Editorial

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The innovative capability of companies – the capability to develop new products and successfully introduce them into the market – is generally accepted as a source of competitive advantage. Many new products are based, to a great extent, on existing skills and knowledge, knowledge about product technologies, product structures, customer requirements, development routines and so on. Companies can profit from being aware of their so-called core competencies (Prahalad and Hamel, 1990) and applying them in the

market, such as in product development. As Leonard-Barton (1992) pointed out, core competencies can become core rigidities if companies fail to extend their competencies. Prahalad (1998) mentioned creativity and imagination as a starting point for competence progression. However, what is creativity?

Creativity is broadly understood as finding new and useful solutions to problems (see Amabile, 1996; Feist, 2005; Sternberg, 1988). There are different ways to look at creativity:

- creativity as the ability of a person (Feist, 2005, summarised the extensive research done on the correlation of creativity and other personality traits)
- creative action, which refers to people acting in a creative way and thereby creating new knowledge (as described by Ford and Ogilvie, 1996)
- research on the creative thinking process investigates the different steps of creative action (described by Wallas, 1926); every step can be enhanced by creativity methods (*e.g.*, Osborn, 1953)
- creative climate, because the interaction of the person and the situation results in creativity (Hunter *et al.*, 2007, gave a literature review on creative climate)
- creativity as a characteristic of the created product (a piece of art or a product concept prototype; a scale for evaluating creative products has been developed by Besemer and O'Quin, 1986).

In this special issue, we focus on big-step creativity in new product development. Within this context, we especially look at the patterns of creative behaviour leading to new product concepts guided by processes and/or structures and influenced by situations and environments.

The first three papers of this special issue investigate the interdependencies of structures and product innovation creativity in companies. The first paper, 'Can structures foster creativity and innovation? The propositions based on a Giddens-inspired framework' by Kobe, develops propositions on the interdependency of procedures like innovation processes and the creative and innovative capability of organisations. The second paper, 'Blending creativity and structure in implementing a novel idea' by Beckett, also refers to structuration theory. It suggests a framework on the process of innovating, involving both elements of structure and agency. A case study relating to the implementation of a particular out-of-the-box innovation illustrates the framework. The third paper of this special issue, 'How to create and sustain an open and radical innovation capability in the fuzzy front end: the case of Vodafone Group R&D Germany and selected ongoing radical innovation projects', is by Stüer *et al.*

The next three papers are dedicated to the barriers constraining creativity. The fourth paper by Lempiälä examines 'The barriers and obstructive practices for out-of-the-box creativity in groups' based on the empirical materials collected from three group ideation contexts. The fifth paper, 'Reshaping the box: creative designing as constraint management' by Stacey and Eckert, explores how overconstrained and underconstrained problems are tackled in fundamentally different ways using engineering design, knitwear design and software development as exemplars. The sixth paper, 'Out-of-the-box creativity and risks: the propositions and future research directions' by Verworn and Kobe, proposes a framework of the risk-related prerequisites of 'extreme' creative action based on an integrative analysis of the existing theory and empirical findings.

The last three papers are on the drivers of creativity and ideation. In the seventh paper, 'Understanding creativity motors and obstacles in product development' by Lakemond *et al.* a multiple-case study of three Swedish manufacturers is used to explore and complement a framework on the motors of creativity in product development, building upon the model of Van de Ven and Poole (1995). The eighth paper, 'Exploring the ideation patterns of ordinary users: the case of mobile telecommunications services' by Magnusson *et al.* based on a quasi-experimental study, identifies four different ideation patterns leading to different types of ideas with regard to their innovativeness. The ninth paper, 'Idea management systems for a changing innovation landscape' by Sandström and Björk, explores what an idea management system that handles both continuous and discontinuous innovation ideas may look like.

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