

# Strategic Organisational Application of IT - Workflow and Knowledge Management

Programme course

6 credits

Strategisk organisatorisk IT-användning - workflow

och knowledge management

TDEI21

Valid from: 2017 Spring semester

**Determined by** Board of Studies for Industrial Engineering and Logistics

Date determined 2017-01-25

# Main field of study

Industrial Engineering and Management

Course level

Second cycle

#### Advancement level

A1X

## Course offered for

- Industrial Engineering and Management International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Design and Product Development

#### Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

#### Prerequisites

Have basic insights in organisation and business administration.



# Intended learning outcomes

In Strategic Application of IT - workflow och knowledge management we focus on the more or less structured communication processes within the organisation. By learning more about participation and influence in development and implementation, group roles, incentives, responsibilities and roles in knowledge management, you build an understanding that can help you turn visions and strategies into action. But it is not just the premeditated and planned that can be of strategic importance. At least as important is that you learn to recognise spontaneous and temporary initiatives and developments that warrant attention and support.

The purpose is to give you insights enabling you to make nuanced assessments of the potential behind the hype.

When having completed the course, you should be able to:

1) assess the potential of a strategic IT application supporting processes within the organisation

2) find and interpret academic articles of relevance to a strategic application of IT, and

3) orally and in writing present your own analyses and constructively contribute to and discuss others' analyses.

## Course content

The basic idea of the course is to discuss strategic importance, business impact, current applications and commercial potential, based on current trends. Using case studies and the experience of the participants, we investigate the chain from vision to realisation. Workflow and Knowledge management are two central perspectives in the analysis of applications of IT. Reading and discussing published empirical research is a recurring activity in the course. The investigating projects performed by the participants, their literature searches and the interaction between the workgroups form central parts of the knowledge management theme in the course.

## Teaching and working methods

The course consists of lectures and seminars - traditional and virtual. The participants' own investigating projects, literature seraches and the interaction between the workgroups form central parts of the knowledge management theme in the course.



#### Examination

UPG2	Seminars	1 credits	U, G
PRA1	Project	3 credits	U, 3, 4, 5
UPG4	Hand-in assignments	2 credits	U, 3, 4, 5

To pass the course, the student should actively participate in seminars, have completed reflection reports concerning literature and teaching cases, have participated (well prepared) in the discussion of course literature, teaching cases and the other groups' projects, and have actively participated in a completed project that has been presented orally and in writing in line with the directions given in the course.

#### Grades

Four-grade scale, LiU, U, 3, 4, 5

#### Department

Institutionen för ekonomisk och industriell utveckling

#### Director of Studies or equivalent

Johan Holtström

#### Examiner

Alf Westelius

#### Course website and other links

 $\label{eq:http://www.iei.liu.se/indek/utbildning/ekonomiska-informationssystem/tdei21? l=sv$ 

#### **Education components**

Preliminary scheduled hours: 48 h Recommended self-study hours: 112 h



## **Course literature**

Huvudsakligen empiriskt grundade artiklar som presenterar aktuell forskning inom området. Den slutgiltiga läslistan bestäms inför och under kursen, delvis av deltagarna själva. Ett exempel på hur litteraturlistan kan se ut ges nedan: 1) Bensaou, M. & Earl, M. (1998) The right mind-set for managing information technology. Harvard Business Review 76 (5), 119-128. 2) Carr, N. G. (2003) IT Doesn't matter. Harvard Business Review 81 (5) 41-49. 3) Brown, J.S.; Hagel, J.III; Varian, H; Carr, N. (2003) Does IT Matter? Letters to the Editor. Harvard Business Review 81 (7), 109-112. 4) Markus, M.L. & Benjamin R.I. (1997) The magic bullet theory in IT-enabled transformation, Sloan Management Review 1997 Winter, 55-68. 5) Choi, Byounggu and Lee, Heeseok, (2003) An empirical investigation of KM styles and their effect on corporate performance, Information & Management 6) Ikujiro Nonaka and Ryoko Toyama (2003) The knowledgecreating theory revisited: knowledge creation as a synthesizing process, Knowledge Management Research & Practice, Vol. 1, pp. 2–10. 7) Christensen, Peter Holdt (2007) Knowledge sharing: moving away from the obsession with best practices. Journal of Knowledge Management, 11(9) 36-47. 8) Daft, Richard L.; Robert H. Lengel (1986) Organizational Information Requirements, Media Richness and Structural Design. Management Science; May 1986, Vol. 32 Issue 5, p554, 18p. 9) Ojetanki K. Ngwenyama; Allen S. Lee (1997) Communication Richness in Electronic Mail: Critical Social Theory and the Contextuality of Meaning. MIS Quarterly, Vol. 21, No. 2. (Jun., 1997), pp. 145-167. 10) Newell, Sue, Huang, J.C., Galliers Robert D., Pan, S.L. (2003) Implementing enterprise resource planning and knowledge management systems in tandem: fostering efficiency and innovation complementarity. Information and Organization Vol. 13, No. 1, pp. 25-52. 11) Newell, Sue, Pan, S., Galliers, Robert, Huang, J. (2001) The myth of the boundaryless organization: Limitations of collaborative technologies in global firms. Communications of the ACM, Vol. 44, No 12, pp. 74–76. 12) Pan, S.L., Leidner, D.E. (2003) Bridging communities of practice with information technology in pursuit of global knowledge sharing. Journal of Strategic Information Systems 12 (1) 71-88. 13) Suchman, Lucy (1995) Making Work Visible. Communications of the ACM, September 1995, Vol. 38, No. 9, pp. 56-64. 14) Alf Westelius and Pär Mårtensson (2004) The Midas Touch in Knowledge Management Projects - Beware, Your Wish Could Come True, The Electronic Journal of Knowledge Management, 2(2) 35-44, available online at www.ejkm.com. 15) Westelius, Alf (2006) Muddling through - the life of a multinational, strategic enterprise systems venture at BT Industries. Linköping Electronic Articles in Computer and Information Science, Vol. 10, No. 1. Linköping University Electronic Press, Linköping, Sweden. 16) Alf Westelius and Pablo Valiente (2006) Bringing the Enterprise System to the Frontline -Intertwining Computerised and Conventional Communication at BT Europe. In Unwired Business: Cases in Mobile Business, Stuart J. Barnes and Eusebio Scornavacca (Eds.), IRM Press, Hershey. 17) Ke, Weiling; Wei, Kwok Kee (2004) SUCCESSFUL E-GOVERNMENT IN SINGAPORE, Communications of the ACM; Jun2004, Vol. 47 Issue 6, p95, 5p



# **Common rules**

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\_pa\_grund-\_och\_avancerad\_niva.

