

Douglas J. Thomas

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Henry E. McWane Professor of Business Administration
Academic Director, Sands Institute for Lifelong Learning

Education

- 1999 **Ph.D., Industrial Engineering**, Georgia Institute of Technology
- 1996 **M.S., Industrial Engineering**, Georgia Institute of Technology
- 1992 **B.S., Operations Research and Industrial Engineering**, Cornell University

Academic and Professional Appointments

- 2017–present **Darden School of Business, University of Virginia**
Henry E. McWane Professor of Business Administration (2020–present); Professor (2017–2020).
- 1999–2017 **Smeal College of Business, Penn State**
Professor (2013–2017); Associate Professor (2006–2013); Assistant Professor (1999–2006).

Visiting Faculty Appointments

Darden School of Business, University of Virginia (2016); Johnson Graduate School of Management (2014–2015); INSEAD (2007–2008).

- 2021–present **Affiliated Expert, The Brattle Group**
- 2014–present **Plan2Execute**
Chief Scientist and Board Member.
- 1991–1993 **C-Way Systems, Inc.**
Analyst/Consultant.

Leadership and Faculty Governance

- 2024–present **Academic Director, Sands Institute for Lifelong Learning, Darden School of Business, University of Virginia**
 - Provide academic leadership for the Sands Institute for Lifelong Learning, advancing Darden's lifelong learning strategy across degree and non-degree audiences and multiple delivery formats.
 - Partner with Executive Education & Lifelong Learning leadership to set priorities for learning environments, innovative programming, and faculty support and development.
 - 2011–2014 **Faculty Director, MBA Programs, Smeal College of Business, Penn State**
 - Led academic strategy and operations for the full-time MBA; coordinated faculty staffing, course delivery, and program improvement; served as academic integrity officer.
 - Oversaw curriculum governance and assurance-of-learning processes supporting AACSB accreditation.
 - Assumed oversight of the Executive MBA program during the term; ensured consistent standards across formats; represented the school on the Provost's Advisory Council on Graduate Education.
- Faculty Governance (Selected, Recent)
- 2025–present **Chair, Appointments (Promotion & Tenure) Committee, Darden School of Business, University of Virginia**
 - Lead the faculty committee advising the Dean on tenure-track personnel actions, including reappointment, tenure, and promotion.

- 2025–present **Chair, Task Force on Revisions to Promotion & Tenure Standards and Criteria**, *Darden School of Business, University of Virginia*
 - Lead a task force revising standards and criteria for renewal, tenure, and promotion, and clarifying continuing performance expectations for tenure-track faculty, aligned with School priorities and aspirations.
- 2025–present **Co-Chair, Task Force on Community Norms**, *Darden School of Business, University of Virginia*
 - Co-lead a School-wide effort to revise community norms and related processes/practices to strengthen engagement and community across faculty and staff.
- 2025–present **Area Coordinator, Technology and Operations Management (TOM)**, *Darden School of Business, University of Virginia*
- 2024–present **Chair, Executive Education Programs Committee**, *Darden School of Business, University of Virginia*
 - Chair the faculty committee providing guidance on mission, strategy, curriculum, faculty engagement, governance, and organization of executive education programs.
- 2018–2022 **Faculty Director, The Executive Program (TEP)**, *Darden Executive Education & Lifelong Learning, University of Virginia*
 - Led a major redesign of Darden’s flagship advanced management open-enrollment program for senior leaders, shifting to a modular format with an extended intersession for coaching and applied leadership projects and modernizing curriculum, faculty mix, and delivery modalities to reflect emerging topics and immersive learning.

Selected Teaching Experience

Executive Education

- Designed and led company-specific and open-enrollment executive education programs across the United States, Europe, Asia, and Africa. Custom clients include Accenture, Edward Jones, ExxonMobil, GEICO, IBM, Mars, Pfizer, the U.S. Navy, the U.S. Marine Corps, and the U.S. Maritime Industrial Base.

Darden Teaching and Global Courses

- Teach MBA and Executive MBA: Operations Management (core), Supply Chain Management (elective), and Leading Operational Excellence (elective).
- Designed and led one-week global courses, including Executive MBA global courses to Finland/Estonia and Germany (Darden) and MBA courses to Santiago, Chile and Lima, Peru (Smeal).

Penn State Teaching

- Designed and taught courses across undergraduate, MBA (full-time and executive), Ph.D., and specialized master’s programs (in-person and online). Four-time recipient of MBA-program-wide teaching award.
- Courses include operations management (core for MBA and Executive MBA); demand fulfillment (undergrad and MBA); quantitative modeling for supply chain management (MBA); foundations of supply chain and operations management (Ph.D.); warehouse and distribution operations (undergraduate); and product design and development (Master’s in Manufacturing Management).

Curricular Innovation (Selected)

- Developed and deployed a scalable online course on sustainable supply chains for a global audience.
- Led the design and delivery of asynchronous and hybrid learning components in Darden Executive Education programs.
- Designed and delivered online courses for Smeal’s online specialized master’s program in Supply Chain Management.

Research

Refereed Journal Publications

- Saldanha, J. P., B. P. Price, and Douglas J. Thomas (2023). “A Non-Parametric approach for setting safety stocks levels”. In: *Production and Operations Management* 32.4, pp. 1150–1168.

- Abbasi, B., M. Fadaki, H. Jahani, Z. Hosseinifard, and Douglas J. Thomas (2022). "Allocation policies to fulfil heterogeneous service requirements under resource pooling". In: *Decision Sciences* 53.2, pp. 277–319.
- Huang, R., A. M. Davis, and Douglas J. Thomas (2022). "Retailer inventory sharing in two-tier supply chains: An experimental investigation". In: *Management Science* 68.12, pp. 8773–8790.
- Mani, V., Douglas J. Thomas, and S. Bansal (2022). "Estimating product substitution and basket abandonment effects in retail stores: Implications for assortment planning". In: *Management Science* 68.7, pp. 5001–5024.
- Goldschmidt, K., M. Kremer, Douglas J. Thomas, and C. Craighead (2021). "Strategic sourcing under severe disruption risk: Learning failures and under-diversification bias". In: *Manufacturing and Service Operations Management* 23.4, pp. 761–780.
- Acimovic, J., F. Erize, K. Hu, Douglas J. Thomas, and J. Van Mieghem (2019). "Product life cycle data-set: Raw and cleaned data of weekly orders for personal computers". In: *Manufacturing and Service Operations Management* 21.1, pp. 171–176.
- Hu, K., J. Acimovic, F. Erize, Douglas J. Thomas, and J. Van Mieghem (2019). "Forecasting new product life cycle curves: Practical approach and empirical analysis". In: *Manufacturing and Service Operations Management* 21.1. Finalist, 2017 Practice-Based Research Competition (M&SOM), pp. 66–85.
- Abbasi, B., Z. Hoseinifard, O. Alamri, Douglas J. Thomas, and J. P. Minas (2018). "Finite time horizon fill rate analysis for multiple customer cases". In: *Omega* 76, pp. 1–17.
- Chen, C. and Douglas J. Thomas (2018). "Inventory allocation in the presence of service level agreements". In: *Production and Operations Management* 27.3, pp. 553–577.
- Fan, J., A. Kwasnica, and Douglas J. Thomas (2018). "Paying for teamwork: Supplier coordination with endogenously-selected groups". In: *Production and Operations Management* 27.6, pp. 1089–1101.
- Kremer, M., E. Siemsen, and Douglas J. Thomas (2016). "The sum and its parts: Judgmental hierarchical forecasting". In: *Management Science* 62.9, pp. 2745–2764.
- Gao, L., Douglas J. Thomas, and M. Freimer (2014). "Optimal inventory control with retail pre-packs". In: *Production and Operations Management* 23.10, pp. 1761–1778.
- Wang, T., Douglas J. Thomas, and N. Rudi (2014). "The effect of competition on the efficient-responsive choice". In: *Production and Operations Management* 23.5, pp. 829–843.
- Harrison, T. P., P. J. Houm, Douglas J. Thomas, and C. Craighead (2013). "Supply chain disruptions are inevitable – Get READI: Resiliency enhancement analysis via deletion and insertion". In: *Transportation Journal* 52.2, pp. 264–276.
- Freimer, M., J. Linderoth, and Douglas J. Thomas (2012). "The impact of sampling methods on bias and variance in stochastic linear programming". In: *Computational Optimization and Applications* 51.1, pp. 51–75.
- Srinivasan, M., R. Novack, and Douglas J. Thomas (2011). "Optimal and approximate policies for inventory systems with order crossover". In: *Journal of Business Logistics* 32.2, pp. 180–193.
- Thomas, Douglas J., D. Warsing, and X. Zhang (2009). "Forecast updating and supplier coordination for complementary component purchases". In: *Production and Operations Management* 18.2, pp. 167–184.
- Katok, E., Douglas J. Thomas, and A. Davis (2008). "Inventory service level agreements as coordination mechanisms: The effect of review periods". In: *Manufacturing and Service Operations Management* 10.4, pp. 609–624.
- Thomas, Douglas J. and J. Tyworth (2007). "Is pooling lead-time risk by splitting orders simultaneously worthwhile?" In: *Journal of Business Logistics* 28.1, pp. 169–193.
- Thomas, Douglas J. and D. Warsing (2007). "A periodic inventory model for stocking modular parts". In: *Production and Operations Management* 16.3, pp. 343–359.
- Barton, R., D. Lin, H. Bi, M. Freimer, Z. Huang, J. Shu, Douglas J. Thomas, and S. Xu (2006). "Challenges in RFID enabled supply chain management". In: *Quality Progress* 39.11, pp. 23–28.
- Freimer, M., Douglas J. Thomas, and J. Tyworth (2006). "The value of setup cost reduction and process improvements for the economic production quantity model with defects". In: *European Journal of Operational Research* 173.1, pp. 241–251.
- Thomas, Douglas J. and J. Tyworth (2006). "Pooling lead-time risk by order splitting: A critical review". In: *Transportation Research Part E* 42.4, pp. 245–257.

- Chen-Ritzo, C., T. Harrison, A. Kwasnica, and Douglas J. Thomas (2005). "Better, Faster, Cheaper: An experimental analysis of a multi-attribute reverse auction mechanism with restricted information feedback". In: *Management Science* 51.12, pp. 1753–1762.
- Thomas, Douglas J. (2005). "Measuring item fill rate performance in a finite horizon". In: *Manufacturing and Service Operations Management* 7.1, pp. 74–80.
- Novack, R. and Douglas J. Thomas (2004). "The challenges of implementing the perfect order concept". In: *Transportation Journal* 43.1, pp. 5–16.
- Chen, J., D. Lin, and Douglas J. Thomas (2003). "On the item fill rate for a finite horizon". In: *Operations Research Letters* 31.2, pp. 119–123.
- Srinivasan, M. and Douglas J. Thomas (2002). "Return on investment for a warehouse management system". In: *Supply Chain Practice Journal* 4.2, pp. 44–57.
- Thomas, Douglas J. and S. Hackman (2002). "A committed delivery strategy with fixed frequency and quantity". In: *European Journal of Operational Research* 148.2, pp. 363–373.
- Thomas, Douglas J. and P. Griffin (1996). "Coordinated supply chain management". In: *European Journal of Operational Research* 94.1, pp. 1–15.

Working Papers

- Hua, L., T. Kraft, Douglas J. Thomas, Y. Zheng, and M. Hämmäläinen (2026). "The Market Value of Social Responsibility Communications: A Cross-Cultural Behavioral Study".
- Kremer, Mirko and Douglas J. Thomas (2026). "Blame In Supply Chains".
- Mani, Vidya and Douglas J. Thomas (2026). "How Trade Agreements Impact Economic Development and National Competitiveness".
- Saldanha, J. P., B. P. Price, and Douglas J. Thomas (2025). "Bootstrap Approach for Setting Safety Stock for a Common Component".
- Schaer, O., N. Kourentzes, and Douglas J. Thomas (2025). "New product life cycle forecasting with temporal hierarchies".

Books

- Silver, E., D. Pyke, and Douglas J. Thomas (2017). *Inventory and Production Management in Supply Chains*. CRC Press.

Other Publications

- Thomas, Doug and Vidya Mani (2025). *Turning Global Volatility into Competitive Advantage: Fortifying Supply Chains in an Era of Uncertainty*. Tech. rep. Charlottesville, VA: University of Virginia Darden School of Business, Executive Education & Lifelong Learning.
- Hämmäläinen, M., T. Kraft, Douglas J. Thomas, and Y. Zheng (2020). "Supply Chain Transparency at Goodio Chocolate". In: *Responsible Operations*. Ed. by V. Deshpande and J. Swaminathan.
- Thomas, Douglas J. (2016). "Improvements in Inventory Management: Past Success and Future Opportunities". In: *Cross-functional inventory research*. World Scientific.
- Holcomb, M., A. Krul, and Douglas J. Thomas (2015). "How business and universities are collaborating". In: *Supply Chain Management Review*. July/August.
- Thomas, Douglas J. (2002). "Customer service models for bricks, clicks and in between". In: *Supply Chain Management: Algorithms and Applications*. Ed. by Joseph Geunes and H. Edwin Romeijn. Kluwer Academic Publishing.

Confidential Reports

- Thomas, Douglas J., Y. Liu, E. Thomchick, and M. Pietrucha (2009). *Technical report delivered to the Pennsylvania Secretary of Transportation*. Strategic planning and facility location analysis for Pennsylvania driver licensing centers. Pennsylvania Department of Transportation.

■ Sponsored Projects

Industry-Sponsored and Consortium-Funded

- **Sales & Operations Planning (S&OP) benchmarking consortium** (Center for Supply Chain Research, Penn State), \$400,000, 2004–2014. Principal investigator.
- **IBM**: “Coordinating Production Planning between a Contract Manufacturer and an Original Equipment Manufacturer,” \$43,000, 2002. Co-investigator.
- **IBM**: “Are Real-Time Inventory Updates Worth Anything?,” \$25,000, 2005. Co-investigator.
- **EXE Technologies**: “Return on Investment for Warehouse Management System Implementation,” \$25,000, 2001. Principal investigator.

Government and Public-Sector

- **National Institute of Standards and Technology (NIST)**: “Supply Chain Practices for Small Manufacturing Enterprises,” \$189,000, 2005. Co-investigator.
- **Pennsylvania Department of Transportation (PennDOT)**: “Strategic Planning for Driver Licensing Centers,” \$132,418, 2007–2009.

Selected Invited Research Seminars

Arizona State, Chinese University of Hong Kong, Rutgers University, The Darden School (University of Virginia); Kenan-Flagler (UNC); Boeing Center for Technology, Information and Manufacturing (Olin, Washington University in St. Louis); R.H. Smith (University of Maryland); National University of Singapore; INSEAD; Lehigh University; Johnson (Cornell); Carlson (University of Minnesota); Smeal (Penn State).

Selected Professional Activities

- Consulting on supply chain strategy, education/talent development, and applied optimization. Selected clients: Accenture; Dell; ExxonMobil; Lockheed Martin.
- Keynotes and invited industry presentations for organizations including Deloitte; DuPont; Unilever; Hershey Foods; Hewlett-Packard; Microsoft; SAP; Virginia Economic Development Association.
- Expert witness in matters involving (i) supply chain contract disputes (e.g., service-level performance, operational obligations, damages) and (ii) intellectual property disputes (patent validity/infringement; trade secrets), with extensive deposition and hearing/trial testimony experience.

Professional Affiliations and Service

- Institute for Operations Research and the Management Sciences (INFORMS), 1996–present.
- INFORMS Publication Committee, 2007–2008 and committee to select Editor-in-Chief, *Manufacturing & Service Operations Management* (M&SOM).
- Senior Editor, *Production and Operations Management*, 2005–present.