

Corporate Foresight. Tools, Experiences, and Insights

Introduction

We live in an age of innovations. Every year companies show their competitive edge by putting new products on the markets. Some succeed, some – perhaps even a larger number – fail. Some companies earn windfall profits, others have to struggle with sunk investments, some simply vanish. Is there a formula for success?

First of all, not every vision, not every invention will mature to an innovation. There are hundreds of examples where company researchers had really good ideas – and nothing resulted but frustration. In most cases, a lack of foresight is one reason for failure.

In general, corporate foresight can support companies to:

- Reduce uncertainty by identifying new and relevant trends
- Prepare strategic decisions
- Support innovation processes
- Develop new and future business fields / markets
- Create orientation on future developments
- Build a knowledge base

Therefore, in recent year a growing number of European companies is relying on foresight to support their activities: Siemens, BASF, Deutsche Telekom to mention a few from Germany, Philips, Ericsson, British Telecom, Swiss Re, to add some large European ones. Companies like DaimlerChrysler are engaged in foresight since twenty years, Shell has done scenario studies since the 1960s. Corporate foresight is even better established in the USA, where companies as different as Boing and 3M, venture capital firms and GE are engaged in foresight activities, and foresight consultancies flourish.

Corporate Foresight as a Knowledge-Based Service

Corporate foresight is a reaction to the growing complexity of the business environment of companies and the increasing speed of change. But not only corporate foresight is on the up and up, governmental foresight activities are likewise spreading. The reasons for this can be easily named: increasing challenges caused by globalization, and the fear of “dislocation” of industries to emerging economies, the central significance of innovation for economic growth and, last not least, increasing uncertainties in the global political environment. A classical foresight field as well for companies and nations is the early detection of emerging technologies, in order to select promising inventions and to support innovation processes. Examples of governmental technology foresight are numerous: Delphi surveys as they have been carried out in Japan since the 1970ies, during the 1990ies they had also a

boom in Europe. Since that time the focus has shifted from the classical Delphi studies to more open and continued foresight processes with large participation of industry and public research experts (Martin 1999, Steinmüller 2000). Examples are “British Foresight” and the German research dialogue “Futur” or the Research Foresight Project of the Grand duchy of Luxembourg (FNR Secretariat 2007). Recently, there has been increasing activity – particularly in the EU – in the field of regional foresight, by means of which regional innovation potentials shall be better understood and furthered to the benefit of integrated regional development.

“Foresight can be defined as a systematic, participatory, future intelligence gathering and medium-to-long-term vision-building process aimed at present-day decisions and mobilizing joint actions.” (HLEG 2002: 14)

It is not a traditional scientific discipline; we can characterize it as a knowledge-based service for the preparation and support of strategic innovation activities. Its main features are

- Medium to long-term orientation (not the next innovation cycle, but the following)
- Scientifically founded approach (with a combination of futures studies methods)
- Holistic and discipline overlapping approach (including all STEEP¹ areas)
- Clear orientation towards activity

This includes:

- Provision of methods for the perception, analysis and assessment of relevant developments in markets and environments
- Development of scenarios of alternative plans for courses of action, from which strategic decisions can be derived
- Initiation and accompaniment of innovation processes, which not only emphasize technical, but also social and organizational aspects on these innovations
- Organization of internal communication and transfer processes in order to put the future orientation of the company on a wide corporate culture basis.

Corporate Foresight as an Instrument for Companies

Despite its importance, foresight has no defined place as an individual field of action in most companies (Burmeister et al. 2004). Exceptions like DaimlerChrysler, where a separate foresight unit is in operation for more than twenty years, prove the rule. Some companies have established a kind of future observatory that fulfills specialized tasks, e.g. forecasting future traffic, and has mostly a single addressee within the company but is well networked internally. Some companies rely on a kind of collection post for future related information that sometimes consists of only one employee (Becker 2003).

On the other hand, companies need foresight for dealing with uncertainty and insecurity. It serves as a preparatory instrument for long-term oriented and pro-active action. Foresight offers a useful approach to this, as it follows an action and practice oriented working approach, the focal point of which is networked, inter-disciplinary thinking, oriented towards long-term developments in the business environment with an eye on innovation potentials.

¹ STEEP – Society, Technology, Economy, Environment, Politics

Faced with an increasing flow of information of varying quality regarding possible future developments, foresight is occupied with a systematic analysis of social motives (basic trends) and therefore lends a helping hand to the stabilization of corporate development. Principally, foresight simplifies conscious, pro-active future planning concepts or even makes them possible at all. At the same time, foresight helps to open up new horizons and to overcome mental barriers. Empirical surveys (Becker 2003, Burmeister et al. 2004, Schwarz 2006) show that foresight can perform these tasks all the better, the deeper foresight instruments are embedded in corporate activity and the better their tasks, questions and results are communicated within the company.

Usually, a foresight process runs through the following steps:

- Definition of the task: aims and goals, topical field (so-called “bounding”)
- Analysis of the future business environment and its main driving forces by means of trend analysis and/or scenario construction
- Identification of relevant fields of action (technology fields, application areas) most often by means of a prioritization process
- Finding of concrete ideas for actions and measures (e. g. innovations) in the selected fields, usually done by brainstorming workshops of different formats or specific creative methods like “visioning“
- Further selection of the most promising ideas, sometimes done in combination with a SWOT² analysis
- Elaboration of the ideas in view of implementation, e. g. by means of back-casting and/or the establishment of road maps
- Implementation

According to our experience, the integration of customers (corporate clients, private customers) and stakeholders (e. g. local public, even trade unions) can be crucial for the whole process. Customers know best what they really need, they bring their own wishes and visions into the process. Furthermore, they know best which features of new products or services they would use and which ones would only provide obstacles for acceptance. Of course, whether it is possible to invite “outsiders” into e. g. visioning workshops depends on secrecy considerations.

Implementing Foresight Results

Success of a foresight process depends mainly on its social and organizational dimensions. This is expressed in the “5 C Model” of corporate foresight (Burmeister et al. 2004: 53f; Daheim 2004: 120). This model highlights five factors needed for corporate foresight activities in order to be successful:

- Competence: Competence in methods, contents and processes (with transparency of methods as a central factor)
- Creativity: Deliver inspiring and new results, not only “business as usual scenarios“

² SWOT – Strengths, Weaknesses, Options, Threats

- **Communication:** Find and use new ways of communication apart from reports (“shelfware”)
- **Cooperation:** Include a variety of participants in the activity (guaranteeing a variety of perspectives as well as providing better chances of implementation)
- **Continuity:** Establish a learning culture, adapt ways of working to needs, optimize methods and results continuously

We estimate that about half of the effort of a foresight process has to be spent on communication, on reaching consensus and commitment. According to our own experience, new presentation tools can be very helpful: from internet sites to comic strips (as in the Siemens magazine “Pictures of the Future”) and to short animation movies (Philips “Connected PI@net”), from implementation workshops to intra-corporate road-shows.

There are many potential obstacles and “show stoppers” to implementing foresight within a company. Typical pitfalls include:

- **Playground pitfall:** No “Building of a Knowledge Pool”, insufficient continuity of activities, lack of commitment to corporate foresight
- **Monologue pitfall:** Results remain more or less unknown internally, low level of diffusion of results into the corporation
- **Lone rider pitfall:** Insufficient acceptance and/or implementation problems for outcomes, lack of inclusion of colleagues / employees into the process

In some ways, there is a tendency to re-invent the wheel in terms of processes, methods, application, communication. The most important “show stopper” is still NIH – “Not invented here”, not invented in my unit, my department, my “silo”. Foresight needs therefore high-ranking advocates in the company, preferably at the board level. Ideally, these powerful advocates should be well acquainted with the foresight process. As a rule we try to make them join the first important workshop and the final stage of the process. Furthermore, the foresight activities should have a formal connection to the strategic planning process. Other factors of success are that the foresight process itself is transparent and understandable, inclusive for interest groups from within and from outside the company, and a sound combination of quantitative and qualitative methods (comp. Glenn 2003, Introduction: 14f).

Winning Through Foresight

“Winning through foresight” is the slogan of the British foresight process. Considering the growing uncertainty, fiercer competition and at least constantly high innovation dynamics, foresight instruments will play an increasingly central role in early detection of risks and opportunities, in systematic strategy formation and management in general.

Some final remarks: In the last years we could observe, that corporate foresight is becoming more widespread and important. Still it has to struggle with difficulties, which methodological improvement alone cannot answer. Quite often you meet in companies (and not only there) a deep cultural clash between extrapolation / forecasting people who are oriented exclusively towards quantitative extrapolations or forecasts and people who appreciate also qualitative factors and try to take into account all of the business environment even if it is not quantifiable. Acceptance of qualitative future knowledge has still to be improved in upper management. The “need for numbers” often makes blind with respect to “narra-

tives". But corporate foresight itself very often still has some deficiencies: Sometimes, the methodological bridge to established business processes seems to be missing. Further on, corporate foresight has to cope with paradoxes:

- Lack of standards vs. need for individual solutions
- Low level of diffusion / extent of practical use in businesses in general vs. sophisticated state of the art "lead user" development
- Gap between "report culture" and need for action
- Gap between scientific and foresight community discussions and practical use

Despite these challenges on the theoretical and on the practical levels, corporate foresight is a success story. Corporate foresight needs support and commitment, it needs sufficient time and resources. But corporate foresight is the most efficient way for a company to survive in a chaotic business environment, in fierce competition – and to grow and prosper in the long run.

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