

# ANDREW MANIKAS, Ph.D., PMP

Assistant Professor  
Department of Management  
College of Business  
University of Louisville  
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## EDUCATION

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**Georgia Institute of Technology**, College of Management, Atlanta, Georgia

Ph.D. in Operations Management, May 2008

Dissertation Title: "Essays in Inventory Decisions under Uncertainty"

Committee Members: Dr. Yih-Long Chang (Chair), Dr. Srinagesh Gavirneni (Cornell University), Dr. Soumen Ghosh, Dr. Ravi Subramanian, Dr. Paul Griffin (School of Industrial & Systems Engineering)

**Michigan State University**, East Lansing, Michigan

M.B.A. in Materials and Logistics Management, June 1992

B.S. in Computer Science, May 1990

## PROFESSIONAL AND ACADEMIC EXPERIENCE

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2012 – Present	Assistant Professor, Management College of Business University of Louisville										
2008 – 2012	Assistant Professor, Supply Chain Management College of Business Administration University of Wisconsin Oshkosh										
2003 – 2008	Ph.D. Student, Graduate Research Assistant College of Management Georgia Institute of Technology										
2000 – 2003	Global Curriculum Manager, Instructor i2 Technologies										
1991 – 2008	Management Consultant: <table><tbody><tr><td>Big 4 Management Consultants</td><td>Independent Consultant</td></tr><tr><td>Deloitte Consulting</td><td>Manager, Senior Manager</td></tr><tr><td>Computer Sciences Corporation</td><td>Senior Consultant</td></tr><tr><td>KPMG Peat Marwick</td><td>Consultant, Senior Consultant</td></tr><tr><td>Unisys</td><td>Internal Consultant</td></tr></tbody></table>	Big 4 Management Consultants	Independent Consultant	Deloitte Consulting	Manager, Senior Manager	Computer Sciences Corporation	Senior Consultant	KPMG Peat Marwick	Consultant, Senior Consultant	Unisys	Internal Consultant
Big 4 Management Consultants	Independent Consultant										
Deloitte Consulting	Manager, Senior Manager										
Computer Sciences Corporation	Senior Consultant										
KPMG Peat Marwick	Consultant, Senior Consultant										
Unisys	Internal Consultant										

## PROFESSIONAL AND ACADEMIC EXPERIENCE (CONT.)

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Experience in business process reengineering, technology transformation and project management. Representative clients include:

- Baker Hughes – Global business process reengineering and full lifecycle SAP R/3 Implementation (cutover leader for core team of 55 FTEs)
- Rockwell Automation – Business reengineering (Brussels HQ) in anticipation of PeopleSoft pan-European implementation
- Pepsi-Cola General Bottlers – Business process reengineering for manufacturing, distribution and transportation in anticipation of PeopleSoft implementation
- Lockheed Martin Aircraft and Logistics Center – Oracle project planning
- Boeing Commercial Aircraft Group – Shop floor reengineering and Baan training in inbound/outbound logistics
- Lanier Worldwide – Order-To-Invoice reengineering and requirements analysis for PeopleSoft implementation
- Sachs Automotive of America (Mannesmann) – Shop floor and inventory process streamlining
- RR Donnelley & Sons – Inventory and bar-coding assessment
- BlueLinx (Georgia Pacific Distribution spinoff) – Recommended forecasting, procurement and inventory improvements worth \$61 million in the first year. Developed rule based logic to identify import zone into USA for shipments based upon arrival date and estimated length of stay by goods type and value
- Vertafore – Value stream mapping for Quote-to-Cash process
- ChoicePoint – Branch consolidation/migration to corporate ERP system
- J&J Truck Bodies – Recommended assembly scheduling and capacity changes worth \$20 million per year profit improvement
- Plastic Suppliers – Custom and package full lifecycle implementation at seven North American branches (US and Canada) for all back office functions and customer service, receiving, and shipping functions
- Gulf States Steel – Software selection for ERP software and Sales Order Configurator
- Unisys – Just-In-Time inventory implementation, including facility layout to U-shape, 2-bin kanban, parts standardization and bar coding for tracking

## PEER REVIEWED ARTICLES

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- Godfrey, M., and Manikas, A. 2013. Integrating Sustainability into a Goal Programming Exercise. *Business Education and Accreditation*, **5**(1), Accepted.
- Godfrey, M., and Manikas, A. 2012. Integrating Triple Bottom Line Sustainability Concepts into a Supplier Selection Exercise. *Business Education and Accreditation*, **4**(1), 1-12
- Manikas, A., and Godfrey, M. 2011. Evolutionary Algorithm Parameter Fitness: An Exploratory Study. *International Journal of Management and Marketing Research*, **4**(3), 35-44
- Manikas, A., and Godfrey, M. 2010. Inducing Green Behavior in a Manufacturer. *Global Journal of Business Research*, **4**(2), 27-38
- Manikas, A., Chang, Y. L., and Ferguson, M. 2009. BlueLinx Can Benefit from Innovative Inventory Management Methods for Commodity Forward Buys. *Omega*. **37**(3), 545-554
- Manikas, A., and Chang, Y. L. 2009. Multi-Criteria Sequence Dependent Job Shop Scheduling Using Genetic Algorithms. *Computers & Industrial Engineering*, **56**(1), 179-185
- Manikas, A., and Chang, Y. L. 2008. A Scatter Search Approach to Sequence Dependent Job Shop Scheduling. *International Journal of Production Research*, **47**(18), 5217–5236
- Godfrey, M., and Manikas, A. 2009. Revising a Supply Chain Curriculum with an Emphasis on the Triple Bottom Line. *Business Education and Accreditation*, **1**(1), 45-54

## WORKING PAPERS

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- Manikas, A., and Kroes, J. An Exploratory Study of a New Forward Buying Heuristic. Under 2<sup>nd</sup> review at European Journal of Operational Research.
- Manikas, A., and Chang, Y. L. Service Chain Coordination under Exogenous Pricing. Under review at the Journal of the Operational Research Society.
- Kroes, J., and Manikas, A. Cash Flow Management and Manufacturing Firm Financial Performance: A Longitudinal Perspective. .
- Schikora, P. F., Manikas, A. S., and Godfrey, M. R. Batching to Minimize Flow-times on One Machine over a Finite Horizon: The Multiple-Job Capacity-Constrained Batching (MJCCB) Problem.
- Kroes, J., Ghosh, S., and Manikas, A. The Impact of Alignment Between Outsourcing Decisions and Manufacturing Strategy Configuration.
- Manikas, A., and Chang, Y. L. Supply Chain Coordination Using a Salvage Value Subsidy Mechanism.
- Kroes, J., and Manikas, A. Cash Flow Management Strategies and Retail Firm Performance.

## OTHER PUBLICATIONS

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- Godfrey, M., and Manikas, A. 2013. A sustainability exercise for a management science course using Excel solver and goal programming. Refereed *Proceedings of the GCBF*, 8(2), Costa Rica.
- Kroes, J., and Manikas A. 2013. Cash Flow Management and Retailer Firm Performance. *Proceedings of POMS 2013*, Denver, Colorado.
- Godfrey, M., and Manikas, A. 2012. Using Actual Motor Carrier Freight Rates in Excel Solver Models for Logistics Decision Making. Refereed *Proceedings of the GCBG*, 7(2), Costa Rica
- Kroes, J. R., Ghosh, S., and Manikas, A. 2012 Maximizing the firm value impact of offshore outsourcing decisions. In V. R. Kannan (Ed.), *Business Strategy in the 21<sup>st</sup> Century*. Santa Barbara, CA: Praeger Publishing
- Manikas, A., and Godfrey, M. 2011. An Exploratory Study of Genetic Algorithm Parameters. Refereed *Proceedings of the GCBG*, 6(2), Costa Rica
- Godfrey, M., and Manikas, A. 2011. Integrating Sustainability Concepts into a Management Science Course. Refereed *Proceedings of the GCBG*, 6(2), Costa Rica
- Manikas, A., and Chang, Y. L. 2010. A Practical Mechanism to Coordinate the Travel Industry. Refereed *Proceedings of DSI*, San Diego, California
- Manikas, A., and Godfrey, M. 2010. A Game Theoretic Model for Achieving Company-Wide Triple-Bottom-Line Goals. Refereed *Proceedings of the GCBF*, 5(2), Costa Rica, 155-160
- Godfrey, M., and Manikas, A. 2010. Clean Coal Adoption for Maximal Industry Profitability. Refereed *Proceedings of the GCBF*, 5(2), Costa Rica, 147-154
- Manikas, A., Godfrey, M., and Dunn, S. 2009. Optimal Implementation Timing for Sustainable Technologies. Refereed *Proceedings of the GCBF*, 4(2), Costa Rica, 100-111
- Dunn, S., Manikas, A., and Godfrey, M. 2009. Regulatory Agency Levers to Reduce Manufacturing Emissions. Refereed *Proceedings of the GCBF*, 4(2), Costa Rica, 141-151
- Godfrey, M., Dunn, S. and Manikas, A. 2009. Sustainability As A Catalyst For Curriculum Re-Design Of A Supply Chain Program. Refereed *Proceedings of the GCBF*, 4(2), Costa Rica, 121-130
- Manikas, Andrew. 2007. Dissuading Student Cheating. *Decision Line – In the Classroom*. 38(3), 7-9
- Manikas, Andrew. 2007. Fighting Pests with the EOQ. *APICS – The Association for Operations Management*. 17(4), 34-37
- Manikas, Andrew. 2007. The Importance of Using Historical Commodity Spot Purchase Prices. Refereed *Proceedings of Decision Sciences Institute SE*, Savannah, Georgia
- Manikas, A., Change, Y. L. 2006. Job Shop Rescheduling Due to Unplanned Supply Chain Disruptions via Scatter Search. *Proceedings of POMS 2006*. Boston, Massachusetts.

## OTHER PUBLICATIONS (CONT.)

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- Manikas, Andrew. 2006. Optimal Production in an Emissions Permit Constrained Environment. Refereed *Proceedings of INFORMS SE*, Myrtle Beach, South Carolina
- Manikas, A., and Chang, Y. L. 2006. Effective Work Ordering in a Constrained Manufacturing Environment. *Proceedings of the 36th International Conference on Computers and Industrial Engineering*, Taipei, Taiwan
- Manikas, A., and Chang, Y. L. 2005. Using A Genetic Algorithm to Solve the Sequence Dependent Job Shop Scheduling Problem. Refereed *Proceedings of INFORMS SE*, Myrtle Beach, South Carolina

## PRESENTATIONS

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- Godfrey, M., and Manikas, A. Global Conference On Business and Finance 2013, Costa Rica. "A sustainability exercise for a management science course using Excel solver and goal programming"
- Kroes, J., and Manikas, A. POMS 2013, Denver, Colorado. "Cash Flow Management and Retailer Firm Performance"
- Godfrey, M., and Manikas, A. Global Conference On Business and Finance 2012, Costa Rica. "Using Actual Motor Carrier Freight Rates in Excel Solver Models for Logistics Decision Making" (Author only)
- Manikas, A., and Godfrey, M. Global Conference On Business And Finance 2011, Costa Rica. "An Exploratory Study of Genetic Algorithm Parameters"
- Godfrey, M., and Manikas, A. Global Conference On Business And Finance 2011, Costa Rica. "Goal Programming AHP for Triple Bottom Line"
- Manikas, A., and Chang, Y. L. DSI 2010, San Diego, California. "A Practical Mechanism to Coordinate the Travel Industry"
- Manikas, A., and Godfrey, M. Global Conference On Business And Finance 2010, Costa Rica. "A Game Theoretic Model for Achieving Company-Wide Triple-Bottom-Line Goals"
- Godfrey, M., and Manikas, A. Global Conference On Business And Finance 2010, Costa Rica. "Clean Coal Adoption for Maximal Industry Profitability"
- Manikas, A., Godfrey, M., and Dunn, S. Global Conference On Business And Finance 2009, Costa Rica. "Optimal Implementation Timing for Sustainable Technologies"
- Dunn, S., Manikas, A., and Godfrey, M. Global Conference On Business And Finance 2009, Costa Rica. "Regulatory Agency Levers to Reduce Manufacturing Emissions"
- Godfrey, M., Dunn, S., and Manikas, A. Global Conference On Business And Finance 2009, Costa Rica. "Sustainability As A Catalyst For Curriculum Re-Design Of A Supply Chain Program"
- Manikas, A., Chang, Y. L., and Gavirneni, S. DSI 2007, Phoenix, Arizona. "Salvage Manipulators as an ATO Coordination Mechanism"

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## PRESENTATIONS (CONT.)

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- Manikas, A., Chang, Y. L., and Gavirneni, S. INFORMS 2007, Seattle, Washington. “Efficient n-Supplier Coordination”
- Manikas, A., and Chang, Y. L. INFORMS International 2007, Puerto Rico. “Multi-Criteria Sequence Dependent Job Shop Scheduling Using Genetic Algorithms” (Author only)
- Manikas, A., Ferguson, M., and Chang, Y. L. POMS 2007, Dallas, Texas. “A Heuristic for Commodity Procurement in the Presence of Price Discounting”
- Manikas, Andrew. DSI SE 2007, Savannah, Georgia. “The Importance of Using Historical Commodity Spot Prices”
- Manikas, A., Chang, Y. L., and Ferguson, M. DSI 2006, San Antonio, Texas. “Commodity Forward Buys at a Two-Stage Distributor”
- Manikas, A., Chang, Y. L., and Ferguson, M. INFORMS 2006, Pittsburgh, Pennsylvania. “An Improved Heuristic for Commodity Forward Buys”
- Manikas, Andrew. INFORMS SE 2006, Myrtle Beach, South Carolina. “Optimal Production in an Emissions Permit Constrained Environment”
- Manikas, A., and Chang, Y. L. POMS 2006, Boston, Massachusetts. “Job Shop Rescheduling Due to Unplanned Supply Chain Disruptions via Scatter Search”
- Manikas, A., and Chang, Y. L. INFORMS 2005, San Francisco, California. “A Genetic Algorithm to Solve the Sequence Dependent Job Shop Scheduling Problem”
- Manikas, A., and Chang, Y. L. INFORMS SE 2005, Myrtle Beach, South Carolina. “Using A Genetic Algorithm to Solve the Sequence Dependent Job Shop Scheduling Problem”

## TEACHING (INSTRUCTION AND CONTENT)

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### **University of Louisville (2012 – Present)**

Project Management (MGMT 404). Core undergraduate course to set the framework of project management used in the management minor. Homework and discussions support readiness for the CAPM certification. Students prepare and present projects individually and a team project.

Project Management (MBA 622). Required MBA course in project management. Have taught the weekend, fulltime, and professional sessions.

### **University of Wisconsin Oshkosh (2008 – 2012)**

Essentials of Operations Management (BUS 341). Covers basics of forecasting, value stream mapping, SPC, EOQ, aggregate planning, and service blueprinting.

Analytical Methods/Management Science (BUS 342). Covers LP, CPM/PERT, Little’s Law, revenue management and simulation. Heavy emphasis of Excel Solver to solve various constraint problems. Also covers DOE, ANOVA and regression, and CPM/PERT.

## TEACHING (INSTRUCTION AND CONTENT – CONT.)

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Supply Chain Management (BUS 344). Supply chain management course covering, facility location analysis (gravity method), economic ordering quantity (EOQ), transportation, capacity, scheduling, and other global supply chain decisions.

Supply Chain Strategy (BUS 445). Covers strategic decision making via game theory, negotiation, managerial statistics, and critical thinking. Includes capstone case reports and presentations on location planning, SPC, aggregate planning, and inventory management.

Advanced Quality Management (BUS 460). Required course covering quality philosophy, six sigma, SPC, and capability indices. Heavy emphasis on attribute and variable chart selection, creation and analysis for control (also online).

MBA course in the Foundations of Production (BUS 740). Introductory course for non-business undergraduate degree MBA students. Covers value stream mapping, strategy, competitive dimensions, lean, triple bottom line/sustainability, forecast method evaluation, quality management and control.

Core MBA course in Operations & Process Management (BUS 741). Required MBA course covering supply chain management. Includes; designing the supply chain network, global supply chain networks, supply and demand, planning/ managing inventories, designing/planning transportation networks, sourcing, and cross-functional drivers in the supply chain (also online).

### **Georgia Institute of Technology (2003 – 2008)**

MGT 3501 – Core operations management course required for all management majors. Covers basics of production and operations management including process analysis, service management, queuing, project management, inventory control, forecasting, mrp and crp.

MGT 2200 Lab – Required Information Technology lab for business students. Covered concepts of normalized databases, primary/foreign keys, Excel formulation, and Access queries.

### **i2 Technologies (2000 – 2003, and 2011 as contractor to JDA)**

Instructor for business clients and consulting partners for public and private on-site courses in supply chain optimization, demand fulfillment, demand planning, factory scheduling, transportation planning and load building. Served as acting Worldwide Curriculum Manager during 2002-2003.

## PROFESSIONAL AFFILIATIONS AND SERVICE

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- UWO - College of Business Committee Chair, Associate Dean Search Committee
- UWO - College of Business Committee Chair, SCM Faculty Search Committee
- UWO - College of Business Committee Member, Undergraduate Programs Committee
- UWO - University Committee Member, Americans with Disabilities Act Advisory Committee
- UWO - University Committee Member, Improvement of Instruction Committee
- UWO - Faculty/Student Advisor to APICS Student Chapter at University of Wisconsin Oshkosh
- Ad-Hoc Reviewer:
  - Arabian Journal for Science and Engineering
  - Computers and Industrial Engineering
  - Decision Sciences
  - European Journal of Operational Research
  - Int. Journal of Management Science and Engineering Management
  - Journal of Combinatorial Optimization
  - Production and Operations Management
  - Production Planning and Control
- Developed interactive content for Operations Management (11<sup>th</sup> edition), by William J. Stevenson.
- Session Chair: POMS, Boston, Massachusetts, 2006, Issues in Logistics and Distribution I
- Session Chair, Discussant: DSI SE, Savannah, Georgia, Stock and Commodity Market Pricing
- Member: Decision Sciences Institute (DSI)
- Member: Project Management Institute
- Served as Vice President, Board of Directors, APICS Fox Valley Chapter
- Panel Member for the Society of Women Engineers regarding pursuing an advanced degree MS versus MBA
- Developed content as part of a FIPSE grant (\$300K) to construct an e-textbook on Introductory Business and Economic Statistics (now trademarked as CoreTxtPlus)
- Manufacturing representative for UWO Business Success Center's "New North Economic Index." Develop the manufacturing survey items, analyzed the results, and developed a final report on the state of the manufacturing industry in Northeastern Wisconsin. Supply Chain Management Program Review at UWO with the Department Chair to collect student pre/post test results, alumni survey data, external curriculum review, advisory panel from major employers of our graduates, and create of report/advice on curriculum.
- Advisor at UWO for 70+ students in the Supply Chain Management major
- Dissertation Committees:
  - E. Shaunn Mattingly
  - Tae Jun Bae



## AWARDS AND CERTIFICATIONS

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- Outstanding Research Award, Global Conference on Business and Finance 2011, Costa Rica
- University of Wisconsin Oshkosh APICS student chapter won 3<sup>rd</sup> Place - 16th Annual Great Lakes District Student Case Competition 2011 (Faculty/Student Advisor)
- Outstanding Research Award, Global Conference on Business and Finance 2010, Costa Rica
- Best in Session Award, Global Conference on Business and Finance 2010, “A Game Theoretic Model for Achieving Company-Wide Triple-Bottom-Line Goals”
- Outstanding Research Award, Global Conference on Business and Finance 2009, Costa Rica
- Decision Sciences Institute Doctoral Consortium selectee, 2006, San Antonio, Texas
- Nominated (and selected) to participate in the Fourteenth Doctoral Symposium of The Council of Supply Chain Management Professionals, 2005
- First Place, Ph.D. Student Paper Competition. SE INFORMS Annual Meeting, 2005
- Earned CPSM: Certified Professional in Supply Management (ISM)
- Earned CPIM: Certified in Production and Inventory Management (APICS)
- Earned CIRM: Certified in Integrated Resource Management (APICS)
- Earned CSCP: Certified Supply Chain Professional (APICS)
- Earned PMP: Certified Project Management Professional (PMI)
- Earned CCP: Certified Computing Professional (ICCP), specializing in
  - Business Information Systems
  - Office Information Systems
  - Management
- Lean Six Sigma Green Belt (Purdue University)
- SAP Certified: Application Consultant ‘Materials Management’
- Oracle Master: Applications Implementation Team Member
- i2 Certified: Factory Planner Professional
- i2 Technical Supply Chain Planner and Demand Fulfillment  
Invited and participated as the College of Business representative for the 2010 Winnebago Sustainability Project, infusing sustainability into curriculum – based on the Association for the Advancement of Sustainability in Higher Education (AASHE) model
- Mentioned by name by graduating seniors as one of the best things about their time at University of Wisconsin Oshkosh - College of Business – 2009, 2010, 2011, and 2012
- University of Wisconsin Oshkosh APICS Student Chapter (Faculty/Student Advisor) - Recipient of the Platinum Award 2009-2010 and 2010-2011
- Certified Master Instructor (Train for Results)
- Mensa Life Member