

SUNE DUEHOLM MÜLLER

Associate Professor

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ACADEMIC EXPERIENCE

SCIENTIFIC FOCUS AREAS:

- ★ Digital innovation
- ★ Process innovation
- ★ Business process management

PROJECT MANAGEMENT:

- ★ Managing the project (2016-Present)
“Digital innovation of Danish Healthcare”
in collaboration with Regionshospitalet Randers
(for more information, please contact innovation consultant Marie Louise Ladefoged: <http://www.regionshospitalet-randers.dk/afdelinger/administration/innovation>).
- ★ Managing the project (2014-Present)
“Google Glass in Agriculture”
together with SEGES and Business Academy Aarhus.
(<http://mgmt.au.dk/research/innovation-entrepreneurship-and-information-systems/research/information-systems-research-group/google-glass-in-agriculture>)
- ★ Participation in the **DISIMIT Research Project** at Aalborg University (2010-2012).

CONFERENCES:

- ★ **Chair for the “IT Innovation” working group** at the 38th Information Systems Research Seminar in Scandinavia (IRIS38), August 9-12 2015, Oulu, Finland.
- ★ **Served as Associate Editor** for ICIS 2013, the Business Process Management track.
- ★ **Conference presentation at HICSS 48:**
The 48th Annual Hawaii International Conference on System Sciences (HICSS), January 5th – 8th 2015, Kauai, Hawaii.
- ★ **Conference presentation at HICSS 47:**
The 47th Annual Hawaii International Conference on System Sciences (HICSS), January 6th – 9th 2014, Big Island, Hawaii.
- ★ **Presentation at the 2011 pre-ICIS SIG eGovernment workshop**, The 2011 International Conference on Information Systems (ICIS 2011), December 4th – 7th 2011, Shanghai, China.
- ★ **Conference presentation at ECIS2008:**
The 16th European Conference on Information Systems (ECIS2008), June 9th – 11th 2008, Galway, Ireland.
- ★ **Conference presentation at ISD2007:**
The 16th International Conference on Information Systems Development, August 29th – 31st 2007, Galway, Ireland.
- ★ **Participation in Symposium on Software Process & Knowledge**, Aalborg, 28th – 29th January 2006.

EDUCATION

- 2009 • **Ph.D. in Information Systems Research**
Aarhus School of Business
University of Aarhus, Denmark
- 2003 • **MSc in Information Technology**
Aarhus School of Business
University of Aarhus, Denmark
- 2001 • **BSc in Political Science**
Aarhus School of Business
University of Aarhus, Denmark

EMPLOYMENT

- 2014-Present • **Associate Professor**
Department of Management
University of Aarhus, Denmark
- 2013-2014 • **Associate Professor**
Department of Business Administration
University of Aarhus, Denmark
- 2010-2013 • **Assistant Professor**
Center for IS Management
Aalborg University, Denmark
- 2010 • **Manager**
Integrated Defense Systems
Terma, Denmark
- 2008-2010 • **Manager**
Process Improvement
Terma, Denmark
- 2007-2008 • **Business Process Engineer**
Terma, Denmark
- 2004-2009 • **Industrial PhD Student**
Terma, Denmark
- 2003-2004 • **Research Assistant, Informatics**
Aarhus School of Business
University of Aarhus, Denmark
- 2002-2003 • **Teaching Assistant, Informatics**
Aarhus School of Business
University of Aarhus, Denmark
- 2001-2003 • **Customer Service Representative**
TDC, Denmark

REVIEWS:

SERVED AS REVIEWER FOR THE FOLLOWING CONFERENCES AND JOURNALS:

- ✧ European Journal of Information Systems
- ✧ Journal of Systems and Software
- ✧ Wirtschaftsinformatik
- ✧ International Journal of Production Economics
- ✧ International Conference on Information Systems (ICIS)
- ✧ European Conference on Information Systems (ECIS)
- ✧ International Conference on Software Engineering (ICSE)

COMMITTEES:

- ✧ **Chairman of PhD committee;** Lars Haahr's PhD thesis (February 2016): Social Media as Organizing Vision? An Interpretive Field Study of How Formal Organizations Respond to Social Media.
- ✧ **Member of assessment committee** evaluating applications for the position (# 776977) of external lecturer ("ekstern lektor") at Department of Management, Aarhus University 2015.
- ✧ **Member of assessment committee** evaluating applications for the position (# 750411) of Assistant Professor at Department of Management, Aarhus University 2015.
- ✧ Participation in "Udviklingsgruppen for identificering og udvikling af samfundsvidenskabelige IKT-kompetencer på Aalborg Universitet".

TEACHING PORTFOLIO

MASTER OF SCIENCE (MSc) COURSES:

- * **Lecturer in "IS Strategy and Management" (2013-16)**, MSc in Economics and Business Administration - Information Management.
- * **Lecturer in "Informationssystemers rolle i organisationer" (2010-14)**, MSc in IT (Danish: "cand.it. i It-ledelse"), Aalborg University.
- * **Lecturer in "It-baseret forbedring af organisatoriske processer" (2011-2014)**, MSc in IT (Danish: "cand.it. i It-ledelse"), Aalborg University.
- * **Lecturer in "Business Process Management and Innovation" (2015-17)**, Master of IT (for ICT professionals), It-vest.
- * **Guest lecturer in "It-forretningsmuligheder og tilbudsproces" (2010-2013)**, "IT-lederen" (2011), and "IT-organisationen" (2011-12), Master of IT (for ICT professionals), It-vest.
- * **Co-examiner in "Informationsteknologi, programmering og databasesystemer" (2010)**, MSc in IT (Danish: "cand.it. i It-ledelse"), Aalborg University.

BACHELOR OF SCIENCE (BSc) COURSES:

- * **Lecturer in "Organisering og Forretningsmodeller for IT-innovationer" (2013-16)**, BSc in IT, Aarhus University.
- * **Lecturer in "Brugerrettet IT-Innovation" (2013-15)**, Bsc in Business Administration and Information Technology, Aarhus University.

SUPERVISION:

- * PhD students Kathrine Stampe (2016) and Maria Festila (2016).
- * Research trainees (Danish: forskningspraktikanter) Hans Henrik Balshøj (2007), Morten Boldsen (2007), Ann Nørgaard Dorset & Laura Nicoline Purup (2011-12), Hans Christian Hvistendahl & Chris Kovács (2011-12), Elisa Bang Møller & Thomas Jakobsen Nygaard (2011-12), Frank Ulrich (2011-12); Sofie Abildgaard Skau (2012-13), Martin Rother Petersen & Morten Dybdal (2012-13), Stefan Holm & Jens Søndergaard (2013), Espen Fjeld (2014), Mads Hundahl (2014-15), Jakob Vang Glud & Gunnar Johildarson (2015), Preben Jensen (2015), Kathrine Stampe (2015), and Niels Elmegaard Bæk (2016).
- * 50+ master thesis students.

ADMINISTRATIVE RESPONSIBILITIES:

- * **Study coordinator (2014-16)** of the Master of Science (MSc) program in Information Technology (Danish: "cand.it. i It, kommunikation og organisation"), Aarhus University.
- * **Study coordinator (2012-13)** of the Master of Science (MSc) program in Information Technology (Danish: "cand.it. i It-ledelse"), Aalborg University.

PRACTITIONER TRAINING PROGRAMMES:

- * **"CMMI Intro"**: CMMI introduction for Terma managers (2005-2006), Terma Academy.
- * **"Requirements Management and DOORS"**: Educating Terma employees – project managers, system engineers, and project participants – in requirements management at Terma, including tool (DOORS) support (2008-2010), Terma Academy.
- * **"JIRA Introduction"**: Educating Terma employees in the use of JIRA – a bug, issue, and project tracking tool for software development (2010), Terma Academy.
- * **"Terma Management System 2"**: Introducing all Terma employees to the Terma Management System – an ISO 9001 certified quality management system (2009-2010), Terma Academy.
- * **"Terma Management System for Managers"**: Informing Terma managers about their roles and responsibilities (2010-2010), Terma Academy.

LABORATORY TEACHING:

- * **Instructor (2002-2003)**: the course "Systems Development and Databases"; the Master of IT programme at the Aarhus School of Business, Aarhus University.
- * **Instructor (2002-2003)**: the course "[Java] Programming"; the Master of IT programme at the Aarhus School of Business, Aarhus University.

PROFESSIONAL EXPERIENCE

MANAGEMENT EXPERIENCE WITH:

- **CMMI based Software Process Improvement (SPI)**. Terma's SPI project (2004-2007) targeting CMMI level 2. Roles and Responsibilities: *CMMI training and maturity assessments*.
- **Metrics**. Establishing production metrics (Line of Balance) to accommodate information need on

- Joint Strike Fighter (F-35) programme.
Roles and Responsibilities: *project manager*.
- **Obsolescence management.**
Improving processes related to Diminishing Manufacturing Sources and Material Shortages (DMSMS).
Roles and Responsibilities: *project manager*.
 - **Personnel management.**
Directing and coaching employees; staff development.
Roles and Responsibilities: *department manager*.
 - **Portfolio management.**
Planning, prioritizing between, initiating, and monitoring company portfolio of improvement projects. Roles and Responsibilities: *corporate-wide SPI manager*.
 - **Product management.**
Defining corporate product management strategy and product life-cycle model. Roles and Responsibilities: *project manager*.
 - **Project status reporting.**
Calculating and reporting on key financial figures.
Roles and Responsibilities: *responsible for financial status reporting on all company projects to executive management*.
 - **Risk management.**
Improving processes related to risk mitigation; implementing risk management software (DOORS).
Roles and Responsibilities: *Process owner; responsible for DOORS (technical contact)*.
 - **Scrum.**
Deployment of Scrum (agile software development framework). Roles and Responsibilities: *project owner*.
 - **Supplier management.**
Improving processes related to (i) approving and monitoring suppliers, and (ii) quality inspection.
Roles and Responsibilities: *project manager*.

MANAGEMENT COURSES ATTENDED:

- Fra faglig specialist til personaleleder, CfL (2009)
- Lean ledelse i servicevirksomheder, Mannaz (2009)
- Lederen som coach, Mannaz (2009)
- Mastering Process Improvement, Software Engineering Institute,
- Carnegie Mellon University (2007)
- CMMI Version 1.2 Upgrade Training, Software Engineering Institute,
- Carnegie Mellon University (2007)
- Intermediate Concepts of Capability Maturity Model Integration (CMMI),
- Software Engineering Institute, Carnegie Mellon University (2005)
- Introduction to Capability Maturity Model Integration (Staged Representation), V1.1, Borland (2005)

LIST OF PUBLICATIONS¹

ARTICLES:

- ✂ Müller, S., Mathiassen, L., Saunders, C. & Kræmmergaard, P. (2017),
“*Political Maneuvering During Business Process Transformation: A Pluralist Approach*”, Journal of the Association for Information Systems, vol. 18, no. 3, pp. 173-205. *
- ✂ Müller, S. & Jensen, P. (2017),
“*Big Data in the Danish Industry: Application and Value Creation*”, accepted for publication in Business Process

- ✂ Management Journal (Manuscript ID BPMJ-01-2016-0017)•
- ✂ Ulrich, F., Mengiste, S. & Müller, S. (2015),
“*Informal Evaluation and Institutionalization of Neoteric Technology Ideas: The Case of Two Danish Organizations*”, Communications of the Association for Information Systems, vol. 37, Article 47, pp. 949-974. *
- ✂ Müller, S., Holm, S. & Søndergaard, J. (2015),
“*Cloud Computing: Toward a Maturity Model*”, Communications of the Association for Information Systems, vol. 37, article 42, pp. 851-878. *
- ✂ Müller, S. & Skau, S. (2015),
“*Success Factors Influencing Implementation of E-government at Different Stages of Maturity: A Literature Review*”, International Journal of Electronic Governance, vol. 7, no. 2, pp. 136-170. •
- ✂ Müller, S. & Nielsen, P. (2013),
“*Competing Values in Software Process Improvement: A Study of Cultural Profiles*”, Information Technology & People, vol. 26, no. 2, pp. 146-171. *
- ✂ Müller, S. & Ulrich, F. (2013),
“*Creativity and Information Systems in a Hypercompetitive Environment: A Literature Review*”, Communications of the Association for Information Systems, vol. 32, no. 7, pp. 175-200. *
- ✂ Müller, S., Mathiassen, L. & Balshøj, H. (2010),
“*Software Process Improvement as Organizational Change: A Metaphorical Analysis of the Literature*”, Journal of Systems and Software, vol. 83, no. 11, pp. 2128-2146. •
- ✂ Müller, S., Kræmmergaard, P. & Mathiassen, L. (2009),
“*Managing Cultural Variation in Software Process Improvement: A Comparison of Methods for Subculture Assessment*”, IEEE Transactions on Engineering Management, vol. 56, no. 4. •

MONOGRAPHS:

- ✂ Müller, S. (2008),
“*The Politics of Process Implementation: Explaining Variations Across Units in a High-Tech Firm*”, ISBN: 978-8778823-40-3,
Aarhus School of Business, Denmark.

REFEREED PROCEEDINGS:

- ✂ Festila, M. & Müller S. (2017),
“*The Impact of Technology-Mediated Consumption on Identity: The Case of Airbnb*”, accepted for publication at The 50th Hawaii International Conference on System Sciences (HICSS). •
- ✂ Müller, S. & Fjeld, E. (2015),
“*The Effects of Information Technology on Business Model Innovation*”, Proceedings of the 38th Information Systems Research Seminar in Scandinavia (IRIS38), August 9-12 2015, Oulu, Finland. •
- ✂ Müller, S. & Ulrich, F. (2015),
“*The Competing Values of Hackers: The Culture Profile that Spawned the Computer Revolution*”, The 48th Hawaii International Conference on System Sciences (HICSS), pp. 3434-3443. •
- ✂ Müller, S., Ulrich, F. & Nielsen, P. (2014),
“*When Process Is Getting in the Way of Creativity and*

¹An asterisk (*) indicates BFI-level 2, and a bullet (•) indicates BFI-level 1 as per <http://ufm.dk/forskning-og-innovation/statistik-og-analyser/den-bibliometriske-forskningsindikator/autoritetslister/autoritetslister-for-serier-2016-2017-xlsx.pdf>.

- Innovation**", The 47th Hawaii International Conference on System Sciences (HICSS), pp. 221-229. •
- ✎ Müller, S., Møller, E. & Nygaard, T. (2012), **"IT-enabled Process Innovation: A Literature Review"**, Proceedings of the Eighteenth Americas Conference on Information Systems, Seattle, Washington, August 9-12, 2012. •
- ✎ Müller, S., Reinwald, A. & Kræmmergaard, P. (2011), **"Dynamic Relationships in E-Government Initiatives: Craftsmanship, Partnership, Companionship, and Entrepreneurship"**, The 2011 pre-ICIS SIG eGovernment workshop, The 2011 International Conference on Information Systems (ICIS 2011).
- ✎ Müller, S., Nielsen, P. & Boldsen, M. (2008), **"An Examination of Culture Profiles in a Software Organization Implementing SPI"**, Proceedings of the 16th European Conference on Information Systems (ECIS2008), June 9-11, Galway, Ireland. •
- ✎ Müller, S., Nørbjerg, J. & Cho, H. (2007), **"Assessment Tools as Drivers for SPI: Short-term Benefits and Long-term Challenges"**, Proceedings of the 30th Information Systems Research Seminar in Scandinavia (IRIS30), August 11-14 2007, Tampere, Finland. •
- ✎ Müller, S., Nørbjerg, J. & Cho, H. (2007), **"Assessment Tools as Drivers for SPI: Short-term Benefits and Long-term Challenges"**, Proceedings of the 16th International Conference on Information Systems Development (ISD2007), August 29-31 2007, Galway, Ireland.

BOOK CHAPTERS:

- ✎ Müller, S., Nielsen, P. & Nørbjerg, J. (2008), **"Standards, Processes and Practice in SPI"** in Software Processes & Knowledge. Beyond Conventional Software Process Improvement, eds. Nielsen, P. & Kautz, K., Software Innovation Publisher, Aalborg.

WORKING PAPERS:

- ✎ Müller, S., Mathiassen, L., & Saunders, C. (2017), **"Pluralist Theory Building: A Critical Approach to Generalization from Qualitative Data"**, submitted for review to Journal of the Association for Information Systems (Manuscript ID: RA-JAIS-17-0040).
- ✎ Stampe, K. & Müller, S. (2016), **"The Intertwining of Technologies and Work Practices: The Case of Google Glass in Danish Agriculture"**, submitted for review to Scandinavian Journal of Information Systems (Manuscript ID: #1485).
- ✎ Müller, S., Rodil, L., & Påske, N. (2016), **"Managing Ambidexterity in Startups pursuing Digital Innovation"**, submitted for review to Communications of the Association for Information Systems (Manuscript ID: Regular Article-17-009).
- ✎ Heeager, L. & Müller, S. (2016), **"Balancing flexibility and control: competing values in software development"**, submitted for review to IEEE Transactions on Software Engineering (Manuscript ID: TSE-2015-11-0369).
- ✎ Obwegeser, N. & Müller, S. (2016), **"Innovation and public procurement: Terminology, Concepts, and Applications"**, submitted for review to Technovation (Manuscript no.: TECHNOVATION-D-16-00282).
- ✎ Müller, S. & de Lichtenberg, C. (2016),

- "The culture of ITIL: values and implementation challenges"**, submitted for review (2nd review) to Information Systems Management (Manuscript ID: UISM-2015-146.R2).
- ✎ Müller, S., Glud, J., & Johildarson, G. (2016), **"The Impact of Organizational Culture on Digital Innovation: The Case of a Danish Newspaper Company"**, submitted for review to Scandinavian Journal of Information Systems (Manuscript #: 1526).
- ✎ Müller, S. & Hundahl, M. (2016), **"IT-Driven Business Model Innovation: Sources and Ripple Effects"**, submitted for review to Information Systems and e-Business Management (Manuscript ID: ISEB-D-17-00034).
- ✎ Ulrich, F. & Müller, S. (2016), **"Encouraging Divergent Thinking from Knowledge Generated during Idea Evaluation: A Design Experiment with Creativity Enhancing Systems"**, submitted for review to Creativity and Innovation Management (Manuscript ID: 1366-CIM-A-02-2016).
- ✎ Ulrich, F. & Müller, S. (2016), **"Hack the Business: Decoding the Innovation Outlaws"**, submitted for review to IT Professional (Manuscript ID: ITPro-2017-02-0024).
- ✎ Müller, S. & Bæk, N. (2017), **"Value Co-creation through Digital Innovation"**, submitted for review to the International Conference on Information Systems 2017 (Manuscript ID: ICIS-0245-2017).
- ✎ Müller, S., Mathiassen, L. & Saunders, C. (2016), **"Pluralist Theory Building: A Critical Approach to Generalization from Qualitative Data"**, invited submission to special issue of the Journal of the Association for Information Systems.
- ✎ Müller, S., Dorset, A. & Purup, L. (2013), **"IS Driven Process Innovation: A Literature Review Based on Swanson's Tri-Core Model of IS Innovation"**.