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Bachelor Seminar

## Digital Innovation and its Role for Organizational Transformation

Summer semester 2023

### Overview

Firms find themselves at the crossroads between digital innovation and the opportunities and challenges for transformational change it creates. New and emergent digital technologies, such as artificial intelligence, IoT, distributed databases or Web 3.0 offer plenty of opportunities for the creation of new infrastructures, products, processes, business models and organizational forms, and reshape traditional ways of organizing and working. At the same time, digital technology within firms' environments produces ongoing changes in customer expectations, the competitive landscapes, and regulation. It is no longer only startups who innovate digitally and are leveraging the new opportunities provided by digital technologies. Large and small incumbents across a great diversity of different industries and geographies are embracing digital innovation, and as they scale them, they transform their entire organization. Within and across organizations, digital technologies give rise to new ways of collaboration, leveraging resources, development, and deployment over open standards and shared technologies. Firms are moving from stand-alone organizations to open, collaborative eco-systems in which multi-firms' networks innovate together with partners, suppliers, customers, and even competitors.

This situation asks how digital innovation as drivers of organizational change can effectively be managed. This question is what this seminar will explore. We will examine a variety of topics related to digital innovation and its transformational consequences – such as (digital) technology management, digital product and process innovation, and organizing models for digital innovation – and explore the current state of research as well as examples on how these aspects are managed in contemporary firms. Students can select a topic of their choice from a list of available questions and explore a related question of their own choosing.

### Teaching Team

**Imke Grashoff** completed her master's degree in the field of Social Economics and is working as a research assistant at the Chair for Information Systems and Digital Innovation.

With a strong interest in topics involving the influence of digital technologies on organizations, collaboration and (the future of) work in general, she is currently pursuing her doctoral studies dealing with ethical issues in the context of AI design, development and deployment.

**Stephanie Kitzler** completed her master's degree in the field of Business Administration and is now working as a research assistant at the Chair for Information Systems and Digital Innovation, pursuing her doctoral studies.

**Jan Recker** is Alexander-von-Humboldt Fellow, Professor for Information Systems and Digital Innovation at the University of Hamburg, and Adjunct Professor at the QUT Business School, Australia.

### Seminar Topics

Topic 1	<b>The technological dimension of digital innovation</b>
	Properties and characteristics of digital technologies and how they can be exploited and managed
Topic 2	<b>The organizational dimension of digital innovation</b>
	Organizing for innovation: How do firms approach innovation processes and are in turn transformed due to digitalization?
Topic 3	<b>The strategic dimension of digital innovation</b>
	How do digital technologies influence the rationale of how an organization creates, delivers, and captures value?
Topic 4	<b>Managing digital technologies</b>
	<ul style="list-style-type: none"> <li>- How do firms deploy and manage digital technologies?</li> <li>- In how far does this differ from traditional technology management?</li> <li>- The role of the CDO</li> <li>- ...</li> </ul>
Topic 5	<b>Managing digital product innovation</b>
	<ul style="list-style-type: none"> <li>- How do digital technologies influence the properties of new products and their development?</li> <li>- Methods and tools in / for product innovation</li> <li>- The role of AI in product innovation</li> <li>- ...</li> </ul>
Topic 6	<b>Managing digital process innovation</b>
	<ul style="list-style-type: none"> <li>- How do digital technologies influence how tasks are carried out?</li> <li>- The role of data</li> <li>- Modern technologies and how they are applied</li> <li>- ...</li> </ul>
Topic 7	<b>The transformative effects of digital innovations</b>
	<ul style="list-style-type: none"> <li>- How do digital technologies influence traditional organizational structures and business strategies?</li> <li>- Challenges of incumbent firms</li> <li>- ...</li> </ul>
Topic 8	<b>Managing digital ecosystems</b>
	<ul style="list-style-type: none"> <li>- How do digital technologies influence the rationale of how an organization creates, delivers, and captures value?</li> <li>- Digital business strategies</li> <li>- ...</li> </ul>
Topic 9	<b>Sustainable digital transformation</b>
	<ul style="list-style-type: none"> <li>- How can digital process innovation contribute to environmental goals?</li> <li>- How can digital products innovation contribute to environmental goals?</li> <li>- How do firms use digital technologies for ESG purposes?</li> <li>- ...</li> </ul>

## **Preliminary Schedule**

1. Kick-Off: Introduction and topic assignment (3 hours + break): TBD
2. Refresher workshops on how to design and write a seminar paper (2 x 2 hours): TBD
3. Topic presentations based on given research papers and discussion (1 day/ 7 hours + break): TBD
4. Presentation of the essays (1 day/ 7 hours + break): TBD

## **Assessment**

Grading in this course is based on three main components. Grading rubrics will be used and made accessible to the students in advance.

1. Presentation of a seminal scientific paper on digital innovation (20% of final grade)
2. Submission of seminar essay (50% of final grade)
3. Presentation of seminar essay to the class (30% of final grade).