# The Epistemology of Resilient Organizations Implications for Business Continuity Management

Eva Gatarik<sup>1</sup>, Viktor Kulhavý<sup>1</sup> and Rainer Born<sup>2</sup>

<sup>1</sup>Department of Corporate Economy and Management, Faculty of Economics and Administration, Masaryk University, Lipová 41a, Brno, Czech Republic <sup>2</sup>Institute of Philosophy and Theory of Science, Johannes Kepler University, Altenberger Straße 69, Linz, Austria

- Keywords: Organizational Performance, Organizational Epistemology, Organizational Resilience, LIR (Language Information Reality) Framework of Analysis, Business Continuity Management (Case Study).
- Abstract: Pointing out flaws and errors can be a risky pastime for those employees, whose information conflicts with theories and rules held dear by management. However, effective performance does not consist in strictly adhering to established rules. Instead, it is driven by a continuous search for meaning within organizational environments, which are, in turn, enacted upon emerging and redrafted meaning. Meaning based upon lived and reflected experience provides a corrective use of rules and, hence, more appropriate, effective results. Effective performance arises out of plausibility rather than accuracy. In the event of uncertainty, equivocation and doubt, people in organizations claiming resilience should jointly classify and interpret observed data into new knowledge so that subsequent action can tap into the prevailing business climate, reduce ambiguity, and offer more exciting prospects. A framework is introduced and applied to justify an organizational epistemology to assist the construction, processing and justification of meaning within organizations.

## **1 INTRODUCTION**

Despite several insightful empirical studies on how effective performance is created in organizations, there is still no satisfactory answer to the question: How is effective performance created in organizations?

The purpose of this paper is to address this question by focusing on a theory of successful organizational practice, and the application of that theory.

The following argument is advanced. Taking up a case of redevelopment and since then effective performance in an Austrian SME, it is argued that the success of that enterprise is explained by the enacting and management of four selected components. These components knowledge comprise expertise, competence and capabilities in their operational influence upon effective performance, as well as an explanatory metatheoretical reflection.

The structure of this explanation is generalized into a sort of holistic framework "for the analysis, the guidance and evolution of actions to be taken", concerning the relation between (not only but primarily) language, information/meaning, and well-selected parts of reality.

## 2 FRAMEWORK OF ANALYSIS

literature related to In the organizational performance, there are primarily descriptions available, leaving everything as it is. In the sequel, it is argued that via introducing and using the modeltheoretic systemic framework of analysis Language-Information-Reality (LIR), there also would be a chance to explain and predict both mischief and success of an organization. Furthermore, it could be identified in which way a holistic understanding of the creation of knowledge, and its influence on expertise, competence, and capabilities, could both change the current situation in the related research, as well as produce and reproduce in a controlled manner long-enduring effective organizational performance, resting upon overcoming or overruling established organizational presuppositions and assumptions, or - put differently - upon overriding

established organizational rites.

Copyright (© 2015 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved

Gatarik, E., Kulhavy, V. and Born, R.

The Epistemology of Resilient Organizations - Implications for Business Continuity Management.

In Proceedings of the 7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K 2015) - Volume 3: KMIS, pages 93-97 ISBN: 978-989-758-158-8



Figure 1: The LIR framework of analysis, depicting the scissors of meaning.

The technique at the bottom of the framework LIR is a multi-dimensional form of *mapping* based upon model theory and a multi-component formal semantics. The force behind are both the ideas of classical systems theory, as well as the semantic approach to a theory of truth, originating in research starting with Alfred Tarski and others.

The framework LIR is covered in more detail in Born and Gatarik (2013). Its shortcut in Figure 1 can nevertheless be used to highlight that we cannot reduce expertise (**E**) to rules/heuristics (**K**) in such a way that the latter showing up as the competence of an organization can be used causally and applied to solve problems (P ==> Q) in an acceptable way by just applying ordinary, unrefined and unchanged common sense knowledge (**F**), i.e. capabilities, also with respect to *collective understandings* (Tsoukas and Vladimirou, 2001).

Instead, it is essential to enhance the epistemic resolution level of users with common sense knowledge (**F**), which holds true for the management and their theories as well, by way of enhancing **F** to some **F**\* in order to be able to solve problems P in an inventive, flexible and acceptable way, in symbolic terms:  $\langle K|F^* \rangle$  (P) ==> Q\* in a

way such that the solution  $Q^*$  is not an element of the set of solutions [Q] produced by  $\langle K|F \rangle$  (P) ==>  $Q^*$ , and thus to create a competitive advantage and be successful in the long-run.

Drawing on a variety of theoretical sources it is argued, and portrayed (Tsoukas, 2011) with the help of a case study, that such an extension from  $\mathbf{F}$  to  $\mathbf{F}^*$ can be accomplished via an *explanatory* reflection (a sort of view from outside) in  $\mathbf{M}$  to be able to achieve or provide a proper change from  $\mathbf{F}$  to  $\mathbf{F}^*$ , and thus to establish and support the controlled reproducibility of effective organizational performance.

In Figure 1, there is also designated the influence of background knowledge component E versus F both upon the production of acceptable or intended results or problem solutions Q as well as the acceptance of Q as scissors of meaning. If there can be identified different local epistemic resolution level in E and F as one of the causes, leading to (managerial) suboptimal decisions (formally depicted as: H; S  $\rightarrow$  R), then we can also understand why the reduction of decisions to rules K has its limits. Therefore, a guided instantiation of dialogue (in the sense of David Bohm) within organizations is suggested that allows to translate knowledge from E

to  $\mathbf{F}$  or rather to build up some extension or enhancement  $\mathbf{F}^*$  (Tsoukas, 2009). This can lead to better decisions in the long-run due to an evolved ability to evaluate future consequences in particular on the part of management.

Reasoning about the *knowledge gap* between **E** and **F** might also help to close a corresponding gap between theory and the so called *organizational practice* with its own local theories or rites of rationality (Foucault, 1970; O'Leary and Chia, 2007). The latter expresses itself in the acceptance of [1] the proposed or produced *solutions* Q, [2] the means, i.e. the rules, structures, expertise, etc., that produce Q, and [3] the justifications for what is proposed to be taken to generate Q (in the scheme LIR sometimes indicated as *three levels of reflection*).

#### **3** CASE STUDY

A case study may serve to illustrate the case in point. It was developed at Beham Techn. Handels GmbH, an Upper Austrian SME specialising in the production of precision metal parts since 1948. The LIR framework was employed as the main means of analysis in a description of re-modelling Beham's processes of decision and action in such a way as to enhance organizational performance in terms of creativity, flexibility and innovation in the long run.

Some years ago, Beham encountered massive financial difficulties. Their budget was simply unable to cover future payments (problem situation P represented in S as "red numbers"). It was clear that sustainable solutions in this case could not rest upon one-dimensional, monetary representations of knowledge following by measures like closing down divisions not belonging to the core business, abandoning unprofitable branches, or avoiding extraordinary, inherently *one-off* processes, although such a solution might appear to be calculable and accessible to plausible representation.

In other words, the management realized that partial (e.g. economic) explanations and suggestions for action derived from the former in a non-reflective way need to be overcome (overruled) and replaced by fresh practical problem solving ideas (H;  $S \rightarrow R$ ) based upon a sort of enactment of a joint meta-



Figure 2: Enacting expertise, competence, and capabilities via joint meta-reflection in M towards effective performance, embedded into the meaning transfer supportive corporate culture at Beham GmbH, depicted in LIR, indicating the three levels of reflection and the *scissors of meaning*, handled by dialogue between experts in E and users in F towards enhancing the epistemic resolution level of F to F\*.

reflection (M) of problem situations (P) in the concrete causal organizational context (P ==> Q), see Figure 2.

However, the quality and innovativeness of the Beham solutions depended on more than just the implementation of knowledge component M by way of a management team; extended involvement of the content of the other three knowledge components of the LIR scheme allow comprehensive knowledge of the enterprise to be taken into account. The precise selection of the members of the management team has ensured that they also convey the particular perspectives and challenges generated by their various departments (in terms of E) to the decisionmaking process. In addition to this, these experts have provided an excellent interface with other employees. whose aspirations and opinions (knowledge component  $\mathbf{F}$ ) could thus be said to have been represented at team meetings. Finally, through the special use of a sophisticated information system K and the extensive experience of an IT specialist as a one of the eight members of the management team, even more significant information has been shared.

Further, the members of the management team may also perform and even adjust the various knowledge roles that form the essential theoretical backbone of the LIR scheme. When addressing the topic discussed and the situation, they play a number of roles: they may be specialists – experts; they can provide general knowledge and life experience; they may think and argue in both procedural and regulatory terms; and they may provide certain reflective external perspectives.

This kind of *thinking together and learning from each other* is explained by, and rests upon, the LIR framework initiated at Beham GmbH as a theoretical backbone for sustainably effective organizational performance. This framework provides guidance for the actions, evaluation and understanding on the part of the employees. However, although the specific direction the enterprise should take is indicated, the employees themselves are granted local autonomy to find ways of maintaining that course.

From the corporate-financial point of view, the positive effects of the re-modelling at Beham GmbH may be selectively summarised after eight years. The company turnover has increased threefold; Beham has been listed as the most successful enterprise of those in which the participating private equity-fund had ever invested (proportional to size); and the capital invested by outside parties has been superseded by internal equity capital generated over the eight years. Moreover, after the re-modelling Beham has been the recipient of several business awards, among them the international Best Business Award for Sustainable Management, Europaregion Donau-Moldau, in 2014. The rating criteria were economic success, uniqueness, employee status, innovative power, sustainability and social responsibility.

Although space dictates that the Beham case is not covered in more detail, the case study can nevertheless be used to highlight that any remodelling of an enterprise via LIR requires, *inter alia*, outstanding attitudes on the parts of the managers and employees and an appropriate corporate culture. These are vital to the *reflective transfer* of the analysed approach to other enterprises.

## **4 REFLECTIVE CONCLUSIONS**

The light was thrown on that it is important not only to describe the *rites of rationality* in an organization, but also to understand the processes going on there to be able to induce change both in theory as well as in practice.

In the case study it was the implementation of the management team as an enactment of the fourth, explanatory knowledge component  $\mathbf{M}$  from the framework LIR.

However, it must also be pointed out that it is not just the enactment of  $\mathbf{M}$  which *can* lead to success. What is important to take into account is the population of  $\mathbf{M}$  and the way in which it can help to give meaning to documentations, existing or implicit rules  $\mathbf{K}$  and to transfer knowledge from experience and expertise  $\mathbf{E}$  into an episteme for decision support via management.

Due to the systemic and model theoretic background of the framework LIR it might be summarized and pointed out:

- (1) The adding up of the local optimization of expertise, competence, and capabilities is suboptimal for the success of the whole (an organization as such).
- (2) In many cases (although not in all) effective organizational performance does not only depend on strictly or stubbornly obeying or applying *rules, practices and theories*, but on knowledge about the coming about of expertise, and about the limits of the application of those rules, and thus on a reflective and corrective collective practice.
- (3) To reflect the limits of *following a rule* might well help to understand constraints and

presuppositions about the world we live in, and thus support an ecological point of view.

(4) Routines should not replace thinking. The incompleteness of formal systems (Kurt Gödel) should be taken into account.

Corollary, the integration of organizational and management practices into the meta-theoretical framework LIR can facilitate understanding and controlled reproducibility of those events that are considered and accepted as examples of *effective performance* mirrored in sustainable success, economic or otherwise.

#### ACKNOWLEDGEMENTS

This contribution owes a great debt to Dr. Christian Hochrainer, Beham GmbH, in terms of both inspiration and execution.

### REFERENCES

- Blatter, J., Haverland, M. 2012. *Designing case studies: explanatory approaches in small-N research*, Palgrave Macmillan. New York.
- Born, R., Gatarik, E. 2013. Knowledge management and cognitive science: Reflecting the limits of decision making, in Kreitler, S. (ed.), *Cognition and Motivation: Forging an Interdisciplinary Perspective:* 321-351, Cambridge University Press. Cambridge.
- Foucault, M. 1970. *The order of things*, Pantheon. New York.
- O'Leary, M., Chia, R. 2007. Epistemes and structures of sensemaking in organizational life. *Journal of Management Inquiry*, 16(4), 392-406.
- Tsoukas, H., Vladimirou, E. 2001. What is organizational knowledge? *Journal of Management Studies*, 38(7): 973-993.
- Tsoukas, H. 2009. A dialogical approach to the creation of new knowledge in organizations. Organization Science, 20(6), 941-957.
- Tsoukas, H. 2011. Craving for generality and small-N studies: A Wittgensteinian approach towards the epistemology of the particular in organization and management studies, in Buchanan, D., Bryman, A. (eds.), *The SAGE Handbook of Organizational Research methods*: 285-301, Sage. Thousand Oaks, 2<sup>nd</sup> edition.