Management Resilience & Resilience Management
Four basic questions

Ulrike Gelbmann

ISIS – Institute for Systems Sciences, Innovation and Sustainability Research, University of Graz

INTRODUCTION, GOAL OF RESEARCH, AND METHOD

"Resilience" is increasingly becoming investigated in areas like climate change adaptation, cities or regions (e.g. Pahl-Wostl 2009; Folke 2010). However, in business management the topic has not yet been addressed a lot, and it seems that neither scientists nor practitioners get into making use of resilience – and are actually hardly acquainted with the concept, its roots, and its implications. To address this gap, this paper explores four basic questions of resilience management and management resilience:

- What are the contexts and boundaries of „resilience"?
- How does resilience work?
- What are the related fields in management?
- What are possible fields of application in managing business/enterprises?

This is a conceptual paper directed at opening the field from the scientific point of view. It is based on a literature review undertaken by (chain-referral sampling (Heckathorn 2002) and systematical search via Scopus and Google Scholar, trying to identify different approaches to resilience, related concepts, and potential application fields in management.

RESULTS AND DISCUSSION

Resilience research started in the field of technical research in the first place, looking at the speed at which systems return to their normal functioning after a disturbance. This approach focuses on "efficiency, constancy, and predictability" (Holling 2009). Another strand of resilience research started in psychology, focusing mainly on defining resilience as an individual's tendency to cope with stress and adversity by better functioning (posttraumatic growth) (Masten 2009). Taking into account continuous or disrupt change, discontinuity, ambiguities of instable environments is also the approach of ecological resilience. This concept focuses on socio-eco-systems (SES) and defines resilience as

- "the magnitude of disturbance that can be absorbed before the system changes its structure by changing the variables and processes that control behavior" (Holling 1973)
- "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks" (Walker et al. 2002).

Ecological resilience is based on adaptive cycles of growing and accumulating potential over a (longer) period of time, collapsing and releasing potential after having experienced disturbances and finally recovering and setting out for new cycles (Holling 2001). Thus, resilience aims to "build capacity for learning and adaptation" (Folke et al., 2002) in instable environments. This bears analogy to concepts like

- change management, directed at adapting to, controlling, and effecting change (Rouse 2010)
- risk management (ISO 31000)
- management cybernetics and viable systems, stressing the ability of systems to move independently through a constantly changing environment.

Still, there has been little activity in business/management research as to the topic, and enterprise resilience has up to now mainly been discussed for supply chains (e.g. Sheffi, Rice 2005) or special sectors

(e.g. Beermann, 2009). A few papers address risk management, aiming at increasing the enterprise's ability to cope with crises of all kinds (e.g. Crichton et al. 2009; Somers 2009). Sheffi (2005), as well, is more interested in identifying and structuring vulnerabilities and returning to "normal" performance. McManus et al. (2007) feature some cybernetics characteristics, stressing the importance of situation awareness, keystone vulnerabilities and adaptive capacity in a complex environment. Heitger (2008), in a change management oriented approach, stresses a 5R approach of reduction, readiness, response, recovery, and renewal. Farjoun (2009) defines resilience in a more engineering-like way, his approach is based on change management more than others.

CONCLUSION AND FUTURE RESEARCH

Although the plethora of concepts called resilience stem from completely different backgrounds, most of them focus on adaptive capabilities. If management literature addressed the topic the approaches were related to either change management, management cybernetics, or mainly risk management, which seems to be the main focus of application so far. In times of increasing complexity and dynamics, however, it makes sense to build on this concept in order to make enterprises more resilient and to manage enterprise resilience adequately.

REFERENCES

Beermann M. (2009): Linking corporate climate adaptation strategies with resilience thinking. Journal of Cleaner Production. 19, pp. 836-842.

Crichton, M. et al. (2009): Enhancing Organizational Resilience Through Emergency Planning: Learnings from Cross-Sectoral Lessons. Journal of Contingencies and Crisis Management, 17 (1), pp.24-37

Farjoun, M. (2009): Beyond Dualism: Stability and Change As a Duality The Academy of Management Review, 35 (2), pp. 202-225.

Folke C. et al. (2002): Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations 31 (5), pp. 437-440.

Folke, C. (2010): How resilient are ecosystems to global environmental change? Sustainability Science 5 (2), pp. 151–154.

Glaser, B.G.; Strauss, A.L. (2009): The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine Pub: New Brunswick.

Heckathorn, D.D. (2008): Respondent-Driven Sampling II: Deriving Valid Population Estimates from Chain-Referral-Samples of Hidden Populations. Social Problems, Vol. 49, No. 1, pp. 11-34

Holling, C.S. (2009): Engineering resilience versus ecological resilience. In: Gunderson, L.H. et al (Eds.): Foundations of Ecological Resilience. Island Press: Washington, D.C., pp. 51-66

Holling, C. S. 2001. Understanding the complexity. Ecosystems 4 (5), pp. 390–405.

Masten, A. S. (2009). "Ordinary Magic: Lessons from research on resilience in human development"). Education Canada Vol. 49 No. 3, 28–32.

Pahl-Wostl, C. (2009): A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. Global Environmental Change 19, pp. 354–365.

Rouse, M. (2010). Definition Change Management. Available online: http://searchcio-midmarket.techtarget.com/definition/change-management , 30/07/2013

Sheffi, Y. (2005): The Resilient Enterprise: Overcoming Vulnerability for Competitive Advantage. Boston, Mass.: MIT Press.

Sheffi, Y.; Rice, J.B. (2005): A Supply Chain View of the Resilient Enterprise. MIT Sloan Management Review, 47 (1), pp. 41–48.

Somers, S. (2009): Measuring Resilience Potential: An Adaptive Strategy for Organizational Crisis Planning. Journal of Contingencies and Crisis Management, 17 (1), pp. 12-23.