

**MELTEM DENIZEL**

Iowa State University  
Ivy College of Business/Supply Chain and Information Systems

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**Education**

1993 Ph.D. Decision and Information Sciences, University of Florida, USA

1986 M.S. Industrial Engineering, Middle East Technical University, METU, Turkey

1983 B.S. Industrial Engineering, Middle East Technical University, METU, Turkey

**1. Academic Work Experience**

2016 – Present Associate Professor, College of Business, Supply Chain and Information Systems

2009 – 2016 Professor, Ozyegin University, Faculty of Business

2007 – 2009 Professor, Faculty of Management, Sabanci University

2007 – 2008 Visiting **Fulbright** Scholar, College of Management, Georgia Institute of Technology

1999 - 2007 Associate Professor, Faculty of Management, Sabanci University

1996 - 1999 Visiting Assistant Professor, Department of Decision and Information Sciences, University of Florida

1995 - 1996 Assistant Professor, Department of Industrial Engineering, Middle East Technical University METU

1994 - 1995 Visiting Assistant Professor, NEOS MBA, International Program for Business Studies, Pordenone, Italy

1993 - 1994 Visiting Assistant Professor, Department of Decision and Information Sciences, University of Florida

**2. Research****Publications:**

Soytas, M.A., Usar, D.D., Denizel M., (2020) “Estimation of the Static Corporate Sustainability Interactions Model,” To appear in International Journal of Production Research <https://doi.org/10.1080/00207543.2020.1856435>

- Sternberg, H., S., Denizel M., (2020) "Towards the Physical Internet – Logistics service modularity and design implications" To appear in *Journal of Business Logistics*, DOI: 10.1111/JBL.12261
- Yanikoglu, I., Denizel M., (2019) "A Robust Optimization Approach to Multi-period Remanufacturing Planning with Uncertain Quality of Inputs" To appear in *International Journal of Production Research* <https://doi.org/10.1080/00207543.2020.1711983>
- Denizel, M., Yoshi, S., Anderson, C.J., (2020) "Increasing Biofuel Proliferation via the Optimal Use of Government Incentives," *Transportation Journal* Vol. 59, No. 4, Pages 399-419
- Usar, D.D., Denizel, M., Soytaş, M.A., (2019) "Corporate sustainability interactions: A game theoretical approach to sustainability actions." *International Journal of Production Economics*, Vol. 218, Pages 196-211
- Soytaş, M.A., M. Denizel, D. D. Usar, (2019) "Addressing endogeneity in the causal relationship between sustainability and financial performance." *International Journal of Production Economics*, Vol. 210, Pages 56-71
- Solyali O., M. Denizel, and H. Sural, (2015) "Effective Network Formulations for Lot Sizing with Backlogging in Two-Level Serial Supply Chains," *IIE Transactions* 47, 1-13; DOI: 10.1080/0740817X.2015.1027457
- Ozdemir, O., M. Denizel, and M. Ferguson, (2014) "Allocation of Returned Products among Different Recovery Options through an Opportunity Cost based Dynamic Approach," *Decision Sciences*, Vol 45, No 6, pp 1083-1116
- Denizel, M., M. Ferguson, and B. Toktay (2013) "Incorporating Sustainability into Humanitarian Aid Operations: Recipient Selection in Donations of Medical Supplies," *Operations Management Education Review*, No. 7, pp. 49-78
- Ozdemir O., M. Denizel, D. Guide, (2012) "Recovery Decisions of a Producer in a Legislative Disposal Fee Environment," *European Journal of Operational Research*, Vol 216, No. 2 pp. 293–300
- Kosedag, A., M. Denizel, and O. Ozdemir (2011) "Testing for convergence in bank efficiency: a cross-country analysis," *The Service Industries Journal*, Vol 31, No. 9, pp. 1533–1547
- Sural H., O. Solyali, M. Denizel (2010) "The one-warehouse multi-retailer problem with an order-up-to level inventory policy," *Naval Research Logistics*, Vol 5, No. 7, pp. 653-666
- Denizel, M., M. Ferguson, and G. Souza (2010) "Multi-Period Remanufacturing Planning with Uncertain Quality of Inputs," **(2008 Wickham Skinner Best Unpublished Paper Award, First Prize)**, *IEEE Transactions on Engineering Management*, Vol. 57, No. 3, pp. 394 - 404
- Sural H., M. Denizel, and L.V. Wassenhove, 2009, "Lagrangian Relaxation Based Heuristics for Lot-sizing with Setup Times," *European Journal of Operational Research* Vol. 194, No. 1, pp. 51–63
- Denizel, M., F. T. Altekin, H. Sural, and H. Stadtler, 2008, "Equivalence of the LP Relaxations of Two Strong Formulations for the Capacitated Lot-Sizing Problem with Setup Times," *OR Spectrum*, Vol. 30, No.4, pp. 773-785

Batislam, E., M. Denizel, and A. Filiztekin, 2007, "Empirical Validation and Comparison of Models for Customer Base Analysis," *International Journal of Research in Marketing*, Vol. 24, No.3, pp. 201–209

Denizel, M., U. Ekinci, G. Ozyurt, D. Turhan, "Ford-Otosan Optimizes Its Stocks Using a Six-Sigma Framework," 2007, *Interfaces*, Vol. 37, No.2, pp. 97-107

Denizel, M., H. Sural, "On Alternative Mixed Integer Formulations and LP-based Heuristics for Lot-sizing with Setup Times," 2006, *Journal of Operational Research Society* Vol. 57, pp. 389-399

Denizel, M., B. Usdiken, and D. Tuncalp, "Drift or Shift? Continuity, Change and International Variation in Knowledge Production in OR/MS," 2003, *Operations Research* Vol. 51, No. 5, pp. 711-720

Denizel, M., "Minimization of Number of Tool Magazine Setups on Automated Machines: A Lagrangean Decomposition Approach," 2003, *Operations Research*. Vol. 51, No. 2, pp. 309-320

Denizel, M. and S. Sayin, "Part-type Selection in Flexible Manufacturing Systems: A Bicriteria Approach with Due Dates," 1998, *Journal of Operational Research Society*, Vol. 49, pp. 659-669

Denizel, M. and S. S. Erenguc, "Exact Solution Procedures for a Class of Production Planning Problems in Flexible Manufacturing Systems," 1997, *Computers and Operations Research*, Vol. 24, No.11, pp. 1043-1055

Denizel, M., S. S. Erenguc, and H. Benson, "Dynamic Lot-Sizing with Setup Cost Reduction," 1997, *European Journal of Operational Research*, Vol.100 pp. 537-549

Denizel, M., S. S. Erenguc, and H. D. Sherali, "Convex Envelope Results and Strong Formulations for a Class of Mixed Integer Programs," 1996, *Naval Research Logistics*, Vol. 43, No. 4, pp. 503-518

Denizel, M., and S. S. Erenguc, "A Branch and Bound Procedure for Setup Problems in Flexible Manufacturing Systems," 1993, *Production and Operations Management* Vol. 2, No. 4, pp. 289-305

Denizel, M., and S. S. Erenguc, "A Polynomial Algorithm for a Multi-item Capacitated Production Planning Problem," 1993, *Operations Research Letters*, Vol. 13, No. 5, pp. 287-293

Saatcioglu, O., M. Denizel, N. Karabakal and L. Tuncel, "Industrial Engineering Applications in Middle East Technical University Management," 1989, *Endustri Muhendisligi Dergisi* (Turkish Journal of Industrial Engineering), Vol. 1, No. 2, pp. 3-7, (in Turkish)

### **Conference Proceedings:**

Denizel, M., "The Zero Inventory Rule in Lot Sizing for Spare Parts and Refurbished Cores in a Remanufacturing Environment," in *International Workshop on Lot-Sizing, IWLS2018*, 2018

Nurlu-Deniz N., Denizel, M., "Lot-sizing in a remanufacturing environment" *International Workshop on Lot Sizing August 23rd - 25th, 2016, Hannover, Germany.*  
<http://iwls2016.emse.fr/program.html>

Nurlu-Deniz N., Denizel, M., "Lot Sizing for Spare Parts and Refurbished Cores in a Remanufacturing Environment," in *International Workshop on Lot-Sizing, August 26th - 28th, 2013 Brussels, Belgium.* <http://iwls2013.emse.fr/>

Solyali O., M. Denizel, and H. Sural, "Effective Network Models for the Two-Level Serial Lot Sizing Problems," in *International Workshop on Lot-Sizing, IWLS2012*, 2012.

Denizel, M., O. Solyali, and H. Sural, "Tight formulations for the two and three level serial lot-sizing problems," in *International Workshop on Lot-Sizing, IWLS2010*, 2010.

Ozdemir, O. and M. Denizel, "A resource based and context dependent model of firm competitiveness," *POMS 2006 17<sup>th</sup> Annual Conference Proceedings*, 004-0557, April 28-May 1 2006

Tuncalp D, A. Oncu, and M. Denizel, "Enterprise resource planning technology as a source of change and stability in organizations" *Proceeding of the EuroMA Conference - Operations as a Change Agent* INSEAD and EuroMA 2004, 1167 – 1177 (on CD ROM)

Denizel, M., Y. Arikan, G. Ulusoy, and B. Catay "Conceptual Design of an E-Marketplace for Small and Medium Size Enterprises in the Turkish Machine Industry," 2002, *Proceedings of the Fifth International Conference on Electronic Commerce Research ICECR-5, Montreal, Canada* (on CD Rom)

Denizel, M., and S. S. Erenguc, "Production Planning in a Flexible Manufacturing Environment", 1991, *Proceedings of the 1991 Annual Meeting of the Decision Sciences Institute*, Vol. 3, 1206-1208

Dogrusoz H., M. Denizel, and N. Karabakal, "Replacement of Garbage Collection Trucks Under Deterioration in Cost and Availability," 1987, *Proceedings of the 11<sup>th</sup> National Meeting of the Operations Research Society of Turkey* (in Turkish)

Denizel, M., N. Karabakal, O. Saatcioglu, and A. Toker, "An Information System and Organizational Design for Solid Waste Management," 1987, *Proceedings of the 11<sup>th</sup> National Meeting of the Operations Research Society of Turkey* (in Turkish)

#### **Papers under Review or Revision:**

Zhuang, Y., Denizel, M., Montabon, F., "Examining Firms' Sustainability Frontier: Are Firms with High Sustainability Performance Also Efficient?" First Revision for *Journal of Production Economics*

#### **Working Papers**

Suzuki, Y., Denizel, M., "Driver Assignment Problem" (tentative title). Developing and testing a mathematical model.

Denizel, M., "The Zero Inventory Rule in Lot Sizing for Spare Parts and Refurbished Cores in a Remanufacturing Environment," (In Preparation)

#### **Dissertation/ Thesis Supervision:**

**Thesis Title:** Corporate Sustainability Interactions and Corporate Financial Performance  
Ph.D. Student: Damla Durak-Usar, Co-advisor with Mehmet A. Soytaş, Completed November 2017, Ozyegin University

**Thesis Title:** Product Recovery Systems: Policy Issues and Disposition Decisions  
Ph.D. Student: Oznur Ozdemir, Supervisor, Completed July 2009, Sabanci University

**Thesis Title:** Recursive Dualism of Technology: Restructuring Technology Adaptation in Organizations

Ph.D. Student: Deniz Tuncalp, Co-advisor with Ahmet Oncu, Completed February 2006, Sabanci University

### **Current Research Interests:**

Sustainable Operations,  
Product Recovery Systems  
Supply Chain Management/ Multi Level Lot Sizing

### **3. Teaching Experience**

2016-2020     SCM 424 Process Management Analysis and Improvement,  
                  SCM 524 Strategic Process Analysis and Improvement  
                  SCM 605 Seminar in Operations Management

### **Courses Taught at Ozyegin University:**

2009-2012     Data, Models, and Decisions, Graduate MBA  
2009-2014     Operations Management, Graduate MBA/EMBA  
2011-2013     Operations Research  
2012-2016     Linear Programming and Extensions Graduate, PhD.

Developer and Organizer, *Certificate Program in Sustainability in Business*, Ozyegin University

### **Courses Taught at Other Universities:**

#### Sabanci University:

2000            Methods of Inquiry, MBA  
2000, 2002    Value Creation Management, MBA  
2000            Functional E-Business, MBA  
2001, 2007    Business Process Analysis & Design, MBA  
2001            Customer Relationships Management, MBA  
2002-2007    Operations Management, MBA  
2002-2007    Supply Chain Management, MBA  
2003, 2005    Operations and Decision Systems, Ph.D. Level  
2003            Operations Modeling, Ph.D. Level  
2001, 2006    Special Topics in OM, Ph.D. Level  
2002, 04-05   Professional Development Seminar I – II, Ph.D. Level

#### University of Florida:

1997-1999    Management Science with Excel, Graduate  
1996            Production and Operations Management, Undergraduate  
1996-1997    Knowledge Based Systems, Undergraduate  
1996-1999    Discrete Event System Simulation, Graduate  
1993, 1997    Manufacturing Planning and Control, Graduate  
1993            Statistics for Business, Undergraduate

#### Middle East Technical University

1995-1996    Discrete Event System Simulation, Undergraduate  
1996            Seminar in Flexible Manufacturing Systems, Graduate

1988 Quantitative Methods, Undergraduate

NEOS MBA 1994 Statistic for Business, Graduate

### **Teaching Case:**

Denizel, M., E. Batislam, C. Akkan (2006) “TEMSA: A time of Crisis”, *ECCH The case for learning*, No 606-029-1, UK

### **4. Awards/ Honors/ Research Grants/ Fellowships**

TUBITAK 1001 Grant (Turkish Science and Technology Foundation) – March 2014 – August 2016 (with Mehmet Ali Ozsoy) “Sustainability in Business: Database construction and economics based modelling”

TUBITAK 1001 Grant (Turkish Science and Technology Foundation) – September 2013– August 2015, (with Erim Kardes) “Robust Optimization for Remanufacturing Planning with Uncertain Quality of Inputs”

February 2008 – August 2008 **TUBITAK Post Doctoral Research Scholarship**, Hosting University: Georgia Institute of Technology, Atlanta, Georgia; Project Title: Product Recovery Systems for Sustainable Development

**2008 Wickham Skinner Best Unpublished Paper Award First Prize**, “Multi-Period Remanufacturing Planning with Uncertain Quality of Inputs” (with M. Ferguson and G. Souza), Presented at the 19<sup>th</sup> Annual Conference of POMS (production and Operations Management Society), May 2008, La Jolla, CA, USA

August 2007– January 2008 **Fulbright Senior Research Scholarship** Fulbright Turkey-USA Cultural Exchange Commission, Hosting University: Georgia Institute of Technology, Atlanta, Georgia; Project Title: Product Recovery Systems for Sustainable Development

### **Industry Grants/Consulting Projects:**

Project Title: Supply Chain Network Optimization for the Renewable Energy Group (REG), Ames Iowa – 2017-2018

Project Team: Meltem Denizel, Yoshinori Suzuki

Project Title: Inventory Optimization for TEMSA Spare Parts Management, Industry funded project, 2006.

Project Title: Business Excellence and E-Business Strategies in The Turkish Machine Industry, TUSIAD Projesi, 2001-2002.

Project Team: G. Ulusoy, B. Catay, M. Denizel, and Y. Arikan

Project Title: Customer Base Analysis and Customer Loyalty Measurement in a Grocery Retailer, Industry funded project, 2003-2004

Project Team: E. Batislam, M. Denizel, A. Filiztekin, and Y. Saygin

Project Title: Solid Waste Collection, Transportation and Disposal System for the Metropolitan Area of Istanbul, 1985-1986

Project Team: H. Dogrusoz, N. Erkip, O. Kirca, C. Beseli, M. Denizel, H. Sural, A. Toker.



## 5. Administrative Work Experience:

2019-2020	PhD Committee Faculty Senate Appeals Committee Academic Standards Committee P&T Committee
2018-2019	PhD Committee Ivy Speaker Series Committee Faculty Senate Appeals Committee P&T Committee
2017-2018	Recruiting Committee Diversity Committee PhD Committee Faculty Senate Appeals Committee P&T Committee
2016-2017	Diversity Committee PhD Committee Voorhees Supply Chain Conference Organization Committee Faculty Senate Appeals Committee
2013-2016	<b>Dean,</b> Faculty of Business Ozyegin University
2009-2016	Member, University Senate, Ozyegin University Member, University Administrative Board, Ozyegin University Member, Graduate School Administrative Board, Ozyegin University Member, Business Faculty Administrative Board, Ozyegin University
2009-2013	Director, Business PhD Program, Ozyegin University
2000-2006	Chair, Faculty of Management PhD Committee, Sabanci University
2005-2009	Member, Graduate School Administrative Board, Sabanci University
2003-2007	Member, University Administrative Board, Sabanci University
2003-2007	Member, University Senate, Sabanci University
2002-2007	Member, University Research Council, Sabanci University

## 6. Professional and Public Services:

Editor/Editorial board memberships in scientific journals:

Editorial Review Board member for Decision Sciences Journal (2020-)

Editorial Board Member for Flexible Services and Manufacturing Systems (2011-)

Advisory Board Member for OR Spectrum (SCI)

Associate Editor for POMS Chronicle 2009-2013

Referee: Operation Research, Transportation Research Part E: Logistics and Transportation Review, IIE Transactions, Decision Sciences, 4OR A Quarterly Journal of Operations Research, Computers and Operations Research, OR Spectrum, IEEE Transactions on Engineering Management, Transactions on Operational Research, Flexible Services and Manufacturing

Organizer/Coordinator of Academic Conferences:

Voorhees Supply Chain Conference – April 28, 2007, Organizing Committee member

Track Chair: POM 2013 - Twenty Fourth Annual Conference, Denver, Colorado, U.S.A. May 3 – May 6, 2013

Organizer, IWLS (International Workshop on Lot-Sizing), August 24 – 26, 2011, Istanbul, Turkey (Hosted by Ozyegin University)

Co-organizer: Twelfth Annual Decision and Information Sciences (DIS) Workshop on the “*Globalization of Business Processes*”. June 2000 Istanbul. Jointly hosted by Graduate School of Management (GSM), Sabanci University and Department of Decision and Information Sciences Warrington College of Business Administration, University of Florida

Co-organizer: Organized a session on “Sustainability and Competitiveness” in the 2<sup>nd</sup> Workshop on Competitiveness; Organized by Competitiveness Forum of Sabanci University and TUSIAD (Turkish Industrialists and Businessmen Association), Hosted by Sabanci University on October 6-7, 2006

**Professional Affiliations:**

Institute for Operations Research and Management Sciences (INFORMS, USA)

Production and Operations Management Society (POMS, USA)