

Erik Skov Madsen
Department of Technology and Innovation
SDU Engineering Operations Management
Email: esm@iti.sdu.dk
Phone: +4565507415



Publications

Retten til at reparere smartphones – hvad gør EU?

Madsen, E. S., 15. Dec 2023, In: Ingeniøren.com. 2 p.

Comparison of end-of-life value chains for decommissioned wind turbine blades

Lund, K. W. & Madsen, E. S., Nov 2022.

The researcher`s role in industrial sustainability transformations: The observer or the facilitator of new eco-systems?

Lund, K. W. & Madsen, E. S., Nov 2022.

Sustainability assessment of equipment for sectioning end-of-life wind turbine blades: A multi criteria decision making framework

Lund, K. W., Liep Nielsen, M. & Madsen, E. S., Jul 2022.

Establishing Sustainable Value Chains for Decommissioned Wind Turbine Blades: A Framework and a Case Study

Lund, K. W. & Madsen, E. S., Mar 2022.

A new Roadmap for Procurement and Sourcing Preparedness Activities in Humanitarian Disasters for NGOs

Wilhelm Lund, K. & Madsen, E. S., 2020, *Book of Proceedings - 27th EurOMA Conference : Managing Operations for Impact*. Warwick: University of Warwick, p. 69-78

A scientometric analysis of fourth-generation KM challenges: A systematic network analysis of last decade (2009-2019)

Verma, S., Wolf, P. & Madsen, E. S., 2020, *Proceedings - Knowledge in Digital Age*. Matera, Italy: IFKAD

Vedligehold 4.0

Madsen, E. S., 2020, *Vedligeholdelse: asset maintenance management*. West, S. A. (ed.). 5. ed. Den danske vedligeholdelsesforening, p. 101-118

Industry 4.0

Stentoft, J., Rajkumar, C. & Madsen, E. S., 4. Jun 2019, *Reducing Cost of Energy in the Offshore Wind Energy Sector: A Supply Chain Innovation Perspective*. Stentoft, J., Narasimhan, R., Wong, C. Y., Johnsen, T., Govindan, K., Mikkelsen, O. S., Madsen, E. S., Rajkumar, C. & Brinch, M. (eds.). Odense: Syddansk Universitetsforlag, p. 203-215 13 p.

Reducing Cost of Energy in the Offshore Wind Energy Sector: A Supply Chain Innovation Perspective

Stentoft, J. (ed.), Narasimhan, R. (ed.), Wong, C. Y. (ed.), Johnsen, T. (ed.), Govindan, M.E., PhD., K. (ed.), Mikkelsen, O. S. (ed.), Madsen, E. S. (ed.), Rajkumar, C. (ed.) & Brinch, M. (ed.), 4. Jun 2019, Odense: Syddansk Universitetsforlag. 244 p.

Improving Maintenance of Offshore Wind Farms through Modularization: A Supply Chain Innovation Perspective

Madsen, E. S., Petersen, K. R. & Bilberg, A., Jun 2019, *Reducing Cost of Energy in the Offshore Wind Energy Sector: A Supply Chain Innovation Perspective*. Stentoft, J., Narasimhan, R., Wong, C. Y., Johnsen, T., Govindan, K., Mikkelsen, O. S., Madsen, E. S., Rajkumar, C. & Brinch, M. (eds.). 1. ed. Syddansk Universitetsforlag, p. 133-139 2

Technology transfer as a part of the business – inter-organizational transfer strategies based on experiences of aircraft production

Frederiksson, A., Malm, A. & Madsen, E. S., 18. Feb 2019, In: Journal of Global Operations and Strategic Sourcing. 12, 1, p. 151-171

Giv os retten og muligheden for at reparere tilbage!

Madsen, E. S., 2019, In: *Aktuel Naturvidenskab*. 2019, 5, p. 12-14

På tærsklen til den fjerde industrielle revolution

Madsen, E. S., 2019, In: *Optimering*. 2019, p. 14-19 2.

The need for vocational education in operations and maintenance of offshore wind power

Madsen, E. S., 2019, *Reducing Cost of Energy in the Offshore Wind Energy Sector: A Supply Chain Innovation Perspective*. Stentoft, J., Narasimhan, R., Wong, C. Y., Johnsen, T., Govindan, K., Mikkelsen, O. S., Madsen, E. S., Rajkumar, C. & Brinch, M. (eds.). 1. ed. Syddansk Universitetsforlag, p. 193-201 3

Extreme E-waste generated from successful Operations Management? More focus on Design for Repair for Extension of Life

Madsen, E. S., Zhilyaev, D. & Parajuly, K., 24. Jun 2018. 9 p.

The Need for Knowledge Modification in Technology Change: - A Framework to Consider Changes in Domain Complexity, Knowledge and Productivity

Madsen, E. S. & Mikkelsen, L. L., 2018, In: *Production Planning & Control*. 29, 2, p. 91-105

Industry 4.0 in Danish Industry: An empirical investigation of the degree of knowledge, perceived relevance and current practice

Stentoft, J., Rajkumar, C. & Madsen, E. S., Jun 2017, Syddansk Universitet. 52 p.

Expert in Teams Course Demands Work on Real Problems

Madsen, E. S., 23. May 2017, *Exploring Teaching for Active Learning in Engineering Education : Book of Abstracts*. SDU Cortex Lab, p. 81-86 6 p.

Flexible automated manufacturing for SMEs

Grube Hansen, D., Bilberg, A. & Madsen, E. S., 2017, *IN-TECH 2017: Proceedings of International Conference on Innovative Technologies*. Tomaž, P., Zlatan, C. & Jan, K. (eds.). University of Rijeka, p. 225-228

Smart Factory: Growth through Collaboration and Technology

Bilberg, A., Radziwon, A., Grube Hansen, D. & Madsen, E. S., 2017, 24 p.

Svendborgbanen - en vaskeægte succes!

Madsen, E. S., 6. Jan 2016, In: *Fyns Amts Avis*. 1 p.

First Lean, then modularization: improving the maintenance of offshore wind turbines

Petersen, K. R., Madsen, E. S. & Bilberg, A., 2016, In: *International Journal of Energy Sector Management*. 10, 2, p. 221-244

Industry 4.0 and digitalization call for vocational skills, applied industrial engineering, and less for pure academics

Madsen, E. S., Bilberg, A. & Grube Hansen, D., 2016, *Proceedings of the 5th P&OM World Conference*. P&OM, 10 p.

Lifetime Impact Identification for Continuous Improvement of Wind Farm Performance

Petersen, K. R., Ruitenburt, R. J., Madsen, E. S., Braaksma, A. J. J. & Bilberg, A., 13. Sep 2015, *Pursuing Innovation Leadership: Proceeding of the 16th International CINet Conference*. Continuous Innovation Network, 9 p.

Hvad er egentlig filosofien (epistemologien) bag vedligehold? Bæredygtighed gennem vedligehold

Madsen, E. S., 10. Sep 2015, In: *Optimering*. 2015 September, 3, p. 10-12 3.

From Offshoring to Backshoring: The Path of Two Danish Companies and Implications in the Next Era of Chinese Manufacturing

Slepniov, D. & Madsen, E. S., 5. Sep 2015, *Proceedings of the Eleventh International Symposium on Global Manufacturing and China*. Wu, X. (ed.). University of Cambridge, 8 p.

Key drivers for informal project coordination among sub-contractors: A case study of the offshore wind energy sector

Aagaard, A., Eskerod, P. & Madsen, E. S., 7. Apr 2015, In: *International Journal of Managing Projects in Business*. 8, 2, p. 222-240 35 p.

Maintenance of Offshore Wind Farms Located far from the Coast: A Research of Challenges, new Strategies and Legislation

Madsen, E. S., Stentoft, J. & Petersen, K. R., 10. Mar 2015. 1 p.

Vocational Education and Vocational Skills: Urgent Need in European Production

Madsen, E. S., 2015. 7 p.

Vocational Education and Vocational Skills in Production: Urgent Need for Future Production Worldwide

Madsen, E. S., 2015, *Proceedings of the Eleventh International Symposium on Global Manufacturing and China*. Wu, X. (ed.). 1 ed. Cambridge: University of Cambridge, Institute of Manufacturing, 6 p.

Operation and maintenance of offshore wind farms: A new approach in a stochastic environment

Petersen, K. R., Madsen, E. S. & Bilberg, A., 20. Jun 2014. 10 p.

Knowledge Transfer and Manufacturing Relocation in International Manufacturing Networks

Madsen, E. S., 12. Jun 2014, *International Operations Networks*. Johansen, J., Farooq, S. & Cheng, Y. (eds.). London: Springer, p. 105-118

Exploring manufacturing solutions for SMEs

Radziwon, A., Blichfeldt, H., Bilberg, A., Madsen, E. S. & Bogers, M., Jun 2014. 10 p.

Den Smarte Fabrik: Udforskning af tilpasningsdygtige og fleksible produktionsløsninger

Radziwon, A., Bilberg, A., Bogers, M. & Madsen, E. S., 2014, *Supply Chain Udvikling for den reflekterende praktiker*. Vejrum Wæhrens, B. (ed.). Aalborg Universitetsforlag, p. 103-109

Knowledge Management i globale supply chains og produktion

Madsen, E. S., 2014, *Børsens Ledelseshåndbog*. Børsen Forum A/S

The managerial issues related to transferring shop floor knowledge in manufacturing relocation

Knudsen, M. P. & Madsen, E. S., 2014, In: *International Journal of Operations and Production Management*. 34, 11, p. 1389-1416

The Smart Factory: Exploring adaptive and flexible manufacturing solutions

Radziwon, A., Bilberg, A., Bogers, M. & Madsen, E. S., 2014, In: *Procedia Engineering*. 69, p. 1184-1190 7 p.

A study of current maintenance challenges in a large offshore wind farm: A case study

Petersen, K. R., Madsen, E. S. & Bilberg, A., 19. Sep 2013. 7 p.

THE INTERNATIONALISATION OF PRODUCTION: A NEW PRACTICE FOR SMEs

Cheng, Y. & Madsen, E. S., Jul 2013. 7 p.

Offshore Wind Power at Rough Sea: The need for new Maintenance Models

Petersen, K. R., Madsen, E. S. & Bilberg, A., 9. Jun 2013. 10 p.

Knowledge Transfer in International Manufacturing Networks: -An Empirical Study of European, Mexican and Chinese Sites

Madsen, E. S., 2013. 8 p.

Ledelse af viden

Madsen, E. S., 2013, *Håndbog for Maskinmestre*. West, S. A. (ed.). 10 ed. København: Maskinmestrenes Forening, Vol. 2 . p. 1549-1562 13 p.

Productivity? Domain Complexity vs. Tacit Knowledge

Madsen, E. S. & Mikkelsen, L. L., 3. Dec 2012. 13 p.

Complex Domains Call for Automation but Automation Requires More Knowledge and Learning: A Paradox in Manufacturing and Offshore Oil and Gas Production

Madsen, E. S. & Mikkelsen, L. L., 1. Jul 2012. 10 p.

Supply Chain Segmentation Models: A Question of Muddling Through?

Arvad Johansen, J., Madsen, E. S. & Arlbjørn, J. S., 7. Jun 2012, *NOFOMA 2012 - Proceedings of the 24th Annual Nordic Logistics Research Network Conference*. NOFOMA, p. 380-394 15 p.

The replication of expansive production knowledge: The role of templates and principles

Wæhrens, B. V., Yang, C. & Madsen, E. S., 2012, In: *Baltic Journal of Management*. 7, 3, p. 268-286

The Path from Outsourcing to Backsourcing: Debating its Logic and Consideration

Madsen, E. S. & Slepnirov, D., 5. Dec 2011. 12 p.

Levels of Outsourcing and Offshoring: from Law and Logic to Systems Integration

Madsen, E. S. & Slepnirov, D., 11. Sep 2011. 11 p.

Har vi sejret ad helvede til?

Madsen, E. S. & Matzen, D., 5. Apr 2011, In: *Fyens Stiftstidende*.

Bringing in new Practices: A learning arena to support transfer in global manufacturing

Madsen, E. S., Riis, J. O. & Wæhrens, B. V., Sep 2010, *The Proceedings of the 15th Annual Cambridge International Manufacturing Symposium: Innovation in global manufacturing - New models for sustainable value*. Cambridge, UK: University of Cambridge, Institute of Manufacturing, p. 364 - 377 13 p.

Projektet som arena for læring

Madsen, E. S., Aug 2010, In: *Projektledelse*. 2010, 3, p. 15-16 2 p.

Hvordan overføres viden i global produktion?

Madsen, E. S., 1. May 2010, In: *Fyens Stiftstidende*.

A learning arena for knowledge development by the use of didactics and situated learning: A framework to support individual, group and organizational learning in a manufacturing environment

Madsen, E. S., Riis, J. O. & Wæhrens, B. V., 2010, *Proceedings of the 17th International Annual EurOMA Conference: Managing Operations in Service Economics*. International Annual EUROMA Conference, 10 p.

Dispatching capacity in manufacturing facility offshoring

Madsen, E. S. & Knudsen, M. P., 2010, *Proceedings of the 17th International Annual EurOMA Conference*. 1 ed. International Annual EUROMA Conference, 10 p.

DISPATCHING CAPACITY IN MANUFACTURING FACILITY OFFSHORING: AN UNNOTICED ASPECT OF KNOWLEDGE TRANSFER

Madsen, E. S. & Knudsen, M. P., 2010, *Proceedings of the 22nd Annual NOFOMA Conference: Logistics and Supply Chain Management in a Globalised Economy*. Arlbjörn, J. S. (ed.). Syddansk Universitet. Institut for Entreprenørskab og Relationsledelse, p. 279-294 15 p.

Overførsel af viden ved flytning af produktion

Madsen, E. S., Riis, J. O. & Wæhrens, B. V., 2010, In: *Ledelse & Erhvervsøkonomi*. 75, 2, p. 41-54 13 p.

The Knowledge Dimension of Production Transfer

Riis, J. O., Wæhrens, B. V. & Madsen, E. S., 2010, *The proceedings of APMS 2009 - Advances in Production Management Systems: Production Management Systems: New Challenges, New Approaches*. APMS, 8 p.

Transferring Knowledge in the Relocation of Manufacturing Units

Yang, C., Madsen, E. S. & Liangsiri, J., 2010, In: *Strategic Outsourcing: An International Journal*. 3, 1, p. 5-19 12 p.

Building Fitness for Transfer - Transferring Manufacturing Knowledge Across Borders

Wæhrens, B. V., Madsen, E. S., Riis, J. O. & Slepnirov, D., 2009, *The Proceedings of the 16th International Annual Euroma Conference: Implementation - Realizing Operations Management Knowledge*. Johansson, M. & Jonsson, P. (eds.). 10 p.

Knowledge transfer in global production: The use of didactics and learning to transfer and to share tacit knowledge on the shop floor in a manufacturing environment

Madsen, E. S., 2009, Syddansk Universitet. Det Tekniske Fakultet. 282 p.

Means for Transferring Knowledge in the Relocation of Manufacturing Units

Yang, C., Madsen, E. S. & Liangsiri, J., 2009, *The Proceedings of the 16th International Annual Euroma Conference: Implementation - Realizing Operations Management Knowledge*. Johansson, M. & Jonsson, P. (eds.). 10 p.

Means for transferring knowledge in the relocation of manufacturing units

Madsen, E. S., Yang, C. & Liangsiri, J., 2008, *13th Annual Cambridge International Manufacturing Symposium*. Cambridge University Press, 15 p.

The Knowledge Dimension of Manufacturing Transfers: A method for identifying hidden knowledge

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2008, In: *Strategic Outsourcing: An International Journal*. 1, 3, p. 198-209 11 p.

The Knowledge Dimension of Production Transfer

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2008, *The Proceedings of the 3rd Nordic Workshop on Outsourcing*. Busi, M. (ed.). Carisma, 12 p.

Transfer of manufacturing units: Issues and dilemmas from a knowledge perspective

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2008, *The Proceedings of the 15th International Annual EurOMA 2008 Conference: Tradition and Innovation in Operations Management*. van der Vaart, T. & van Donk, D. P. (eds.). University of Groningen, 10 p.

Accelereret læring ved overførsel af tavs viden i Global Produktion

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2007. 23 p.

Nedbrud og Omstilling: at fange og overføre den dynamiske viden på produktionsgulvet

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2007, *The Proceedings of the 2nd Nordic Workshop on Outsourcing*. Forlag uden navn, 20 p.

To Capture Dynamic Shop Floor Knowledge in Global Production Networks

Madsen, E. S., Riis, J. O. & Sørensen, B. V., 2007, *Proceeding of the 8th International CINet Conference Continuous Innovation - Opportunities and Challenges*. Chalmers University, p. 409 - 420 12 p.

Bachelorprojekt løfter uddannelsen

Madsen, E. S. & Hundahl, M., 2006, In: Maskinmesteren. 6/7

Projects

DecomBlades: Decommissioning of wind turbine blades at their end of life

Madsen, E. S., Birkved, M., Lund, K. W. & Khoshnevisan, B.

01/01/2020 → 31/12/2023

Activities

Aalborg Universitet (External organisation)

Erik Skov Madsen (Member)

1. Jan 2018 → 31. Jan 2018

Bedømmelsesudvalg (Event)

Erik Skov Madsen (Chairman)

2017

Copenhagen School of Marine Engineering and Technology Management (External organisation)

Erik Skov Madsen (Member)

1. Mar 2020 → 20. Apr 2020

Den Danske Vedligeholdelsesforening - (DDV) - Bestyrelsesmedlem (External organisation)

Erik Skov Madsen (Member)

2012 → 2017

Digitalisering: Hvad betyder det for virksomheder og medarbejdere?

Erik Skov Madsen (Guest lecturer) & Arne Bilberg (Guest lecturer)

14. Mar 2018

Drivers and barriers for industry 4.0: Insights from a Danish large scale questionnaire-survey

Jan Stentoft (Speaker), Erik Skov Madsen (Other) & Christopher Rajkumar (Guest lecturer)

3. May 2017

Drivkræfter og barrierer for Industri 4.0 - Indsigt fra en større dansk undersøgelse

Erik Skov Madsen (Keynote speaker)

9. May 2017

En lærings arena for udvikling af viden ved hjælp af didaktik of situeret læring

Erik Skov Madsen (Lecturer)

28. Apr 2010

Experts in Teams Seminaret

Erik Skov Madsen (Participant)

1. Jun 2016

Håndtering af viden i en vedligeholdelsesorganisation

Erik Skov Madsen (Lecturer)

16. May 2013

How can the results from a research project about knowledge transfer be used in a windturbine company?

Erik Skov Madsen (Lecturer)

6. Mar 2010

Knowledge Management and Knowledge Transfer: Presentations at study tour for Danish SMEs to Detroit and Chicago, USA, - organized by Department of Human Factors, FORCE Technolgy, Kgs Lyngby, Denmark

Erik Skov Madsen (Lecturer)

8. Dec 2015 → 9. Dec 2015

Knowledge transfer in global produktion

Erik Skov Madsen (Lecturer)

4. Sep 2009

Linköping University (External organisation)

Erik Skov Madsen (Member)

11. Nov 2016

Maintech 2013

Erik Skov Madsen (Organizer)

16. May 2013

Maskinmesterskolen København / Copenhagen School of Marine Engineering and Technology Management (External organisation)

Erik Skov Madsen (Member)

9. Feb 2019

Modularisering af produkter og service – lettere håndtering af varians?

Erik Skov Madsen (Lecturer)

8. Jun 2016

Modularizaion of Maintenance in the Offshore Wind Power Sector

Erik Skov Madsen (Panel member)

8. Mar 2018

Øget bæredygtighed ved produktion af øl og læskedrik – et forskningsprojekt i samarbejde med MADE, Carlsberg og SDU

Erik Skov Madsen (Speaker)

6. Oct 2021

Overførelse af (tavs) videnGlobal produktion og offshore vindkraft: - relationen til sygepleje?

Erik Skov Madsen (Lecturer)

26. Mar 2014

Overførelse af tavs viden i global produktion

Erik Skov Madsen (Guest lecturer)

2. May 2013

Overførelse af viden i global produktion og Vedligehold af offshore vindkraft: Forskningens Døgn

Erik Skov Madsen (Lecturer)

23. Apr 2015

Overførelse af viden i global produktion og Vedligehold af offshore vindkraft: Forskningens Døgn

Erik Skov Madsen (Guest lecturer)

27. Apr 2017

PhD bedømmelsesudvalg (Formand) (Event)

Erik Skov Madsen (Chairman)
6. Jun 2017

PhD evaluation and defence (Event)

Erik Skov Madsen (Chairman)
15. Aug 2022 → 15. Oct 2022

PhD evaluation and defence (Event)

Erik Skov Madsen (Member)
15. Aug 2022 → 15. Nov 2022

Project - SDC

Erik Skov Madsen (Participant)
2012 → ...

Research project - Energy at the Sea

Erik Skov Madsen (Participant)
Jan 2012 → 1. May 2013

Research Project: New Models for Maintenance of Offshore Wind Farms

Erik Skov Madsen (Supervisor)
1. Dec 2012 → 1. Feb 2016

Secop Compressors (Tianjin) Co., Ltd. Wuqing Development Area, Tianjin, China (External organisation)

Erik Skov Madsen (Member)
2011 → 2012

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Chairman)
2016

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Chairman)
2014

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Member)
2013

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Member)
2013

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Member)
2012

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Member)
2012

SIMAC - Svendborg, Lektorat (External organisation)

Erik Skov Madsen (Member)
2012

SIMAC - Svendborg: Lektorat (External organisation)

Erik Skov Madsen (Chairman)
2014

The Consultative Research Committee for Development Research - Ministry of Foreign Affairs of Denmark (External organisation)

Erik Skov Madsen (Member)
Feb 2017 → ...

Ukendt (External organisation)

Erik Skov Madsen (Participant)
2014 → 2019

University of Southern Denmark (External organisation)

Erik Skov Madsen (Chairman)
6. Mar 2020

University of Twente

Erik Skov Madsen (Visiting researcher)
6. Mar 2018 → 8. Mar 2018

Vedligehold 4.0

Erik Skov Madsen (Guest lecturer)
25. Feb 2020

Vejen fra maskinarbejder til forsker - fra Industry 1.0 til 5.0

Erik Skov Madsen (Keynote speaker)
13. Oct 2022

Videnoverførsel i global produktion

Erik Skov Madsen (Lecturer)
24. Nov 2009

Videnoverførsel i global produktion

Erik Skov Madsen (Lecturer)
1. Sep 2009

WIND ENERGY DENMARK 2018 - Conference

Erik Skov Madsen (Participant)
30. Oct 2018