

UiO Department of Informatics
University of Oslo

# **IN5210 – Information Systems**

First Lecture - Introduction

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# **Agenda**

- 1. Welcome
- 2. Introduction to the course
  - Motivation
  - Structure
- 3. Discuss expectations
- 4. A very short introduction to Information Systems
- 5. Lecture on «Information Systems as a Research Field» by Margunn Aanestad

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# 1. Welcome

## Who are we?

#### **Petter Nielsen**

- Associate Professor in the information systems research group
- Deputy Head of the Department of Informatics
- Head of PhD at IFI
- Research interests
  - Digital innovation
  - Software platforms and ecosystems
  - Health Information Systems in Developing Countries/DHIS2/HISP
- PhD from IFI (2006)
- Hovedfag in Systemarbeid from IFI (1999)

## **Seminars: Teachers**

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#### **Contact information**

Alexander Moltubakk Kempton (seminar teacher)

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Troels Mønsted (planning and feedback on assignments)

Email: monsted@ifi.uio.no

#### **Research Interests**

Digital service innovation, infrastructures and platforms in Norwegian health care; meta-theories in Information Systems; philosophy of science. Empirical focus on digital projects in the primary health sector.

Studies of the complexities of development of (a) generative information infrastructures in Norwegian healthcare and (b) a digital infrastructure for early detection and preventive of lifestyle related disease in Denmark.



# Who are you?

## 2. Introduction to the course

## **Motivation**

- Introduce Information Systems research and practice broadly
- Prepare students for master thesis work
  - Know as selection of Information Systems theories and concepts
    - How to identify them
    - How they are made
    - How to use them in own research
  - Practice reading papers
  - Practice academic writing

## Motivation cont.

- Reflecting the research focus in the Information Systems and the Digitization and Entrepreneurship research groups – many "guest lecturers"
- Warning: Lectures will appear as fragmented
  - Reflects our research groups
  - Reflects the information systems research field
- Fragments may be relevant for your thesis!
  - To learn to know potential supervisors
  - To use in your thesis
- A different approach: Management Information Systems: Managing the Digital Firm, Laudon & Laudon

(http://dinus.ac.id/repository/docs/ajar/MIS\_KC\_Laudon.pdf)

## **Structure**

- 2+2 hours of lectures per week
  - Monday 10:15 12:00 (Smalltalk)
  - Friday 10:15 12:00 (Smalltak)
  - Not two lectures every week the scheduele is not yet finalized (but almost there)
- 2 hours seminar
  - Group 1: Thursday 12:15 14:00 (Postscript)
  - Group 2: ???
  - Mandatory (80%), including preparation (submission of a short summary/reflection document prior to each seminar)

# **Seminars: Purpose and format**

#### **Purpose**

- Prepare you for:
  - The course exam
  - Your masters thesis
- Train the practice of reading and understanding research literature
- Applying theories from literature in case analysis and argumentation

#### **Format**

- 1 seminar per week
- Within the Monday before each seminar you must:
  - Read assigned paper
  - Submit an short essay/group work assignment/paper summary (1/2-1 page) assigned in the previous seminar
- Activities
  - Discussion of questions to the papers
  - Discussion of questions to the lectures
  - Group work were you apply theory to analysis of case studies

## First seminar

#### Before the seminar:

- Read Watson (2014), A Personal Perspective on a Conceptual Foundation for Information Systems
- For this session there are no written assignments

### Agenda:

- Introduction to the exercise seminars: Purpose, process, and activities
- Strategies for reading a research paper
- Group formation
- Group work on themes from first lecture

# Stay informed

- Use the course <u>website</u>
  - Schedule
  - Curriculum
  - Messages
- Read your IFI email

## **Exam**

- Essay (written home exam)
- The mandatory assignments must be approved prior to the exam
- Graded A-F
- 2 weeks, 3-4 days work expected
- Tentatively: November 12th to November 23rd



# 3. Discuss expectations

# Learning outcomes

- Have insights in information systems practices in organizations, and can relate these to complexity and organizational change
- Have an understanding of core concepts, models and approaches of information systems development
- Have an understanding of the socio-technical and complex nature of information systems
- Are knowledgeable of contemporary debates in information systems research
- Can review academic literature to identify relevant theories and concepts and use them to analyze and discuss empirical data
- Have an understanding of the role of theory in guiding research and as outcome of research

# My expectations to you

- Come to the lectures
- Ask questions and engage the lecturers in discussions
- Read prior to the seminars
- Come to the seminars
- Engage actively in the seminar discussions
- Form groups and work on your own
- Identify interesting research areas, research topics, theories, concepts as well as potential supervisors

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# 4. A very short Introduction to Information Systems

# What is an Information System?

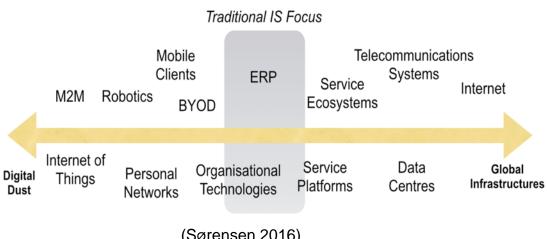
- "An information system (IS) is an organized system for the collection, organization, storage and communication of information. More specifically, it is the study of complementary networks that people and organizations use to collect, filter, process, create and distribute data." (Wikipedia)
- Phenomenon/subject matter
  - Observable
  - Designed, implemented and used
- And a research field

## **Another definition of Information Systems**

- «... a set of entities, shared patterns, and information processing capabilities that support goal attainment.» (Watson, 2014, p. 520)
  - Entities: people, groups of people and organizations
  - Common language and protocols for communication
  - Capabilities like brains, but increasingly computers
  - For a purpose (utilitarian or hedonic)
- Better information systems, better
  - prepared to attain goals,
  - collaborate,
  - and transformative capacity
- Not only technology: Socio-technical

# Scope of Information Systems research

- Broader scope than the organization
- Driving forces behnding this change:
  - Digitalization in all aspects of life
  - Distribution and interconnection
  - Scale and capacity of computers



(Sørensen 2016)