

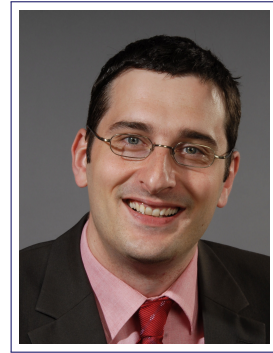
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Rainer Kleber

Curriculum Vitae

Education

- 12/2012 **Postdoctoral Lecture Qualification**, cumulative Habilitation dissertation entitled “*Decision Support for Spare Parts Inventory Management in Closed-Loop Supply Chains*”, *venia legendi* for management, Faculty of Economics and Management, Otto von Guericke University Magdeburg, Germany.
- 06/2005 **Doctor of Philosophy in Management**, Dissertation entitled “*Dynamic Inventory Management in Reverse Logistics*” (Dr. rer. pol., *summa cum laude*). Reviewers: Karl Inderfurth, Alfred Luhmer, Franz Wirl.
- 05/1998 **Diploma in Management**, Otto von Guericke University Magdeburg, Germany, Specializations in *Operations Management and Logistics* and *Operations Research*.

Professional experience

- 04/2014 – **Lecturer and Postdoctoral Researcher**, Faculty of Economics and Management, Otto von Guericke University Magdeburg, Germany.
Present
- 04/2013 – **Interim Professorship** for Production and Logistics, University of Wuppertal, Germany.
03/2014
- 02/2007 – **Visiting Research Fellowship** at the Mechanical Engineering Department, Università degli Studi di Brescia, Italy.
03/2007
- 12/2005 – **Lecturer Executive BBA/MBA**, Business School Magdeburg, Germany.
12/2018
- 08/2005 – **Postdoctoral Associate**, Faculty of Economics and Management, Otto von Guericke University Magdeburg, Germany.
03/2013
- 06/1998 – **Postgraduate Associate**, Faculty of Economics and Management, Otto von Guericke University Magdeburg, Germany.
07/2005

Research

- Sustainable Supply Chain Management and Reverse Logistics
- Spare Parts Management
- Application of Quantitative Methods in Production and Logistics

Monographs

1. Kleber, R. (2006) *Dynamic Inventory Management in Reverse Logistics*. Springer, Berlin, Heidelberg. DOI: 10.1007/3-540-33230-8

Articles in peer-reviewed journals and conference proceedings

2. Kleber, R., Reimann, M., Souza, G.C., Zhang, W. (2020) *Two-sided competition with vertical differentiation in both acquisition and sales in remanufacturing* To appear in European Journal of Operational Research. DOI: 10.1016/j.ejor.2020.01.012
3. Kleber, R., Quariguasi Frota Neto, J., Reimann, M. (2020) *Proprietary Parts as a Secondary Market Strategy*. To appear in European Journal of Operational Research. DOI: 10.1016/j.ejor.2019.11.062
4. Abbey, J., Kleber, R., Souza G., Voigt, G. (2019) *Remanufacturing and Consumers' Risky Choices: Behavioral Modeling and the Role of Ambiguity Aversion*. Journal of Operations Management 65(1), pp. 4–21. DOI: 10.1002/joom.1001
5. Kleber, R., Reimann, M., Souza, G.C., Zhang, W. (2018) *On the Robustness of the Consumer Homogeneity Assumption with Respect to the Discount Factor for Remanufactured Products*. European Journal of Operational Research 269(3), pp. 1027–1040. DOI: 10.1016/j.ejor.2018.02.052
6. Inderfurth, K., Kelle, P., Kleber, R. (2018) *Inventory control in dual sourcing commodity procurement with price correlation*. Central European Journal of Operations Research 26, pp. 93–119. DOI: 10.1007/s10100-017-0475-x
7. Abbey, J., Kleber, R., Souza, G.C., Voigt, G. (2017) *The Role of Perceived Quality Risk in Pricing Remanufactured Products*. Production and Operations Management 26, pp. 100–115. DOI: 10.1111/poms.12628

8. Kleber, R., Inderfurth, K., Kelle, P. (2015) *Combined sourcing and inventory management using capacity reservation and spot market*. In: Vastag, G. (Ed.): *Research in the Decision Sciences for Global Business - Best Papers from the 2013 Annual Conference of the European Decision Sciences Institute*, Pearson Education, Upper Saddle River, NJ, pp. 321–334.
9. Inderfurth, K., Kelle, P., Kleber, R. (2013) *Dual Sourcing Using Capacity Reservation and Spot Market: Optimal Procurement Policy and Heuristic Parameter Determination*. *European Journal of Operational Research* 225, pp. 298–309. DOI: DOI:10.1016/j.ejor.2012.08.025
10. Inderfurth, K., Kleber, R. (2013) *An Advanced Heuristic for Multiple-Option Spare Parts Procurement after End-of-Production*. *Production and Operations Management* 22, pp. 54–70. DOI: 10.1111/j.1937-5956.2012.01358.x
11. Kleber, R., Schulz, T., Voigt, G. (2012) *Dynamic buy-back for product recovery in end-of-life spare parts procurement*. *International Journal of Production Research* 50, pp. 1476–1488. DOI: 10.1080/00207543.2011.560202
12. Kleber, R., Zanoni, S., Zavanella, L. (2011) *On how buyback and remanufacturing strategies affect the profitability of spare parts supply chains*. *International Journal of Production Economics* 133, pp. 135–142. DOI: 10.1016/j.ijpe.2010.04.020
13. Puttkammer, K., Kleber, R., Schulz, T., Inderfurth, K. (2011) *Simultane Maschinenbelegungs- und Personaleinsatzplanung in KMUs anhand eines Fallbeispiels aus der Druckereibranche*. In: Sucky, E., Asdecker, B., Dobhan, A., Haas, S, Wiese, J. (Eds.): *Logistikmanagement: Herausforderungen, Chancen und Lösungen, Band I*. University of Bamberg Press, Bamberg, pp. 229–247.
14. Inderfurth, K., Kleber, R. (2009) *Modellgestützte Flexibilitätsanalyse von Strategien zur Ersatzteilversorgung in der Nachserienphase*. *Zeitschrift für Betriebswirtschaft/Journal of Business Economics* 79, pp. 1019–1049. DOI: 10.1007/s11573-009-0303-4
15. Kleber, R., Inderfurth, K. (2009) *A Heuristic Approach for Integrating Product Recovery into Post PLC Spare Parts Procurement*. In: Fleischmann, B., Borgwardt, K.-H., Klein, R., Tuma, A. (Eds.): *Operations Research Proceedings 2008*. Springer, Berlin Heidelberg New York, pp. 209–214. DOI: 10.1007/978-3-642-00142-0_34

16. Kleber, R., Inderfurth, K. (2007) *Heuristic Approach for Inventory Control of Spare Parts after End-of-Production*. In: Otto A., Obermaier, R. (Eds.): *Logistikmanagement - Analyse, Bewertung und Gestaltung logistischer Systeme*. DUV, Wiesbaden, pp. 185-200. DOI: 10.1007/978-3-8350-5458-5_9
17. Kleber, R. (2007) *Dynamisches Bestandsmanagement in der Kreislauflogistik*. In: Waldmann, K.-H., Stocker U.M. (Eds.): *Operations Research Proceedings 2006*. Springer, Berlin Heidelberg New York, pp. 24-28. DOI: 10.1007/978-3-540-69995-8_4
18. Langella, I.M., Kleber, R. (2007) *The Use of Chance Constraint Programming for Disassemble-to-Order Problems with Stochastic Yields*. In: Waldmann, K.-H., Stocker U.M. (Eds.): *Operations Research Proceedings 2006*. Springer, Berlin Heidelberg New York, pp. 473-478. DOI: 10.1007/978-3-540-69995-8_75
19. Kleber, R. (2006) *The integral decision on production/remanufacturing technology and investment time in product recovery*. OR Spectrum 28, pp. 21–51. DOI: 10.1007/s00291-005-0011-6
20. Kleber, R. (2006) *Recovery knowledge acquisition in medium and long term planning of a joint manufacturing / remanufacturing system*. In: Haasis, H. D., Kopfer, H., Schönberger, J. (Eds.): *Operations Research Proceedings 2005*. Springer, Berlin Heidelberg New York, pp. 197-202. DOI: 10.1007/3-540-32539-5_32
21. Kleber, R. (2004) *A Dynamic Model for Choosing the Optimal Technology in the Context of Reverse Logistics*. In: Ahr, D., Fahrion, R., Oswald, M., Reinelt, G. (Eds.): *Operations Research Proceedings 2003*. Springer, Berlin Heidelberg New York, pp. 79-86. DOI: 10.1007/978-3-642-17022-5_11
22. Kleber, R., Minner, S., Kiesmüller, G. (2002) *A continuous time inventory model for a product recovery system with multiple options*. International Journal of Production Economics 79, pp. 121–141. DOI: 10.1016/S0925-5273(02)00256-6
23. Minner, S., Kleber, R. (2001) *Optimal control of production and remanufacturing in a simple recovery model with linear cost functions*. OR Spectrum 23, pp. 3–24. DOI: 10.1007/PL00013344
24. Kiesmüller, G.P., Minner, S., Kleber, R. (2000) *Optimal control of a one product recovery system with backlogging*. IMA Journal of Mathematics Applied in Business and Industry/IMA Journal of Management Mathematics 11, pp. 189–207. DOI: 10.1093/imaman/11.3.189

Book chapters and non-refereed publications

25. Inderfurth, K., Kleber, R. (2008) *Ersatzteilversorgungsstrategien im After Sales-Geschäft: Risikobeherrschung durch Flexibilität*. In: Pfohl H.-C., Wimmer, T. (Eds.): *Robuste und sichere Logistiksysteme*. DVV, Hamburg, pp. 347–360.
26. Teunter, R., Inderfurth, K., Minner, S., Kleber, R. (2005) *Reverse Logistics in a Pharmaceutical Company: the Schering case*. In: Flapper, S. D. P., van Nunen, J. A. E. E., Van Wassenhove L. N. (Eds.): *Managing Closed-Loop Supply Chains*. Springer, Berlin Heidelberg New York, pp. 20–31. DOI: 10.1007/3-540-27251-8_2
27. Kiesmüller, G., Minner, S., Kleber, R. (2004) *Managing dynamic product recovery: an optimal control perspective*. In: Dekker, R., Inderfurth, K., Van Wassenhove, L. N., Fleischmann, M. (Eds.): *Reverse Logistics. Quantitative Models for Closed-Loop Supply Chains*. Springer, Berlin Heidelberg New York, pp. 221–247. DOI: 978-3-540-24803-3_9

Scientific presentations (as a speaker)

- 2019-03-29 *Proprietary Parts as a Secondary Market Strategy*, GOR Working Group “Game Theory and Behavioral MS”, University of Hamburg, Germany
- 2018-06-13 *Sourcing Strategies in the Presence of Demand and Price Risks*, invited presentation at the University of Graz, Austria
- 2017-09-06 *On the Robustness of the Consumer Homogeneity Assumption with Respect to the Discount Factor for Remanufactured Products*, International Conference on Operations Research 2017, Berlin, Germany
- 2015-06-08 *The Effect of Demand-Price Correlation and Spot-Price Autocorrelation on Combined Sourcing and Inventory Management*, 5th Annual Symposium on Supply Chain and Finance, June 8th-9th, 2015, Växjö, Sweden
- 2015-03-27 *Challenges and opportunities in end-of-life spare parts management*, ISLA Campus | Business meets Science, Annual Meeting of the International Service Logistics Association 2015, Hamburg, Germany (invited presentation)
- 2014-09-04 *Sources and Effects of Heterogeneous Willingness to Pay for Remanufactured Products*, International Conference on Operations Research 2014, Aachen, Germany (invited presentation)
- 2014-05-27 *The Effects of Heterogeneous Quality Assessments of Remanufactured Products on the Price/Quantity Decisions of a Monopolist*, invited presentation at the University of Graz, Austria

- 2013-02-02 *Dual sourcing in the presence of price fluctuations*, Gemeinsame Tagung der Wissenschaftlichen Kommission Operations Research und der AG Projektmanagement und Scheduling der GOR, Wuppertal, Germany
- 2013-01-25 *Challenges in end-of-life spare parts management and opportunities for cost reductions*, Optimising the International Spare Parts Management in the Machinery Industry 24th & 25th January 2013, Berlin, Germany
- 2012-10-15 *The impact of stock-keeping on dual-sourcing strategies with capacity reservation and spot markets*, INFORMS Annual Meeting 2012, Phoenix, USA
- 2012-09-06 *Single vs. dual sourcing: the strategic impact of stock-keeping on supply strategies*, International Annual Conference of the German OR Society 2012, Hannover, Germany
- 2012-07-07 *Prognoseverfahren für partiell bekannte Nachfragen und ihre Anwendung am Fallbeispiel des Theater Magdeburg*, Sommertagung 2012 der Wissenschaftlichen Kommission Logistik, Frankfurt (Main), Germany
- 2012-05-30 *Dual Sourcing Using Capacity Reservation and Spot Market: Optimal Procurement and Heuristic Parameter Determination*, 74. Wissenschaftliche Jahrestagung des VHB, Bolzano, Italy
- 2011-11-13 *Coordinating Multiple Spare Parts Procurement Options after End-of-Production*, INFORMS Annual Meeting 2011, Charlotte, USA (invited presentation)
- 2011-09-01 *A Heuristic for Dual Sourcing with Capacity Reservation and Stochastic Spot Market Prices*, International Conference on Operations Research 2011, Zürich, Switzerland
- 2010-10-15 *Heuristics for Sustainable and Efficient Spare Parts Procurement after End-of-Production*, Herbsttagung der Wissenschaftlichen Kommission Produktion-swirtschaft, Vallendar, Germany
- 2010-07-12 *The value of flexibility of different sourcing strategies for spare parts after end-of-production*, 24th European Conference on Operations Research (EURO), Lissabon, Portugal (invited presentation)
- 2009-09-25 *On how the acquisition of recoverable parts influences the profitability of spare parts management for durables*, Meeting of the Interlink Project "Supply Chain Sustainability", Brescia, Italy (invited presentation)
- 2009-01-24 *Zur Integration der Altteileaufarbeitung in die Beschaffung von Ersatzteilen*, Wintertagung der Wissenschaftlichen Kommission Operations Research, Ingolstadt, Germany
- 2008-09-04 *A Heuristic Approach for Integrating Product Recovery into Post PLC Spare Parts Procurement*, Operations Research Conference 2008, Augsburg, Germany
- 2008-06-12 *Ersatzteilversorgungsstrategien im After Sales-Geschäft: Risikobeherrschung durch Flexibilität*, 4. Wissenschaftssymposium Logistik der BVL, München, Germany

- 2008-05-16 *Modellgestützte Flexibilitätsanalyse von Strategien zur Ersatzteilversorgung in der Nachserienphase*, 70. Jahrestagung des VHB, Berlin, Germany
- 2007-09-27 *Ein heuristischer Ansatz für das Bestandsmanagement von Ersatzteilen nach Abschluss der Serienproduktion*, Logistik Management 2007, Regensburg, Germany
- 2007-01-20 *Dynamisches Bestandsmanagement in der Kreislauflogistik*, Wintertagung 2007 der Wissenschaftlichen Kommission Logistik, Halle (Saale), Germany
- 2006-10-10 *Coordination of Final Order Decision and Product Recovery in Spare Parts Management after End-of-Production*, 6th Workshop on Business Aspects of Closed Loop Supply Chains, Rotterdam, The Netherlands
- 2006-09-08 *Dynamic inventory management in reverse logistics*, Operations Research 2006, Karlsruhe, Germany
- 2006-08-24 *Inventory control of spare parts after end-of-production: The optimization problem and a heuristic approach*, 14th International Symposium on Inventories, Budapest, Hungary
- 2005-09-08 *Recovery knowledge acquisition in medium and long term planning of a joint manufacturing / remanufacturing system*, Operations Research 2005, Bremen, Germany
- 2004-09-03 *A dynamic model for determining the optimal time of a remanufacturing investment: results of a numerical investigation*, Operations Research 2004, Tilburg, The Netherlands
- 2003-09-04 *A Dynamic Model for Choosing the Optimal Technology in the Context of Reverse Logistics*, Symposium on Operations Research 2003, Heidelberg, Germany
- 2001-09-01 *Optimal control of a dynamic product recovery system in consideration of learning activities*, Fourth RevLog Summer Workshop, Costa da Caparica, Portugal
- 2001-08-10 *Optimal control of a capacitated dynamic product recovery system*, Fifth ISIR Summer School 2001, Loftahammar, Sweden
- 2000-09-11 *Balancing of Returns with Demands in Capacitated Dynamic Recovery Systems*, Symposium on Operations Research 2000, Dresden, Germany
- 2000-09-01 *Optimal Control of Production and Remanufacturing - A Simple Model and Extensions*, Third RevLog Summer Workshop, Wittenberg, Germany
- 2000-02-23 *Multiple options in dynamic product recovery systems*, Eleventh International Working Seminar on Production Economics, Innsbruck/IGLS, Austria
- 1999-11-26 *Optimal Control of Production and Remanufacturing*, International Workshop of the GOR Working Group "OR and Environmental Protection", Braunschweig, Germany
- 1999-09-02 *Optimale Steuerung von Produktion und Aufarbeitung*, Symposium on Operations Research 1999, Magdeburg, Germany

Honors

- 2013 Best Paper Award of the German Academic Association for Business Research
- 2013 Best Paper Award, 4th Annual Conference of the European Decision Science Institute, Budapest, Hungary
- 2006 Best Dissertation Prize of the German Operations Research Society
- 2005 Prize of the Faculty of Economics and Management, Otto von Guericke University Magdeburg, for the best Ph.D. thesis

Teaching experience

Otto von Guericke University Magdeburg

Business Forecasting, M.Sc. Management and Engineering, Summer 2018, Summer 2019, ca. 60 participants

Business Decision Analysis, B.Sc. Management and Economics, Summer 2017–2019, ca. 80 participants

Introduction to Production Management, B.Sc. Management, Winter 2018/19, Winter 2019/20, ca. 50 participants

Service Operations Management, M.Sc. Management and Engineering, Summer 2016, Summer 2017, ca. 20 participants

Service Logistik (**Logistics for After-Sales Services**), M.Sc. Management and Engineering, Summer 2010–2012, Summer 2014, Winter 2015/16–2016/17, ca. 50 participants

Decision Analysis, Bachelor Management and Economics, Winter 2008/09–2012/13, Winter 2014/15–2015/16, ca. 60 participants

Operations Management, Bachelor Management and Engineering, Winter 2011/12, ca. 70 participants (in German)

Produktionswirtschaft II (**Production Management**), M.Sc. Management and Engineering, Summer 2007–2010, ca. 120 participants (in German)

Unternehmenslogistik (**Logistics Management**), M.Sc. Management and Engineering, Summer 2007, ca. 80 participants (in German)

Produktionswirtschaft und Operations Research (**Introduction to Production Management and Operations Research**), Bachelor Management and Engineering, Winter 2006/07, ca. 600 participants (in German)

Introduction to Management, Bachelor Management and Economics, Winter 2011/12, ca. 80 participants

University Wuppertal

Supply Chain Management, M.Sc. Management and Engineering, Winter 2013/14, ca. 100 participants (in German)

Sustainable Supply Chain Management, M.Sc. Management and Engineering, Winter 2013/14, ca. 100 participants (in German)

Einführung in die Produktion (**Introduction to Production Management**), Bachelor Management and Engineering, Summer 2013, ca. 550 participants (in German)

Produktionsmanagement (**Production Management**), Bachelor Management and Engineering, Summer 2013, ca. 120 participants (in German)

Logistikmanagement (**Logistics Management**), Bachelor Management and Engineering, Summer 2013, ca. 120 participants (in German)

Business School Magdeburg

Production Management, International MBA, 2017, 2018

Produktionsmanagement (**Production Management**), MBA, 2007, 2014–2018 (in German)

Logistik (**Logistics**), MBA, 2011–2018 (in German)

Logistik (**Logistics**), BBA, 2006 (in German)

Produktionsplanung (**Production Planning**), BBA, 2005 (in German)

Selected Seminars

Project Seminar: Quantitative Methods for Business, B.Sc. Management, Winter 2017/18 - Winter 2019/20 (Spreadsheet Modeling, Optimization, Simulation, VBA Programming)

Seminar in Production and Logistics, B.Sc. Management, Winter 2017/18

International Logistics, B.Sc. Management, Winter 2016/17

Business Forecasting, M.Sc. Management, Summer 2016

Sustainable Supply Chain Management, M.Sc. Management, Summer 2014

Service Management, M.Sc. Management, Summer 2012

Angewandte Planung in Produktion und Logistik (**Software for Operations Management**), Bachelor Management, Summer 2009–2013 (in German)

Strategic Production Management, M.Sc. Management, Summer 2009

Spare Parts Logistics, M.Sc. Management, Summer 2008

Cases in Production and Logistics, M.Sc. Management, Summer 2007

Service

Reviewer activities

Applied Mathematical Modelling, Computers and Mathematics with Applications, Central European Journal of Operations Research, Decision Sciences, European Journal of Operational Research, Flexible Services and Manufacturing, International Journal of Production Economics, International Journal of Production Research, International Journal of Sustainable Engineering, Journal of Business Economics, Journal of Industrial and Management Optimization, Logistics Research, Mathematical and Computer Modelling, Omega, Operational Research, OR Spectrum, Production & Operations Management

List of projects supported by third-party funds

- Collaboration on INTERLINK project “Supply Chain Sustainability”, sponsored by the Italian Ministry of Education, University and Research (MIUR), 2006-2010
- Collaboration on TMR-Projekt “REVersed LOGistics”, sponsored by the European Commission (ERB 4061 PL 97-650), 1998-2002
- Grants for conference participations by German Society for Operations Research (GOR), German Academic Association for Business Research (VHB), and the German Academic Exchange Service (DAAD)

Internal services at Otto von Guericke University Magdeburg

- Member of the Apparatus and Computing Committee (substitutional), since 2016
- Task Force Member, Library Committee of the Faculty of Economics and Management, since 2016
- First-aider, Faculty of Economics and Management, since 2012
- Faculty search committees:
 - Prof. Marketing, 2012
 - Jun.-Prof. Accounting and Controlling, 2007
- Member of the Faculty Council, Faculty of Economics and Management (2011–2012)
- Member of the Examination Board, Faculty of Economics and Management (for 2 years)

- Organization of conferences:
 - Local organizing committee, 9th Workshop on Business Aspects of Closed Loop Supply Chains 2009, Braunschweig, Germany
 - Local organizing committee, Magdeburger Logistiktagung 2000, 2003 und 2008, Magdeburg, Germany
 - Local organizing committee, Symposium on Operations Research 1999, Magdeburg, Germany
- Doctoral dissertation committee member: Robin Hartwig (2015)

Memberships in professional societies

- since 2013 Deutscher Hochschulverband (German Association of University Professors and Lecturers, DHV)
- since 2012 Institute for Operations Research and Management Science (INFORMS)
- since 2008 Verband der Hochschullehrer für Betriebswirtschaft (German Academic Association for Business Research, VHB)
- since 1998 Gesellschaft für Operations Research (GOR)