Course title: Specialization Seminar “Research on Digital Innovation”

Coordinator(s): Prof dr. Marleen Huysman and Prof dr. Hans Berends

Educational institution: VU SBE (KIN Research)

Language: English

Study period: period 5

ECTS: 6 ECTS

Course objectives: Upon completion of this course, students will have:

- Acquired a basic understanding of issues around organizational theories on digital technology and innovation;
- Developed an understanding of the importance of a socio-technical perspective and practice- and process-approaches in analyzing the development and use of technology
- Developed an understanding of how the nature of digital technologies affect work, knowledge integration and development, and innovation processes
- Developed reflective and critical skills in understanding the role of (digital) technology in organizations
- Developed the ability to synthesize the literature and integrate knowledge in the field of technology, work and innovation, and formulate possible research directions based on that
- Developed the ability to communicate with other experts about the current theories and research on technology, work and innovation

Course Content: The course focuses on classics and contemporary theories and empirical studies addressing various aspects of the role of technology and innovation in organizations, and in particular related to digital technologies. Thorough understanding of theories explaining how technological innovations come about and how technologies influences innovative ways of working and organizing is needed to avoid the use of limited deterministic perspectives of technological developments within organizations and society at large. Characteristic of the course is its focus on practice- and process research approaches, while technology is addressed from a socio-technical perspective. The emphasis is on digital technologies, including digital innovations in sectors such as healthcare and high-tech industry.

The purpose of the course is to provide students with a thorough grounding in various theoretical perspectives and in-depth empirical studies on technology development and use. This seminar has two major purposes. One is to explore important, contemporary issues at the intersection of organization theory, work, innovation from a number of theoretical, methodological, and topic-oriented perspectives. The second is to practice a variety of skills such as synthesizing research, understanding research designs, and developing research questions that should prove useful in your academic careers.
Form of Tuition
The final grade consists of the following elements:
- Individual examination (80%): essay-type exam
- Class participation (20%)

Readings
This course has a heavy reading load. You will read four papers a week. You are asked to analyze and be prepared to discuss the readings that are assigned for each class. All students should arrive at class with their analyses of the readings, ready to go. A good analysis means that you will think about the "big story" - what are the core research problems or questions addressed by the theory? - as well as the details of the articles – e.g. how convincing is the empirical evidence? Also think about how the paper relate to the other papers assigned for this week (and the earlier weeks).
You do not need to send it to instructors.

Grading
Class participation (20%)
A primary aspect of a doctoral level course is the emphasis on discussing the readings. Research articles can be understood in different ways and evaluated on a variety of papers already discussed dimensions. The most important part of a doctoral course is the collective sensemaking that takes place during class discussion. Thus, class discussion time is probably the most valuable part of a doctoral course and must be taken extremely seriously.

Effective participation cannot be achieved without a deep preparation of the readings. Students are expected to attend class fully prepared to discuss all the readings. The participation grade will be based on the quality of the in-class contribution.

Individual assignment (80%)
At the end of the seminar, student will be given a take-home assignment. More information on this will be given during class.

Literature

Week 1 (Huysman)


**Week 2 (Huysman)**


**Week 3 (Huysman)**


Waardenburg, L. Sergeeva, A and Huysman, M.H. (working paper, submitted to Organization Science, distributed in class) "In the land of the blind, the one-eyed man is king: brokerage work in the age of learning algorithms.

Broek, E. Sergeeva, A. Huysman, M.H. (conditionally accept MISQ, distributed in class) paper
Machine knowledge with a human face: Managing the independence-relevance tension in machine learning

**Week 4 (Berends)**


Week 5 (Berends)


Week 6 (Berends)


