Intensity on Online Purchase.” *INFORMS Conference on Information Systems and Technology (CIST)*, Nashville, 2016.
 25. Xingyue Zhang, Weijia Dai, and Yuliang Yao, “Between Online and Offline Markets: A Structural Estimation of Consumer Demand.” *INFORMS Conference on Information Systems and Technology (CIST)*, Houston, 2017.
 26. Xingyue Zhang, Weijia Dai, and Yuliang Yao, “Between Online and Offline Markets: A Structural Estimation of Consumer Demand.” Workshop on Information Systems Economics (WISE), *Seoul, Korea*, 2017.
 27. Xingyue Zhang, Jim Dearden, and Yuliang Yao, “Let Them Stay or Let Them Go? Price Competition in Online and Offline Markets with Consumer Search and Product Stockouts.” *INFORMS Conference on Information Systems and Technology (CIST)*, Phoenix, 2018.
 28. Jia Gao, Ying Rong, Xin Tian and Yuliang Yao, “Technology Adoption in Public: The Impact of Mere Social Presence on Adoption and Usage”, *INFORMS Conference on Information Systems and Technology (CIST)*, Seattle, 2019.

INVITED SEMINARS

University of Minnesota, February 2007
University of Maryland, April 2008
Beijing University of Science and Technology, June 2010
University of Maryland, September 2011
Lehigh University, September 2011
Tongji University, June 2012
University of Science and Technology of China, June 2012
Drexel University, May 2016
Tongji University, June 2016, 2017
University of Maryland, May 2017
University of Utah, November 2017
University of Notre Dame, April 2018
Lehigh University, DISC Institute, April 2019
Temple University, Global Center on Artificial Intelligence & Business Analytics, August 2019
Arizona State University, November 2020
Baruch College, November 2022

PROFESSIONAL SERVICES AND AFFILIATIONS

Member of AIS and INFORMS
Associate Editor for ICIS 2003; ICIS 2010; ICIS 2011; ICIS 2012; ICIS 2013; ICIS 2019
Track Chair for DSI 2011
Session Chair for AMCIS 2003, ICIS 2003, CIST 2010, INFORMS 2014
Member of Editorial Board of Journal of Supply Chain Management
Member of Editorial Board of Journal of Operations Management
Member of Editorial Board of Journal of Business Logistics (2011-)
Member of Editorial Board of IEEE of Engineering Management (2013-2017)
Program Committee for INFORMS CIST (2009-)

AWARDS AND HONORS

Scholarship from Rensselaer Polytechnic Institute for outstanding students, 1995.
Summer Research Fellowship from Robert H. Smith School of Business, 1999.
AMCIS Doctoral Consortium, 2001
Council of Logistics Management (CLM) Doctoral Consortium, 2001
Research Grants (\$1,000; \$2,500) from Lehigh University, 2004, 2005
Research Grants (\$6,000) from College of Business and Economics of Lehigh University and
Martindale Center, 2004
C. Scott Hartz'68 Term Professorship, 2006-2012
CSCMP 2007 E. Grosvenor Plowman Award (Best Paper)
Carl R. and Ingeborg Beidleman Research Awards, Lehigh University, 2009
George N. Beckwith'32 Professor, 2012-
Carl R. and Ingeborg Beidleman Research Awards, Lehigh University, 2015
MBA Excellence in Teaching Award (MBA Core Course), Lehigh University, 2015
Allen N Nash Distinguished Doctoral Graduate Award, University of Maryland, 2017

COURSES TAUGHT

University of Maryland:

BMGT 476: Applied Computer Models in Supply Chain Management

California State University San Marcos:

BA690G: Supply Chain Management

BUS304: Management Information Systems

Lehigh University:

MBA403: Managing Information

MBA455: Electronic Business Applications

BIS342: Electronic Business Systems and Applications

BIS372: Business Intelligence

BIS311: System Analysis and Design

BIS348/448: Predictive Analytics in Business

Ph.D. STUDENTS

Xingyue (Luna) Zhang: Initial placement at University of Washington at Takoma

SERVICES

Service to University:

Continuing Education Committee 2005-2008

Data Advisory Council 2007-2012

Graduate and Research Committee 2009-2012

Curriculum Sub-Committee 2009-2012

Lehigh in Shanghai 2009-

Program Co-Director of Lehigh in Shanghai 2011

Program Director of Lehigh in Shanghai 2012-

China Working Group 2009-2012

University Delegation to China January 2-16, 2011

University Delegation to China October 15-23, 2011

Iacocca International Internship Steering Committee 2011-2012

University Delegation to China September 9-20, 2012

Global Steering Committee 2014-2016

University Delegation to China November 4-12, 2018

Search Committee for Deputy Provost for Graduate Education 2018

Search Committee for Vice Provost for Research 2022

Strategic Planning Sub-Committee: Smart Growth Fall 2022

Lehigh COE Taskforce on Enrollment, Diversity and Modality Fall 2022

Search Committee Co-Chair for University Registrar

Service to College:

MBA Core Team 2003-2015

CBE Global Lehigh Internship Sub Committee 2008

MBA Curriculum Review Committee 2008-2009

Master Committee 2008-2011

CBE Global Steering Committee 2010-2012

Global EMBA 2010-2011

Program Director of China Global Lab 2012

Service to Department:

IS Faculty Search Committee 2004

Supply Chain Management Faculty Search Committee 2005

Departmental Research Seminar Committee 2005-2010

Supply Chain Management Faculty Search Committee 2007

Supply Chain Management Faculty Search Committee 2008

Supply Chain Management Faculty Search Committee 2010

BIS Program Director, Spring 2011

Supply Chain Management POP Search Committee 2013

IS Faculty Search Committee Chair 2014

IS Faculty Search Committee 2018

Department Chair Search Committee Chair 2019