CREATIVE MANAGEMENT AND INNOVATION IN EUROPE AUTOMOTIVE DIMENSION

Hana Janáková, Ing., PhD
Monika Zatrochová, Ing., PhD, Doc.
Slovak University of Technology, Bratislava, Slovakia

Abstract

Nowadays, entrepreneurship is determined by creativity and innovations. Creativity means constantly aspiring process of innovation and progress, and both are important keys to any effort how to be success in business world. Innovation has an impact on every area of organization: design and technology, product development and value creation, creativity and problem solving, structure reorganisation etc.. Creativity and innovation in company or in entrepreneurship should be able to provide and contribute solving problems. The paper is trying to describe a creative process in management of innovation in European automotive companies in developing new products or creating new strategy. It develops the idea of how creative techniques and innovations can be used to enhance a potential of the activities of the organizational processes that can be oriented towards to achieve the objectives and specific tasks to manage.

Keywords: Innovation, creative management, management of innovation

Introduction

Application of creativity techniques with innovations depends on the type and characteristics of a pocket of creativity. Creative management is the study and practice of management, drawing on the theories of creative processes and their application at individual, group, organizational and cultural levels. In Europe, research on creativity and innovation in business followed the rise in interest in the United States. Companies are critical element in the innovation system, and their health determines the competitiveness of countries. Innovation systems are tested at various levels. The majority of analyses are conducted on national innovation systems, since it is considered that the characteristics distinctive to individual nations most affect the distinctness of the innovation process in companies: the type and number of institutions and their behaviour.

Usually innovation is automatically associated with new technologies. Innovation is often measure by the amounts of money spent on research and development. It has the advantage that it can be measured quite precisely, but innovation is something quite different. Innovation also can be changing processes, changing the way we do things. Innovations determining the competitiveness have not only technological dimension, but also the organizational and personal one – the quality of human resources is extremely important for the profitability and the development of an organization.

European examples of creativity and innovation in management

The automotive industry worldwide need radical change and innovation required to meet the environmental challenges that are emerging in our modern society. The point has been reached where it has become evident that action was required long ago to redirect production towards more environmentally friendly and sustainable offerings. If car manufacturers are to survive, they need now to strive continuously towards more efficient product development processes using new technologies, novel designs and specially developed features. These needs require creativity and innovation. Improvements have tended to focus on areas such as performance, fuel consumption, safety, comfort and driver information, all areas that have improved exponentially. Automotive firms have developed their capabilities to innovate within this paradigm, resulting in 'more-of-the-same' products, while competition has become ever fiercer due to structural changes in the marketplace, intense brand competition, stricter regulation, growing fragmentation and shorter product lifecycles. All these changes are subjecting car manufacturers to extreme pressure – to excel in the execution of current capabilities and to develop new organizational capabilities in areas that are unfamiliar to them while at the same time revising their overall strategic direction. In general terms, organizational capabilities signify what an organization is (or is not) able to do for instance, organizational capabilities have been seen as the abilities of firms to deploy their available resources to achieve the desired end results, describes the firm's core capabilities as the set of knowledge that provides competitive advantage. According to her, these capabilities have four dimensions: employee knowledge and skills; technical systems; the managerial systems that guide the knowledge creation and control processes, and the values and norms associated with these processes.

The paper describes how real creativity and innovations have been implemented in European companies.

Vision 2020

The Vision 2020 project was brought to an end in early 2009 in the context of a major re-organization of Volvo Cars under new creative managers (CEO and others). New creative management project was decided to establish a new organizational unit – **Long Range Strategy and Innovation** – to deal with long-term strategic issues and creative innovation. The more detailed agenda for the unit is still under development, but should allow a more structured way of dealing with developing capabilities to achieve innovativeness. It could be argued that institutionalization of the project is a major creative achievement.

The objective of the Vision 2020 project was to build the new creative organizational capability in process of developing car to break away from the prevailing incremental approach to innovation and to '**innovate differently'**. In particular, Volvo Cars wanted to be able to create and launch offerings that encompassed safety and eco-environmental improvements, to increase attractiveness and the willingness of customers to pay for a 'common good', but without relying on external incentives related to greening. Thus, the overarching aim was to learn how to creatively innovate so that the offer could be profitable while the level of both private and common good could be increased, which translated in the aim to develop Volvo Cars' creative capabilities for innovation. Vision 2020 was a bottom-up initiative, but it was well anchored in parts of Volvo Cars' top creative management team and overall responsibility lay with the Vice-President (VP) of Brand.

The Vision 2020 project was small in terms of staffing. The core team initially was three people and was reduced to two in 2007, one of whom was replaced during the latter part of 2008. However, throughout its two-and-a-half year life, the various activities of this core team had the support and involvement of many people from different parts of the Volvo Cars organization. The aim of the Vision 2020 project to develop the creative company's organizational capability was focused on two explicit objectives: first, to be experimental creative and explore different methods of and approaches to creative innovation, and second, to systematically develop a different mindset for the creative decision makers – at all levels. The project defined four routes to achieving the first objective of being experimental and exploring new approaches:

1) **Defining targets**. Defining what needed to be achieved in order to overcome societal and ecological constraints and thus define the problem as well as part of the solution.

2) **Defining technology pathways**. Participating in studies on alternative energy consumption and provisions for the future, in order to choose from technologies that fitted with future paths.

3) **Innovating differently**. Experimenting with combinations of different expertise in the processes of idea generation (especially to the bundling of private and common goods and combining different perspectives), and creative product development.

4) **Conducting small-scale market tests** as a way of learning (business model development). To address the second objective of developing organizational competence and cognition, that is, influencing those involved in creative decision making, the project team identified a need for continuous development of competences, but without originally specifying or knowing how this could be achieved. It became obvious that this objective was a dominant and time-consuming part of the project.

Experimenting with Alternative Creative Methods

In terms of activities and processes, the Vision 2020 project had a strong focus on experimentation. The project started with some experimental activities related to how to creatively innovate, based on multi-disciplinary workshops designed to promote ideas and concept development, drawing on design-based theory and external knowledge sources. Central to the project was that Volvo Cars needed to develop alternative activities to enable it to innovate differently, or as a member of the core project team expressed: We need to create an organizational ability to earn profit on our core values of safety and environment. That is [we need] to learn how to creatively innovate differently.

Experimenting with Ideas Generation in Terms of Focus and Approach

The Vision 2020 project was based on hands-on or 'learning-by-doing'. The aim was to experiment with relatively small innovations (such as car subsystems), then to capitalize on that experience to persuade creative management to fund a larger experiment (potentially a car). The insights developed would be disseminated through the company in order to contribute to the development of creative organizational capabilities. This dissemination was enabled by the contributions of an extended team linked to the project that included key members of the organization.

The project kicked off with an ideas and concept-generation workshop series to define desired attributes. The series involved various stakeholders from different internal disciplinary and functional backgrounds in the organization coming together to form temporary taskforces. The outcomes of the workshops were drawn on for a subsequent series of idea-generation creative exercises based around environmentally friendly concepts.

Aligning with and Breaking Into Existing Arenas

Another aim of the project was to align with the intentions of existing initiatives or processes that were focused on future production. For example,

the project was aligned to the ongoing Premium Brand work and an Alternative Fuels Strategy initiative aimed at winning acceptance of building capabilities ideas.

Important is that project has participated in the international five-year **Living Tomorrow** project (2007–2012). This involved some 50 partner companies, among which *Volvo Cars was the only car manufacturer*. **Living Tomorrow** is providing a vision of how people will live, work and travel in the future. The fundamental idea of **Living Tomorrow** is to create physically visible, groundbreaking creative innovations that are shown in Brussels. The Vision 2020 project participated in mutual learning from its involvement with this endeavour.

Aspects of creative management and innovation

Creative management in project Volvo Vision 2020 is based on creativity of subjects, not economically connected to Volvo Company – leader of project. This concept in development of new products in automotive industry is not typical. Development connection existed only in the case of personal ar economics connection relationships between companies. Development of automobile industry is usually done by external company but for the first time Volvo used for design of concept of new product.

The Volvo study also points to an urgent capability that, although well known, is too often neglected: creativity of management. Study shows that without the explicit and consistent support of top management, capabilities development will not progress, but there are few in-depth discussions of this in the literature on innovation capabilities. In the case of Volvo Cars and the Vision 2020 project, it soon became apparent to the core team that the main problem was a lack of strategic direction in the company (and a lack of strategic development work). This made it difficult for the project to achieve a pioneering impact on the organization. Despite their efforts, the team members were unable to gain the leverage required without the simultaneous development of a strategic dimension and management's acknowledgement of the need to develop new capabilities. Strategic direction can be formulated in terms of the implementation of strategic rules. At Volvo Cars, during the time of the project, there were few explicit rules, and those that were in place worked to reinforce the organization's existing behaviour of following the same paths, rather than enabling the required strategic change. Since top management was not providing a clear strategic direction for the organization, the members of the organization applied their own interpretations about what needed to be done and acted accordingly. The aim of the project was to renew the way that the firm worked and this required a much stronger link to strategy.

SAFER Partner Organizations

Project SAFER is Sweden open innovation arena involving 22 partners from academia, industry and government conducting joint research on traffic and vehicle safety. The organizations include large actors such as AB Volvo, Scania and Autoliv and small technology organizations. SAFER provides office space and meeting rooms for the partners. Its explicit vision is: 'to enable Sweden to reach world leading competitiveness and to provide new countermeasures to considerably reduce both the number of traffic accidents and the number of fatalities and serious injuries'. Its aims are 20-fold growth in project money turnover in 10 years. The research involves work on active safety (pre-crash), passive safety (crash and post crash) and traffic safety analyses, and is multi-disciplinary in that it encompasses many different areas from vehicle dynamics and communication technologies, to biomechanics and human behavior. Field operational tests are conducted in the accident analysis area.

SAFER is an interesting case because it differs from the innovation actors previously studied in the literature. It enables innovation by providing a physical space for the collaborating partners and has a proprietary vision to become a world leader. SAFER was launched in 2006. Five years later, there are about 170 people working on SAFER projects as part of their daily operations, while still being employed by their respective companies. SAFER has a board with nine members (including the chairman), mainly from industry. The board has overall strategic responsibility for the centre, monitors the project portfolio, decides on the start of projects and academic courses, can request projects to be initiated in areas not covered by the current project portfolio, and appoints the operating manager. A group of the participating partners proposes people for consideration as board members.

The activities of SAFER are organized around four research areas (pre-crash, crash, post-crash and traffic safety analysis). The projects within each research area are managed by a coordinator with the support of an expert reference group. The reference groups enable active researchers (from university, industry, research institutes, public authorities) to co-operate and create an innovative research environment. There are 12 competence areas (for instance road user behavior and biomechanics) each of which has an assigned leader.

Thematic analysis of the interview transcripts identified three types of challenges: one in the interface between SAFER and the partner firms, one between the partner firms and one in relation to the role of SAFER. These issues and illustrative quotations are presented below.

SAFER has the ambition to become world leader in traffic safety, a goal to which the partner organizations are expected to contribute. This vision is complementary to the goals of some of the partner organizations, and

similar to that of others, which results in a competitive situation. Despite an often explicit desire to contribute to the joint vision of SAFER, company representatives expressed the difficulties this implies in practice. For instance, SAFER's success is perceived as threatening for one partner organization.

People involved in projects at SAFER come from different organizations. It is often unclear how the work in SAFER projects is valued by these organizations. For instance, the work in the arena is sometimes considered additional and not contributing to career development in the home organization. This is illustrated in a quote from a university researcher who is the project manager of a SAFER project including members from several partner organizations.

Launching a SAFER project requires a board decision. However, being a partner in a collaborative arena implies dealing with a variety of decision systems, to launch projects. SAFER needs to be convinced by the proposal as well as the participants' home organizations. If these organizations are part of a large international group, decision processes can be extensive and time consuming.

There are also challenges related to the interfaces between the partner firms. Since SAFER is constituted mainly by partner firms, problems among partners have a major effect on the open innovation arena and are an important concern for its director. At SAFER, people are continuously encouraged to share knowledge. The assumption is that if everyone gives, everyone gains**.** *There are different reasons for participating in SAFER, which are apparent in how the different companies relate to each other in the collaboration. Some want to contribute to the overall knowledge generation while others go to great lengths to create benefit for themselves. This can cause difficulties in projects.*

SAFER provides an opportunity for the partner organizations to collaborate with many other organizations, including competitors. However, partner organizations are not entitled to participate in every project. The teams are decided project by project, and there are no guidelines for project team make-up. Sometimes a partner organization considers a project not very interesting because the 'right' people are not involved.

Aspects of creativity and innovation of SAFER project

The creativity management of project SAFER is based on establishing new type of scientific research consortium. Consortium consists on strong economical partners (Scania, Volvo), university, small research companies and state institutions. Creativity depends on connecting diverse interest entities whose entire project was different. On one side better and safer trucks on other side legislation and on third side economic profit.

Merging of different aims require creativity of managers – to create concept investigators – researchers, academic staff, company managers (Volvo, Scania) and state employees.

The centre for this project was established in university because of biggest creativity of academic staff.

Conclusion

Creativity management is used to describe alternative approaches to business processes such as strategy development and organizational change at the operational level, the development of new products and technological innovations and their introduction into practice. The paper is presented different cases of creative management with innovations in practice.

Case SAFER describes process of establishing consortium of large automotive companies, small research companies, universities and state institutions. For success of this project is necessary to find structure of cooperation, because of aim of all partners is different. Creativity and inventions are required in process of cooperation different teams. Project SAFER is specific. To manage, where high business companies, small research companies, universities and state institutions are connected together is difficult. Strong creativity how to connect university level thinking with business oriented companies and byrocratic state institutions is required. Currently the project is still successful and still functional. To get the most creativity in the project is centrally managed mainly from the universities.

Volvo Vision 2020 project is a special project to develop a new concept car with free new ideas for future collaboration with external partners. Difficulties may be to manage the project on interaction with other projects, for example - Living tomorrow. The development of entirely new product - a hybrid car is held in the new structure. External companies are members of the new team that was responsible for a new concept. But to manage this team is not easy. Volvo car used information from another project team member as Living tomorrow - and then the automobile design pursued with regard to the human body and the quality of life. Creativity management was to link human needs, quality of life and respecting the technical constraints.

Creativity in management is used to describe alternative approaches to business process, such as strategy formation and organizational change, and at the operational level to refer to new products development and technological innovation.

Paper described typical scenarios in which creativity impacts business processes and their management and presented exemplary strategies and actions that organizations apply to deal with the phenomenon of creativity to enhance process performance and quality of creative products. It is relevant

and timely to take a closer look at the role that creativity plays within business processes and how it can be managed. Existent modelling techniques, tools of management and management practices may support some of the important creative aspects in this context. However, until now there is no comprehensive approach on how to manage creativity from a business process perspective. With this paper could to set the baseline for a discussion on the notion of the creativity-intensive process.

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