Understanding digital in management and innovation research

Professor Llewellyn D W Thomas
IESE Business School

Course code: DOEC1145
Time: May 14 – 16, 2024
Location: University of Zürich

Date	Time	Room
May 14	09:30 – 17:00	SOC-E-010
May 15	09:30 – 12:00 12:30 – 17:00	SOC-E-010 HIM-E-4
May 16	09:30 – 17:00	HIM-E-4

Language: English
ECTS: 3
Grading Scale: Pass/Fail
Application: by March 8, 2024

The seminar takes place on site. Attendance in person is compulsory.

The number of participants is limited. To apply for participation with your CV and a short motivational statement by March 8, 2024 by sending an email to tim@business.uzh.

Course Overview

In this doctoral seminar we explore of the role digital technologies play in the modern economy. We delve into the complex topics of digitalization, digital business models, digital innovation, data, artificial intelligence, digital transformation, and the dark side of digital. Participants will engage with both classic and cutting-edge research that illuminate how scholars have considered digital technology, fostering a comprehensive understanding of its impact on, and role in, management and innovation studies. The seminar aims to equip doctoral candidates with the analytical tools and theoretical frameworks necessary to navigate and contribute to the evolving discourse on digital technologies in management and innovation.

Course Delivery

The course will be in discussion format rather than lectures. The seminars will consist of students reading key papers from each of the topics and presenting an overview of one of the papers. Through a critical class discussion about the relevance and impact of the papers, we will together develop our understandings of the digital in management and innovation research. Our discussions will be driven by your insights, questions, concerns, and observations as you read and reflect on the readings and as you relate these readings to your research.

Seminar advance preparation

You will be allocated a paper from the readings for each session. For this paper you should prepare a **ten-minute** overview presentation. This overview should include (but is not limited to): The paper's objective(s), underlying theoretics, method(s), findings, and contributions; an evaluation of the study's strengths and weaknesses; and the implications for management and innovation research. You will also be allocated another *three papers* from the session which you should read beforehand and be prepared to discuss.

Course Assessment

Successful completion of this course requires thorough review of all assigned readings, active engagement during seminar sessions, and presentation of an assigned paper per session. Meeting all these criteria is essential for passing the course.

Course Schedule

Tuesday, **14.5.2024**

9:30 – 11:45 room tbd.
Introduction to the seminar
Session 01: *Digitalization*

12:00 – 13:00
Paper Presentation Prof. Llewellyn
PLM 103/104, Plattenstrasse 14

13:00 – 14:00
lunch break

14:00 – 17:00 room tbd.
Discussion on paper presentation
Session 02: *Digital Business Models*

Wednesday, **15.5.2024**

10:00 – 12:30 room tbd.
Session 03: *Digital Innovation*

12:30 – 13:30
lunch break

13:30 – 16:00 room tbd.
Session 04: *Data and AI*

Thursday, **16.5.2024**

10:00 – 12:30 room tbd.
Session *05: Digital Transformation*

12:30 – 13:30
lunch break

13:30 – 16:15 room tbd.
Session 0*6: The Dark Side of Digital*
Closing of the seminar

Course Structure

Session 01: Digitalization

- Sambamurthy, V., Bharadwaj, A., & Grover, V. 2003. Shaping Agility through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms. ***MIS Quarterly***, 27(2): 237–263.
- Orlikowski, W. J., & Scott, S. V. 2008. Sociomateriality: Challenging the Separation of Technology, Work and Organization. ***Academy of Management Annals***, 2(1): 433–474.
- Belk, R. W. 2013. Extended Self in a Digital World. ***Journal of Consumer Research***, 40(3): 477–500.
- Autio, E., Nambisan, S., Thomas, L. D. W., & Wright, M. 2018. Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. ***Strategic Entrepreneurship Journal***, 12(1): 72–95.
- Balsmeier, B., & Woerter, M. 2019. Is this time different? How digitalization influences job creation and destruction. ***Research Policy***, 48(8): 103765.
- Kronblad, C. 2020. How Digitalization Changes our Understanding of Professional Service Firms. ***Academy of Management Discoveries***, 6(3): 436–454.
- Gradillas, M., & Thomas, L. D. W. 2023. Distinguishing digitization and digitalization: A systematic review and conceptual framework. ***Journal of Product Innovation Management***.

Session 02: Digital Business Models

- Garud, R., & Kumaraswamy, A. 1993. Changing competitive dynamics in network industries: An exploration of Sun Microsystems' open systems strategy. ***Strategic Management Journal***, 14(5): 351–369.
- Amit, R., & Zott, C. 2001. Value creation in e-business. ***Strategic Management Journal***, 22(6–7): 493–520.
- West, J. 2003. How open is open enough? ***Research Policy***, 32(7): 1259–1285.
- Leiponen, A. E. 2008. Competing Through Cooperation: The Organization of Standard Setting in Wireless Telecommunications. ***Management Science***, 54: 1904–1919.
- Parker, G., van Alstyne, M., & Jiang, X. 2017. Platform Ecosystems: How Developers Invert the Firm. ***MIS Quarterly***, 41(1): 255–266.
- Stonig, J., Schmid, T., & Müller-Stewens, G. 2022. From product system to ecosystem: How firms adapt to provide an integrated value proposition. ***Strategic Management Journal***.
- Varga, S., Cholakova, M., Jansen, J. J. P., Mom, T. J. M., & Kok, G. J. M. 2024. From platform growth to platform scaling: The role of decision rules and network effects over time. ***Journal of Business Venturing***, 38(6): 106346.

Session 03: Digital Innovation

- Langlois, R. N., & Robertson, P. L. 1992. Networks and innovation in a modular system: Lessons from the microcomputer and stereo component industries. ***Research Policy,*** 21: 297–313.
- Boland Jr, R. J., Lyytinen, K., & Yoo, Y. J. 2007. Wakes of Innovation in Project Networks: The Case of Digital 3-D Representations in Architecture, Engineering, and Construction. ***Organization Science***, 18(4): 631–647.
- Garud, R., Jain, S., & Tuertscher, P. 2008. Incomplete by Design and Designing for Incompleteness. ***Organization Studies***, 29(3): 351–371.
- Dougherty, D., & Dunne, D. D. 2012. Digital Science and Knowledge Boundaries in Complex Innovation. ***Organization Science***, 23(5): 1467–1484.
- Boudreau, K. J. 2012. Let a Thousand Flowers Bloom? An Early Look at Large Numbers of Software App Developers and Patterns of Innovation. ***Organization Science***, 23(5): 1409–1427.

- Lusch, R. F., & Nambisan, S. 2015. Service Innovation: A Service-Dominant Logic Perspective. ***MIS Quarterly***, 39(1): 155–175.
- Thomas, L. D. W., & Tee, R. 2022. Generativity: A systematic review and conceptual framework. ***International Journal of Management Reviews***, 24(2): 255–278.

Session 04: Data and AI

- Kallinikos, J., Aaltonen, A., & Marton, A. 2013. The ambivalent ontology of digital artifacts. ***MIS Quarterly***, 37(2): 357–370.
- Hartmann, P., & Henkel, J. 2020. The Rise of Corporate Science in AI: Data as a Strategic Resource. ***Academy of Management Discoveries***, 6(3): 359–381.
- Koutroumpis, P., Leiponen, A., & Thomas, L. D. W. 2020. Markets for Data. ***Industrial & Corporate Change***, 29(3): 645–660.
- Verganti, R., Vendraminelli, L., & Iansiti, M. 2020. Innovation and Design in the Age of Artificial Intelligence. ***Journal of Product Innovation Management***, 37(3): 212–227.
- Gregory, R. W., Henfridsson, O., Kaganer, E., & Kyriakou, H. 2021. The Role of Artificial Intelligence and Data Network Effects for Creating User Value. ***Academy of Management Review***, 46(3): 534–551.
- Alaimo, C., & Kallinikos, J. 2022. Organizations Decentered: Data Objects, Technology and Knowledge. ***Organization Science***, 33(1): 19–37.
- Berg, J. M., Raj, M., & Seamans, R. 2023. Capturing Value from Artificial Intelligence. ***Academy of Management Discoveries***, 9(4): 424–428.

Session 05: Digital Transformation

- Hinings, B., Gegenhuber, T., & Greenwood, R. 2018. Digital innovation and transformation: An institutional perspective. ***Information and Organization***, 28(1): 52–61.
- Chanias, S., Myers, M. D., & Hess, T. 2019. Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. ***The Journal of Strategic Information Systems***, 28(1): 17–33.
- Lanzolla, G., Lorenz, A., Miron-Spektor, E., Schilling, M. A., Solinas, G., et al. 2020. Digital Transformation: What is new if anything? Emerging patterns and management research. ***Academy of Management Discoveries***, 6: 341–350.
- Firk, S., Hanelt, A., Oehmichen, J., & Wolff, M. 2021. Chief Digital Officers: An Analysis of the Presence of a Centralized Digital Transformation Role. ***Journal of Management Studies***.
- Lanzolla, G., Pesce, D., & Tucci, C. L. 2021. The Digital Transformation of Search and Recombination in the Innovation Function: Tensions and an Integrative Framework. ***Journal of Product Innovation Management***, 38(1): 90–113.
- Marion, T. J., & Fixson, S. K. 2021. The Transformation of the Innovation Process: How Digital Tools are Changing Work, Collaboration, and Organizations in New Product Development. ***Journal of Product Innovation Management***, 38(1): 192–215.
- Orlikowski, W. J., & Scott, S. V. 2023. The Digital Undertow and Institutional Displacement: A Sociomaterial Approach. ***Organization Theory***, 4(2): 26317877231180898.

Session 06: The Dark Side of Digital

- Zuboff, S. 2015. Big other: Surveillance Capitalism and the Prospects of an Information Civilization. ***Journal of Information Technology***, 30(1): 75–89.
- Etter, M., Fieseler, C., & Whelan, G. 2019. Sharing Economy, Sharing Responsibility? Corporate Social Responsibility in the Digital Age. ***Journal of Business Ethics***, 159(4): 935–942.
- Barnett, M. L., Henriques, I., & Husted, B. W. 2020. The Rise and Stall of Stakeholder Influence: How the Digital Age Limits Social Control. ***Academy of Management Perspectives***, 34(1): 48–64.

- Cichy, P., Salge, T. O., & Kohli, R. 2021. Privacy concerns and data sharing in the Internet of Things: Mixed methods evidence from connected cars. ***MIS Quarterly***, 45(4): 1863–1891.
- Malik, A., & Froese, F. J. 2022. Corruption as a perverse Innovation: The dark side of digitalization and corruption in international business. ***Journal of Business Research***, 145: 682–693.
- Gray, B., Briscoe, F., & Ferraro, C. D. 2023. The Technological Entrainment of Moral Issues: The Case of Genomic Data Markets. ***Academy of Management Journal***, 66(4): 1123–1151.
- van Houwelingen, G., & Stoelhorst, J. W. 2023. Digital Is Different: Digitalization Undermines Stakeholder Relations Because It Impedes Firm Anthropomorphization. ***Academy of Management Discoveries***, 9(3): 297–319.