Overview

Today’s organizations increasingly often identify human capital as a source of competitive advantage. Consequently, HR strategy is receiving growing attention as a critical factor for growth and added value. However, given the dynamic rate of change in the workplace and in global markets, effective strategic prioritization and resource allocation in the field of HR is a challenging endeavor. HR management is further complicated by the fact that it involves to a great extent soft (human) factors – as opposed to hard (monetary) ones. In this context, HR departments are often criticized for making investments based on too many ‘soft’ estimates. Decision Analysis can aid HR practitioners in dealing with this dilemma. Methods such as MCDA (Multi Criteria Decision Analysis) can be used to integrate existing HR knowledge effectively, develop support amongst different organizational units for a joint HR strategy, and provide insights on efficient allocation of resources.

Case Study “Demographic Change: Portfolio Analysis on Human Resource Strategy”

In several joint projects in the area of HR at Deutsche Bahn AG (DB), the Decision Institute has supported the company with the optimization of recruiting activities as well as with the identification of successful measures and activities to enhance employee identification. Furthermore, we have developed an efficient portfolio of activities dealing with internal demographic change at Deutsche Bahn AG in the areas of qualification, health, labor conditions, and recruiting. This project won the MARA 2006 Excellence Award and was presented at the 2006 INFORMS conference in Pittsburgh (www.projectmara.com), USA. A more detailed description is given in the following case study.

In 2006, one of our teams, together with DB’s HR strategy department, identified an efficient portfolio of activities to prepare for the internal demographic change. The analysis served to effectively bundle the various initiatives of several sub-departments, resulting in a consistent overall strategy for a joint board proposal across the areas of qualification, health, labor conditions, and recruiting. Because employee groups are affected differently by demographic change, only a highly diversified portfolio of individual measures could respond to the specific needs of DB. Strategically, DB wanted to address three questions:

1. How can DB best prepare its employees for the future challenge of demographic change?
2. Which synergies can DB exploit across departments?
3. What budget is required to implement a comprehensive future strategy? How can it be analytically justified?
Figure 1: Portfolio of employability options

Modeling approach

With the support of the Decision Institute, DB generated and evaluated activities for the departments of qualification, health, and labor relations to cope with internal demographic change. Our team used an analytic-interactive approach, which combined Multi-Criteria Decision Analysis (MCDA) and Decision Conferencing in order to facilitate knowledge exchange across the HR sub-departments and to perform a cost-benefit analysis of the activities under consideration. The resulting portfolio of options to manage the internal demographic change is displayed above.

A notable characteristic of the evaluation process was the dominance of ‘soft’ benefit criteria, which represents an HR peculiarity. They include criteria such as working ability enhancement, motivational effects, and the long-term impact of specific options (see figure on the right). The modeling approach incorporated ‘realization constraints’ (e.g. risks posed by a possible union veto) in the form of a risk criterion. This made the benefit estimate more realistic and also stimulated valuable discussion among all parties involved.

Results and impact

- The process enabled decision makers at DB to analyze their current and potential future activities and to identify optimal resource allocation strategies to manage internal demographic change.
- The discussion and mutual justification proved to stimulate creativity, as new insights emerged along the way. Decision makers found it highly valuable that participants at all levels were involved in the process.
- The process generated a common understanding of the objectives of each department as well as the overlapping objectives across departments. The main trade-offs when coping with the negative effects of demographic change could be adressed. The system continues to be in use to develop new activities.
Conclusion
To our knowledge, it is one of the first times that an MCDA modelling approach has been applied to aid strategic allocation of resources in the field of HR. The results of the model provided DB with a sound argumentation for the composition of activities that will be promoted in the future. Further information on similar applications in the areas of recruiting channel optimization and employee identification is available on request.

Most relevant literature