



Aalto-yliopisto

Ako-E3020

Knowledge Management in Practice (5 op)

Tervetuloa kurssille!

Kurssin avaus 16.1. 2020 – Eerikki Mäki

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Agenda 16.1.2020

- Kurssin osanottajat
 - Tausta, tavoitteet & odotukset
- Kurssin tavoitteet
- Kurssin työskentelytavat ja niistä sopiminen
 - Kurssin kieli
 - Luennot
 - Tehtävät
 - Kirjallisuus
- Tietotyön ominaispiirteet, tietyöhön ja tiedon johtamiseen liittyviä keskeisiä käsitteitä, tiedon ja osaamisen johtamisen tavoitteet
- Ryhmätöistä sopiminen (ryhmät, aiheet)

Kurssin opettaja



- Eerikki Mäki
 - Konsultti, MPS Yhtiöt
 - Vanhempi yliopistolehtori, Tuotantotalouden laitos
 - D.Sc. (Tech.), Helsinki University of Technology, Department of Industrial Engineering and Management, Majoring Knowledge Management and Organizational Behaviour
 - M.Sc. (Psychology), University of Helsinki
 - N. 15 v. opetuskokemusta tuotantotalouden koulutusohjelman kursseista

Kurssin opiskelijat

- Oma tausta
- Kokemus ja ymmärrys tiedon ja osaamisen johtamisesta
- Millaisia odotuksia tai tavoitteita
- Mahdollinen case kurssin harjoitustyötä varten

Tavoite

- **Osaamistavoitteet** Kurssin tavoitteena on auttaa opiskelijoita tunnistamaan, analysoimaan ja ymmärtämään tietointensiivisten organisaatioiden tiedon ja osaamisen johtamisen haasteita. Kurssi antaa opiskelijoille valmiuksia soveltaa ja kehittää menetelmiä, joilla tietointensiivisten organisaatioiden tiedon ja osaamisen johtamisen haasteisiin voidaan vastata sekä kuinka voidaan arvioida kehittämistoimenpiteiden toimivuutta ja vaikuttavuutta.
- **Työmäärä toteutustavoittain**
Luennot ja ryhmäohjaus 16-20 h, omakohtainen opiskelu 40 h, henkilökohtaiset oppimispäiväkirjat 20 h, pienryhmäprojekti 55 h

Kurssin luennot (pieniä muutoksia ja täsmennyksiä voi tulla sisältöihin)

- Luento 1
 - Kurssin työskentelymuodot ja käytännönjärjestelyt, tietotyön ominaispiirteet, tietyöhön ja tiedon johtamiseen liittyviä keskeisiä käsitteitä, tiedon ja osaamisen johtamisen tavoitteet
- Luento 2
 - Tietojohtamisen kehittäminen tietointensiivisissä organisaatioissa, erilaiset tietointensiiviset organisaatiot ja niiden ominaispiirteet, työskentelyä ryhmässä tehtävän harjoituksen parissa
- Luento 3
 - Tiedon jakaminen tietointensiivisissä organisaatioissa ja tiedon jakamisen esteet, työskentelyä ryhmässä tehtävän harjoituksen parissa

- Luento 4
 - Teknologiaperusteinen ja vuorovaikutusperusteinen lähestymistapa tiedon ja osaamisen johtamiseen, tiedon ja osaamisen johtamisen strategiat, työskentelyä ryhmässä tehtävän harjoituksen parissa
- Luento 5
 - Tiedon ja osaamisen johtaminen yli ammatillisten, organisatoristen ym. rajapintojen, kriittinen näkökulma tiedon ja osaamisen johtamiseen
- Luento 6
 - Kurssin yhteenveto

Avoimen Yliopiston terveiset

- Kurssille eivät voi osallistua muut kuin kurssille ilmoittautuneet opiskelijat. Emme ota jälki-ilmoittautuneita kurssille. Opiskelija voi kaikissa kysymyksissä ohjata ottamaan yhteyttä toimistoomme. Yhteystiedot <http://avoin.aalto.fi/fi/contact/> sähköposti avoin@aalto.fi, puhelinpalvelu ma-to klo 13-15 puhelinnumerossa 02 944 29292, käyntiosoite Otakaari 1, 1 krs. huone Y195.

Kurssin sivu

- <https://mycourses.aalto.fi/course/view.php?id=26756>

Kysymyksiä kurssin käytännöistä?

Some basics

- A **knowledge-intensive organization** refers to an organization where knowledge has more importance than other inputs (Starbuck 1992) (i.e., in contrast to labor-intensive or capital-intensive).
 - This not an on-off concept i.e. organizations may need both knowledge and financial capital e.g. The European Space Agency
- Information and knowledge are **inputs** of work and they are also **outputs** of work

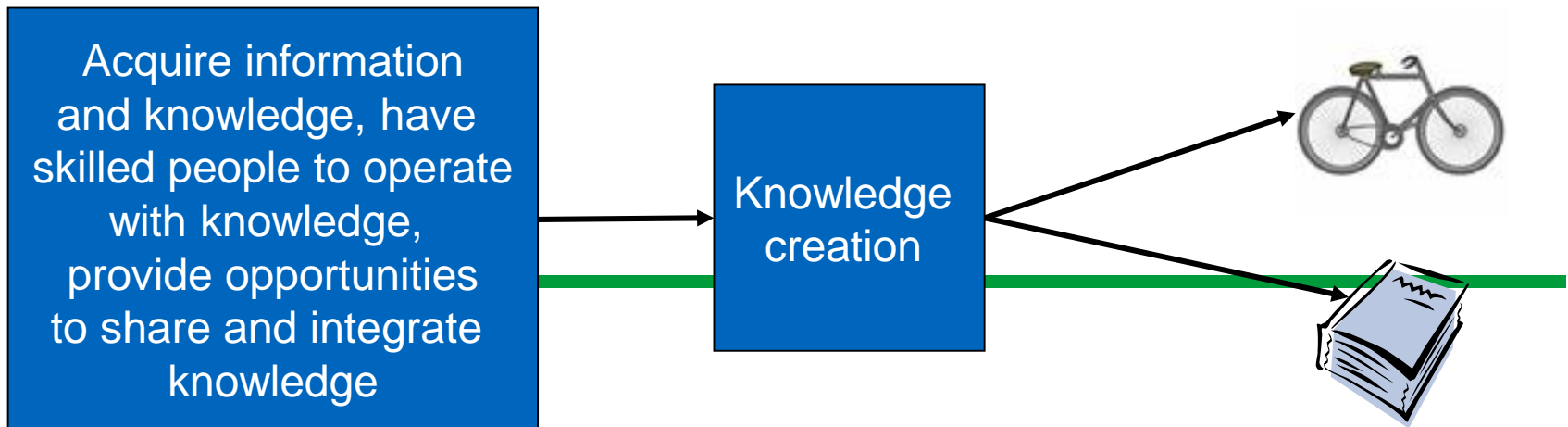


Course focus



How can knowledge-intensive organizations and their employees utilize information and knowledge? The course focuses to understand and elaborate how **individuals** (employees), **groups** in organizations, and **organizations** explore and exploit information, knowledge and competencies.

At the conceptual level, knowledge exploration and exploitation are simple



Knowledge and competence management needs of knowledge-intensive organizations

1. Coordination of work

- Knowing what other members (of an organization/team/etc.) are doing
- Guaranteeing needed information flows

2. Preserving organizational knowledge and competencies

- Maintaining consistency
- Knowledge reuse (not inventing the wheel over and over again)

3. Learning form others

- Creating shared understandings
- Connecting diverse experts (knowledge and competencies)

Many definitions of knowledge management...

Knowledge management is perceived as organizational practices that facilitate and structure knowledge sharing among knowledge workers (Huysman & de Wit 2004)

Knowledge management is an effort to increase useful knowledge within the organization. Ways to do this include encouraging communication, offering opportunities to learn, and promoting the sharing of appropriate knowledge artifacts (McInerney 2002)

Knowledge management is a process of knowledge creation, validation, presentation, distribution, and application. These five phases in knowledge management allow an organization to learn and reflect as well as unlearn and relearn, which are usually considered essential for the building, maintaining, and replenishing of core-competencies (Bhatt 2001)

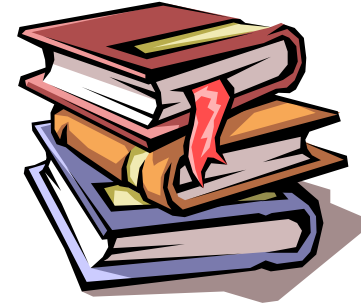
Knowledge management

- **Utilizing knowledge resources**
 - Creation of new knowledge (knowledge exploration)
 - Reusing existing knowledge (knowledge exploitation)
- **Knowledge sharing**
 - Informing, distribution of information and knowledge
 - Creation of new knowledge by sharing knowledge with other people
- **Knowledge acquisition, knowledge preservation, knowledge renewal**
- **Enablers** for knowledge creation and knowledge sharing
- **Tools and methods for knowledge sharing**
 - Communities, networks, IT

(modified from Järvenpää & Mäki, 2001)

Typical features of knowledge work

- Content of knowledge work
 - From knowledge, with knowledge, and for knowledge
- Complexity of knowledge work
 - Often non-routine and non-repetitive
- Competences required
 - Formal education and experience
- Autonomy over work
 - Usually many ways to perform tasks
- Collective knowledge systems
 - Knowledge is created in social systems
- Learning orientation
 - Organizational and individual levels



Different types of knowledge needs to be managed differently, but what are these different types?

Most commonly used classification in knowledge management is separate **explicit** and **tacit** knowledge.

Tacit and explicit knowledge

- "We can know more than we can tell" (Polanyi, 1966)
- Tacit knowledge: knowing how
 - technical or physical "know-how"
 - knowing how to obtain desired end-states
 - knowing what to do in order to obtain the desired end-states
- Explicit knowledge: knowing that

} Cognitive abilities

Continuum

Tacit knowledge
(Doing)

Explicit knowledge
(Knowing)

Tacit knowledge



How did you learn to ride a bike?
Or to be a leader?

Not by reading a book!



Tacit knowledge

- Highly personal
- Hard to formalise
- Context-specific
- Subjective insights, intuitions, hunches
- Rooted in actions, procedures, routines, commitment, ideals, values and emotions
- Difficult to communicate to others
- Requires "simultaneous processing"

modified from Nonaka and Takeuchi 1991, 1995,
Polanyi 1966, Nonaka, Toyama & Konno, 2000)

Tacit knowledge includes...

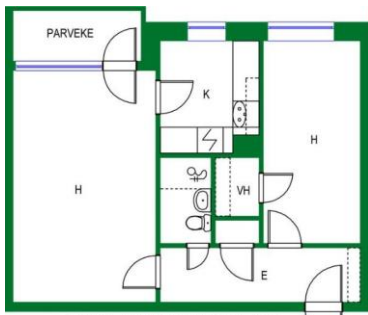
- **Cognitive elements**

- mental models, perspectives, beliefs, and viewpoints that help people to perceive the world around us

- **Technical elements**

- know-how, crafts, and skills

Explicit knowledge



Explicit knowledge

- Formal
 - "Objective"
- Can be codified and articulated and expressed in formal and systematic language, using signs and symbols
- Shared in the form of data, scientific formulae, manuals, etc
- Processed, transmitted, stored relatively easily

Tacit and explicit knowledge

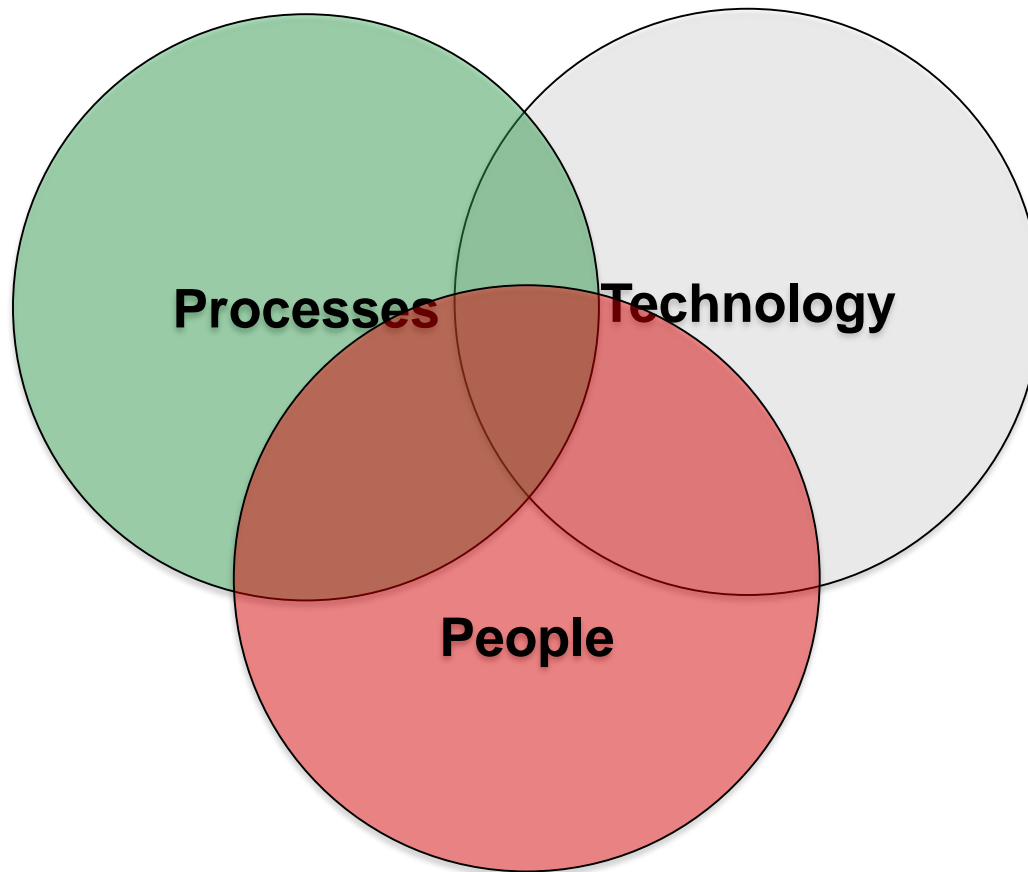
- Complementary
- Both types of knowledge are essential to knowledge creation
- Explicit knowledge without tacit insight loses its meaning
- New knowledge is created through interactions between tacit and explicit knowledge

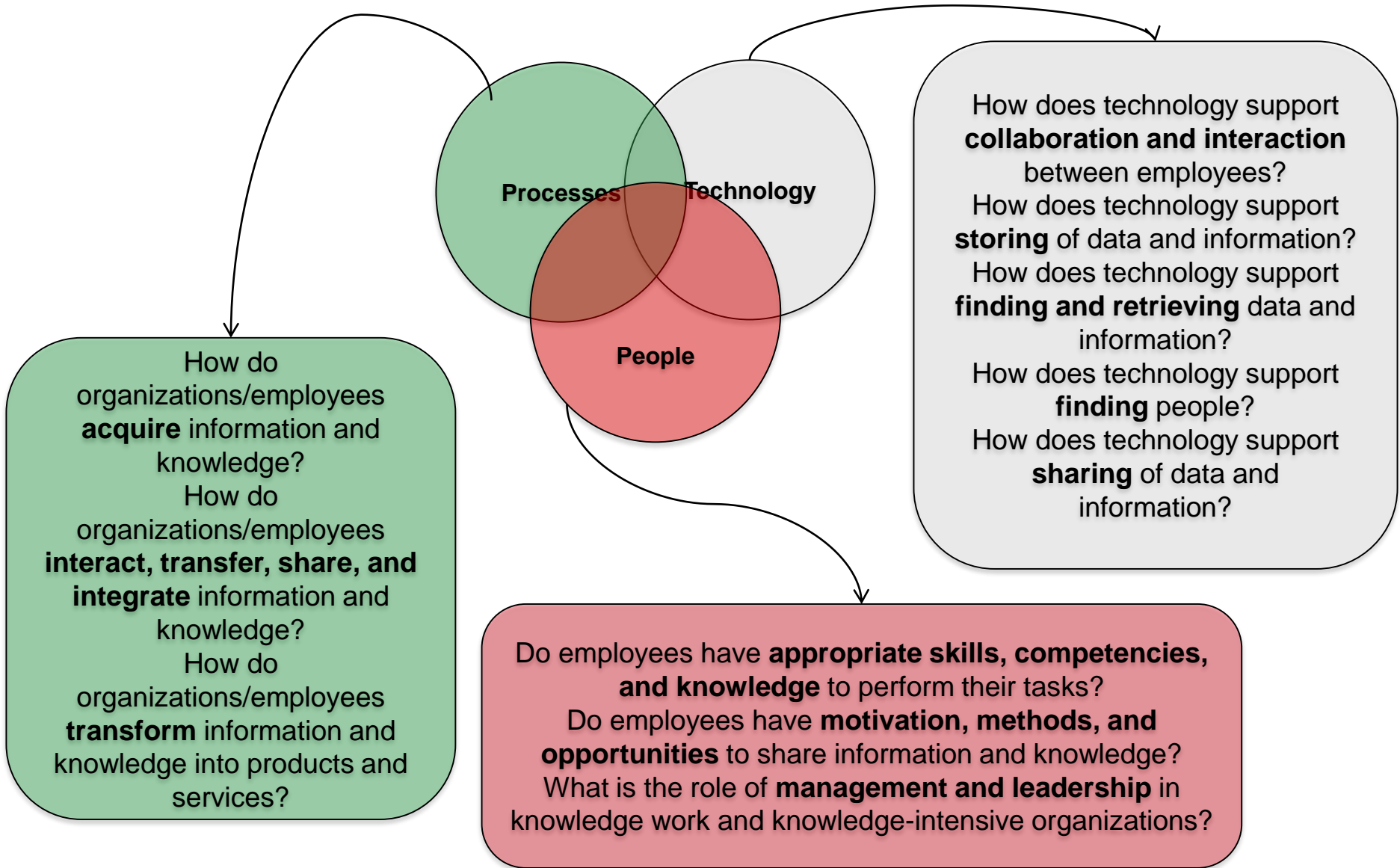
Knowledge types in organizations

Table IV. Knowledge types in organizations (modified from Blackler 1995).

Knowledge types	Characteristics of knowledge types	Tacit / explicit personal / social
Embrained knowledge	Cognitive skills and abilities. Acquired, e.g., through formal education. Gives answers to what-questions.	Explicit (and tacit) personal knowledge
Embodied knowledge	Ability to apply knowledge appropriately in a certain context. Gives answers to how-questions.	Mainly tacit personal knowledge
Encultured knowledge	Encultured knowledge includes collective and shared meanings, understandings, and interpretations of a social community.	Mainly tacit social knowledge
Embedded knowledge	Embedded knowledge resides in systemic routines.	Mainly tacit social knowledge
Encoded knowledge	Knowledge expressed in formal language, e.g., in written texts.	Explicit personal and social knowledge

Main elements of knowledge and competence management



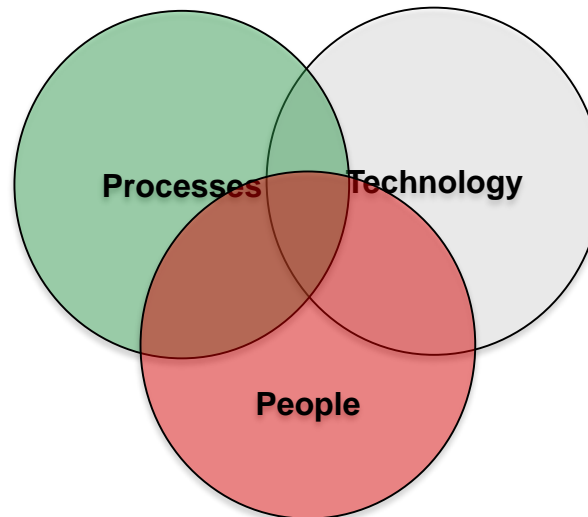


Lecture discussion

- Discuss with a student (or in a small group) next to you:
- What challenges have you encountered when trying to share (either receive or deliver) knowledge with someone?
- 5-10 minutes discussion.

Lecture discussion

- Did you relate your problems on technology, people, or processes? What causes most challenges?



References

- Blackler F. (1995) Knowledge, Knowledge Work and Organizations: An Overview and Interpretation. *Organization Studies*, vol. 16(6), 1021-1046.
- Delphi Group (2004) Information Intelligence: Intelligent Classification and the Enterprise Taxonomy Practice (06/01/2004). Retrieved 18.11.2005 from <http://www.delphigroup.com/research/whitepapers/20040601-taxonomy-WP.pdf>
- Nonaka I. & Takeuchi H. (1995) *The Knowledge-creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.
- Nonaka, I., Toyama, R. & Konno, N. (2000) Seci, Ba and leadership: a unified model of dynamic knowledge creation. *Long range planning* 33, 5-34.
- Ruggles R. (1998) The State on the Notion: Knowledge Management in Practise. *California Management Review*, vol. 40 (3), 80-89.
- Starbuck W. (1992) Learning by Knowledge-Intensive Firms. *Journal of Management Studies*, vol. 29 (6), 713-740.

Learning journal #1

- Reflektoi jotain merkityksellistä ja omaan kokemukseesi perustuvaa tiedon johtamiseen liittyvää helppoutta/vaikeutta. Käytä luentomateriaalia ja artikkeleita liittääksesi kokemuksesi johonkin teoriaan tai tieteelliseen malliin (esim Bhatt G. (2002) Management Strategies for Individual and Organizational Knowledge. Journal of Knowledge Management, vol. 6 (1), 31-39.).