David R. Nowicki, Ph.D.

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SUMMARY

Dr. David Nowicki is a Professor at the University of North Texas and Director of the G. Brint Ryan College of Business Center for Logistics and Supply Chain Management. He holds a joint appointment in the G. Brint Ryan College of Business' Logistics and Operations Management Department and the College of Engineering's Mechanical Engineering Department. Dr. Nowicki received his master's degree in Industrial and Systems Engineering from Virginia Tech and his bachelor's and doctorate in Industrial and Systems Engineering from the University of Wisconsin–Madison.

Dr. Nowicki's research applies advanced analytical techniques to solve logistics and supply chain management problems in a systems engineering context. His research focuses on performance-based contracts, supply chain management, resiliency and risk, game theory, multi-objective optimization, reliability theory, and inventory optimization. Dr. Nowicki has been awarded over $7.7 million in competitive research grants as a Principal or Co-Principal investigator with thirty-five (35) funded proposals. He consistently publishes in top-tier research journals 35 publications - 1,706 citations, an h-index of 20, and an i-10 index of 24. Dr. Nowicki focuses on applied research, leveraging his two decades of industry experience, holding executive positions at i2 Technologies and the TFD Group.

Dr. Nowicki is an accomplished teacher who has developed nine courses and taught 13 distinct courses to over 1,700 undergraduate, MBA, and Ph.D. students. He has served as the dissertation committee chair for 10 Ph.D. students, master's thesis chair for 6 students, and a dissertation committee member for 17 Ph.D. students. He has been an invited speaker at the Wharton School of Business, Exeter University, Auburn, University of Wisconsin-Madison, Stevens Institute of Technology, Rutgers University, University of Southern California, and the European University of Madrid.

Dr. Nowicki has served as the Chair of the Logistics and Operations Management's Department Personal Affairs Committee and chair of faculty search committees, including the G. Brint Ryan Endowed Chair positions. He is a reviewer for the International Journal of Logistics Management, Journal of Business Logistics, Journal of Supply Chain Management, Journal of Operational Research, European Journal of Operational Research, International Journal of Production Economics, and the International Journal of Physical Distribution and Logistics Management. Dr. Nowicki has multiple local and national media appearances discussing logistics and supply chain issues.

As the Director of the G. Brint Ryan College of Business Center for Logistics and Supply Chain Management, Dr. Nowicki has raised over $3.1 million. Sources of funding include industry gifts (from the CLSCM's Board of Directors and other industry relationships, including corporate sponsorships), alum donations, scholarship events (e.g., Annual Southwest Airlines scholarship breakfast, and golf tournaments), endowments, the Institute of Supply Management (ISM), and the Intermodal Association of

North America (IANA). The Center funds student professional development (e.g., software skills, leadership, case competitions, and industry tours), industry relationships (internships, placements, and scholarships), case competitions, conference travel, and classroom experience to get our students work-ready. The Center initiates, develops, manages, and supports activities to improve students' skills, knowledge, and critical thinking, ultimately producing work-ready students.

EDUCATION

Ph.D., Industrial and Systems Engineering
University of Wisconsin – Madison, Wisconsin. 2008.
Thesis: *Optimization Models in Support of Performance-Based Logistics Contracts*
Thesis Advisor: Harold J. Steudel, Emerson Electric Professor in Total Quality
Concentration: Operations Research, Quality, Statistics, Systems Engineering, and Supply Chains

M.S., Industrial Engineering and Operations Research
Virginia Tech, Blacksburg, Virginia. 1989.
Thesis: *Reliability, Allocation and Apportionment: Addressing Redundancy and Lifecycle Cost*
Thesis Advisor: Joel A. Nachlas, Associate Professor, Industrial and Systems Engineering
Concentration: Operations Research, Reliability, Logistics, and Systems Engineering

B.S., Industrial Engineering
University of Wisconsin – Madison, Wisconsin. 1986.
Concentration: Operations Research and Statistics

PUBLICATIONS

REVIEWED JOURNAL ARTICLES

Published and Accepted
Thirty-five (35) refereed manuscripts publications with 1,706 citations, an h-index of 20, and an i-10 index of 24.

1. Idug, Y., Gligor, D., Porchia, J., Niranjan, S., Manuj, I., and Nowicki, D.R. (2024). Exploring the impact of rider-driver ethnicity match/mismatch in ride-hailing. *International Journal of Physical Distribution & Logistics Management*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJPDLM-01-2023-0056.
2. Celik, H., Nowicki, D.R., Uvet, H., Adana, S. and Cevikparmak, S. (2023), "Supplier goal commitment in performance-based contracts: the lens of goal-setting theory", *International Journal of Physical Distribution & Logistics Management*, Vol. 53 No. 10, pp. 1158-1186. https://doi.org/10.1108/IJPDLM-07-2022-0215.
3. Gligor, D.M., Stank, T.P., Gligor, N., Ogden, J.A., Nowicki, D.R., Farris, T., Idug, Y., Rana, R., Porchia, J. and Kiran, P. (2023). Examining the rigor of SCM research: the case of supply chain agility. *Supply Chain Management: An International Journal*, 28 (3): 522-543.
4. Dickens, J.M., Anderson J.R., Reiman, A., Uvet, H., & David R. Nowicki (2023) Supply chain resilience: an empirical examination of the bouncing back or forward phenomenon, *International Journal of Logistics Research and Applications*, 26 (10): 190-210.
5. Cevikparmak, Sedat & Celik, Hasan & Adana, Saban & Uvet, Hasan & Sauser, Brian & Nowicki, David. (2022). Scale development and validation of Transaction Cost Economics typology for contracts: A systems thinking approach. *Journal of Purchasing and Supply Managemen*t. 28 (3). 100769. 10.1016/j.pursup.2022.100769.

6. C. C. Classi, D. R. Nowicki, J. M. Dickens and A.V. Glassburner. (2021). "A Redesign Decision Model for Large-Scale Complex Sustainment-Dominated Systems," in *IEEE Transactions on Engineering Management*, doi: 10.1109/TEM.2021.3092962.

7. Sadeghi, J.K.; Struckell, E.; Ojha, D.; Nowicki, D.R. (2021). "Absorptive Capacity and Disaster Immunity-The Mediating Role of Information Quality and Change Management Capability", *Journal of Kno*wledge *Management*, Vol. 25 No.4, pp. 714-742. https://doi.org/10.1108/JKM-06-2020-0404.

8. Patra, P., Kumar, U.D., Nowicki, D.R., & Randall, W.S. (2019). Effective Management of Performance-Based Contracts for Sustainment Dominant Systems. *International Journal of Production Economics*, 208: 369-382.

9. Warren, S., Sauser, B., & Nowicki, D.R. (2019). A Bibliographic and Visual Exploration of the Historic Impact of Soft Systems Methodology on Academic Research and Theory. *Systems*, 7 (1): 10.

10. Zavala, A., Nowicki, D.R., & Ramirez-Marquez, J.E. (2019). Quantitative Metrics to Analyze Supply Chain Resilience and Associated Costs. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, 233(2), 186-199.

11. Kochan, C. & Nowicki, D.R. (2018). Supply Chain Resilience: A Systematic Literature Review and Typological Framework. *International Journal of Physical Distribution and Logistics Management*, 48 (8): 842-865.

12. Glassburner, A.V., Nowicki, D. R., Sauser, B., Randall, W. S., & Dickens, J. M. (2018) Theory of Paradox within Service-Dominant Logic. *Service Science*, 10 (2): 111-123.

13. Nowicki, D.R., Randall, W.S., Sauser, B., & Lusch, R.F. (2018). Service Dominant Logic and Performance Based Logistics: A Systems Thinking Perspective. *Service Science*, 10 (1): 12-24.

14. Classi, C., Nowicki, D.R., Mansouri M., Sauser, B. & Randall, W.S. (2018). A Systems Thinking Approach to Managing Sustainment Phase Redesign Planning for Large-Scale, Complex, Sustainment Dominated Systems. *Engineering Management Journal*, 30 (1).

15. Kochan, C.G., Nowicki, D.R., Sauser, B. & Randall, W.S. (2018). Impact of Cloud-Based Information Sharing on Hospital Supply Chain Performance: A System Dynamics Framework. *International Journal of Production Economics*. 195: 168-185.

16. Sauser, B., Baldwin, C., Pourreza, S., Randall, W.S., & Nowicki, D.R. (2018). Resilience of Small- and Medium-sized Enterprises as a Correlation to Community Impact: An Agent-based Modeling Approach. *Natural Hazards.* 90 (1): 79-99.

17. Randall, W.S., Nowicki, D.R., & Kulkarni, S. (2016). The Perfect Formula. *Supply Chain Management Review*. 2016 (3): 12-19.

18. Randall, W.S., Hawkins, T.G., Haynie, J.J., Nowicki, D.R., Armenakis, A.A., & Geary, S.R. (2015). Performance-Based Logistics and Inter-Firm Team Processes: An Empirical Investigation. *Journal of Business Logistics*. 36 (2): 212-230.

19. Scott, R.A., Nowicki, D.R., & Prybutok, V. (2015). Single-Period Newsvendor Modeling of Flu Vaccination Order Quantities. *International Journal of Logistics Systems and Management.* 22 (4): 483-499.

20. Magnaye, R., Sauser, B., Patanakul, P., Nowicki, D.R., & Randall, W.S. (2014). Earned Readiness Management for Scheduling, Monitoring and Evaluating the Development of Complex Product Systems. *International Journal of Project Management*. 32 (7): 1246-1259.

21. Randall, W.S., Nowicki, D.R., Deshpande, G., & Lusch, R.F. (2014). Converting Knowledge into Value: Gaining Insights from Service Dominant Logic and Neuroeconomics. *International Journal of Physical Distribution and Logistics Management* 44 (8/9): 655-670.

22. Randall, W.S., Wittman, C.M., Nowicki, D. R., & Pohlen, T.L. (2014). SDL Special Issue: Service-Dominant Logic and Supply Chain Management: Are We There Yet? *International Journal of Physical Distribution and Logistics Management* 44 (1/2): 113-131.

23. Nowicki, D.R., Randall, W.S., & Ramirez-Marquez, J. E. (2012). Corrigendum to "Improving the Computational Efficiency of Metric-Based Spares Algorithms". *European Journal of Operational Research* 221 (3): 649.

24. Nowicki, D.R., Randall, W.S., & Ramirez-Marquez, J. E. (2012). Improving the Computational Efficiency of Metric-Based Spares Algorithms. *European Journal of Operational Research* 219 (2): 324-334.

25. Randall, W.S., Brady, S., & Nowicki, D.R. (2012). Business Case Analysis and the Confounds of Innovation Driven by Performance-Based Post-Production Support Strategies. *Transportation Journal*, 51 (1): 33-58.

26. Randall, W.S., Nowicki, D.R., & Hawkins, T.G., (2011). Explaining the Effectiveness of Performance Based Logistics: A Quantitative Examination. *International Journal of Logistics Management*, 22 (3): 324-348 Emerald Literati Award.

27. Chang, P., Nowicki, D.R., Man, H., & Mansouri, M., (2011). Managing Vulnerabilities of Tactical Wireless RF Network Systems: A Case Study. *International Journal of Engineering Business Management*, 3 (4): 22-33.

28. Chang, P., Man, H., Nowicki, D.R., & Mansouri, M., (2010). System Engineering Approach in Tactical Wireless RF Network Analysis with Vulnerability Assessment using Bayesian Networks. *International Journal of Simulation, Systems, Science, and Technology* 11 (6).

29. Kumar, U. D., Nowicki, D.R., Ramirez-Marquez, J. E., & Verma, D. (2008). On the Optimal Selection of Process Alternatives in a Six Sigma Implementation. *International Journal of Production Economics*, 111 (2): 456-467.

30. Sols, A., Nowicki, D.R., & Verma, D. (2008). n-Dimensional effectiveness metric-compensating reward scheme in performance-based logistics contracts. *Systems Engineering*, 11 (2): 93-106.

31. Nowicki, D.R., Kumar, U.D., Steudel, H. J., & Verma, D. (2008). Spares Provisioning Under Performance-Based Logistics Contract: Profit-Centric Approach. *Journal of Operational Research Society*, 59 (3): 342-352.

32. Kumar, U.D., Saranga, H., Ramirez-Marquez, J. E., Nowicki, D.R., & Verma, D. (2007). Six Sigma Project Selection Using Data Envelopment Analysis. *TQM Journal (formerly published as The Total Quality Management Magazine)*, 19 (5): 419-441.

33. Kumar, U.D., Ramirez-Marquez, J.E., Nowicki, D.R., & Verma, D. (2007). Reliability and Maintainability Allocation to Minimize Total Cost of Ownership in a Series-Parallel System. *Journal of Risk and Reliability*, 221 (2): 133-140.

34. Kumar, U.D., Ramirez-Marquez, J.E., Nowicki, D.R., & Verma, D. (2007). A Goal Programming Model for Optimizing Reliability, Maintainability and Supportability under Performance Based Logistics. *International Journal of Reliability, Quality, and Safety Engineering*, 14 (3): 251-261.

35. Sols, A., Nowicki, D.R., & Verma, D. (2007). Defining the Fundamental Framework of an Effective Performance-Based Logistics (PBL) Contract. *Engineering Management Journal*, 19 (2): 40-50.

Currently Under Review

1. Glassburner, A.V., Nowicki, D.R., & Kochan, C. (2024). Understanding the Influence of Cloud-based Information and Communication Technology on Supply Chain Resilience. Submitted to *Benchmarking: an International Journal.*

2. Nowicki, D.R., Ramirez-Marquez, J.E., Randall, W.S., & Roh, J.A. (2024). Optimal Cost Avoidance Investment and Pricing Strategies for Performance Based Post-Production Service Contracts. Submitted to the *European Journal of Operational Research.*

3. Zavala, A., Nowicki, D.R., and Ramirez-Marquez, J.E. (2024). Simultaneous Consideration of System Design and Post-production support network Decisions in the Context of a Performance-Based Contract. Submitted to *IEEE Access*.

4. Nowicki, D.R., Randall, W.S., Golgeci, I., & Gligor, D. (2023). Unveiling Performance-Based Contracting Superiority in Supply Chain Management: Conditions and Opportunities in Post-Production Support Services. Submitted to the *Supply Chain Management: An International Journal.*

5. Gligor, D.M., Tan, A., Ogden, J.A., Idug, Y., & Nowicki, D.R. (2023). Exploring Firms' Measures to Increase Supply Chain Resilience in Response to COVID-19: A Triadic Perspective. Revise and Resubmit to the *Journal of Business Logistics.*

6. Scott, S.J., Copeland, B., & Nowicki, D.R. (2022). Using Cost and Resource Optimization Techniques for Human and Product Resources Planning in Academic Business Systems. Submitted to the *Journal of Operations Management.*

7. Gligor, D.M., Farris, T., Idug, Y., Pohlen, T., & Nowicki., D.R. (2022). How to Better Explain Inconclusive Results in Multiple Regression Analysis: Exploring fsQCA's Applicability to Supply Chain Management Research. Submitted to the *International Journal of Logistics Management.*

Working

1. Nowicki, D.R., Randall, W.S. & Roh, J. Impact of Performance-Based Contracting: A Longitudinal Study. Preparing for submission to *Production and Operations Management*.

2. Nowicki, D.R. Kochan, C., Glassburner, A., Dickens, J. & Tran, H. Impact of Information Sharing on Emergency Logistics during an Influenza Pandemic. Preparing for submission to *Production and Operations Management*.

3. Nowicki, D.R., Randall, W.S., Dickens, J., Anderson, J. & Glassburner, A. Informational Lead Tmes and its Impact on Supply Chain Inventory. Preparing for submission to *Production and Operations Management*.

4. Nowicki, D.R., Landucci, T., Dickens, J., Glassburner, A. & Roberts, M. Dynamic Cost Structure for Cannibalization. Preparing for submission to the *Engineering Management Journal*.

5. Nowicki, D.R. Radio Obsolescence and Sustainment. Preparing for submission to the *International Journal of Production Economics.*

6. Nowicki, D.R., & Randall, W.S. Statistical Process Control for Monitoring Performance Based Contracts. Preparing for submission to *Naval Research Logistics*.

PUBLICATIONS IN REFEREED CONFERENCE PROCEEDINGS

1. Celik, H., Nowicki, D., Cevikparmak, S., Adana, S., Kucuk, C. (2019). **An Analysis of the Relationship between Performance-Based Contracts (PBCs) and Supply Chain Resilience (SCRES)**. American Marketing Association (AMA) Winter 2019 Conference, San Diego, CA.

2. Nowicki, D.R., Ponnaiyan, S., Kulkarni, S., & Randall, W.S. (2013). ***Impact of Informational Lead Time on Supply chain Inventory and Inventory Cost.*** Production and Operations Management Society (POMS) Conference, Denver, CO.

3. Bogdanowicz, P. & Nowicki, D.R. (2013). ***Cannibalization in the Military: A Viable Sustainment Strategy?*** 81st Annual Military Operations Research Society (MORS), Alexandria, VA.

4. Nowicki, D.R., Ramirez-Marquez, J.E., & Randall, W.S. (2013). ***Multi-Objective Optimization Problems in Lifecycle Affordability.*** Naval Post Graduate School, 10th Annual Acquisition Research Symposium. Monterey, CA.

5. Nowicki, D.R., & Ramirez-Marquez, J.E. (2013). ***Analyzing Economic Vulnerability in Supply Chains.*** Industrial and Systems Engineering Research Conference (ISERC), San Juan, Puerto Rico.

6. Nowicki, D.R., & Randall, W.S. (2013). ***Affordability and Performance Based Logistics.*** Industrial and Systems Engineering Research Conference (ISERC) San Juan, Puerto Rico.

7. Nowicki, D.R., Murynets, I., Ramirez-Marquez, J.E., & Randall, W.S. (2011). ***Optimal Cost Avoidance Investment and Pricing Strategies for Performance Based Post-Production Service***

***Contracts*.** Paper presented at the Naval Post Graduate School, 8th Annual Acquisition Research Symposium. Monterey, CA.

8. Nowicki, D.R., Randall, W.S., & Gorod, A. (2010). ***A framework for performance based logistics: A system of systems approach***. Paper presented at the Ultra Modern Telecommunications and Control Systems and Workshops (ICUMT), 2010 International Congress on.
9. Sauser, B., Ramirez-Marquez, J.E., Tan, W., Magnaye, R., Nowicki, D.R., & Deshmukh, A. (2010). ***System Capability Satisficing in Defense Acquisition via Component Importance Measures***. Paper presented at the Naval Postgraduate School Sixth Annual Acquisition Research Symposium, Monterey, CA.
10. Kumar, U.D., & Nowicki, D.R. (2006). ***Multi-Resource Optimization Models within the Context of Performance Based Logistics***. Paper presented at the 16th International Conf. on Flexible Automation and Intelligent Manufacturing, Limerick, Ireland.
11. Nowicki, D.R. (1991). ***Reliability Allocation with Partial Redundancy***. Paper presented at the Annual Reliability and Maintainability Symposium.

BOOK CHAPTERS

Published

1. Kochan, C., Kulkarni, S., & Nowicki, D.R. (2016). Efficient Inventorying and Distribution of Blood Products during Disasters. In *Advances in Managing Humanitarian Operations.* New York, NY: Springer.
2. Chang. P., Man H., Nowicki, D.R. and Mansouri, M. (2012). System Engineering Approach in Tactical Wireless RF Network Analysis, Systems Engineering - Practice and Theory, Prof. Boris Cogan (Ed.), ISBN: 978-953-51-0322-6, InTech, DOI: 10.5772/34230. Available from: http://www.intechopen.com/books/systems-engineering-practice-and-theory/system-engineering-approach-in-tactical-wireless-rf-network-analysis.

CONFERENCE PRESENTATIONS

1. Celik, H., Nowicki, D., Cevikparmak S., Adana S., Uvet, H. (2019). **Recent Trends in Research Designs, Data Sources, and Statistical Techniques Used in Logistics and Supply Chain Management.** Presented at the Decision Science Institute (DSI) Annual Conference in New Orleans, Louisiana.
2. Celik, H., Nowicki, D., Cevikparmak, S., Adana, S., Kucuk, C. (2019). **An Analysis of the Relationship between Performance-Based Contracts (PBCs) and Supply Chain Resilience (SCRES)**. Presented at the American Marketing Association (AMA) Winter Academic Conference in San Diego, California.
3. Kochan, C. & Nowicki, D.R. (2018). ***Using Cloud Computing Technology to Build a Resilient Supply Chain: A Simulation Approach*,** Presented at the Decision Science Institute (DSI) Annual Meeting in Chicago, Illinois.
4. Kochan, C. & Nowicki, D.R. (2016). ***Cloud-Based Collaborative Information Sharing in Supply Chains*,** Presented at the Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting in Nashville, Tennessee.
5. Kochan, C. & Nowicki, D.R. (2016). ***Impact of Electronic Supply Chain Management Systems (eSCMs) on Supply Chains***, Presented at the Decision Science Institute (DSI) Annual Meeting in Austin, Texas.
6. Kochan, C., Kulkarni, S., & Nowicki, D.R. (2015). ***Planning Allocation and Delivery of Blood Units during a Civil War*,** Presented at the Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting in Philadelphia, Pennsylvania.

7. Kochan, C., Kulkarni, S., & Nowicki, D.R. (2015). ***Management of Blood Supplies during Humanitarian Crises"***, Presented at the Decision Science Institute (DSI) Annual Meeting in Seattle, Washington.

8. Kochan, C., Nowicki, D.R., Randall, W.S., & Pourreza, S. (2014). ***Impact of Cloud Computing on Supply Chain Resilience***, Presented at Council of Supply Chain Management Professionals (CSCMP) Educators' Conference in San Antonio, Texas.

9. Tran, H., Kochan, C., & Nowicki, D.R. (2014), ***Impact of Information Sharing on Relief Distribution During Disasters***, Presented at Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting in San Francisco, California.

10. Classi, C., & Nowicki, D.R. (2011). ***Design Refresh Planning for Large-Scale, Complex Systems***. Presented to the Air Force's Aging Aircraft Scientific Advisory Board, Washington, D.C.

11. Randall, W.S., & Nowicki, D.R. (2011). ***Performance Based Logistics/Contracting: How to Measure Performance and Profit***. Presented at the Military Logistics Summit, Washington, D.C.

12. Nowicki, D.R., & Randall, W.S. (2010). ***Proactive supply chain management in a PBL environment: people, performance, profit and culture***. Presented at the Military Air Assets Exhibition and Conference (MAASEC), Jacksonville, FL.

13. Randall, W.S., Geary, S.R., & Nowicki, D.R. (2010). ***Profitability, Competition, Transaction Costs, and PBL***. Presented at the Defense Logistics Conferences: Resetting for the Future of Logistics, Arlington, VA.

14. Randall, W. S., & Nowicki, D.R. **(**2010). ***The Econometrics of Performance Based Logistics***. Presented at the Military Air Assets Exhibition and Conference (MAASEC), Jacksonville, FL.

15. Randall, W.S., & Nowicki, D.R. (2010). ***PBL Driven Investment, Innovation, and Collaboration: Presentation of the Comprehensive Survey***. Presented at the The Next Generation of PBL - Performance Based Lifecycle Product Support, Arlington, VA.

16. Randall, W.S., Nowicki, D.R., & Geary, S. (2010). ***Success Factors for Organic Participation in Performance Based Lifecycle Product Support Strategies***. Presented at the The Next Generation of PBL - Performance Based Lifecycle Product Support, Arlington, VA.

17. Verma, D., Nowicki, D.R., Sauser, B., & Ramirez-Marquez, J. E. (2010). ***Post-Production Life Cycle Engineering Optimization: A Systems Approach***. Presented at the Lockheed Martin Engineering and Technology Symposium, Maryland.

18. Nowicki, D.R. (2009). ***System Design and Supply Chains***. Presented at the Institute for Operations Research and the Management Sciences (INFORMS), San Diego, CA.

19. Randall, W. S., & Nowicki, D.R. (2009). ***Life Cycle Cost Reliability Investment Model***. Presented at the Production and Operations Management Society (POMS) Supply Chain Management Conference, Orlando, FL.

20. Nowicki, D.R. (2006). ***PBL Business Implications and Defining Metrics***. Presented at the NDIA's 9th Annual Systems Engineering Conference - Focusing on Improving Performance of Defense Systems Programs, San Diego, CA.

21. Nowicki, D.R., Kumar, U.D., & Verma, D. (2006). ***Models for Optimizing Multiple Resources in a Performance-Based Logistics Contract***. Paper presented at the DIMACS Workshop on Computational Optimization and Logistics Challenges in the Enterprise (COLCE) Annandale, NJ.

22. Nowicki, D.R., Kumar, U.D., & Verma, D. (2006). ***Performance Based Logistics Impact on Spares Optimization***. Paper presented at the DIMACS Workshop on Computational Optimization and Logistics Challenges in the Enterprise (COLCE) Annandale, NJ.

RESEARCH REPORTS

1. Nowicki, D.R., Bomba M., Weston, L., (2018). Significant contribution to Riding the Returns Wave: Reverse Logistics and the U.S. Postal Service. RARC-WP-18-008. Office of the Inspector General, U.S. Postal Service. Washington, D.C.
2. Nowicki, D.R., Ramirez-Marquez, J.E., & Randall, W.S. (2013). Improving Defense Acquisition Management and Policy Through a Life-Cycle Affordability Framework. Department of the Navy, Naval Postgraduate School, Acquisition Research Program, Program Grant No. N00244-12-1-0059.
3. Nowicki, D.R., Ramirez-Marquez, J.E., & Randall, W.S. (2012). Mixed Methodological Approach to Advance the Analytical Examination of Performance Based Acquisition and Sustainment Strategies. Department of the Navy, Naval Postgraduate School, Acquisition Research Program, Program Grant No. N00244-11-1-0046.
4. Nowicki, D.R., Ramirez-Marquez, J.E., & Randall, W.S. (2011). Analytical Examination of Performance Strategies. Department of the Navy, Naval Postgraduate School, Acquisition Research Program, Program Grant No. N00244-10-1-0074.
5. Sauser, B.J., Ramirez-Marquez, J.E., & Nowicki, D.R. (2011). Development of Systems Engineering Maturity Models and Management Tools: Systems Engineering Research Center (SERC).

TECHNICAL REPORTS

1. Nowicki, D.R. (2005). SDOE and Long Term Contracts. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
2. Nowicki, D.R. (2005). PBL Survey (Short Form). Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
3. Nowicki, D.R. (2005). PBL Survey (Long Form). Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
4. Nowicki, D.R. (2005). PBL Overview. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
5. Nowicki, D.R. (2005). PBL Structure. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
6. Nowicki, D.R. (2005). Modeling Techniques Overview. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
7. Nowicki, D.R. (2005). Facilities Modeling in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
8. Nowicki, D.R. (2005). Transportation Modeling in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
9. Nowicki, D.R. (2005). Information in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
10. Nowicki, D.R. (2005). Distribution Network Modeling in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
11. Nowicki, D.R. (2005). Demand Forecast Modeling in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]

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[1] These reports represent funded research from the Lockheed Martin's PBL and Logistics Modeling contract.

12. Nowicki, D.R. (2005). Aggregate Planning in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
13. Nowicki, D.R. (2005). Sourcing and Source Selection Modeling in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
14. Nowicki, D.R. (2005). Price Modeling and Revenue Management in the Logistics Enterprise. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
15. Nowicki, D.R. (2005). A Strategic Framework for Logistics Enterprise Modeling. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]
16. Nowicki, D.R. (2005). Introducing Profit Margins into Logistics Models. Orlando, FL: Lockheed Martin - Simulation, Training and Support. [1]

TEACHING AND ADVISING

Developed nine courses and taught 13 distinct courses to over 1,700 undergraduate, MBA, and Ph.D. students and served as a dissertation committee chair for 10 Ph.D. students, master's thesis chair for 6 students, and a dissertation committee member for 17 Ph.D. students.

COURSES DESIGNED AND TAUGHT

Designed and developed the material for the Logistics and Supply Chain Management (LSCM) 6040, LSCM 6060, LSCM 6071, LSCM 6071, LSCM 5590, Engineering Management (EM) 450, and EM 665 courses. Significantly redesigned the material for the EM 670, LSCM 4530, LSCM 5860, EM 611, Systems Engineering (SYS) 640, and SYS 645 courses.

Undergraduate Courses

LSCM 4530 e-Logistics for Supply Chain Management

Focus is on the role of e-commerce in collaborative distribution and logistics relationships. Special attention is afforded to resource and technology interdependencies, exchange governance mechanisms and relationship management benchmarking. Emphasis is given to the tools for creating value in the supply chain.

EM 450 Logistics and Supply Chain Management

An introduction to supply chains, logistics and supply chain management. Topics covered include supply chain performance and metrics related to facilities, inventory, transportation, sourcing, pricing and information. Design of distribution networks, forecasting, and planning of demand and supply are covered.

Graduate MBA Courses

LSCM 5860 Advanced Supply Chain Problems

Decision-making tools and skills as they apply to logistics and supply chain management. Course stresses developing skills to analyze technical problems and their interrelationships within a company.

Graduate Masters Courses

LSCM 5590 Lifecycle Affordability

Course focus is on defining, understanding, and modeling life-cycle affordability for large-scale, complex systems such as those found in the aerospace, defense, rail and utility industries. Analytical models are used as the backdrop to understand the relationship between system design and logistics in the context of affordability. Metrics are introduced and used as a way to measure the affordability impact of design and logistics choices.

SYS 501 Probability and Statistics for Systems Engineering course is designed for students with a background in engineering, technology, or science who have not taken a class in statistics or need a

refresher class. In this class we will apply probability and statistics throughout a system's life cycle. Topics include the roles of probability and statistics in systems engineering, the nature of uncertainty, axioms and properties of probability models and statistics, hypothesis testing, design of experiments, basic performance requirements, quality assurance specification, functional decomposition, technical performance measurements, statistical verification, and simulation.

Graduate Doctoral Courses

LSCM 6071 Operations Research in Logistics and Supply Chain Management

Focuses on operations research (OR) techniques published in top-tier logistics and supply chain management journals. Deterministic (e.g., mathematical programming) and stochastic techniques (e.g., reliability theory and queueing theory) are studied with a focus on delienating between optimal and heuristic techniques. Genetic algorithms and simulated annealing are examples of relevant heuristic techniques. Real-world, industry problems and supporting data are use to further validate the application of OR techniques to the discipline of logistics and supply chain management. Analytical tools such as MatLab and SPSS will be used.

LSCM 6090 Game Theory

Drives students to learn game theory, agency theory and contract theory. The intent is to undertand how these theories are relavant to logistics and supply chain management. Once the students have an appreciation for the theory, the course will then focus on how these theories are instantiated into mathematical models. Top-tier LSCM journal articles will provide the basis to illustrate how theory and mathematical modeling is woven together to create publishable manuscripts. Students will use analytical tools such as Matlab and SPSS to replicate and solve the models described in the journal articles.

EM 611 Simulation and Modeling

Emphasizes the development of modeling and simulation concepts and analysis skills necessary to design, program, implement, and use computers to solve complex systems/products analysis problems. The key emphasis is on problem formulation, model building, data analysis, solution techniques, and evaluation of alternative designs/ processes in complex systems/products.

SYS 640 System Supportability and Logistics

Introduces a disciplined approach to providing efficient and effective system logistics support, so that a system is ensured of satisfying its business and operational readiness requirements. Particular focus is placed on the concept of integrated supply chain and demand management, and the optimization and allocation of a system's logistic resources to ensure maximum availability at the lowest investment in logistics resources.

SYS 645 Design for Reliability, Maintainability, and Supportability

Provides a disciplined approach for identifying opportunities to influence the design of a system from a reliability, maintainability, and supportability perspective. There is an emphasis on the mathematical descriptions of these parameters and their relationships. The course will also address specific methods, tools, and practices for influencing the design of complex systems for enhanced reliability, maintainability, and supportability.

SYS 665 Integrated Supply Chain Management

Focus is on the supply chain from the point of view of a general manager. The goal in this course is to understand how supply chain design and planning decisions impact the performance of an individual firm as well as the end-to-end supply chain. The key will be to understand the link between supply chain structures and logistical capabilities in a firm or supply chain.

SYS 670 Forecasting and Demand Management

Covers the theory and application of modeling aggregate demand, fragmented demand and consumer behavior using statistical methods for analysis and forecasting for facilities, services and products. Provides an understanding of basic marketing instruments and their use in demand modeling.

SYS 675 Dynamic Pricing Systems

Illustrates the difference between static and dynamic pricing, and covers various dynamic pricing models and methodologies for successful pricing. Explores various dynamic pricing models and identifies relevant factors in choosing dynamic pricing models that best support the operational effectiveness, external environment and business strategy of a firm.

DIRECTED STUDENT LEARNING

Dissertation Committee Chair

1. Matthew Blair Copeland, Ph.D. Thesis: Confounds of Internet Influences on Industry Structure Predicting Value Proposition. Anticipated Graduation in December 2022.
2. Hasan Celik, Ph.D. Thesis: Implications of Performance-Based Contracting on Logistics and Supply Chain Management: A Multi-Method Approach. 2020.
3. Araceli Zavala, Ph.D. Thesis: A Multi-objective Optimization Framework to Simultaneously Evaluate System Design, Logistics, and Supply Chain Tradeoffs. 2019.
4. Aaron Glassburner, Ph.D. Thesis: Impact of Governance on Service-Dominant Relationships. 2018.
5. Mazen Hammady Bhro, Ph.D. Thesis: Game Theoretic Models and Cash-to-Cash Metrics that Inform Supply Chain Management Decisions. 2018.
6. John Dickens, Ph.D. Thesis: Service Dominant Logic Value Co-Creation. May 2018.
7. Hugette Tran, Ph.D. Thesis: A Framework to Evaluate Entropy-Base Data Fusion Methods in Supply Chain Management. 2016.
8. Cigdem Kochan, Ph.D. Thesis: Impact of Cloud Computing on Supply Chain Resilience. 2015.
9. Cal Classi, Ph.D. Thesis: A Holistic Decision-Making Model for Large-Scale Sustainment Dominated System Redesign Planning. 2015.
10. Ilona Murynets, Ph.D. Thesis: Optimal Investment and Marketing Strategies for Technologically Innovated Services. 2010. School of Systems and Enterprises recipient of the Outstanding Dissertation Award.

Master's Thesis Committee Chair

1. Greg Blanche, M.S. Thesis: Bass Diffusion Model for Performance Based Contracts. 2012.
2. Jay Brass, M.S. Thesis: Engineering Funding through Public-Private Partnerships. 2012.
3. Kyle Fitzpatrick, M.S. Thesis: Obsolescence Management: The Process Model for System Integrators. 2012.
4. Louis Krell, M.S. Thesis: Obsolescence Management: Multi-Attribute Value Analysis for Analyzing the Selection of Sensor Technology of Collision Avoidance Systems for Incorporating UAVs into US Civil Airspace. 2012.
5. James Scott, M.S. Thesis: Mechanism Design for Satellite Network Resource Allocation. 2011. School of Systems and Enterprises recipient of the Best Masters' Thesis.
6. Kevin Gilchrist, M.S. Thesis: Agent-Based Modeling of Experimental Asset Market Bubbles. 2011.

Dissertation Committee Member

1. Yavuz Idug (Ph.D. 2024)
2. Justin D'Agostino (2024)
3. Sedat Cevikparmak (Ph.D. 2020)
4. Hasan Uvet (Ph.D. 2018)
5. Saba Pourreza (Ph.D. 2016)
6. Robert Barnett (Ph.D. 2013)
7. Peter Korfiatis (Ph.D. 2013)
8. Weiping Tan (Ph.D. 2012)
9. Chi Zhang (Ph.D. 2012)
10. Devanandham Henry (Ph.D. 2012)
11. Ana Lisbeth Concho (Ph.D. 2011)
12. Romulo Magnaye (Ph.D. 2011)
13. Clifton Baldwin (Ph.D. 2011)
14. Ozge Doguc (Ph.D. 2010)
15. Jimmy Gandhi (Ph.D. 2010)
16. Alex Gorod (Ph.D. 2009)
17. Jason Cook (Ph.D. 2008)
18. Alberto Sols (Ph.D. 2007)

GUEST LECTURER

University of Penn, Wharton School of Business, Topic: Servicization
Auburn University, Topic: Lifecycle Affordability
Virginia Tech, Topic: Reliability Analysis
University of Wisconsin – Madison, Topic: Performance-Based Contracting
Exeter University, England, Topic: Econometrics Modeling
Rutgers University, Topic: Supply Chain Optimization Modeling

RESEARCH

PROPOSALS FUNDED
Thirty-five (35) proposals funded for a total of $7,734,374 as either a Principal Investigator (PI) or Co-Principal Investigator (Co-PI).

1. D. Nowicki (PI). 2026-2024. Intermodal Association of North America (IANA) Scholarship Program. Intermodal Association of North America. $180,000.
2. D. Nowicki (PI) and M. Bomba (Co-PI). 2024-2023. Support for the Activities of the Border Trade Advisory Committee and Implementation of the Texas Border Strategic Transportation Blueprint. Texas Department of Transportation. $1,972,952.
3. D. Nowicki (PI). 2023-2021. Intermodal Association of North America (IANA) Scholarship Program. Intermodal Association of North America. $150,000.
4. D. Nowicki (PI) and M. Bomba (Co-PI). 2022-2019. Support for the Activities of the Border Trade Advisory Committee and Implementation of the Texas Border Strategic Transportation Blueprint. Texas Department of Transportation. $1,690,367.
5. D. Nowicki (PI). 2020-2018. Intermodal Association of North America (IANA) Scholarship Program. Intermodal Association of North America. $135,000.
6. D. Nowicki (Co-PI), M. Bomba (Co-PI) and J. Fite (PI). 2020. Grayson County Freight Mobility Plan – Phase 3. Sherman-Denison Metropolitan Planning Organization. $25,000.
7. D. Nowicki (PI) and M. Bomba (Co-PI). 2019. Mission Operations Benchmarking Delivery Contract 01E34-001. Office of the Inspector General (OIG) - U.S. Postal Service. $135,000.
8. D. Nowicki (Co-PI), M. Bomba (Co-PI), J. Fite (PI), B. Sauser (Co-PI). 2019. Logistics and Supply Chain Finance: Industry Benchmark. East-West Bank. $10,000.
9. D. Nowicki (Co-PI), M. Bomba (Co-PI) and J. Fite (PI). 2019. UNT System Downtown Dallas Strategy Assessment. University of North Texas System. $46,000.
10. D. Nowicki (PI) and M. Bomba (Co-PI). 2019-2017. Support of Implementing the Fixing America's Surface Transportation Act and the Border Trade Advisory Committee. Texas Department of Transportation. $1,008,821.
11. D. Nowicki (Co-PI), M. Bomba (Co-PI) and J. Fite (PI). 2018. Grayson County Freight Mobility Plan – Phase 1. Sherman-Denison Metropolitan Planning Organization, $20,000.
12. D. Nowicki (PI) and M. Bomba (Co-PI). 2018. The E-Commerce Returns and Reverse Logistics Landscape. Office of the Inspector General (OIG) – U.S. Postal Service. $37,500.
13. D. Nowicki (Co-PI), M. Bomba (Co-PI), and Jonathon Fite (PI). 2018-2017. Regional Campus Strategy. University of North Texas. $300,000.
14. D. Nowicki (Co-PI), M. Bomba (Co-PI) and T. Pohlen (PI). 2017-2016. Gulf Intracoastal Canal Capacity Study. Texas Department of Transportation. $176,265.

15. D. Nowicki (Co-PI) and M. Bomba (PI). 2017. Assessing the Economic Impacts of Special Events in the Tarrant Regional Water District. Tarrant Regional Water District. $24,744.
16. 2017-2016: Amount: $194,273; Role: Co-Principal Investigator; Funding organization: Texas Department of Public Safety; Title: "Texas Department of Public Safety Racial Profiling Project"; Type: Contract Competitively Bid.
17. 2017-2015: Amount: $135,000; Role: Principal Investigator; Funding organization: Intermodal Association of North America (IANA); Title: "IANA Scholarship Program"; Type: Contract Competitively Bid.
18. 2016: Amount: $15,431; Role: Co-Principal Investigator; Funding organization: Texas A&M Transportation Institute; Title: "Technical Assistance and Support for TxDOT Maritime Division"; Type: Contract Competitively Bid.
19. 2015: Amount: $80,340; Role: Principal Investigator; Funding organization: Greyhound Lines Inc.; Title: "Phase II Study - Develop a data warehouse and data mining scripts to study the behavior of the historic population of bus tickets"; Type: Contract Competitively Bid.
20. 2015: Amount: $34,684; Role: Principal Investigator; Funding organization: Greyhound Lines Inc.; Title: "Phase I Study - Feasibility Study to Understand the Types of Bus Tickets Redeemed for Travel on GLI Schedules"; Type: Contract Competitively Bid.
21. 2015: Amount: $20,000; Role: Co-Principal Investigator; Funding organization: First Student, Inc.; Title: "Evaluation of First Student's Diesel Engine Life"; Type: Contract Competitively Bid.
22. 2015: Amount: $23,000; Role: Co-Principal Investigator; Funding organization: First Transit, Inc.; Title: "Develop a Predictive Analytics Strategy"; Type: Contract Competitively Bid.
23. 2014-2013: Amount: $100,000; Role: Principal Investigator; Funding organization: Greyhound Lines Inc.; Title: "Establishing a Long-Standing, Collaborative Relationship between Greyhound and the University of North Texas"; Type: Contract Competitively Bid.
24. 2012: Amount: $120,000; Role: Co-Principal Investigator; Funding organization: Naval Supply Systems Command – Acquisition Research Program; Title: "Improving Defense Acquisition Policy through a Life-Cycle Affordability Framework"; Type: Grant Competitive Award.
25. 2012: Amount: $50,000 (with $229,000 in kind from UNT); Role: Co-Principal Investigator; Funding Organization: One Network; Title: "Theoretical Minimum Demand Driven Supply Chain Research Project". Type: Contract Competitively Bid.
26. 2012: Amount: $110,000; Role: Co-Principal Investigator; Funding Organization: New York City Bureau of Emergency Management; Title: "Optimal Emergency Preparedness Plans – An Integrated Framework via Multi-Objective Optimization". Type: Contract Competitively Bid.
27. 2011: Amount: $120,000; Role: Principal Investigator; Funding Organization: Naval Supply Systems Command – Acquisition Research Program; Title: "Mixed Methodological Approach to Advance the Analytical Examination of Performance Based Acquisition Strategies"; Type: Grant Competitive Award.
28. 2011: Amount: $10,000; Role: Principal Investigator; Funding Organization: National Security Agency; Title: "Workshop on Life-Cycle Cost Management"; Type: Contract Competitively Bid.
29. 2010: Amount: $120,000; Role: Principal Investigator; Funding Organization: Naval Supply Systems Command – Acquisition Research Program; Title: "Analytical Examination of Performance Based Acquisition Strategies"; Type: Grant Competitive Award.
30. 2009: Amount: $30,000; Role: Principal Investigator; Funding Organization: Embedded Systems Institute, Eindhoven, Netherlands; Title: "Systems Engineering and Supply Chains"; Type: Contract Competitively Bid.
31. 2009: Amount: $250,000; Role: Co-Principal Investigator; Funding Organization: U.S. Navy NAVSEA PMS 420 through the Systems Engineering Research Center; Title: "Development of Systems Engineering Maturity Models and Management Tools"; Type: Grant Competitive Award.

32. 2009: Amount: $50,000; Role: Principal Investigator; Funding Organization: Federal Aviation Administration; Title: “Radio Obsolescence and Sustainability Study”; Type: Contract Competitively Bid.
33. 2006: Amount: $10,000; Role: Principal Investigator; Funding Organization: ELECTROOP, Madrid, Spain; Title: “Fundamental Research in Logistics”; Type: Contract Competitively Bid.
34. 2006: Amount: $150,000; Role: Principal Investigator; Funding Organization: Lockheed Martin – Simulation, Training and Support; Title: “Performance Based Logistics Modeling II”; Type: Contract Competitively Bid.
35. 2005: Amount: $200,000; Role: Principal Investigator; Funding Organization: Lockheed Martin – Simulation, Training and Support; Title: “Performance Based Logistics Modeling I”; Type: Contract Competitively Bid.

PROPOSALS SUBMITTED

PROPOSALS WRITTEN

1. 2019: Amount $100,000 (unfunded); Role: Co-Principal Investigator; Engineering Research Center (ERC) Pre-Proposal with University of Maryland (lead university), Stevens Institute of Technology, Howard University, North Carolina A&T; Funding Organization: National Science Foundation; Title: “Engineering Critical Systems for an Outcome-Based World”; Type: Grant Competitive Award.
2. 2018: Amount $110,000 (unfunded); Role: Principal Investigator; Funding Organization: Texas Department of Transportation; Title: “Using NAS Data to Better Understand Barge and Deep Draft Vessels in the GIWW”; Type: Grant Competitive Award.
3. 2018: Amount $240,000 (unfunded); Role: Principal Investigator; Funding Organization: Department of Homeland Security; Title: “Lifecycle Models for Designing Novel Systems Approaches for Container Screening/Surveillance against Agro-terrorism”; Type: Grant Competitive Award.
4. 2018-2021: Amount $750,000 (unfunded); Role: Supporting; Funding Organization: Agency for Healthcare Research and Quality (AHRQ); Title: “Improved Patient Safety for Older Adults and Reduced Healthcare Costs through Simulation Models Focused on Care Transitions”; Type: Grant Competitive Award.
5. 2018-2021: Amount $1,482,066 (unfunded); Role: Co-Principal Investigator; Funding Organization: National Science Foundation; Title: “BioLogistics: Modeling Biological Development as a Problem in Logistics”; Type: Grant Competitive Award.
6. 2017: Amount $999,733 (unfunded); Role: Co-Principal Investigator; Funding organization: National Science Foundation; Title: “Partnerships of Innovation: Building Innovation Capacity (PFI:BIC) Smart Lifecycle Affordability Management System for Mass Transportation Services (SLAMS-MTS)”; Type: Grant Competitive Award.
7. 2016: Amount $1,000,000 (unfunded); Role: Co-Principal Investigator; Funding organization: National Institute of Health: Agency for Healthcare Research and Quality; Title: “Advances in Patient Safety through Simulation Research”; Collaborative Proposal with UNT Health Science Center, Johns Hopkins University and industry partner Walmart; Type: Grant Competitive Award.
8. 2016: Amount $997,538 (unfunded); Role: Co-Principal Investigator; Funding organization: National Science Foundation; Title: “Partnerships of Innovation: Building Innovation Capacity (PFI:BIC) Smart Lifecycle Affordability Management System for Mass Transportation Services (SLAMS-MTS)”; Type: Grant Competitive Award.
9. 2015: Amount $975,474 (unfunded); Role: Co-Principal Investigator; Funding organization: National Science Foundation; Title: “Partnerships of Innovation: Building Innovation Capacity (PFI:BIC) Life Cycle Affordability Smart System for Mass Transit Services (LCASS-MTS)”; Type: Grant Competitive Award.

10. 2014: Amount $80,000 (unfunded); Role: Co-Principal Investigator; Funding organization: Voodoo Robotics; Title: *"The Economics of Leveraging Computerized Robotic Controls in a Logistics Environment"*; Type: Contract Competitive Award.

11. 2014: Amount $318,287 (unfunded); Role: Co-Principal Investigator; Funding organization: National Science Foundation; Title: *"Key Antecedents of Small and Medium Size Business Disaster Resiliency in Supply Chains"*; Type: Grant Competitive Award.

12. 2014: Amount $798,902 (unfunded); Role: Co-Principal Investigator; Funding organization: National Science Foundation; Title: *"PFI:BIC Lifecycle Affordability Framework for Smart Transportation Service System Platform"*; Type: Grant Competitive Award. Panel Recommendation: Highly Recommended.

13. 2013: Amount: $120,000 (unfunded); Role: Principal Investigator; Funding organization: Naval Supply Systems Command – Acquisition Research Program; Title: *"Improving Defense Acquisition Policy Through a Life-Cycle Affordability Framework"*; Type: Grant Competitive Award.

14. 2013: Amount: $300,000 (unfunded); Role: Investigator; Funding organization: National Science Foundation – Type II; Title: *"Qualitative Investigation of the Key Antecedents of Small and Medium Size Business Supply Chain Disaster Resiliency"*; Type: Grant Competitive Award.

15. 2013: Amount: $39,999 (unfunded); Role: Investigator; Funding organization: National Science Foundation – Type I; Title: *"Supply Chain Resilience for Hazards Preparedness of Small Businesses and their Community Impacts"*; Type: Grant Competitive Award.

16. 2013: Amount: $125,000 (unfunded); Role: Co-Principal Investigator; Funding organization: Texas Sea Grant; Title: *"Hazards Resilience of Small and Medium Size Businesses to Hurricanes in Galveston County"*; Type: Grant Competitive Award.

17. 2012: Amount: $500,000 (unfunded); Role: Principal Investigator; Funding organization: Federal Aviation Administration: *"Economic-Based Performance Analysis"*; Type: Contract Competitively Bid.

18. 2010: Amount: $25,000 (unfunded); Role: Principal Investigator; Funding organization: Logistics Management Institute: *"Logistics – The Next Level: Thinking Big, Multi-Discipline and Bridging Theory and Practice"*; Type: Contract Competitively Bid.

19. 2010: Amount: $350,000 (unfunded); Role: Co-Principal Investigator; Funding organization: U.S. Navy NAVSEA PMS 420 through the Systems Engineering Research Center: *"Development of Systems Engineering Maturity Models and Management Tools"*; Type: Grant Competitive Award.

20. 2010: Amount: $150,000 (unfunded); Role: Principal Investigator; Funding organization: Lockheed Martin Corporation – 2010 University Research Initiative: *"Predictive and Responsive Logistics"*; Type: Contract Competitively Bid.

21. 2010: Amount: $3,000,000 (unfunded); Role: Investigator; Funding organization: Defense Supply Center: *"Logistics and Operations Research Analysis"*; Type: Grant Competitive Award.

22. 2010: Amount: $455,000; Role: Co-Principal Investigator; Funding Organization: USTRANSCOM; Title: "Developing a multi-dimensional demand distribution framework, classification and response strategy for USTRANSCOM"; Type Grant Competitive Award.

23. 2009: Amount: $850,000 (unfunded); Role: Investigator; Funding organization: Systems Engineering Research Center: *"Decision Support Models to Improve Reliability Investment Decisions"*; Type: Grant Competitive Award.

24. 2009: Amount: $120,000 (unfunded); Role: Principal Investigator; Funding organization: Naval Supply Systems Command – Acquisition Research Program; Title: *"Performance Based Acquisition Models to Support Simultaneous Design Considerations on the Primary System and its Enabling Sustainment Network"*; Type: Grant Competitive Award.

EXPERIENCE

ACADEMIC

Professor
University of North Texas, Denton, Texas. 06/12 to present.
G. Brint Ryan College of Business, Department of Logistics and Operations Management
College of Engineering, Department of Mechanical Engineering

Director
Center for Logistics and Supply Chain Management (C-LSCM)
University of North Texas, Denton, Texas. 09/16 to present.
G. Brint Ryan College of Business

Founding Member
Jim McNatt Institute for Logistics Research
University of North Texas, Denton, Texas. 09/16 to present.

Founding Member
The Complex Logistics Systems Laboratory
University of North Texas, Denton, Texas. 09/16 to present.

Member
Center for Integrated Intelligent Mobility Systems (CIIMS)
Jim McNatt Institute for Logistics Research
University of North Texas, Denton, Texas. 09/20 to present.

Associate Professor
Stevens Institute of Technology, Hoboken, NJ. 09/08 to 05/12.
School of Systems and Enterprises

Industry Professor
Stevens Institute of Technology, Hoboken, NJ. 08/04 to 09/07.
School of Systems and Enterprises

Instructor (as a doctoral student)
University of Wisconsin – Madison, Madison, WI. 06/95 to 09/95
College of Engineering, Department of Industrial and Systems Engineering

INDUSTRY

Consultant
Kineticsware, Kirkland, Washington, 09/07 to 09/08.
Guided the strategic direction, product requirements, design and development of the advanced planning and trade promotions management solutions.

Created sales and marketing collateral and the education program for both internal and external sales channels.

Maintained key European alliance relationships.

Consultant
Servigistics, Atlanta, Georgia. 12/03 to 08/04.
Developed and managed product roadmaps.

Managed product requirements, design, and development.

Defined and implemented a life cycle management process from requirements elicitation through product support through end-of-life.

Vice President, Strategic Accounts
Tools for Decision (TFD) Group, Monterey, California. 10/02 to 12/03.
Managed the Service Lifecycle Management (SLM) solutions for the Aerospace and Defense industry, Military organizations, and Government agencies.

Closed $1.5 MM of business at Lockheed Martin Aerospace Corporation (LMAC). This amount accounted for 25% of TFD Group's total revenue.

Managed the implementation of TFD Group's solutions on the Joint Strike Fighter (JSF), F-117, P-3, and C-130J programs at LMAC.

Vice President
i2 Technologies, Dallas, Texas. 01/96 to 10/02.

Vice President, Consumer Goods, 12/00 – 10/02
Vice President, Technology and Process Strategy, 6/99-12/00
Vice President, European Development, 1/97-6/99
Program Manager, 1/96-1/97

Managed 55 people, $12MM P/L, managed $15MM quota for new implementation bookings.

Managed all aspects of customer satisfaction and customer loyalty within the i2 CPG vertical which included: project management, project goals and scope, human resource management and

Led i2's CPG product strategy, sales methodology, and post-sale implementations.

Led more than 125 consumer goods customers through the i2 Project methodology (i2PM) that focuses on Business Releases

45 implementation projects went live in 2001 and 2002 at the consumer goods level.

Defined, Evangelized, and Implemented the Solutions Lifecycle Integrated Model (SLIM).

Initiated a formal process to define standard stack environments and verify compliance.

Managed i2's Technology and Technology Integration Environment.

Worked with our Alliance department to evaluate potential and existing vendors from a technical and business perspective.

Grew the European Development team from 3 to 60 people.

Managed i2's SAP relationship technical and development work in Walldorf, Germany.

Managed the development of strategic integration solutions between i2 products and applications of vendor partners, including SAP, Oracle Manufacturing, Oracle Gemms, JDEdwards OneWorld, SSA BPCS, and Baan Series.

Implemented solutions at Metals and Papers accounts such as Domtar, Acme Metals, US Steel, IMSA, AHMSA, and British Steel.

Director
Systems Exchange, Los Angeles, California. 01/90 to 09/93.
Managed the technology and solutions of all software packages (focus on logistics, reliability and spares part planning)

Provided user training.

Managed European distributors.

Established South American operations.

Principle Researcher
Dynamics Research Corporation, Crystal City, Virginia. 01/89 to 01/90.
Led team in writing the winning proposal to research supportability issues of the Strategic Defense System.

Principle author of the Supportability and Supportability –Related Design Constraints report submitted to the Strategic Defense Initiative Organization.

Cost Engineer (three internships and one year of full-time employment)
IBM, Manassas, Virginia. 01/84 – 08/87
Defined and used probabilistic, statistical, and mathematical techniques to develop procurement, manufacturing, assembly, test, and packaging cost estimates for large-scale systems (mostly submarines).

Programmed color displays used on the Los Angeles-Class Submarines.

SERVICE, AWARDS, AND HONORS

ACADEMIC SERVICE

Committees
Logistics and Operations Management PAC Committee, Chair. 2021-2023.
Logistics and Operations Management PAC Committee, Member. 2021-2023.
Marketing, Logistics, and Operations Management PAC Committee, Chair. 2020.
Logistics and Operations Management RPT Committee, Member. 2021-Present.
Logistics and Operations Management Endowed Chair Search Committee, Chair. 2021.
Logistics and Operations Management Endowed Chair Search Committee, Member. 2024.
Logistics and Operations Management Assistant Tenure-Track Search Committee, Member. 2022.
Marketing and Logistics PAC Committee, Member. 2015, 2018-2019.
Marketing and Logistics RPT Committee, Member. 2020.
Marketing and Logistics Ph.D. Program Committee, Member. 2012-2019.
G. Brint Ryan College of Business State Employee Charitable Campaign. Member. 2014-2015.
G. Brint Ryan College of Business, Logistics, and Operations Management Department Chair Logistics and Reappointment Committee. Member. 2022

Director, Center for Logistics and Supply Chain Management
Dr. Nowicki has raised over $3.1 million. Sources of funding include industry gifts (from the CLSCM's Board of Directors and other industry relationships, including corporate sponsorships), alum donations, scholarship events (e.g., Annual Southwest Airlines scholarship breakfast, periodic golf tournament), endowments, professional societies (my relationships with the Institute of Supply Management (ISM), and the Intermodal Association of North America (IANA). The Center funds student professional development (e.g., software skills, leadership, case competitions, and industry tours), industry relationships (internships, placements, and scholarships), case competitions, conference travel, and classroom experience to get our students work-ready. The Center initiates, develops, manages, and supports activities to improve students' skills, knowledge, and critical thinking, ultimately producing work-ready students.

- Responsible for UNT's Logistics, Aviation Logistics, and Operations Management Internship program. 2016-present.
- Responsible for UNT's Center for Logistics and Supply Chain Management On-Boarding (student soft skills) program. 2016-present.
- Responsible for UNT's Center for Logistics and Supply Chain Management Executive Lecture Series (student leadership skills) program. 2016-present.
- Responsible for LSCM student case competitions 2016-present. Responsible for UNT's Center for Logistics Education and Research Southwest Airlines Scholarship Breakfast Event. 2016-2017.
- Responsible for UNT's Center for Logistics Education and Research Transportation Breakfast Event. 2017.

- Manage the research efforts of UNT's Center for Logistics Education and Research Austin Office. 2016-present.

Reviewer for Refereed Academic Journals
International Journal of Logistics Management. 2012-present
Journal of Business Logistics. 2013-present
Journal of Supply Chain Management. 2012-present
European Journal of Operational Research. 2010-present
Journal of Operational Research Society. 2010-present
International Journal of Production Economics. 2010-present
Systems Engineering. 2008-2020
Systems Research Forum. 2010-2012.

National Annual Logistics Doctoral Symposium
Annual Logistics Doctoral Symposium. Hosted at TCU Neeley School of Business. UNT Faculty Representative 2018.

Annual Logistics Doctoral Symposium. Hosted at Iowa State University. UNT Faculty Representative. 2014.

Annual Logistics Doctoral Symposium. Hosted at the University of Arkansas. UNT Faculty Representative. 2013.

Other
UNT's Center for Logistics Education and Research representative at the NASCO Supply Chain Leadership Conference in Fort Worth, TX. 2016.
Co-Chair of the School of Systems and Enterprises Research Days. 2009 to 2010.

PROFESSIONAL SERVICE

Invited Talks
1. Randall, W.S., & **Nowicki, D.R.** (2012). ***Architecting for Life Cycle Affordability***. Invited talk at the Raytheon Life Cycle Engineering Council Forum, Orlando, FL.
2. **Nowicki, D.R.** (2012). ***Why Executives Should Care about Supply Chains***. Invited talk at the Technical Leadership Conference, Ronald Reagan Building, Washington, D.C.
3. **Nowicki, D.R.**, & Randall, W.S. (2011). ***Service and Product Design***. Invited talk at the Wharton Service Supply Chain Thought Leadership Forum, Wharton West, San Francisco, CA.
4. **Nowicki, D.R.**, & Randall, W.S. (2010). ***Role of Performance Based Logistics (PBL) and Readiness***. Invited talk at the Military Air Assets Exhibition and Conference (MAASEC), Jacksonville, FL.
5. Randall, W.S., & **Nowicki, D.R.** (2009). ***Evaluating Performance Based Logistics Economic Models***. Invited talk at the Aviation Week's Commercial Aviation Supply Chain Management Forum, San Diego, CA.
6. **Nowicki, D.R.**, Kumar, U.D., & Verma, D. (2006). ***Models for Optimizing Multiple Resources in a Performance-Based Logistics (PBL) Contract***. Invited talk at the DIMACS Workshop on Computational Optimization and Logistics Challenges in the Enterprise (COLCE) Annandale, NJ.

Moderator and Panelist
1. **Nowicki, D.R.** (2018). ***Working with Industry for Research Relevance***. Panelist at the 13th Annual Logistics Doctoral Symposium at Texas Christian University, Fort Worth, TX.
2. **Nowicki, D.R.** (2018). ***Analytical Research***. Panelist at the 13th Annual Logistics Doctoral Symposium at Texas Christian University, Fort Worth, TX.
3. **Nowicki, D.R.** (2017). ***Importance of Industry Engagement***. Panelist at the Sixth Annual SCM Directors' Conference, University of Southern California, Los Angeles, CA.

4. **Nowicki, D.R.** (2016). ***Practical Tools for Global Development***. Panelist at the The New Crossroads for Latin America-Asia Trade, Dallas, TX.
5. **Nowicki, D.R.** (2016). ***Technology Advances in Logistics and Supply Chain Management***. Moderator at the Southwest Airlines Scholarship Breakfast, Dallas, TX.
6. Johnson, J., **Nowicki, D.R.**, & Randall, W.S. (2010). ***Focus on Business Case Analysis (BCA) Structure***. Panelist at the The Next Generation of PBL - Performance Based Lifecycle Product Support, Arlington, VA.
7. Johnson, J., **Nowicki, D.R.**, & Randall, W.S. (2010). ***Review of the Product Support Assessment Team (PSAT) Report***. Panelist at the The Next Generation of PBL - Performance Based Lifecycle Product Support, Arlington, VA.

Workshops

1. **Nowicki, D.R.**, & Randall, W.S. (2010). ***Performance Based Logistics/Contracting: How to Measure Performance and Profit***. Workshop conducted at the Military Air Assets Exhibition and Conference (MAASEC), Jacksonville, FL.
2. **Nowicki, D.R.** (2005). ***PBL 101: An Introduction to Performance Based Logistics***. Workshop conducted at the Performance Based Logistics: Projecting and Sustaining Forces into the 21st Century, Washington, D.C.

Seminars

1. **Nowicki, D.R.** (2011). ***Lifecycle Management and Analysis***. Seminar at the National Security Agency, Washington, D.C.
2. **Nowicki, D.R.**, & Randall, W.S. (2009). ***Intersection of Systems Engineering and Supply Chains***. Three-day Seminar at the Embedded Systems Institute (ESI), Eindhoven, Netherlands.
3. **Nowicki, D.R.** (2008). ***Design for Reliability, Maintainability and Supportability and its Impact on Logistics and Supply Chain Decisions*** – *Part II*. Two-day seminar at the Johnson Space Center, National Aeronautics and Space Administration, Houston, TX.
4. **Nowicki, D.R.**, & Sols, A. (2006). ***Performance Based Logistics***. Two-day seminar through Sabentia at the Hotel Melia Castilla, Madrid, Spain.
5. **Nowicki, D.R**. (2006). ***Design for Reliability, Maintainability and Supportability and it's Impact on Logistics and Supply Chain Decisions***. Two-day seminar at the Johnson Space Center, National Aeronautics and Space Administration, Houston, TX.

Attended

1. Attended the Irving Transportation Investment Summit (2018). Infrastructure Resiliency Discussion and Workshop.

Publicity, Media Appearances, and Interviews

AWARDS, HONORS, AND MEMBERSHIPS

UNT College of Business Professional Development Institute (PDI) Business Fellowship in Research. 2016-2017.

Emerald Literati Award for Excellence. International Journal of Logistics Management. 2011.

Teaching Assistantships, University of Wisconsin – Madison. 1992 to 1995.

Research Assistantship, University of Wisconsin – Madison. 1994.

Research Assistantship, Virginia Tech. 1988.

Teaching Assistantship, Virginia Tech. 1989.

Awards and Honors for Students Advised

School of Systems and Enterprises recipient of the Best Master's Thesis. James Scott 2011.

School of Systems and Enterprises recipient of the Outstanding Dissertation Award. Ilona Murynets 2010.

Professional Memberships

Institute for Operations Research and the Management Sciences (INFORMS).
Council of Supply Chain Management Professionals (CSCMP).
Military Operations Research Society (MORS).