Knowledge at risk? A visualization tool for small and medium-sized enterprises

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Agenda

- I. Theoretical background
- II. Methodology Development of tool
- III. Presentation of tool
- IV. Implications





I. Critical organization members in SMEs

A huge amount of knowledge is personalized

- Knowledge is mainly stored in the head (Nonaka, 1984)
- If this knowledge is critical, the possessor takes a central position

In smaller firms the business owner and some employees own this critical knowledge and may be the source for a competitive advantage of the firm (Barney, 1991)

- Business owners possess the most firms human and relational capital (Bracci & Vagnoni, 2005)
- In situations of a very dominant owner his/her exit will have negative implications for the firm's continuity (Ballarini & Keese, 2006)





I. Knowledge attrition due to turnover (I)

Knowledge attrition is closely related to turnover:

- Voluntary & Involuntary turnover (Shaw et al., 1998)

Besides knowledge attrition may be caused

- Unexpected (e.g. disease, accident and death)
- Through absenteeism
 - Especially smaller firms will suffer from it





I. Knowledge attrition due to turnover (II)

Knowledge attrition affects financial capital and intangible capital of firms

The latter might be more harmful

- Departure of staff member may lead to gaps in the firm's IC basis
- Relational Capital is the most difficult IC dimension to transfer (Massingham, 2008)

Yet not every turnover affects the firm in a negative way!





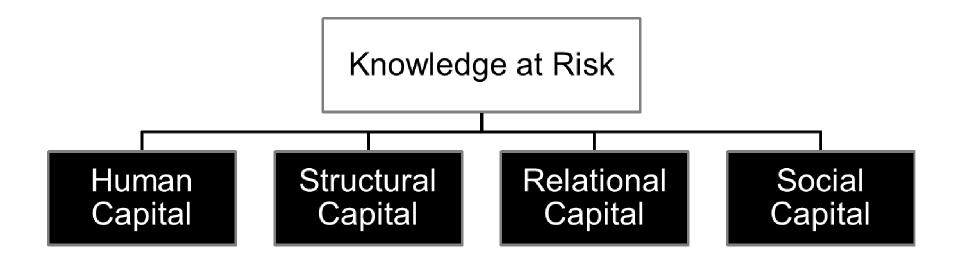
II. Research purpose

This paper proposes a visualization tool for SMEs that enables them to obtain information about the concentration of relevant knowledge with certain individuals respectively in certain departments.





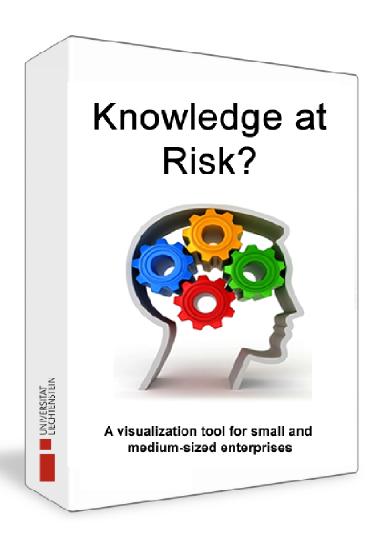
II. Methodology – Development of tool







III. Presentation of tool







IV. Implications

It is argued that smaller firms suffer more strongly from knowledge loss than larger firms

 There is a need for tools helping SMEs to tackle the knowledge at risk challenge

Visualization tool may support SMEs as it helps identify organization members that are valuable

Limitations must be noted:

- Internal focus (even some data about external relationships are considered)
- Less visible people are ignored or underestimated
- The tool may help to identify the knowledge at risk, yet, it does not mean that the firm will actually suffer from this circumstance



