Individual learning, ideation and innovation management – discussion paper seen from innovation management practices

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Abstract: This paper discusses that the hitherto applied practice in innovation projects has a fundamental fallacy to it which can inhibit ideation capabilities and thus the creation of new businesses (Chesbrough et al., 2006; Christensen, 2003). In consequence, this paper elaborates on three key themes which potentially can reduce the gap between creativity and innovation. The themes are as follows:

1 ideation and innovation processes should be managed as two separated operations in practice
2 awareness about individual learning and learning styles ameliorate cooperation and communication in the processes
3 the cognitive domain of personal knowledge is important to articulate to clarify the validity of the arguments used in both the ideation and innovation processes.

The author puts it into hypothesis that the quality of the ideation processes and the results of these processes will be improved radically.

Keywords: individual learning; idea management; ideation; knowledge creation; personal knowledge management; learning styles; innovation management; organisational learning.


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1 Introduction

More than 60 years ago innovation was perceived as a sort of black-box by practitioners and academic scholars (Fagerberg et al., 2005). As a result, research and development centres were established internally in many organisations, and the managers and CEOs believed that their innovation capability would rise linearly according to the amount of money spent on ideation, internal research and development for organisational knowledge creation (Drucker, 1993; Freeman, 1982). Alas for the organisations who tried this in practice, this belief proved not to be true (Drejer and Skaue, 2007).

Nowadays, more and more organisations are moving from the closed innovation paradigm with internal R&D-centres and internal business processes, towards the open innovation paradigm, where they seek external knowledge, i.e., best-practices, know how, etc., and compile the external knowledge with the organisation’s own practice to create new businesses (Chesbrough et al., 2006). A Scandinavian survey has just been published demonstrating that 49% of Danish leaders believe that it is very important to be creative and innovative in their job. Only 20% of the same leaders find themselves to be very creative and innovative in their job. In Sweden, 59% of the leaders find that it is very important to be creative and innovative; but only 27% of them find themselves to live up to this goal (cf. INNOVATIONinside, 2010).

Even though academic scholars and professional businesspeople state that they know much more about innovation today than they did ten years ago, it is still argued that innovation itself remains a black-box for all of us.

2 The causative factor for ideation and innovation projects to fail

The focus on creativity and ideation has been observed to be down prioritised in many innovation processes, simply because the project management is eager to create a surplus as soon as possible. As noted by Zhang and Doll (2001), who state: “Most projects do not fail at the end; they fail at the beginning”. Thus, it is argued that practitioners forget/neglect what academic scholars have been publishing for years; namely that ideation processes (divergent thinking) are not to be seen as part of the innovation project (convergent business process), but as a preliminary groundwork which should be executed in a scrutinised manner beforehand (Gurteen, 1998). In practice, managers articulate that they know by fact that ideation processes can be fuzzy and that these processes can demand many resources when going from the individual thought to a fully developed idea. Still, in practice, managers are more eager to initiate the innovation process and hence start structuring the different ideas when the ideas are only in an embryonic state [also cf. the experiences form Kim and Wilemon (2002)]. To change this bad spiral of wasting time on poor processes with vague results, it is argued that a shift in mindset and general business processes is needed by the individuals constituting the project management and by their organisation, in order to enhance the quality of the ideas which are taken into an innovation process (Dershin, 2010; Newel et al., 2009). It is thus imperative that managers stop taking idea management for granted and that the same managers realise that the ideation process is just as important as the innovation project itself. If there is not a change in attitude, a great source of potential innovation will be wasted (McAdam and McClelland, 2002).
Additionally, a historical perspective on innovation management demonstrates that the accessibility of relevant knowledge is perceived as something manageable (read: objectified), and it seems that knowledge itself and the professional work with knowledge is something which practitioners take for granted in practice (i.e., Schumpeter, 1943; Chesbrough et al., 2006; Prahalad and Krishnan, 2008; Hippel, 1988). Since knowledge is argued to be subjective (Davenport and Prusak, 1998) as something that cannot be objectified and thus managed by others than one self, and since human beings are not machines who can work non-stop with information (Klingberg, 2009) it is argued that we should be aware and accept the fact that communication in general is not to be juxtaposed with knowledge sharing (Kjelgaard, 2009). Davenport and Prusak’s (1998) tripartition of data, information and knowledge create a fundamental distinction – a useful and easy to apply nomenclature in practice – which is down prioritised/unknown in practice and thus creating an inhibiting – if not deadly – factor to the ideation and innovation processes. Hence, it is an influential factor which makes smart people underperform (Hallowell, 2005).

3 Individual learning processes and learning styles

Cf. Camuffo and Comacchio (2004) an imperative and still under-researched element of knowledge management is personal knowledge creation, and the author adds that individual learning is one of the key ingredients in any successful ideation and innovation process. It is henceforth important for the individuals in the divergent and the convergent business processes of ideation and innovation management to know how they can assist themselves in the transformation process of information from others (both people and software systems) into personal knowledge (Drucker, 1993). In short, professionals and academics need to have an understanding of how and under which circumstances they work most efficiently to create (and maintain) their personal knowledge; and they need to know the limitations of their own knowledge – i.e., if they are novices, something in between or experts in a given situation. One method to understand and strengthen individual learning process, which is demonstrated to be utterly beneficial in practice (i.e., Kjelgaard, 2009), is the application of Rundle and Dunn’s building excellence model (Rundle and Hoeningsfeld, 2002), which is based on Dunn and Dunn’s learning styles construct (Dunn and Rundle, 2008).

4 Learning styles and ideation processes – is it relevant?

Since learning, here thought as personal knowledge creation, is a progression of individual information processing it is noted that the building excellence model and the individual learning styles profiles are only tools which can be applied in an ideation and innovation context. Individuals who have taken the BE survey and understood their individual learning strategies (and thus knows how to act when they cannot work under circumstances which correspond their personal learning strategies) are able to assist themselves to learn in the best way possible according to the situation (Rundle and Hoeningsfeld, 2002; Sousa, 2006). This is strengthened by Hallowell (2005) and Klingberg (2009) who state that insight about how to ignore/avoid elements in distracting
situations will remove information overload from the working memory of the individuals’ brains and enhance the individuals’ capabilities, because the participants, for example in an ideation process, will understand what causes them to be unfocused and why (ibid). In short, the more distracting information that can be moved from our exogenous attention in an ideation process, the more information we are capable to process in our working memory where our goal-oriented endogenous attention is needed (ibid.).

5 Learning creates uncertainty and doubt

In an ideation process, it can be difficult to understand and accept the different thoughts and ideas which are presented during the process and this lack of understanding can cause confusion (De Bono, 1970; Damasio, 2000). When people have to learn something new and work with unfamiliar information it is often referred to as a process of accommodation (Piaget, 1953). When accommodating new information into personal knowledge this self awareness is important to articulate, because it is normal to be confused during a learning process (Lauridsen and Lauridsen, 2009). Here, in this confusion many people give up and find themselves defeated, because they feel a lack of skills and understanding to make a choice or to carry on working with other elements in the process (Hogg and Vaughan, 2008). The other way around, Tulving (1974) state that cue dependent forgetting is a factor which can bring forward the same level of frustration as confusion in an ideation process. Cue dependent forgetting is when an individual knows that s/he knows a certain thing, but s/he cannot bring it to awareness before a certain cue makes him/her remember it. When working with ideation in a group of people it is important to stress these perspectives, because they remove focus from the uncomfortable situation of feeling inferior, to accepting the fact that the participants are learning something new during the confusion and thus contributing to the process (Restak, 2003; Goleman et al., 2002). Hence, it is argued to enhance the potential quality of the outcome.

It is imperative to notice that personal knowledge is created when individuals are learning something new, and as stated before accommodation can be one type of learning (Piaget, 1953). Moreover, there is the aspect of getting smarter, that is, to learn more about a certain subject, and this is referred to as assimilation (ibid.). Because there is huge differences between the things we know, and what we really know, it is important to have a common language in order to be self aware of the level of knowledge one has (Eysenck and Keane, 2007). One common error which professionals often fall into is the competence trap (Argyris, 1990). When working with ideation, and in general, people tend to believe that they know much more about a given thing, than they really do; and this is referred to as the illusion of explanatory depth (Keil and Rozenblit, 2002), i.e., if people state that they know something, then it often turns out that they cannot explain it to others because of their limited personal knowledge about the subject (Ibid). In short, a common language (a nomenclature) of the level on one’s personal knowledge is argued to be needed in practice to articulate to others how much one knows about a given subject (Hogg and Vaughan, 2008), and in this context it is argued that Bloom’s taxonomy of the cognitive domain is a appropriate apply in practice.
5.1 Novice, in between or expert

In 1956, Bloom et al. (1956) made the taxonomy of the cognitive domain, where he divided the individual knowledge into a classification, in which it was possible to evaluate how much one new about a certain field/subject. Blooms taxonomy was originally created for classroom learning in an US high school context, but it is argued that this taxonomy is utterly important to induce into the ideation and innovation perspective, because learning – that is, personal knowledge creation – does not only occur in classrooms (Pegels, 1998).

The lowest level in Bloom’s taxonomy is knowledge, where an individual can recall data or information, i.e., define, describe, paraphrase, etc. The next step on his scale is comprehension where an individual is able to understand the meaning of a given element; the third element in the taxonomy is application where a person can apply the learned element into a new context in practice. The fourth element is analysis where the learner can separate relevant information from irrelevant information in a given situation; and the fifth element is synthesis. Synthesis is where the learner can splice two or more different elements into a new element with success, and the sixth and final element in the taxonomy is evaluation. Evaluation is the part of the taxonomy where the individual learner is capable of making subjective judgments of the value of ideas and/or materials and suggest conclusions based on his/her own interpretation of the evaluation (Bloom et al., 1956).

In an ideation context, it is important to direct attention towards the last element in the taxonomy – evaluation – because according to this view, only people who are really knowledgeable, one could say experts should be the ones making decisions and thus elect the ideas and/or inventions suitable for an innovation process (Drucker, 1993). Additionally, it is stressed that this/these individual(s) should be self aware and avoid skilled unawareness, that is, make bad judgments based on routines and distorted theories about how the things work (Argyris, 1990). This could be done by engaging in dialogue, i.e., by using means-end types of questions and open fundamental questions to reveal the underlying reasons for electing one idea over another (Goleman et al., 2002).

6 Discussion

It is argued that the perspectives presented in this paper highlight important aspects which should be articulated during ideation processes and innovation projects in a managerial and leadership perspective. One cannot take for granted that assembling a group of different people automatically will result in good ideation processes and thus the creation of inventions; and it is not true that more information accessible equals more ideas. On the contrary, this paper argues that

1 ideation processes are equally important as innovation projects, and that human and pecuniary resources should be set aside to complete the ideation processes until they are ready to be implemented as an innovation project

2 the participants and facilitators in ideation processes need to recognise that they have to learn from one another, and that they are not sharing knowledge merely by communicating
3 that the implementation of the building excellence model can create individual strategies for how to work focused to maintain full potential in an ideation process.

4 that insight about the level of one’s actual personal knowledge, the taxonomy and the recognised limits as such, will create a more realistic picture of the individual participants and thus enhance the level of the qualified proposals in the processes from ideation towards innovation.

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