Specialization Seminar in Technology and Innovation
“Research on Digital Innovation”

ECTS 6
Period semester 1, period 2
Language English
Educational institution SBE, joint VU/UVA (KINResearch)
Instructors Prof dr. Marleen Huysman (m.h.huysman@vu.nl) and Prof dr. Hans Berends

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 a practice perspective in analysing the use of technology
• Developed an understanding of how the nature of digital technologies affect innovation processes and collaboration
• Developed reflective and critical skills in understanding the role of (digital) technology in organisations;
• Developed the ability to synthesize the literature and integrate knowledge in the field of technology 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 and innovation

Course Content
The course focuses on classics and contemporary theories and empirical studies addressing various aspects of the role of technological innovations in organisations, 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 organising, is needed to avoid the use of limited deterministic perspectives of technological developments within organisations and society at large. Characteristic of the course is its focus on practice perspective while technology is addressed from a socio-technical perspective. The emphasis is on digital technologies, including digital innovations in sectors such as healthcare, the high tech industry, and creative 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, innovation and technology studies 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" of the day as well as the details of
the articles. Write down the answers to this questions and bring this with you to class. You
do not need to send it to instructors.

For the "big story," it may helpful to ask yourself the following questions about the
theoretical perspective under review (think about the readings as a collection):
1. What are the core research problems or questions addressed by the theory?
2. What is the typical metatheory (e.g., concepts, assumptions, evidence, methods, etc.)
   associated with this approach?
3. Can you specify the general theoretical arguments typically used in the approach?
4. What is the state of the evidence with respect to various theoretical claims?

For the details, it may be useful to ask yourself the following questions about each reading:
1. What are the central theoretical questions addressed?
2. What primary mechanisms are posited?
3. What is the evidence to support the argument(s)? How convincing is that evidence?
4. What are the basic assumptions behind the analysis?
5. How could this analysis be improved? Be specific and practical (do not make suggestions
   that you could not realistically envision yourself implementing)
6. How does the paper relate to the other papers assigned for this week and the

**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 and social construction of meaning 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 examination (80%)*

At the end of the seminar, student will be given a take-home examination. More information on this will be given during class.

**Week 1 (Huysman)**


4 Sergeeva A., Huysman M., Faraj S. (under review) Loosing Touch; how robots transform the practice of surgery, Organization Science Under review (distributed in class)

**Week 2 (Huysman)**


Week 3 (Huysman)


Week 4 (Berends)


**Week 5 (Berends)**


**Week 6 (Berends)**


