ERCIM fellowship Programme
Final scientific report

Fellow	Christian **Dremel**

Host Organisation	NTNU

Scientific coordinator	Patrick **Mikalef**
	Full Professor
	patrick.mikalef@ntnu.no
	Høgskoleringen 1, 7034 Trondheim, Norway

I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

The fellowship helped me to conduct several research activities with a diverse set of collaborators across the world. The topics include the following:
- Research on governance and control of AI
- Research on orchestrating AI resources
- Research on sourcing emerging technologies e.g., AI & big data technologies
- Research on digital innovation and transformation
  - Inertia in digital transformation
  - Digital innovation and transformation through digital innovation units

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

1. Herterich, M., Dremel, C., Wulf, J. & vom Brocke, J. (2022). How Smart Service Ecosystem Emerge – The Role of Shared, Organizational, and Collective Affordances. Information Systems Journal
2. de Paula, D., Marx, C., Wolf, E., Dremel, C, Cormican, K. & Uebernickel, F. (2022). A managerial mental model to drive innovation in the context of digital transformation, Industry and Innovation.
3. Roman, R., Dremel, C., Bosch, S., Steinacker, L., Meckel, M. & Leimeister, J.-M. (2022). Quantum Computing. Electronic Markets.
4. Haskamp, T., Dremel, C., Berente, N., Yoo, Y. & Uebernickel F. (2022). Punctuated Multi-Layered Liminality in Digital Transformation: The Case of an Automotive Platform. Proceedings of the 43rd International Conference on Information Systems. Copenhagen, Sweden. Completed Research.
5. Lorson A., Dremel, C. & Uebernickel, F. (2022). Evolution of Digital Innovation Units for Digital Transformation – The Convergence of Motors of Change. Proceedings of the 43rd International Conference on Information Systems. Copenhagen, Sweden. Completed Research.
6. Lorson, A., Dremel, C., Depaula, D. & Uebernickel, F. (2022). Beyond the Fast Lane Narrative - A Temporal Perspective on the Unfolding of Digital Innovation in Digital Innovation Units. Proceedings of the 30th European Conference on Information Systems. Timisoara, Romania. Category: Completed Research.
7. H oller, M., Dremel, C., Hehn, J., Benjamin, V., & Galeno G. (2022). Digitale Plattformen in der Praxis – Einsatz- und Entwicklungsmodelle. HMD 59, 1258–1268.
8. Papagiannidis, E., Enholm, I., Dremel, C., Mikalef, P. & Krogstie J. (2021). Toward AI Governance: Identifying Best Practices and Potential Barriers and Outcomes. Information System Frontiers.
9. Trocin, C., Hovland, I., Mikalef, P. & Dremel, C. (2021). How Artificial Intelligence enables process innovation: A cross-case analysis of Scandinavian companies. Technology Forecasting & Social Change.
10. Gerster, D., Dremel, C., Mayer, R., Conboy, K. & Vom Brocke J. (2021). Managing Time Complexity: How More Considered Thinking about Time Helped Fujitsu to Set a Guinness World Record. MIS Quarterly Executive.
11. Haskamp, T., Dremel, C., Marx, C & Uebernickel F. (2021). Understanding Inertia in Digital Transformation: A Literature Review and Multilevel Research Framework. Proceedings of

the 42nd International Conference on Information Systems. Austin, USA. Completed Research.

12. Hirschlein, N. & Dremel, C. (2021). How to Realize Business Value through a Big Data Analytics Capability – Results from an Action Design Research Approach. Proceedings of the 42nd International Conference on Information Systems. Austin, USA. Rubrik: Completed Research.

13. Hirschlein, N, Merkenstock, J-N & Dremel, C. (2021). Towards Bridging the Gap Between BDA Challenges and BDA Capability: A Conceptual Synthesis Based on a Systematic Literature Review. Proceedings of the 54th Hawaiian Conference on Systems Science. Maui, HI, USA. Completed Research.

14. Papagiannidis, E., Enholm, I., Dremel, C. Mikalef, P. & Krogstie J. (2021). Deploying AI Governance practices: A revelatory case study. Proceedings of the 20th IFIP Conference e-Business, e-Services, and e-Society. Galway Ireland.

15. Holler, M., Dremel, C., Van Giffen, B. & Vogt, H. (2021). From Smart Connected Products to Systems of Systems: Case Study and Archetypes. IFIP 18th International Conference on Product Lifecycle Management

16. Haskamp, T., Dremel, C. & Uebernickel F. (2021). Towards a Critical Realist Understanding of Digital Transformation: Results of a Structured Literature Review. Proceedings of the 27th Americas Conference on Information Systems. Completed Research.

17. Dremel, C. & Rietsche R. (2021). Der Traum vom Mehr: Wie Quanten die Industrie beflügeln. ada-magazin – heute das morgen verstehen.

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

2021: International Conference on Information Systems. Austin, USA.

IV – RESEARCH EXCHANGE PROGRAMME (REP)

Due to COVID 19 the REP could not be performed in person but was done online with Inestec
https://www.inesctec.pt/en