ABSTRACT

The purpose of this paper is to explore the effects of some monetary rewards practices on innovativeness. Innovativeness is an important issue for most organizations, particularly for those in a competitive and changing environment. They need to develop continuously new products, services and business models in order to survive.

How do reward practices influence innovativeness? Reward practices have been developed in many organizations during recent years and particularly the use on performance based pay and incentive pay has increased. They have a clear positive effect on productivity but findings on the effects on quality have been less consistent (e.g. Jenkins & al, 1998). Also literature on creativity and innovativeness frequently questions the use of pay to enhance creativity (e.g. Amabile).

This paper will first take a look at some literature on the topic and then explore the presented concepts through a case study. A particular interest is on the processes of implementing reward practices and how they affect the innovativeness of a work community.

Literature on innovativeness

The concepts of innovativeness and creativity are often used interchangeably and even carelessly. We refer the definition of Hult et al. (2004): “Innovativeness relates to the firm’s capacity to engage in innovation; that is, the introduction of the new processes, products, or ideas in the organization”. Creativity is usually defined as the production of novel and useful ideas in any domain whereas organizational creativity refers to the creation of novel and useful ideas in the work context (Amabile et al., 1996). In order to reach innovativeness creativity must be combined with the ability to develop and implement (e.g. Amabile, 1998). As a summary, creativity produces useful ideas but innovativeness requires the capability to take action after the idea is presented. Creativity can thus be seen as a building block of innovativeness.

The production of innovations in an organization is often described as an innovation process. The innovation process can further be divided into three different stages: the front-end phase, the new development project phase and the commercialization phase (see e.g. Koen, 2001). This study focuses on the Front-end, the FEI. As the early part of the innovation process FEI includes activities such as idea genesis and enrichment, idea selection, opportunity identification, opportunity analyses and concept definition (Koen, 2001). Thus in FEI both creativity and taking action are important.

The basis of organizational creativity is the creativity of individuals. Amabile (1988, 1996) identifies three components in individual creativity: task motivation, domain relevant skills and creativity-relevant skills. They all are needed for bringing about creativity. If the level of any of them increases, the higher the overall creativity will be. The domain-relevant and creativity-relevant skills define what the individual can do, but task motivation defines what the individual eventually will do. Amabile divides task motivation further into two parts: intrinsic and extrinsic motivation. Intrinsic motivation or self-motivation means that a person is motivated by the interest, enjoyment or challenge of the task itself. Extrinsic motivation factors are i.e. evaluation, competition and rewarding. Intrinsic motivation is seen to have the most positive effect on creativity. Extrinsic motivational factors should be executed in a way that they support the intrinsic motivation in order to achieve optimal results. (Amabile, 1988, 1996).
On individual level the desired innovative activities can be described as innovative behaviors. West and Farr (1989) define innovative behavior as covering “all individual actions directed at the generation, introduction and application of beneficial novelty at any organizational level”. Kleyson and Street (2000) categorized five types of innovative behavior: opportunity exploration, generativity, formative investigations, championing and application. Of the five sets of innovative behaviors, the four first are most relevant for the FEI.

How do organizations manage individual behavior? De Jong and Kemp (2003) studied drivers of innovative behavior. They identified seven determinants for incremental innovation: job challenge, autonomy, strategic attention, supportive climate, market differentiation and variation in demand. These determinants have similarities with Amabile’s (1988, 1998) model for creativity and innovation in organizations and Anderson’s and West’s (1998) measures for climate for work group innovation.

Amabile (1998) presents six categories of managerial practices affecting individual creativity: challenge, freedom, resources, work-group features, supervisory encouragement and organization support. West and Anderson (1998) describe four factors: vision, participative safety, task orientation and support for innovation.

For the purposes of this study we summarized six common features in these approaches that seem to be relevant for innovativeness:

- A vision or goal to set direction
- Challenging tasks to energize and motivate
- Freedom of choosing how to innovate
- A group of people to innovate with
- Feeling of safety, support and right to fail
- Concrete support from supervisor and management, such as time, resources and recognition

On reward systems

Most researchers of innovativeness discuss the role of rewards only briefly stating that it is important to align rewards with other innovation management practices. The role of rewards and pay is discussed more in detail by Amabile (1988, 1996, 1998), while other authors often refer to her. Money is seen as an extrinsic motivator. Money may lead people to think that they are bribed or controlled. It may lead to fast and less creative solutions. However rewards can act as recognition of creative work, which in an important part of encouragement. Amabile writes that creative organizations consistently reward creativity but avoid using money. At the same time not providing sufficient recognition and rewards for creativity can spawn negative feelings within an organization.

The question remains, how to use monetary rewards successfully. To explore this we use the concept of reward system. It consists of the specific rewards or pay methods used and the processes related to them. Pay methods may be e.g. incentive pay, performance-based pay, lump sum payment or base pay. The processes consist of those connected to using the pay method but also developing and implementing a new pay system or improving existing ones. In practice there are usually differences between the planned or written processes and their actual deployment. The effects of rewards are created as the outcome of the whole system.

The case organization

The case organization of this study is a research unit of a large, globally operating technology company. This originally Finnish company is today listed publicly and has offices in several countries. The company has been successful and was at the moment of our study experiencing a substantial boom in its business. This has lead to increased time pressure from sales and delivery projects, which is challenging for innovativeness. The company is among the technology leaders in its business and needs innovation in order to keep its market position.

The reward practices in the case organization
We focus here on the two reward practices which were directly aimed at enhancing innovativeness: an incentive system and a compensation plan for employee inventions. The incentive system consisted of three parts: one was based on company financial performance, second on performance of the unit and third could be based either on team performance or individual performance. The unit level targets in the research unit were based on a balanced scorecard framework. The individual level targets were used for the first time at the time of our research. At the research unit targets for innovativeness were included in the second and third part. These measures were linked to the number of invention notices and patent applications. The compensation plan for employee invention has foundations on Finnish legislation concerning inventions at workplace. An employee of the company is entitled to a one-time compensation based on an invention (invention notice reward) and on the patent application made based on this invention (a standard compensation for patent application), and to a royalty type of compensation based on the financial of other benefits for the company due to the invention.

The data and methods

The data for this study was collected during the first phase of an action research project. The purpose there was to explore and diagnose the present situation of innovativeness. The data consists of company documents, discussions with the management and eight semi-structured interviews with employees of the research unit. The interviews were recorded. The contents concerning reward practices were classified according to the above listed six features relevant for innovativeness. Also sources for motivation were analyzed.

The results

The employees’ source of motivation was primarily in the content and challenges of the job: problems presented by customers or unsolved issues in the technology, curiosity, the pleasure of finding solutions to difficult problems, and seeing own ideas being implemented. But also successful projects, appreciation by colleagues and being rewarded were mentioned. Many interviewees said that it is their job to be innovative.

The incentive plan had both positive and negative effects on the factors influencing innovativeness. The targets of the incentive system were seen to communicate what is important for the organization. The existence of unit level and individual targets were perceived to clarify the goals of work. The target with the number invention notices also communicated that the management appreciated innovativeness, even though it was only one of many targets. At the same time one of the targets inhibited innovativeness, while it encouraged researchers to work individually in their own offices instead of communicating with each other. Some of the interviewees felt that some of the individual level measures were too vague and some were outside of the control of the employee. This was perceived to be unfair. The individual targets and measures were not public, which created some suspicions and mistrust. The employees were not sure how exactly the individual bonus sum would in the end be calculated. Due to unclear rules many employees felt that the incentive plan on the whole did not motivate them.

The employee invention plan was evaluated in a more positive spirit. It, too, was considered to communicate management’s interest in innovations. A potential problem could arise due to the rule that if there are several inventors, they share the sum, which was not substantial. However to the interviewees more important than the money was having own name on the list of the inventors. The fact that the sum was perceived to be relatively small, was a positive factor in this case. Interviewees emphasized that innovations require team effort, which is a much more important driver that a small sum of money. The employees knew well the rules of the plan and the procedures were mainly considered to be clear and fair.

Discussion

The negative effects of the incentive system can partly be explained with the newness of the system. They had no previous experience for measuring individual performance. The supervisors may not have had adequate understanding of the challenges for setting individual targets. The processes of the incentive system were not yet ready and it gave room for all kinds of misunderstandings. On the whole measures for the front-end of the innovation process are difficult to create due to its fuzzy nature.
Research literature on rewarding has pointed out some key issues in developing and using reward systems. The paper will also discuss, in the light of the case organization, the importance of strategic fit, employee participation, perceived justice and meaning of pay, and their relevance in planning and implementing a reward system to enhance innovativeness in organizations.

List of references