In order to understand the importance of corporate foresight as a tool and assess its potential, we are to consider Rohrbeck and Gemünden's study on the roles of corporate foresight. Further on, we are to note the results of a study by Öner and Göl on a Turkish company?s use of corporate foresight as a project, with its typical phases. We will briefly mention two other texts? Becker?s *Corporate Foresight in Europe: An overview* and Rohrbeck?s *Corporate Foresight: Towards a Maturity Model for the Future Orientation of a Firm.* 

### Why is that companies fail to adapt to discontinuous change?

The study *Corporate foresight: Its three roles in enhancing the innovation capacity of a ?rm* aims to explore the ability of corporate foresight to increase the innovation capacity of a ?rm, whether it?s about incremental (i.e. enhanced or new products and services within current business ?eld) or radical innovation (i.e. creating products and services in new business ?elds often using new technologies.) Unfortunately, many companies, including those from Fortune 500, don?t manage to adapt to external change in due time and in an efficient manner. The highly mortality rate of companies is their failure to adapt to discontinuous change. There are three reasons why this happens (Rohrbeck, Gemünden, 2010, 232):

- a) A high rate of change product life cycles are shortening, there is an increased technological change, an increased innovation speed coupled with an increased speed of the diffusion of innovations;
- b) *Ignorance* that could be caused by short time frames that don?t correspond to corporate strategic-planning cycles, which are still coupled with the ?scal year cycle, or by corporate sensors that don?t detect signals outside their search area, or by an over-?ow of information that overwhelms top management or by middle managing filtering the information to protect their interests;
- c) *Inertia*? is an effect of internal complexity (regional reach and product range) and external complexity (the extreme network with other companies).

### How can companies manage discontinous change?

The manner in which organizations can successfully manage discontinuous change has been approached from three major research perspectives: strategic management, innovation management, managing the future.

- 1. Strategic management? in times of change, companies need to have the ability to adapt incrementally and the ability to adapt radically (exercising both capabilities is qualified as ?organization ambidexterity?). Environmental scanning is also needed to find up to date information regarding the direction and magnitude of emerging external change.
- 2. *Innovation management*? companies can gain competitive advantage by: acquiring new technologies, linking emerging technologies to the customer needs, building separate organizations for developing radical and incremental innovations, initiating new R&D projects.
- 3. *Managing the future*? identifying methods to systematic explore the future. In the past the change occurred slowly enough and the companies were able to prepare themselves and respond adequately. Today the future research aims more to discover undetected currents that will influence the future. Future orientations are achieved by exploring possible futures rather than predicting future developments.

What is corporate foresight and how does it contribute to managing discontinuous change?

Corporate Foresight does not predict or forecast the future, it just allows to see beyond the close environment of organizations. Rene Rohrbeck defines Corporate Foresight as ?an ability that includes any structural or cultural element that enables the company to detect discontinuous change early, interpret the consequences for the company, and formulate effective responses to ensure the long-term survival and success of the company? (Rohrbeck,2010, p.11) Companies have to take into consideration future developments and include them in their daily decisions and actions. Furthermore, because of the complex and uncertain business environment, organizations need long-term orientation. Corporations work with foresight studies in order to:

- ? reduce uncertainty by identifying new and relevant trends;
- ? prepare strategic decisions;
- ? support innovation processes;
- ? develop new and future business ?elds/markets;
- ? create orientation on future developments;
- ? build a knowledge base (Neef and Daheim, 2005).

Some companies (Aventis, BASF, British Telecom) use foresight information for decision-making process and for the corporate strategy development, others (Philips, Decathlon, Ericsson) use foresight for better understanding the structural changes in science and society (Öner, Atilla M, Göl, Be?er Senem, (2011)).

In order for a company to be able to adapt to discontinuous change, it has to have dynamic capabilities. Dynamic capabilities is the ability to renew the portfolio of strategic resources when the company is facing discontinuous change. These strategic need to be: appropriable? i.e., dif?cult to imitate, substitute, or transfer, scarce and in demand. Of course, these resources lose their competitiveness in time and the companies need to develop new resources, which often proves to be a difficult task.

### What are the specific roles foresight plays in a company?

The objective of the above mentioned research was to help increase the implementation of corporate foresight in companies and, more speci?cally, to broaden knowledge of the impact and value creation of corporate foresight and its role in enhancing the innovation capacity of a ?rm. The conclusions and recommendations draw on rich empirical evidence from 19 case studies and 107 interviews. The companies analyzed were from five distinct industries and with different positions in the value chain. Three major instruments for data collection were used: interviews, internal documents, and external academic publications by the foresight manager, together with interview templates. The study avoided the bias of the foresighters (i.e., an employee whose job is to scan the environment for weak signals on change) by using three informant perspectives: that of the internal customer, that of the corporate foresight activity manager, and that of the corporate foresight activity team. The study reveals three roles that corporate foresight should play to maximize the innovation capacity of a ?rm (Rohrbeck, Gemünden, 2010, 237):

- (1) the initiator role, which increases the number of innovation concepts and ideas;
- (2) the strategist role, which explores new business ?elds;
- (3) the opponent role, which challenges innovation projects to increase the quality of their output.

Each of the roles is further on detailed:

(1) The initiator role - Corporate foresight triggers innovation initiatives by:

?identifying new customer needs through analyzing cultural shifts and collecting the needs of lead customers;

?identifying emerging technologies by scanning the science and technology environment;

?identifying new competitor concepts by monitoring R & D projects, patenting activities, and the new-product launch announcements of the competitors.

(2) The strategist role - corporate foresight directs innovation activities by:

?creating a vision - sharing a vague, broad picture of the future;

?providing strategic guidance - future insights are used to de?ne strategic directions;

?consolidating opinions by simply triggering cross-regional discussions;

?assessing and repositioning innovation portfolios by providing the future insights to change innovation portfolios;

?identifying the new business models and alternative business logic (ex: Deutsche Bank Research explored possible changes in value creation in the German economy in the next 15 years. The most probable of them showed a market in which 15% of all value is created through networks or consortia of ?rms, so the company made steps towards that model.)

(3) *The opponent role* - corporate foresight challenges the innovators to create better and more successful innovations by:

?challenging basic assumptions - These assumptions are typically built on worldviews that are undisputed within the company, but which are the subject of more controversy outside the corporate environment;

?challenging the state-of-the-art of current R & D projects - challenging current activities with what they have observed in the environment or what is already available in lead markets and thus increase the probability that the R & D projects will produce state-of-the-art innovations;

?scanning for disruptions (technologies, products, or changes in the consumer needs) that could endanger current and future innovations.

#### What are the conclusions and lessons learned?

The conclusion of the article is that corporate foresight can contribute through its three roles to exploit the opportunities that arise from disruptive change. Also, we need to bear in mind other findings:

? the initiator role - while it is not clear whether a formal link or constant exchange and broadcast of information is more effective, in companies that rely exclusively on broadcasted foresight information internal stakeholders are reached, which ensures higher chances that the organization will acknowledge faster the innovation opportunity;

? multi-modal dissemination strategy is recommended, establishing process links while broadcasting the foresight insights through mailing lists, the Intranet, blogs, wikis and internal document-management systems;

? moving the field of corporate foresight toward using common and acknowledged theoretical foundations. This would ensure cross-fertilization with other research fields;

? organizational ambidexterity is crucial in a company that wants to cope with inherent changes of the environment. A company's ambidexterity translates into its ability to adapt both incrementally, slowly tailoring its business to the market, and radically, coping efficiently with abrupt, discontinuous change. Organizational ambidexterity enables exploration and planning the development of new business fields. An interplay of corporate foresight and innovation management activities can contribute to organizational ambidexterity.

In another study - Corporate Foresight in Europe: An overview Becker suggest some actions that would render corporate foresight more efficient. Not surprisingly, a better communication would prove very useful, starting from presenting corporate foresight in more appealing terms so that people acknowledge its value, to developing channels for broadcasting findings, to focusing on concrete, realistic predictions (similar to SMART objectives) that can be translated into business objectives. The need for a communication improvement is intertwined with the necessity to pursue corporate foresight in a manner that serves the interests of the business - meaning that corporate foresight has to gain an operative/decision making goal. Also, corporate foresight should be encompassing the views of as many stakeholders, so that it truly contributes to vision building in a company (Becker, 2002, 19)

# How does a company actually implement foresight activities?

While the work of Rohrbeck and Gemünden focuses a lot on the roles of corporate foresight and the output deliveries of its (right) use, a study we will discuss below explores a bit the implementation of a corporate foresight project. The merit of this study is that it looks at the feasibility of a corporate foresight project and the difficulties that might occur in each phase of the project. Its acknowledged drawback is that is very limited, focusing on a single company in Turkey. The objective of *Assessment of corporate foresight project results: case of a multinational company in Turkey* is to asses the success of a foresight project implemented in a Turkish company. While promising as a concept, corporate foresight has rendered weak results in provoking actual changes, due to a number of factors. Various authors refer to these factors of failure under different terminologies. The most comprehensive framework for corporate foresight failure is given by Öner and Göl, who list the pitfalls that occur at every stage of the project? from foundation, to planning, organizing, controlling, to execution and to the final stage of feedback&continuity of the foresight project (Öner, Göl 2011,53 apud Öner and Göl, 2007). In the particular case of the Turkish multinational company, the exploratory assessment model was designed via the use of a survey questionnaire, a case study, and interviews of managers and indicated associations among space/time perspectives of individuals in order to assess corporate foresight project results.

All stages of the foresight project had some drawbacks, in the following order: the pitfalls in the foundation phase seemed to be most problematic, followed by organizing, execution and then feedback and continuity, controlling and planning (pg. 58,59):

? Evidently, misteps in the foundation phase would cause disfunctions during the entire project;

? Assessment of the organizing phase indicated problem areas such as ??distribution of responsibility??, ??availability and motivation of the key resources??, ??commitment of line managers??, as well as ??project communication??;

- ? Execution phase is problematic if there is no right balance between professional competence and administrative aids;
- ? Lack of continuity and follow up renders the foresight project useless, since there is no positive effect on the organizational learning and knowledge base. That happens mainly because the foresight project was carried out without deep involvement of the headquarters, where the decision making power is centered;
- ? Regarding controlling, a more formal authority is needed to control the project which eventually will be re?ected in the project?s organization;
- ? The planning phase was run smoothly compared to the other phases of the project, which may be due to the expertise of the foresight coordinator, who acted as both a member of the project team carrying out the foresight activity and as the coordinator of the corporate foresight and strategic planning process designated by the corporate management. Evidently, the study is limited in the sense that it only considers the foresight project of one company. The aim was to create a theoretical framework that is viable, and the authors conceptualized this ?foresight process as a project? model, with all the phases of a project. The study suggests that in practice, corporate foresight projects should take place within: the scope of foundation, planning, organizing, monitoring, execution, feedback and continuity.

These studies, while not exhaustive, put corporate foresight under the spotlight. The fact that companies cannot plan only for the short term is a fact, and some of the companies? business operation demand by default a long-term orientation (for example, in industries with long product cycles). Also, corporate foresight feeds into the proactive vision of competitive companies to better cope with uncertainties in the business environment. The effort undertaken by the companies examined in the above mentioned studies makes perfect sense if we are to think of Europe's ambition to become the most competitive knowledge economy in the world, as noted in the Lisbon strategy. Exploiting the three roles of corporate foresight - initiator, strategist and opponent - while developing and implementing corporate foresight activities as a project could contribute considerably to such successful knowledge economy.

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