A Support System for the Strategic Scenario Process

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INTRODUCTION

In modern day business, management of uncertainty in the environment has become a vital part in building success. The increasing speed of changes in the field of business and shortening product lifecycles are being discussed right up to the point where these concepts are becoming clichés (e.g., Teece, Pisano, & Shuen, 1997; Wiggins & Ruefli, 2005). The problem of uncertain conditions boils down to the question: how can a business develop reasonable strategies for steering the company in the long run (Mintzberg, 1994)?

Strategic planning and decision making in some form or another is seen as an important part of modern corporate management. Traditional techniques and tools have been criticized for being too rigid from the perspective of managing the environment (Mintzberg, 1994; Schoemaker, 1995). In many instances, the analysis that fuels the development of corporate strategies is a snapshot of the surrounding world and does not perceive possible anomalies in the development of situations. In the traditional sense, management is all about knowing the relevant decision parameters and forecasting the result of each decision. In contrast, scenario planning has gained attention as a structured method for interfacing strategic planning with the evolving operating conditions (e.g., Mintzberg, Ahlstrand, & Lampel, 1998; Walsh, 2005). Scenarios are not a single point prediction of a defined time-space in some point of future, and multiple scenarios have conventionally been used to map the borders of plausible futures (Schwartz, 1996; Schoemaker, 1995; van der Heijden, Bradfield, George, Cairns, & Wright, 2002), which aims at avoiding problems that arise if carefully conducted forecast of future business proves to be faulty.

This article presents the concept of a supported scenario process that can be used in strategic decision making. The purpose is to illuminate the conceptual background of scenario planning, the methods for formulating scenarios, and the way this scenario process can be supported to make it more efficient. The main contribution is the description of the supported process that has been developed and tried in several sessions, ranging from student exercises to technology scenarios in an intersection of industries. Finally, this article will present some future prospects for this field of research and practice.

CONCEPTUAL BACKGROUND

Defining Scenarios

Starting from the very beginning, Kahn and Wiener (1967, p. 33) define *scenarios* as "hypothetical sequences of events constructed for the purpose of focusing attention to causal processes and decision points", with the addition that the development of each situation is mapped step by step and the decision options of each actor are considered along the way. The aim is to answer the questions "What kind of chain of events leads to a certain event or state?" and "How can each actor influence the chain of events at each time?"

Schwartz (1996) describes scenarios as plots that tie together the *driving forces* and key actors of the environment. In Schwartz' view, the story gives a meaning to the events, and helps the strategists in seeing the trend behind seemingly unconnected events or developments. Schoemaker (1991, 1993, 1995) writes that scenarios simplify the infinitely complex reality to

a finite number of logical states by telling how the elements of a scenario relate with each other in a defined situation. In Schoemaker's view, scenarios as realistic stories might focus the attention to perspectives which might otherwise end up overlooked. Chermack (2004) adds that scenarios as a process is a way to enhance decision making processes in an organization, as a result of knowledge convergence experienced in a successful scenario process.

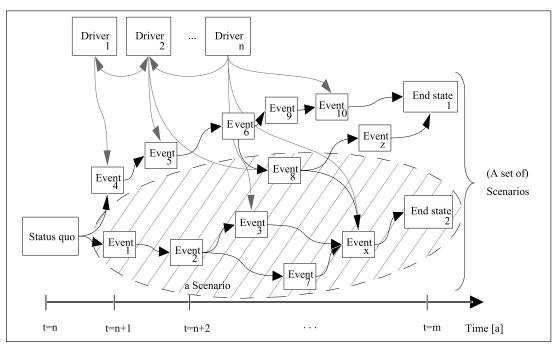
Some writers (e.g., Blanning & Reinig, 2005; Schwartz, 1996) use the concept of "drivers of change" to describe such forces as influential interest groups, nations, large organizations, and trends, which shape the operational environment of organizations. The interpretation used in this study is that these drivers create movement in the operational field, which can be reduced to a chain of related events. These chains of events are, in turn, labeled as scenarios, leading from the present status quo to the defined end state during the time span of the respective scenarios, as seen in Figure 1.

From these definitions, one can derive that scenarios are a set of separate, logical paths of development, which lead from the present to a defined state in the future. Furthermore, it can be deduced that scenarios are not descriptions of a certain situation some time in the future, nor are they a simple extrapolation of past and present trends. As of this point, a single scenario is referred to as *a scenario*, and multiple scenarios developed as a set are referred to as *scenarios*.

SUPPORT METHODS

Group support systems (GSS) are a potential set of methods that can be used to support scenario processes. By definition, GSSs are a collection of applications, similar to groupware, aimed to facilitate group work and communication (Jessup & Valacich, 1999; Turban, Aronson, & Liang, 2005). In the general hierarchy of decision support systems (DSS), GSS is placed in the branch of communication driven DSSs (Power, 2002). Without going into too much detail, GSS implementations generally feature tools for idea generation, prioritization, commenting, and discussion, packaged into a software suite (Turban et al., 2005). Generally, GSS tools are perceived as an effective way to mediate meetings, share information, and achieve consensus on

Figure 1. The relationship of drivers, events and scenarios (a single scenario highlighted, driver relations depicted with the gray arrows)



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