



ME3534 Classics in Industrial Management, 7.5 ECTS

Today's society is, as all previous societies, characterized by accumulated, abandoned, and new conceptions of the value creating process, which traditionally was called "production". Values, assumptions and experience influence our perceptions of rationality and thus give each society its special characteristics.

The objective with this course are:

- 1) to give historical knowledge about how the main discourses on Industrial Management have evolved;
- 2) to give an understanding of how the interplay of various forces have influenced the industrial practices;
- 3) to, in a more speculative finish, deal with what can be said about the future.

Format

The course builds on ten seminars, where some of the basic theoretical contributions within the field of industrial management will be covered. Each contribution will be discussed in terms of: What is the central issue? Which is the leading idea? What is the economic, social, and technical context? What are the elements in the suggested solution? Evidence? Problematic aspects? What can be said about the underlying view of organization, leadership and humans? And last, but not least: which are the implications for your own research?

Content

Point of departure is taken in the cradle of industry, the late 18th century and Adam Smith. The course will end in today's discussions on Lean Production, servitization, and digitalization (if nothing else pops up during the journey). The emphasis will be on ideas and less on practical prowess. Surprisingly, many of the old concepts survive through history, in one form or another, still often referred to in the debate on postindustrial value creation. We shall identify some of the most central ideas, which are now considered as classics. The following list can be disputed and is not yet complete, it outlines however the basic idea of the course (texts could be added upon interest):

0) Introduction

- Shafritz & Ott: Chronology
- The third industrial revolution. The Economist April 21st 2012: Special Report
- Bailey and Barley: Return to work: Toward post-industrial engineering

1) Division of Labor:

- Adam Smith: On the Division of Labor
- Babbage: On the Division of Labor
- Marx/ Braverman and the degradation of work
- Taylor: The Principles of Scientific Management

- 2) Bureaucracy:
 - Gantt and humanized scientific management
 - Henry Ford and mass production
 - The Gilbreths and motion study
 - Smith: work measurement. A system approach
 - Weber
 - Fayol and administration
 - March & Simon

- 3) Human Relations & Motivation
 - Gillespie: Manufacturing Knowledge
 - Smith: The Enduring Legacy of Elton Mayo
 - McGregor
 - Maslow: A theory of human motivation
 - Herzberg and the motivation to work
 - Forslin's own research

- 4) Sociotechnical Systems
 - Tavistock

- 5) Contingency Thinking
 - Woodward: technology
 - Lawrence & Lorch: environment
 - Mintzberg

- 6) Lean and Toyota Production Systems
 - Deming – biographical note
 - Ishikawa
 - Womack, Jones & Roos: The rise of lean production
 - Liker & Morgan: Toyota Way
 - Kochan, Lansbury & MacDuffie

- 7) From manufacturing to operations management
 - Skinner: The focused factory
 - Hayes & Wheelwright: volume - variety
 - Kraljic: purchasing strategy

- 8) Technology and innovation management
 - Burns & Stalker: management of innovation
 - Brown & Eisenhardt: product development
 - Utterback: dynamics of innovation
 - Tushman: ambidextrous organizations
 - Christensen: disruptive innovation

9) Projectification of industry and society

- Lundin & Söderholm: A theory of the temporary organization
- Engwall: No project is an island
- Lundin et al: Managing and working in the project society

10) The third (or fourth) industrial revolution

- The third wave. Special Report. The Economist Oct 4th 2014
- Servitization
- Brynjolfsson and McAfee
- Industrie 4.0

The literature is in English, consisting mainly of excerpts from original works, but also some commentary articles. It encompasses some 2,000 pages.

Schedule and examination:

Seminars will take place every second week (although slight deviations may occur) with start in week 37, i.e. during the week September 11-15. Exact time and place will be announced in advance to course start.

Examination consists of active seminar participation, and a written course paper.

Course leaders:

- Seminar Leaders: Professor Emeritus Jan Forslin (jan.forslin@indek.kth.se).
Professor Mats Engwall (mats.engwall@indek.kth.se)
- Examiner: Professor Mats Engwall (mats.engwall@indek.kth.se)

Registration

Course registration to *mats.engwall@indek.kth.se*. Registration is due August 20, 2017

Participants not registered at the KTH Doctoral Program in Industrial Economics and Management will be charged a minor course fee:

- SEK 10,000: - for non-KTH candidates
- SEK 5,000: - for KTH candidates, outside Industrial Economics and Management

The maximum number of participants is set to 10 candidates.

Most welcome,

Jan & Mats