STRATEGIC FORESIGHT AS A TOOL OF STRATEGIC RESPONSE

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СТРАТЕГИЧЕСКИЯТ ФОРСАЙТ КАТО ИНСТРУМЕНТ, ПОДПОМАГАЩ СТРАТЕГИЧЕСКОТО ФИРМЕНО ПЛАНИРАНЕ

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Abstract *The paper presents the basic aspects of strategic foresight as a tool for better strategic planning at company and policy level. The scope, objectives, basic definitions, methods and elements of strategic foresight have bben presented. The market and technology perspective of foresight as a framework of strategic response have been outlined, the basic actors and methods in the strategic response process have been pointed out.*

Keywords: *strategic foresight, methods and elements of strategic foresight*

Резюме: *Статията представя основните аспекти на стратегическия форсайт като инструмент за по-добро стратегическо планиране както на фирмено равнище, така и на равнище планиране на политики за развитие на бизнеса. Изяснени са същността, обхватът, целта, и елементите на стратегическия форсайт. Представени са пазарните и технологичните аспекти на стратегическия форсайт, основните методи на и участници в стратегическият форсайт като процес.*

Ключови думи: *стратегически форсайт, методи и елементи на стратегическия форсайт*

JEL класификация*: L10, L21*

1. Scope and objectives of Strategic Foresight

In the contemporary world, both fast changing and truly competitive, Strategic foresight represnts a major tool for better strategic planning at both company and policy level. Nowadays representatives of both big international companies as well as small innovative and flexible companies are active in professional social networks such as the Strategic Foresight and Innovation group at LinkedIn, the FERN network (Foresight Education and Research Network), the XING group

(**https://www.xing.com/net/strategic_foresight/**) and many others. Leading universities offer Master programs in Strategic Foresight. European conference of Strategic Foresight enjoys high interest (http://futureorientation.net/ conference/european-conference-on-corporate-foresight/).

In many industries, companies are facing problems stemming from emerging technologies, from the political and legislative environment, from alternative business models or from socio-cultural shifts. In this environment a strong forward view is crucial to maintain competitiveness. The implementation of a Strategic Foresight practice, therefore, is becoming more important and popular especially in multinational enterprises.

As new technologies, services and customer trends emerge, companies in many industries have to watch their entire business models threats. This is not a new phenomenon. The industrial revolution substituted millions of weavers with the mechanical loom, replaced horsepower with steam engines and made manual work in many places dispensable. In recent years, troubled industries include photography, which was largely unprepared for the technological discovery of the digital camera, print media, where for example the publishers of encyclopaedias were caught off guard by the impact of the Internet or the Wikipedia phenomenon, and telecommunications, which is faced with the threat of Voice over IP.

There are many definitions of Strategic foresight, many of them overlapping in sence and repating each other. One of the most practically oriented one belongs to the XING group[1], according to which: „Strategic Foresight is a combination of futures methods and methods of of strategic management. It is the ability to create a forward view and to use the insights in organizationally useful ways, for example, to develop strategies and to explore new markets, products and services. The *underlying assumption* is that *changes and discontinuities in an organization's environment can be perceived before becoming effective. Strategic Foresight deals with the identification, assessment and usage of those weak signals to prolong the reaction time and make strategic action possible instead of short-term reaction.* Hence, Strategic Foresight aims at enabling an organization to capitalize on emerging opportunities and to avoid getting surprised by upcoming threats."

The aim of strategic foresight is well described by Dr. Michael Jackson[2] (2011) in Practical Foresight guide (chapter 2, page 3):"The ultimate aim of using strategic foresight to advantage is to provide challenging visions of alternative futures which can be acted upon today in order to shape the best possible tomorrow. This process starts by asking challenging questions about a particular future topic."

Another proper definition of Strategic Foresight has been given by Rohrbeck, Arnold and Heuer[3] (2007). According to their research "Strategic Foresight deals with the identification, assessment and usage of weak signals to recognize and give warning about threats and opportunities at an early stage. Sources of weak signals are the political,

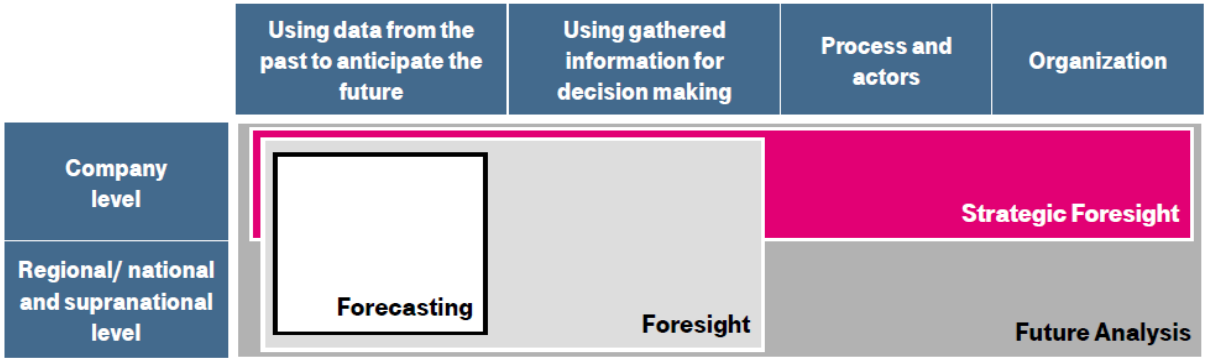
[1] Source: The XING group, https://www.xing.com/net/strategic_foresight/, in : What is Strategic Foresight?
[2] Source: Dr. Michael Jackson, Practical Foresight guide (chapter 2, page 3), 2011
[3] Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India

socio-cultural and competitive environments as well as science and technology. Strategic Foresight defines the methods, the actors, the process and the system needed to enhance the competitive position of a company. Strategic Foresight can be directed (monitoring, issue driven) or undirected (scanning) [13, 20].

2. Methods and elements Strategic Foresight

The research on the future and how to deal with it has evolved over time to include an increasing number of aspects. Frameworks for strategic response have been classified by the analysts of Deutche Telecom Laboratories Rene Rohrbeck, Heinrich Arnold and Jorg Heuer as shown in Figure 1.

Figure 1: Scientific classification of research on Future Studies



Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India

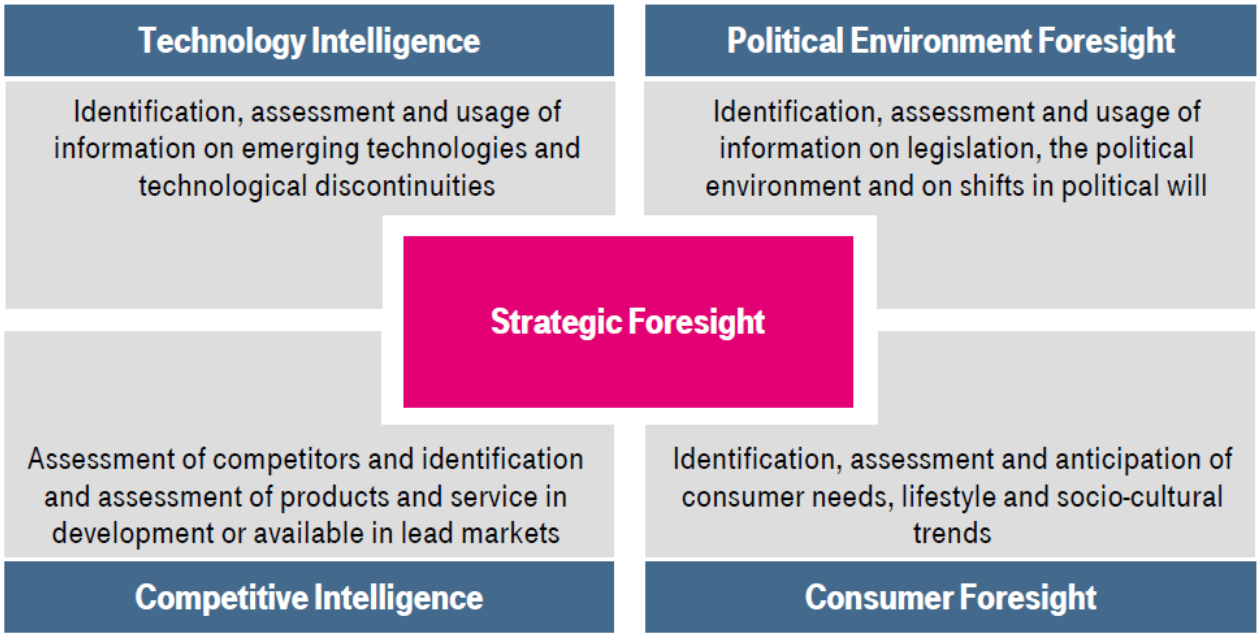
In the 1970s, research conducted on the subject was termed **Forecasting** and focused on *methods* for predicting the future with *modeling and econometric techniques*, using data from the past [2]. These methods included trend extrapolation, S-curves, trend curves, and patent and publication analysis.

Foresight *broadened the scope of research* to incorporate *methods* that enable networking *for information gathering*, assessment and interpretation, *and* methods that support *decision making* [3]. Furthermore, Foresight includes research on the capacity of organizations to cope with the future [4]. The term *Strategic Foresight* was developed to refer to research focused on the company level. [5-7].

Elements of Strategic Foresight

Strategic Foresight uses weak signals from science and technology and from the political, socio-cultural and competitive environment. There has been extensive research on future-related intelligence activities in the main research fields which have been incorporated into Strategic Foresight (Figure 2.).

Figure 2: Elements of Strategic Foresight



Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India

Technology Intelligence deals with the identification, assessment and usage of weak signals and information about emerging technologies and technological discontinuities [12-15].

Competitive Intelligence deals with the assessment of competitors and the identification and assessment of products and services in development or already available in lead markets [16-19].

Political Environment Foresight deals with the identification, assessment and usage of information on legislation, the political environment and on shifts in the political landscape [1, 5]. This element is particularly critical in highly regulated industries such as the infrastructure of the food industry. At first, genetically modified food appeared to have a great deal of potential. However, the introduction of tight regulations led to a significant drop in sales.

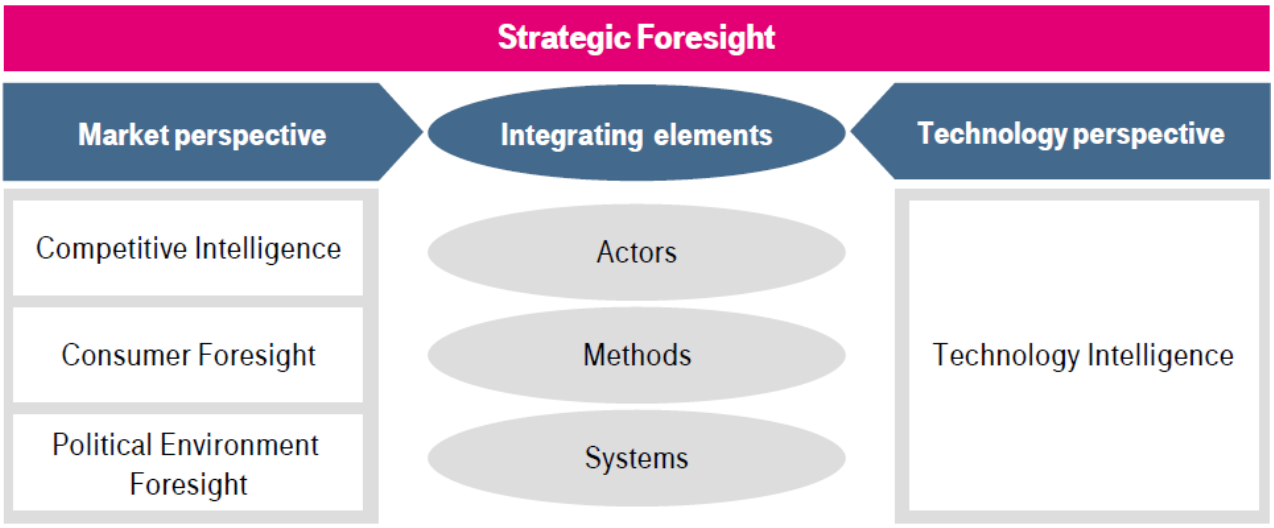
Consumer Foresight deals with the identification, assessment and anticipation of consumer needs as well as lifestyle and socio-cultural trends.

3. Frameworks for strategic response: market and technology perspective

The four elements of Strategic Foresight can be divided up further into two perspectives. They correspond to the activities of the various actors involved in strategic foresight. The restructuring of these perspectives is helpful when analyzing and planning the coordination of different activities, actors and methods within the organization.

The market perspective incorporates the Competitive Intelligence, Consumer Foresight and Political Environment Foresight elements and the technology perspective consists of Technology Intelligence.

Figure 3: Integration of the two perspectives of Strategic Foresight



Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India

The two perspectives can be integrated in three different ways:

Firstly, by bringing the different actors together.

Secondly, by applying methods designed to combine the data generated in the two perspectives.

And thirdly, by using systems which integrate the perspectives. These systems can be IT-solutions or organizational systems such as staff units, which analyze the information generated in the two perspectives and compose an integrated report.

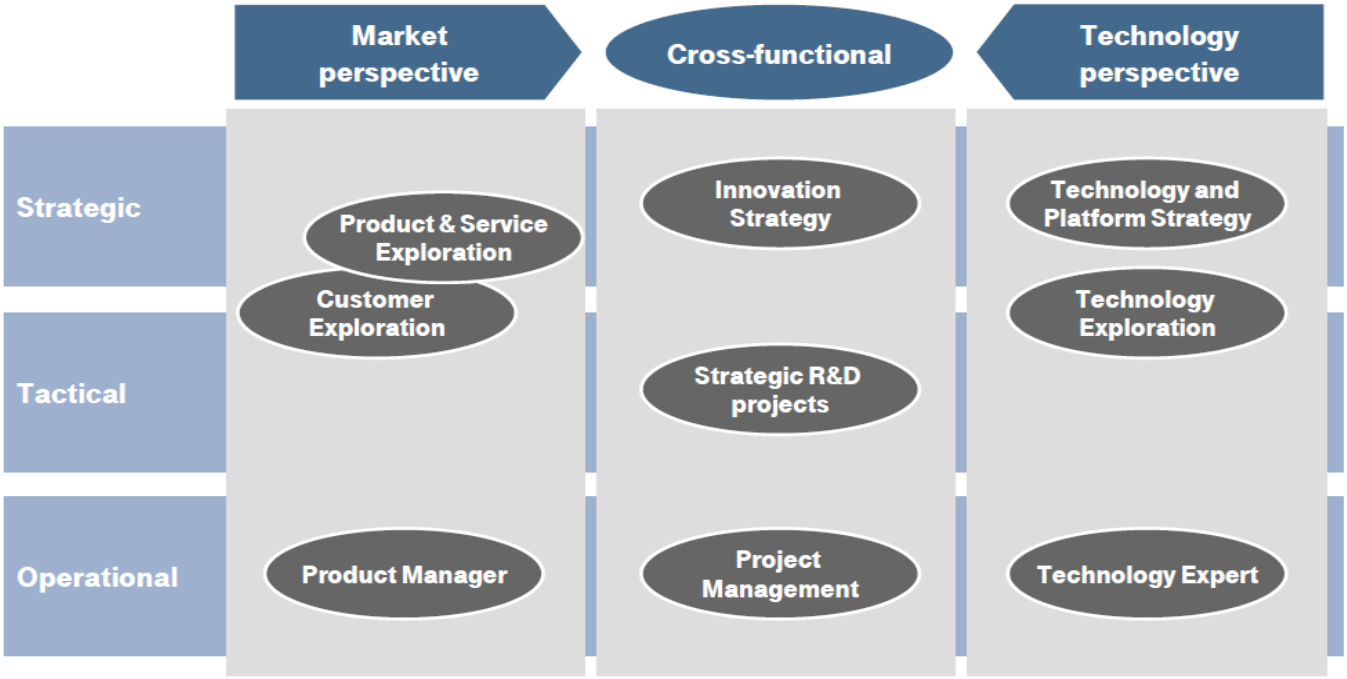
Numerous studies have demonstrated the expected gains from integrating the two perspectives as well as the barriers to overcome while attempting to do so [21-26]. In the end, the success of the integration will depend on bringing the actors together through tailored methods and systems adapted to company specific requirements.

4. Frameworks for strategic response: actors

In recent years, the individual actor has become the focal point of innovation management research. The two research streams have been the *Champions of Innovation* and the *Promoters of Innovation* [27]. This research has shown that the actions of a few individuals, rather than the innovation system itself, are crucial to the success of innovations.

This has been applied in many MNCs in order to give early warning signs and to stimulate innovation. For example, the different Strategic Foresight actors at Deutsche Telekom AG as formulated by Rene Rohrbeck, Heinrich Arnold and Jorg Heuer are presented at Figure 4. The Strategic Foresight activities conducted by these actors are mostly directed by specific issues, which need to be acted upon. In order to decide upon the course of action information is usually gathered, analyzed and, after a conclusion has been reached, the data is usually distributed.

Figure 4: Strategic Foresight Actors at Deutsche Telekom AG



Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India

On the other hand, there are three units which scan in an undirected way. These units are:

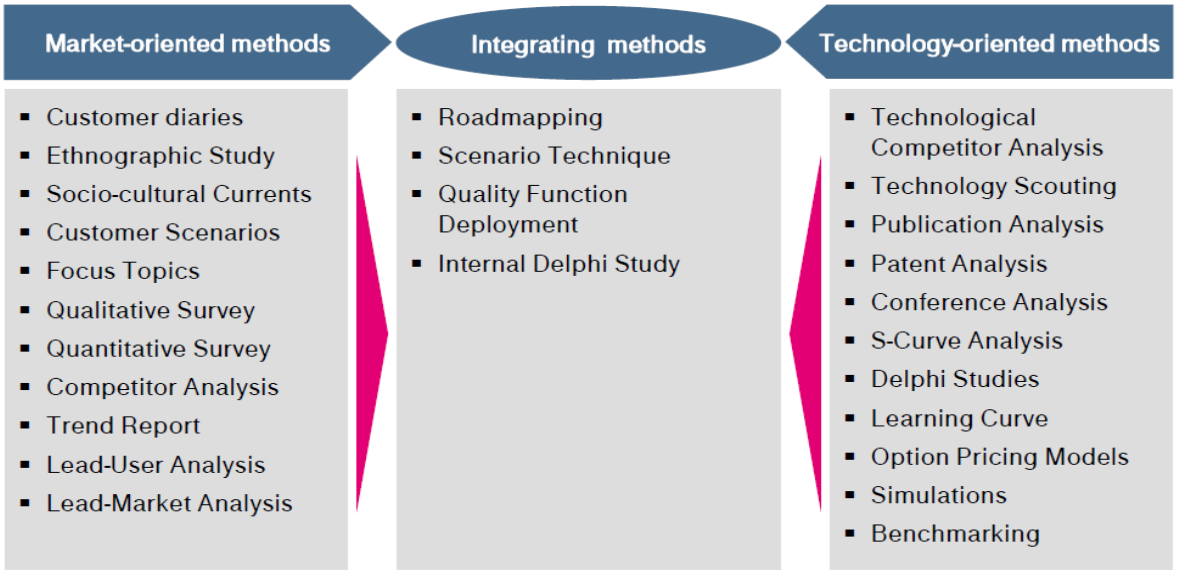
- *Product & Service Exploration,* which is dedicated to the identification of products and services available in lead markets,
- *Customer Exploration,* which uses methods such as ICT diaries, socio-cultural studies and trend analysis to identify latent and emerging customer needs, and
- *Technology Exploration,* which scans for emerging technologies.

All three units publish scanning reports, which are available throughout Deutsche Telekom AG. The way these reports are disseminated has a strong information-push character: readers cannot state what information they require or how comprehensive it should be. There are, however, some information-pull mechanisms in place. Deutsche Telekom AG business units can request workshops or interviews on the scanning results.

5. Frameworks for strategic response: methods

The methods of Strategic Foresight can be differentiated according to the areas in which they are applied, as shown in Figure 5. A literature review in the area of Competitive Intelligence identified the *market-oriented methods*, *technology Intelligence methods* and *integrating methods (Figure 5).*

Figure 5: Methods of Strategic Foresight



Source: Strategic Foresight - a case study on the Deutsche Telekom Laboratories, Rohrbeck, R., H. M. Arnold and J. Heuer, *ISPIM-Asia Conference*; 2007; New Delhi, India. The figure is published by Rohrbeck, R., H. M. Arnold and J. Heuer and based on Rohrbeck, Gemünden (2006) [35]

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