

KNOWLEDGE LEAKAGE

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SOUTH URAL STATE UNIVERSITY – 22
DECEMBER 2016



AGENDA

1. Knowledge leakage

BACKGROUND



Knowledge leakage is closely related to knowledge sharing, which is about an individual's willingness to share with others his/her created or acquired knowledge (Bock et al., 2005).

Knowledge sharing is needed for transforming individual knowledge into organizational knowledge (Foss et al., 2010). Additionally, given today's business environment, collaborations with other actors have become a necessity for companies in order to remain competitive.

KNOWLEDGE LEAKAGE I

Knowledge leakage is “the loss of knowledge intended to stay within a firm’s boundaries” (Frishammar et al., 2015, p. 85).

The majority of literature seems to identify core knowledge as the focal type of knowledge in the context of knowledge leakage.

- Jiang et al. (2013) define knowledge leakage as “the extent to which the focal firm's private knowledge is intentionally appropriated by or unintentionally transferred to partners” (p. 984).
- Similarly, Lau et al. (2010) talk about technological knowledge leakage, which they define as “the risk of loss of proprietary technology owned by the case company” (p. 966).

KNOWLEDGE LEAKAGE II



Knowledge leakage is different to information leakage in the sense that the latter does not refer to the core resources to that extent (Anand and Goyal, 2009).

Critical knowledge, however, is in the eye of the beholder!

Knowledge leakage is difficult to avoid in many situations, e.g., if an innovative or an integrated product is developed, still there are other situations where this challenge can and should be addressed

KNOWLEDGE LEAKAGE III

Two meanings:

- 1) Knowledge and capability shortage: mainly associated with turnover
- 2) Knowledge exposure: organizations enter into collaborative agreements/partnerships



KNOWLEDGE LEAKAGE AND SMES

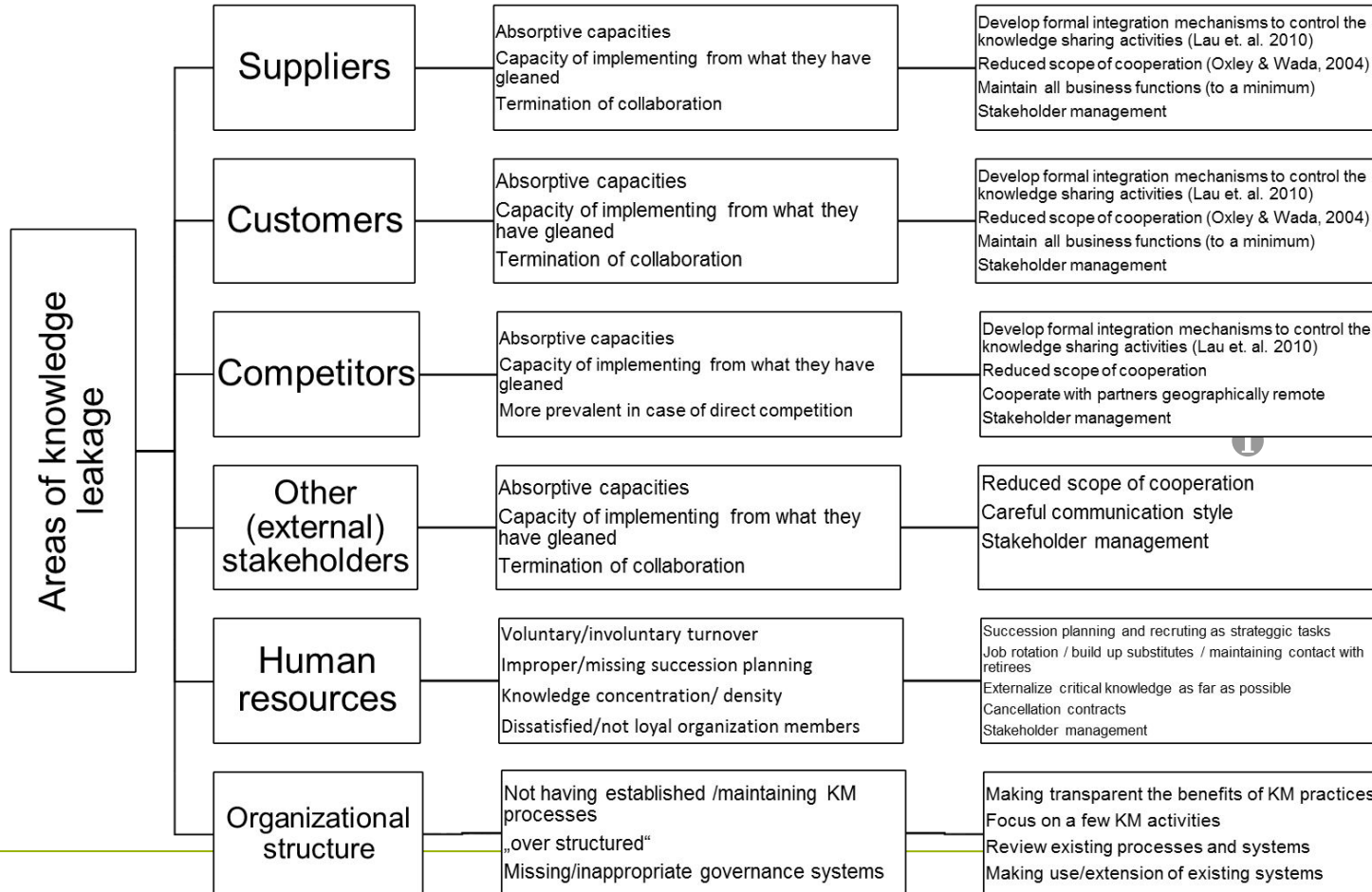


Coping with this challenge should be of particular importance to SMEs as they dispose of fewer knowledge resources compared to their larger counterparties.



Concrete forms of knowledge leakage

Approaches to reduce risk exposure



HOW TO ADDRESS THE DANGER OF KNOWLEDGE LEAKAGE

Knowledge leakage is mainly the result of interactions between various internal and external stakeholders

- SMEs should actively pursue stakeholder management.

For example, stakeholder mapping would help SMEs to identify those primary stakeholders that pose the most serious threat concerning knowledge leakage

Knowledge Risk Management

AS IS SITUATION IN KM LITERATURE

- The contribution of knowledge to develop and sustain competitiveness is generally accepted
- KM has established itself as a field of study
- Yet, a closer look at extant literature suggests that knowledge is mainly discussed as something of value
 - Potentially negative aspects, like knowledge as a liability, seem to be underestimated

This is dangerous as it suggests that to date we have only an unbalanced understanding of the concept of knowledge and its management

HOW TO ADDRESS THIS SITUATION?

Given the importance of knowledge to firms, a strategic approach to knowledge management including knowledge risk management is required to help organizations survive in the long run

It is particularly relevant for SMEs!!!



SMES ARE EXPOSED TO A NUMBER OF KNOWLEDGE RISKS

- *risks related to human resources* (i.e. founder/managing director and staff), which can be the consequence of both voluntary and involuntary turnover and (long-term) absence
- *relational risk*
- *risks related to decision making* relating to new strategies, markets, products as well as other important business issues
- *risks related to knowledge gaps*
- *risks related to outsourcing of business functions*, such as accounting or human resources management

KNOWLEDGE RISK MANAGEMENT



Risk is a natural part of life and can be “defined by the adverse impact on profitability of several distinct sources of uncertainty” (Bessis, 1998, p. 5).

Risk management is primarily about identifying, assessing, monitoring, controlling and reporting firm risks.

→ the focus should be on all types of risk

RESEARCH ON KNOWLEDGE RISK MANAGEMENT

Against the background that knowledge is mainly associated with something of value

□ the study of knowledge risk management (KRM) is in its infancy



POSSIBLE AREAS OF KNOWLEDGE RISKS I

The consequence of *knowledge loss* can be defined as “the decreased capacity for effective action or decision making in a specific organizational context” (DeLong, 2004, p. 21).

- It can be the result of personnel turnover, e.g. a company loses a key organization member;
- the dissolution of well-established teams;
- the outsourcing of business functions;
- a system crash and the theft of data are further examples that can lead to a loss of documented (explicit) knowledge.

POSSIBLE AREAS OF KNOWLEDGE RISKS II

Knowledge leakage may be considered a sub-form of knowledge loss and can be defined as the “loss of knowledge intended to stay within a firm’s boundaries” (Frishammar et al., 2015, p. 85).

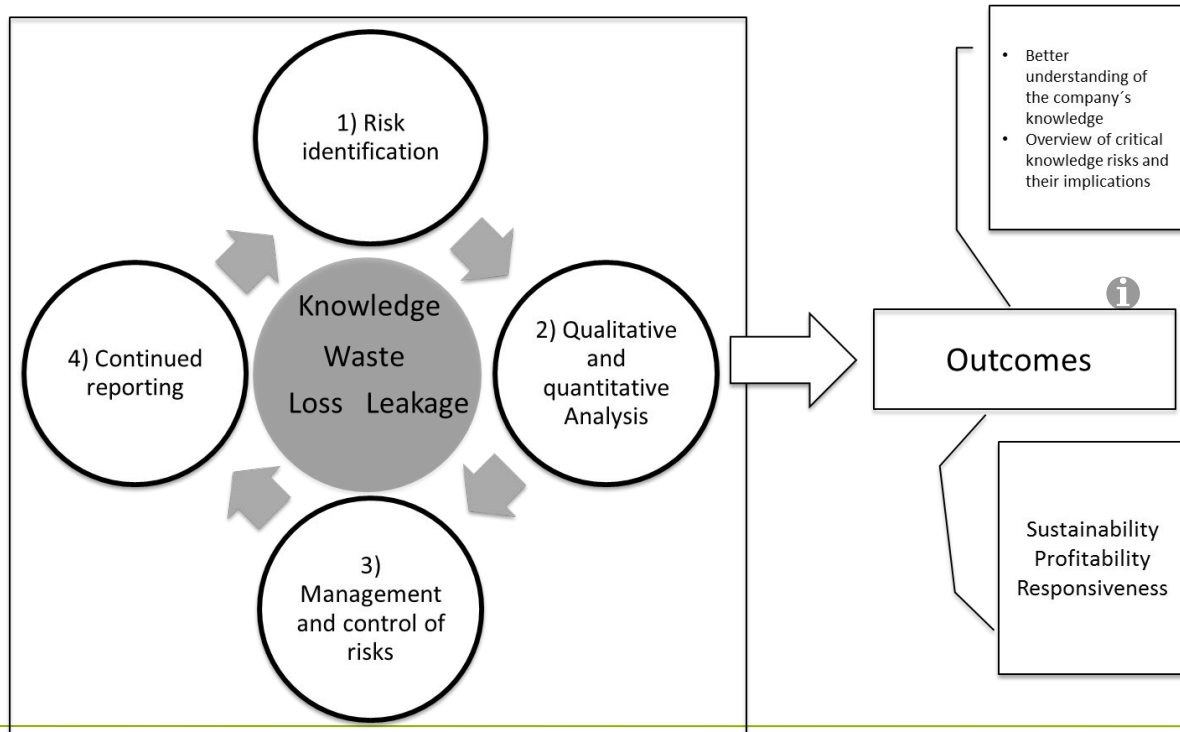
Knowledge leakage, in the meaning of knowledge leaking away from its origin can occur in different situations and be positive, when the organization benefits from it, or negative, when it is detrimental to the organization (Mohamed et al., 2007).

POSSIBLE AREAS OF KNOWLEDGE RISKS III

Knowledge waste can be understood as not using extant knowledge or not supporting the use of the full knowledge capacity. It is defined as any failure in the process of knowledge conversion, better known as the spiral of knowledge creation as proposed by Nonaka and Takeuchi (1997)



FRAMEWORK FOR KNOWLEDGE RISK MANAGEMENT IN SMES



Unlearning and KM



BACKGROUND I

- The processes of unlearning and forgetting knowledge (accidentally or deliberately abandoning or giving up knowledge) are neglected in the KM literature
- Yet, they are a crucial element in organizational KM processes as well as change processes.
- In fact, the inability to unlearn or forget can produce a rigidity in thinking and acting and create a blinkering of outlook which prevents change being implemented when it is necessary.
- In business environments where high levels of turbulence and change occur, the capacity to do effectively is crucial to organizational performance.



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BACKGROUND II

- There is a growing body of conceptual and empirical work on topics such as the nature of forgetting, unlearning, and their relationship to change and learning, what the antecedents of unlearning are, and what the consequences of unlearning are.

UNLEARNING AS A TYPE OF DELIBERATE FORGETTING I

- It is important to make clear that not all forms of abandoning or giving up knowledge are functional for organizations.
- Distinguishing between what constitutes useful and dysfunctional knowledge loss requires defining and differentiating between the specific and distinctive forms that it can take.
- Accidental vs. deliberate loss
 - Accidental knowledge loss is where knowledge and capabilities are lost inadvertently
 - Deliberate knowledge loss involves a conscious process of giving up and abandoning knowledge, values, and/or practices which are deemed to have become outdated.

UNLEARNING AS A TYPE OF DELIBERATE FORGETTING II

- Generally, unintentional or accidental processes of forgetting are typically understood as having generally negative and dysfunctional consequences, while deliberate processes of forgetting are regarded as having positive consequences for the organizations which undertake them.

TYOLOGY OF ORGANIZATIONAL FORGETTING BY DE HOLAN & PHILLIPS (2004)

		MODE OF FORGETTING	
		Accidental	Intentional
SOURCE OF KNOWLEDGE	From Existing Stock	MEMORY LOSS	UNLEARNING
	Newly Innovated	FAILURE TO CAPTURE	AVOID BAD HABITS



DIFFICULTIES WITH UNLEARNING

- It involves reflecting upon and being prepared to give up knowledge and practices which may be taken for granted and which are deeply embedded in organizational routines and cultures.

UNLEARNING, LEARNING, AND CHANGE



- It is acknowledged that learning and unlearning are closely interrelated, there is no consensus in the unlearning literature regarding the nature of their relationship.
- In terms of the relationship between change and unlearning, the vast majority of the unlearning literature suggests that unlearning is a precursor for or facilitator of change. However, only a few papers consider the relationship between unlearning and change in any depth.

TYPES OF UNLEARNING

Type of Unlearning	Wiping	Deep Unlearning
Catalyst	Change programme	Unexpected individual experience
Level/type of impact	Typically focused on behaviours	Unlearning of behaviours and knowledge/values/beliefs
Speed of unlearning	Variable	Typically sudden
Emotional impact	Variable	Typically significant

Source: Rushmer and Davies 2004.

ANTECEDENTS OF UNLEARNING



- There are many factors that influence the willingness of people and organizations to unlearn.
 - Individual-level antecedents of unlearning
 - Organizational-level antecedents of unlearning

INDIVIDUAL-LEVEL ANTECEDENTS OF UNLEARNING

- Negative emotion that unlearning and giving up knowledge can generate, e.g. feeling of fear and anxiety
- Unlearning which is related to admitting to and learning from failure can be an even more difficult process for people to undertake
- Perception of unlearning as threatening and undermining people's self-interest, as it may impact not only their status and esteem, but also the power they possess, and the interests they are trying to pursue
- Cognitive-level factors can also act as a potential barrier, through blinkering people's thinking and creating a sense of cognitive myopia and inertia



ORGANIZATIONAL-LEVEL ANTECEDENTS OF UNLEARNING

- Embeddedness and institutionalization of knowledge, values, and practices in standard operating procedures and specific work practices can create an inertia that makes them difficult to change
- Nature of people's jobs, i.e. complexity and opportunities that jobs provide

- Retraining of existing staff is considered as promising of enhancing an organization's capacity to unlearn.
- Provision of access to training is a way to facilitate attitudes to unlearning during change initiatives.

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