

Collaborative Trend Analysis Using Web 2.0 Technologies: A Case Study

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ABSTRACT

Through early trend recognition in the business environment and specific processing within the innovation management, companies can achieve long-term market success. A particular challenge is the systematic identification, gathering, structuration and evaluation of trends. Web 2.0 technologies and especially Wikis, which allow several people to maintain and use content simultaneously, are eminently suitable for an efficient process of continuous collection and analysis of relevant market trends. In this paper, trend management processes are introduced and demonstrated how trends can be collected, structured and communicated within the enterprise using a customized wiki. The trend assessment is carried out inter alia on methods of crowd sourcing, resulting in an extensive evaluation basis. In addition, the presented approach includes a visualization of the trends and its assessment for decision support. A case study of global polymer solutions supplier REHAU AG demonstrates the use of the methodology in practice.

Keywords: Collaboration, Innovation Management, Radar, Trend Scouting, Web 2.0, Wiki

INTRODUCTION

In light of the increasing speed of innovation of technologies and products, companies cannot longer react to changes in terms of a quick response, but they have to act proactively in order to remain competitive. The ability to respond to already weak signals and proactively initiate changes and market adjustments is required (Bullinger & Schäfer, 1997).

The importance of an effective innovation management is not disputed among experts. Innovations permanently secure market position and ensure a competitive advantage

(Goll, 2007). Thus makes the management of innovation a lasting contribution to promoting and safeguarding the viability of a company.

Global competition, short product life cycles, increased technical risk and enhanced customer demands lead to new challenges in management. To meet these challenges, for global enterprises it is required to internationalize the innovation management and thus the innovation processes. The aim is to ensure cross-border synergies by optimally using existing resources. This can be realized by combining the existing knowledge across the enterprise (Gassmann & von Zedwitz, 1996; Marquardt et al., 1996).

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Prerequisite for a successful innovation is a logical thought and rigorous planning, implementation and monitoring of all activities that are associated with innovation (Burr & Stephan, 2005). This systematic development and implementation of innovation in an enterprise is the core area of innovation management.

Innovation management consists of several components. Koch and Möslein (2007) report, that successful innovating requires a holistic approach in a structured innovation strategy, the promotion of an innovation culture and organization, and an efficient innovation process. The innovation process involves the generation of ideas, the selection and acceptance of ideas and finally their implementation. Trend management is part of the early stage in innovation management and assigned to the generation of ideas in the innovation process (Herstatt & Verworn, 2007).

At the present time, it is an increasingly important component in managing innovation, since innovations in the past have often come on the market very quickly and unnoticed and companies had to suffer losses by inadequate monitoring of these trends. The goal of trend management is the generation of new ideas and innovations that can become a competitive advantage in the product portfolio. Thus, in trend research, the exploration and appointment of present change processes is of high relevance (Pfähdenhauer, 2004).

Specific tasks of the trend management in enterprises are the identification, the structured gathering and finally the assessment of relevant trends. Based on this, in the following phases of the innovation process appropriate measures for implementation or further monitoring are developed.

In addition to the lack of efficient methods for trend detection, a systematic and holistic approach to innovation management is often missing in companies. As part of the innovation process, the trend management cannot be considered independently of this. The importance of a formal process is shown in various studies. According to the PDMA best practices study of 1997, companies which follow a structured

innovation process are more successful (Griffin, 1997).

Methods of crowdsourcing can be applied in trend management, to identify, evaluate and document trends (Whitla, 2009). A common, departmental and cross-site evaluation and assessment of trends allows a quick prioritization due to the "wisdom of crowds".

The Web 2.0 provides software solutions that are suitable for the establishment of collaborative trend management. Thus, trends can be collected and structured together in a modified Wiki. An evaluation component allows the common evaluation of trends. The comment function enables the development of business ideas along trends. A complex evaluation matrix opens the possibility for a detailed assessment of trends by experts.

In the following sections, a tool for the efficient support of each step in the trend management process is presented and its practical use is explained based on an example.

TREND MANAGEMENT PROCESS

The trend management process is divided into five steps that can be supported using collaborative methods. Key elements are the trend identification, assessment, analysis, reporting and finally the trend monitoring (Figure 1) (Fink & Siebe, 2006).

In the following sections it is described in more detail how these steps are supported by the system.

Trend Identification

The trend identification is the basis for further steps in the trend management.

In this context an attempt is made to proactively look for trends and track their development over time, to take action as appropriate. However, the embodiment of the identification phase is highly dependent on the industry and the objective pursued (Fink & Siebe, 2006).

For a long time trend research in the company was solely the responsibility of manage-

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