COURSE SYLLABUS

Frontiers in Digital Innovation Research

Phenomena, Theories, and Approaches

7,5 ETCS credits

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Background

Digital technologies demonstrate unique properties, such as malleability and flexibility. Such properties make them generative, in the sense that they continuously produce new opportunities for the creation of products, services, infrastructures, business models, and organizational forms (Bharadwaj et al., 2013; Lyytinen et al. 2016; Nambisan et al. 2017; Yoo et al. 2010). Digital technologies are also increasingly affordable and accessible, radically lowering entry barriers. As new stakeholders are engaged, value creation processes spread far beyond corporate lab environments, further embedding digital technologies into society. Ultimately, digital technologies alter the environments of organizations, give rise to tensions and opportunities, and call for profound change in how they organize for innovation (Gregory et al. 2015; Sandberg et al. 2020; Svahn et al. 2017).

In response, the information systems (IS) community has established a strong foundation for research on topics such as digital innovation (Fichman et al. 2014; Yoo et al. 2012; Yoo et al. 2010), digital infrastructure (Constantinides et al. 2018; Henfridsson and Bygstad 2013; Tilson et al. 2010), digital transformation (Majchrzak et al. 2016; Nambisan et al. 2019), and digital ecosystems (El Sawy et al. 2010; Jacobides et al. 2018; Suseno et al. 2018; Tiwana 2015). This research is further accelerated by regional and global initiatives, such as [Swedish Centre for Digital Innovation](#) and the [AIS special interest group on Digital Innovation, Transformation, and Entrepreneurship](#) (SIG DITE).

Target Audience/Entrance Qualifications

The course is designed for Ph.D. students pursuing a dissertation on digital innovation, digital transformation, digital entrepreneurship, or a similar topic.

We accept a maximum of 18 students. Applicants will be evaluated on the match between thesis focus and course content.

Learning Outcomes

After finalizing the course, participants shall demonstrate a capacity to design creative research studies of transformative digital innovation phenomena. More specifically, the participants should increase their abilities to conduct the following tasks on an advanced level:

- *Identify* and *analyze* phenomena of relevance for research and practice.
- F*ormulate* relevant research questions.
- *Develop* appropriate theoretical frameworks.
- *Assess* methodological options and *select* appropriate methods to leverage different types of data sources.
- *Evaluate* methodological design choices.
- *Reflect* on contributions of research.
- *Recommend* dissemination strategies.

Content, Structure, and Faculty

This Ph.D. course offers an overview of contemporary research in the area of digital innovation. In particular, it showcases a range of theories and approaches

that researchers can employ to study the many complex phenomena associated with digital innovation (see Table 1 below). A range of focus areas are discussed in relation to selected readings and illustrated by SCDI research projects. The course is divided into four phases, including both online and offline sessions. We will run the offline sessions in [Riksgränsen](#) – an internationally renowned ski resort in the very northern parts of Sweden.

Phase 1: Introduction to the course and to foundational work on digital innovation.
When? Two-hour long sessions at two occasions on March 8th.
Activities: Two online meetings, preparation for phase 2 by reading the assigned material.
Location: Zoom

Phase 2: Seminar week with presentations by SCDI researchers
When? Full days, March 24th – 28th.
Activities: Offline presentations and seminars.
Location: [Riksgränsen](#)

Phase 3: Online seminars with SCDI affiliated researchers
When? Two-hour long sessions at four occasions between April 8th - 18th.
Activities: Four online seminars
Location: Zoom

Phase 4: Application writing
When? April 15th - May 20th
Activities: Writing, reviewing, and presenting the research application (the final examination, see below). Includes both online meetings and a final hybrid seminar (in Gothenburg or on Zoom) on the 20th of May where we will conclude the course together.
Location: Zoom (except for the final day May 20th

Examination

To complete the course, students are required to write a complete research application, targeting a recognized research funding agency[1]. The examination engages the specified learning outcomes across four general criteria; scientific contribution; practical relevance; originality/creativity; and feasibility.

This form of examination is selected to (1) stimulate extensive engagement with the course literature, (2) foster a creative thesis design process, and (3) support long-term career development.

Grading

Pass or Fail

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[1] E.g. Vetenskapsrådet, Stiftelsen för Strategisk Forskning, Wallenbergstiftelserna, Forte, VINNOVA if you are acting in the Swedish market.

Tuition

The course is offered free-of-charge together with lodging and board at Riksgränsen.

Required Reading

A list of course literature will be released eight weeks before the course start.

2025-10-27

References

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Yoo, Y., Boland, R. J., Lyytinen, K., and Majchrzak, A. 2012. "Organizing for Innovation in the Digitized World," *Organization Science* (23:5), pp. 1398-1408.

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