

Yinliang (Ricky) Tan

China Europe International Business School
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Date: December, 2026

ACADEMIC EMPLOYMENT

China Europe International Business School , Shanghai, China		
Full Professor of Decision Sciences and Management Information Systems		May 2024—Present
Stanford University, Stanford, California		
Visiting Scholar, Stanford Digital Economy Lab		March 2024—May 2024
University of Houston , Houston, TX (on-leave)		
Associate Professor of Decision & Information Sciences		Sep 2021—Present
Area Coordinator in Supply Chain Management		Sep 2021—Present
Bauer Senior Fellow		Sep 2021—Present
DBA International Program Director		Sep 2021—Present
Researcher, HPE Data Science Institute		Jan 2023—Present
Associate Director, Human-Centered Artificial Intelligence Institute		Nov 2023—Present
Tulane University , New Orleans, LA		
Assistant Professor of Management Science (Tenure granted on May 2021)		Jul 2015—Jun 2021
Executive Director, Goldring Institute of International Business		Jan 2020—Jun 2021
Irving H. LaValle Early Career Professorship		2016—2021

EDUCATION

University of Florida , Gainesville, FL		June 2015
Ph.D. in Operations Management and Information Systems		
University of Florida , Gainesville, FL		December 2010
Master of Science in Industrial Engineering		
Tongji University , Shanghai, China		August 2009
Bachelor of Engineering in Logistics Engineering, <i>Summa Cum Laude</i>		

RESEARCH

REFEREED JOURNAL PUBLICATION

- FT 50 = Top 50 Journals used in Financial Times Research Ranking;
 - UTD 24 = Top 24 Journals for UT Dallas Top 100 Business School Research Ranking
1. Rakesh Mallipeddi, Nicholas Hall, Yinliang (Ricky) Tan, Xianjun Geng *The Business of Sports: An Operations Perspective, Production and Operations Management* (FT 50, UTD 24). 2026. Forthcoming
 2. Junghee Lee, Lai Wei, Ming Hu, and Yinliang (Ricky) Tan. *Shades of Green: The Hidden Impact of Prosumers and Its Mitigation, Production and Operations Management* (FT 50, UTD 24). 2026. Forthcoming
 3. Jun Pei, Ping Yan, Yinliang (Ricky) Tan, and Ruiqi Wang. *Quality Management in Supply Chain: Strategic Implications and the Paradox of AI Inspection, Decision Science*. 2025. Forthcoming

4. Ting Hou, Meng Li, Yinliang (Ricky) Tan, and Huazhong Zhao. *Physician Adoption of AI Assistant, Manufacturing & Service Operations Management*. 2024 26 (5), 1639-1655 (FT 50, UTD 24)

Best Student Paper. College of Service Operations, 2023 Production & Operations Management Annual Conference.

5. Geng Sun, Yeongin Kim, and Yinliang (Ricky) Tan, and Geoffrey Parker. *Dinner at Your Doorstep: Service Innovation Through the Gig Economy in Food Delivery Platforms, Information Systems Research*. 2024 26 (5), 1639-1655 (FT 50, UTD 24)
6. Ailing Xu, Yinliang (Ricky) Tan, and Qiaochu He. **(Equal contribution)** *Information Transparency With Targeting Technology for Online Service Operations Platform, Production and Operations Management*. 2024 33 (6), 1410-1425 (FT 50, UTD 24)
7. Yinliang (Ricky) Tan (solo-authored), *Implications of blockchain-powered marketplace of preowned virtual goods, Production and Operations Management*. 2024 33 (6), 1393-1409. (FT 50, UTD 24)
8. Yinliang (Ricky) Tan, Chuanbin Yu, Quan Zheng, and Yang Liu. *Agency Models in Online Platforms: A Review of Recent Developments and Future Prospects. European Journal of Operational Research*. 2024 319 (3), 679-695
9. Feiqiong Wei, Yinliang (Ricky) Tan, Huazhong Zhao, and Haibing Gao. *When Investors Meet Consumers: When Investors Meet Consumers: The Interaction of Different Backers in Crowdfunding Markets, Decision Sciences*. 2024 55 (5), 474-490
10. Yuetao Gao, Bo Shen, Shaoxuan Liu, and Yinliang (Ricky) Tan **(Equal contribution)** *Social Pricing in a Distribution Channel under Conspicuous Consumption*, Forthcoming at **Production and Operations Management** (FT 50, UTD 24)
11. Yuetao Gao, Norman Johnson, Bo Sheng, and Yinliang (Ricky) Tan **(Equal contribution)** *Benefits of Sourcing Alternative Inputs of Manufacturers for Suppliers, Production and Operations Management*. 2023 32(6), 1880-1894 (FT 50, UTD 24)
12. Stephanie Cheng, Pengkai Lin, Yinliang (Ricky) Tan and Yuchen Zhang **(Equal contribution)** *High Innovators? Marijuana Legalization and Regional Innovation*, Forthcoming at **Production and Operations Management**. 2023, 32(3), 685-703 (FT 50, UTD 24)
13. Haibing Gao, Subodha Kumar, Yinliang (Ricky) Tan and Huazhong Zhao **(Equal contribution)** *Socialize More, Pay Less: Randomized Field Experiments on Social Pricing*, Forthcoming at **Information Systems Research**. 2022 33(3), 935-953 (FT 50, UTD 24)
14. Shuhua Sun, Huaizhong Chen, Michael Burke, Yinliang (Ricky) Tan, Jiantong Zhang, Lili Hou, *Mitigating the Psychologically Detrimental Effects of Supervisor Undermining: Joint Effects of Voice and Political Skill, Human Relations*. 2022, 75 (1), 87-112 (FT 50)
15. Yinliang (Ricky) Tan, Yan Xiong, Haibing Gao, Xi Li, and Huazhong Zhao *Less is More? The Strategic Role of Retailer Capacity, Production and Operations Management*. 2021, 30 (10), 3354-3368 (FT 50, UTD 24)
16. Haibing Gao, Huazhong Zhao, Yinliang (Ricky) Tan, Ya Lin and Lai Wei *Social Promotion: A Creative Promotional Framework on Consumers' Social Network Value, Production and Operations Management*. 2020, 29 (12), 2661-2678 (FT 50, UTD 24)

17. Yixuan Feng, Yinliang (Ricky) Tan, Yongrui Duan, and Yu Bai *Strategic Analysis of Luxury Fashion Rental Platform in Sharing Economy*, ***Transportation Research Part E: Logistics and Transportation Review***. 2020, 142, 102065
18. Subodha Kumar, Yinliang (Ricky) Tan and Lai Wei (**Equal contribution**) *When to Play Your AD? Optimal Insertion Policy of Behavioral Advertisement*, ***Information Systems Research***. 2020, 31(2), 589-606 (FT 50, UTD 24)
19. He Huang, Geoffrey Parker, Yinliang (Ricky) Tan and Hongyan Xu (**Equal contribution**) *Altruism or Shrewd Business? Implications of Technology Openness on Innovations and Competition* , ***MIS Quarterly***. 2020, 44(3) 1049-1071 (FT 50, UTD 24)
20. He Huang, Liming Liu, Geoffrey Parker, Yinliang (Ricky) Tan, and Hongyan Xu (**Equal contribution**) *Multi-Attribute Procurement Auctions in the Presence of Satisfaction Risk*, ***Production and Operations Management***. 2019, 28(5), 1206-1221 (FT 50, UTD 24)
21. Baozhuang Niu, Jiawei Li, Jie Zhang, Hsing Cheng, and Yinliang (Ricky) Tan (**Equal contribution**) *Strategic Analysis of Dual Sourcing and Dual Channel with an Unreliable Alternative Supplier*, ***Production and Operations Management***. 2019, 28(3), 570-587 (FT 50, UTD 24)
22. Lin Tian, Asoo Vakharia, Yinliang (Ricky) Tan, and Yifan Xu (**Equal contribution**) “Marketplace, Reseller, or Hybrid: a Strategic Analysis of Emerging E-Commerce Model”, ***Production and Operations Management***. 2018, 27 (8), 1595-1610 (FT 50, UTD 24)
23. Xianjun Geng, Yinliang (Ricky) Tan, and Lai Wei (**Equal contribution**) “How Add-On Pricing Interacts with Distribution Contracts”, ***Production and Operations Management***. 2018, 27 (4), 605-623 (Lead article) (FT 50, UTD 24)

Best Problem-Driven Analytical Research Paper, 2017, Decision Science Institute (DSI) Annual Conference.

24. Brent Kitchens, Tawnya Means, and Yinliang (Ricky) Tan (**Equal contribution**) “CAPTIVatE: Building Blocks for Implementing Active Learning”. ***Journal of Education for Business***, 2018, 93(2), 58-73
25. Yinliang (Ricky) Tan, Anand Paul, Qi Deng, and Lai Wei, “Mitigating Inventory Overstocking: Optimal Order-up-to Level to Achieve a Target Fill Rate”, ***Production and Operations Management***. 2017, 26 (11), 1971-1988 (Lead article) (FT 50, UTD 24)
26. Yinliang (Ricky) Tan, and Janice Carrillo, “Strategic Analysis of the Agency Model for Digital Goods”, ***Production and Operations Management***. 2017, 26(4), 724-741 (FT 50, UTD 24)

Best Student Paper Award, 2014 Decision Science Institute (DSI) Annual Conference.

27. Yinliang (Ricky) Tan, Janice Carrillo, and Hsing K. Cheng, “The Agency Model for Digital Goods”, ***Decision Sciences Journal***. 2016, 47(4), 628-660
 28. Anand Paul, Yinliang (Ricky) Tan and Asoo Vakharia “Inventory Planning for a Modular Product Family” , ***Production and Operations Management***. 2015, 24(7), 1033-1053 (Lead Article) (FT 50, UTD 24)
 29. Anuj Kumar, and Yinliang (Ricky) Tan “Demand Effects of Joint Product Advertising in Online Videos”, ***Management Science***. 2015, 61(8), 1921-1937 (FT 50, UTD 24)
- Research Grant Awardees**, Innovative Approaches to Measuring Advertising Effectiveness, Wharton Customer Analytics Initiative, University of Pennsylvania

BOOK CHAPTERS AND CONFERENCE PROCEEDINGS

1. Nazli Turken, Yinliang (Rick) Tan, Asoo J. Vakharia, Lan Wang, Ruoxuan Wang, and Arda Yenipazarli “*The Multi-product Newsvendor Problem: Review, Extensions, and Directions for Future Research*”, ***Handbook of Newsvendor Problems, International Series in Operations Research & Management Science***, 2012
2. Yinliang (Ricky) Tan, Janice Carrillo “*The Agency Model for Digital Goods: Strategic Analysis of Dual Channels in Electronic Publishing Industry*”, ***Proceedings of 2014 Portland International Conference on Management of Engineering and Technology (PICMET) Conference***

PAPERS UNDER REVIEW

- *Quality Certification in the Presence of Review Bias* (With Xu Guan, and Guangrui Ma), Under 2nd Round Review at ***Production and Operations Management***
- *Quality Management in Supply Chain: Strategic Implications and the Paradox of AI Inspection* (With Subodha Kumar, Bo Shen, and Yuetao Gao), Under 1st Round Review at ***Manufacturing & Service Operations Management***

WORKING IN PROGRESS

- *Genes and AI Performance* (With Shiyang Gong, and Shuhua Sun), Target at ***Management Science***
- *Last-Step Human Involvement: The Impact of Industrial GPT on B2B Procurement – Evidence from a Field Experiment* (With Xiande Zhao, Shichen Zhang, and Ruyu Chen), Target at ***Journal of Operations Management***
- *The Role of Virtual Person on Social Network Platforms* (With Erik Brynjolfsson, Frank Li, Shiyang Gong, Yuetao Gao, and Eric Guo), Target at ***Information Systems Research***
- *Impact of Auctioneers Voice and Action on Art Auction Pricing* (With Yuexin Li, Qi Deng, and Shuihan Yi), Target at ***Management Science***
- *The Role of Free Players in the Mobile Games* (With Xuying Zhao, Yixuan Feng), Target at ***Information Systems Research***

TEACHING EXPERIENCE

DSCI038 - Artificial Intelligence and the Frontiers of Academic Research (DBA Level), CEIBS.

DSCI5057 - Artificial Intelligence and Business Transformation (EMBA Level), CEIBS.

DSCI3057 - Artificial Intelligence and Business Transformation (MBA Level), CEIBS.

DISC1037 - Artificial Intelligence: The Frontier of Productivity (EMBA Level), CEIBS.

OPER051 - Visual Analytics (Graduate Level), CEIBS.

SCM 8397 - Analytical Modeling in Operations Management (Ph.D. Level), Bauer College of Business, University of Houston.

MIS 7397 - Visual Analytics (Graduate Level), Bauer College of Business, University of Houston.

BZAN 6350/6352 - Quantitative Foundations for Business Analytics (Graduate Level), Bauer College of Business, University of Houston.

MGSC 7000 - Business Analytics Practicum (Graduate Level), Freeman School of Business, Tulane University.

MGSC 7310 - Modeling and Analytics (Graduate Level), Freeman School of Business, Tulane University.

MGSC 7510 - Business Analytics Project I (Graduate Level), Freeman School of Business, Tulane University.

MGSC 7320 - Advanced Spreadsheet Modeling (Graduate Level), Freeman School of Business, Tulane University.

MGSC 3010 - Intro to Business Analytics (Undergraduate Level), Freeman School of Business, Tulane University.

ISM 4330 - Information System & Operation Management Strategy (Undergraduate Level), Warrington College of Business Administration, University of Florida.

QMB 4702 - Managerial Operations Analysis 2 (Undergraduate Level), Warrington College of Business Administration, University of Florida.

TEACHING CASE DEVELOPMENT

1. POOK Technology: How AI Drives Business Value and Enhances Productivity, 2025
2. AI MUST: Shinyway Education's AI Transformation and Leadership 2025
3. Balancing Global Standards with China's Speed: Merck's Path to Responsible, Scaled AI Adoption, 2026
4. Ipsos China: Navigating the AI Wave and Choosing Between '+AI' and 'AI+', 2026
5. Swire Coca-Cola: Organizational Choices on the Road to Digital Twin Adoption 2026
6. ZDM's AI Transformation: Strategic Choices Between Application and Ecosystem, 2026
7. Lingmou AI: The Next Stop for AI-Empowered Retail, 2026
8. Microlumin Technology: Choosing an Innovation Path, 2026
9. SFC ERiC: Between Opportunity and Integrity 2026
10. Shandong Century Innovation Value Chain Reshaping in the AI Era 2026

AWARDS AND HONORS (A SELECTED LIST)

- 2025 Outstanding Research Award, CEIBS
- 2025 Outstanding Case Writer in Generative AI, business and society, The Case Centre
- 2024 Special Award in Global Contest for the Best China-Focused Cases
- 2024 Best Senior Editor Award, Production & Operations Management Journal
- 2023 Global Supply Chain and Logistics Award, Industrial Engineering & Operations Management Society International
- 2023 Lucile and Leroy Melcher Excellence in Research Award, University of Houston
- 2022 Sandra A. Slaughter Early Career Award, The Information Systems Society, INFORMS.
- 2019 Carol J. Latta Emerging Leadership Award for Outstanding Early Career Scholars, Decision Science Institute.
- 2019 Irving H. LaValle Research Excellence Award, Tulane University.
- 2019 The Most Outstanding 40 Business Professors under 40, Poets & Quants
- 2019 Best Reviewer Award, Production and Operations Management Journal
- 2018 Dean's Excellence in Graduate Teaching Award, Tulane University
- 2017 Best Problem-Driven Analytical Research Paper, 2017 Decision Science Institute (DSI) Annual Conference.

- 2016 Irving H. LaValle Research Excellence Award, Tulane University.
- 2016 Faculty International Travel Grant, Tulane University.
- 2014 Best Student Paper Award, 2014 Decision Science Institute (DSI) Annual Conference.
- 2014 Doctoral Student Consortium, Decision Science Institute (DSI) Annual Conference.
- 2014 Doctoral Student Consortium, POMS Annual Conference.
- 2013 Finalist & Honorable Mention, Instructional Innovation Award Competition, Decision Sciences Institute.
- 2013 Doctoral Student Consortium, Decision Science Annual Conference.
- 2013 Honorable Mention, UF Graduate Teaching Assistant Awards.
- 2013 Research Grant Awardees, Wharton Customer Analytics Initiative, University of Pennsylvania.
- 2013 ISOM Doctoral Student Teaching Award, Department of Info. Systems & Operations Management, University of Florida
- 2012 ISOM Doctoral Student Teaching Award, Department of Info. Systems & Operations Management, University of Florida
- 2011 Ray M. Greenly Scholarships, National Retail Federation (NRF) Foundation.
- 2011 Sixth International Doctoral Consortium Meeting, Purdue University.
- 2010 Outstanding International Student, University of Florida.
- 2009 Achievement Award for New Engineering Graduate Student, University of Florida
- 2009 Outstanding Graduate Student, Tongji University (Top 1%)
- 2008 Baosteel Group Scholarship (a Fortune 500 Company Scholarship)
- 2008 First-Class Scholarship, Tongji University (Top 1%)

INVITED CAMPUS TALKS

- 2026 Feb University of New South Wales, Australia
- 2025 May Warwick University, UK
- 2025 Mar Stanford University
- 2024 Aug Nanyang Technological University, Singapore
- 2024 Feb Ohio State University
- 2024 Jan China Europe International Business School, China
- 2023 Apr Tilburg University, Netherlands
- 2023 Apr Wake Forest University
- 2023 Mar University of Nebraska-Lincoln
- 2023 Feb Hewlett Packard Enterprise Data Science Institute, University of Houston
- 2022 Dec Amazon New York Office, Advertising Group
- 2022 May China Europe International Business School, China
- 2022 May Shanghai Jiao Tong University, China
- 2021 Apr Tsinghua University, China
- 2021 Mar Pontifical Catholic University of Chile
- 2021 Jan University of Houston
- 2021 Jan Texas A&M University
- 2019 Nov Vanderbilt University
- 2018 Feb Arizona State University
- 2016 Jun Tongji University

- 2015 Jan University of Florida, Teaching with Teams Workshop
2015 Jan University of Rochester
2015 Jan University of Hong Kong
2015 Jan Peking University HSBC Business School, China
2014 Dec Shanghai University of Finance and Economics, China
2014 Dec East China University of Science and Technology, China
2014 Dec Fudan University, China
2014 Dec Tongji University, China
2014 Dec University of New South Wales, Australia
2014 Dec University of Kansas
2014 Dec University of Houston
2014 Dec Tulane University
2014 Oct Utah State University
2014 Oct Florida International University
2013 Dec East China University of Science and Technology, China

CONFERENCE PRESENTATIONS

- 2024 April POMS Annual Meeting (Invited Talk)
2023 Nov DSI Annual Meeting (Invited Talk)
2023 Mar Theory in Economics of Information Systems Workshop (TEIS Discussant)
2022 Nov DSI Annual Meeting (Gig Economy and Social Media Research)
2022 Aug 16th International Conference on Operations and Supply Chain Management (Invited Talk)
2022 Aug Workshop on New Business Models and Operations Innovation, Dartmouth College (Invited Talk)
2021 May POMS Annual Meeting (Information Systems and Technology session)
2020 Nov INFORMS Annual Meeting (Technology, Innovation Management and Entrepreneurship Section)
2018 Mar Theory in Economics of Information Systems Workshop (TEIS Discussant)
2017 Nov DSI Annual Meeting (Information Systems and Technology session)
2017 May POMS Annual Meeting (Invited Talk)
2017 Mar Theory in Economics of Information Systems Workshop (TEIS Discussant)
2016 Nov INFORMS Annual Meeting (Invited Talk)
2016 Nov Conference of Information Systems and Technology (CIST)
2016 Jun The 7th E-Commerce /Supply Chains Management Workshop, East China University of Science and Technology (Invited Talk)
2016 Jun The 10th China Summer Workshop on Information Management (CSWIM)
2016 May POMS Annual Meeting (Invited Talk)
2015 May POMS Annual Meeting (Invited Talk)
2014 Nov DSI Annual Meeting (Best Student Paper)
2014 Nov INFORMS Annual Meeting (MSOM sponsored session)
2014 Jun MSOM Conference (Future Faculty Track)
2014 May POMS Annual Meeting (Invited Session)
2013 Nov DSI Annual Meeting (Invited Session)

- 2013 Nov DSI Annual Meeting (Instructional Innovation Award Competition Session)
2013 May POMS Annual Meeting (Invited Session)
2012 Oct INFORMS Annual Meeting (Invited Session)
2012 Oct INFORMS Annual Meeting (Advertising and Promotion Effectiveness Session)

ACADEMIC SERVICES AND AFFILIATIONS

Department Editor, Decision Science Journal (Platform and Sharing Economy), 2023 - Present

Senior Editor, Production and Operations Management, 2018 - Present

Associate Editor, Information Systems Research, 2026 - Present, Decision Support Systems, 2024 - Present; Information & Management, 2020 - Present, Decision Science Journal, 2020 - 2022;

Guest Co-Editor, Production and Operations Management (Special Issue on New Business Models and Operations Innovations), 2021 - 2024

Guest Associate Editor, MIS Quarterly (Special Issue on Digital Technologies and Social Justice), 2021-2024. Decision Support Systems (Special Issue on Blockchain Technology and Applications), 2022-2024

Editorial Review Board, Information Systems Research (2022 - 2025), Production and Operations Management (2018 - Present), Management and Business Review (2019 - Present), Journal of Management Information Systems (2023 - Present), Journal of Operations Management (2024 - Present), Journal of Association of Information Systems (2025 - Present)

Reviewer, Management Science, Information System Research, Production and Operations Management, Management Information Systems Quarterly, Journal of Operations Management, Manufacturing & Service Operations Management, Decision Science, European Journal of Operations Research, International Journal of Production Economics, Annals of Operations Research, Journal of the Association for Information Systems, Omega: The International Journal of Management Science, International Conference on Information Systems, Journal of the Operational Research Society, Business & Information Systems Engineering, International Journal of Environmental Research and Public Health, Research Grants Council (RGC) of Hong Kong, Ocean and Coastal Management, Transportation Research Part E

Conference Track Chair, 2025 Production and Operations Management Annual Conference (New Business Models and Emerging Topics), 2024 Production and Operations Management Annual Conference (New Business Models and Emerging Topics), 2023 Production and Operations Management Annual Conference (POMS - New Business Models and Emerging Topics), 2022 Production and Operations Management Annual Conference, (POMS - Social Media and Internet of Things Track), 2018 Production and Operations Management Annual Conference, (POMS - Economic Models in Operations Management Track)

Conference Program Committee Member, International Conference on Information Systems (ICIS 2019), Workshop on Information Technologies and Systems (WITS 2020, 2019, 2018, 2017, 2016), Conference on Information Systems and Technology (CIST 2023 2020, 2019, 2016), Workshop on e-Business (WeB 2021, 2019, 2017, 2016), China Summer Workshop on Information Management (CSWIM 2020, 2019, 2017, 2016)

School Committee Member,

- AI Task Force - CEIBS 2024
- Faculty Senate - University of Houston 2023-2025
- Graduate and Professional Studies Committee (GPSC) - University of Houston 2023-2025
- Promotion and Tenure Committee - DISC Department 2023-2024
- International Students Advisory Committee - University of Houston 2022-2024
- Department Faculty Recruiting Committee - DISC Department 2022-2023
- Committee on Presidential Faculty Search - University of Houston 2021-2022
- Committee on Research Grants - C.T. Bauer College of Business, University of Houston 2021-2022
- Dean Search Committee - A.B. Freeman School of Business, Tulane University 2020-2021

- Study Abroad Scholarship Selection Committee - A.B. Freeman School of Business, Tulane University 2018-2019
- Undergraduate Curriculum Committee - A.B. Freeman School of Business, Tulane University 2017
- Faculty Recruitment Committee - A.B. Freeman School of Business, Tulane University 2017-2021
- Executive MBA Committee - A.B. Freeman School of Business, Tulane University 2017-2018

President, 2011, INFORMS Student Chapter at University of Florida

Honor Society, 2015 - Present, Alpha Iota Delta

Member, 2011 - Present, INFORMS, POMS, DSI, AIS, AOM

NON-ACADEMIC EXPERIENCE

Software Quality Assurance Intern, Hawkes Learning Systems Co., Ltd., Charleston, South Carolina. Responsibilities included reviewing, approving, and testing of educational software, new product development, May 2010–Aug 2010.

Logistics Department Intern, Puma Asia Pacific Co., Ltd., Shanghai, China. Responsibilities included assistance to the department of implementing the SAP system and support for Logistics Manager with regard to communicating and supervising the 3PL company, Feb 2009–June 2009.

Warehouse Manager Assistant, Rainbow Logistics Co., Ltd., Shanghai, China. Responsibilities included improving the forecasting of the inventory system and enhancing the design of the facility layout, July 2008–Aug 2008.