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Corporate Foresight in Europe: Ready for the Next Step?

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The paper addresses Corporate Foresight (CF) as a future intelligence gathering process that has come in widespread use in a business context where – as foresight – it is confronted with specific contextual, processual and methodological difficulties. The results of a 2005/2006 survey on CF by the University of St. Gallen in cooperation with Z_punkt are used as a starting point to give insight into the use, goals and methods of CF in large corporations. Relating to problems of CF and factors regarded as critical for its success, the centrepiece of the paper will propose a historical contextualisation of corporate foresight practices from the 1980s onward, identifying the underlying assumptions – the “dominant logic” – and opting for a new model of corporate foresight as “open foresight”.

Keywords: Corporate Foresight, Strategic Foresight, Foresight Toolbox, Paradoxa

For corporations once again the future seems fashionable: German Telecom in the second half of the 1990s came up with the simple, but striking slogan of “Zukunft wird aus Ideen gemacht” (“Future is made out of ideas”) with the aim to tie together the triangle of future-ideas-telecom. With its in-house magazine “Pictures of the Future”, Siemens is underlining their claim to be a leader in shaping tomorrow, focussing on infrastructure, automotive technology and traffic management, security technology or health and medical technology. Another recent example of a large company aiming to be identified as an innovative and positive future shaping force is Thyssen-Krupp, claiming “We´re developing the future for you”. The world largest chemical company BASF has not only rebranded on the level of corporate design but also tries to establish a firm link between the companies' chemi-cotechnical competence and their commitment to “Shaping the Future”.

But “the future” used as a catchphrase and the construction of futurity as something positive adding to the image of a company or brand is just one side of the coin. The other side is the widespread use of foresight in and for businesses. Futures studies, foresight and especially corporate foresight are increasingly used for providing valuable input in the area of strategic planning, research, technology development and innovation but also for corporate communications and corporate identity/branding. Foresight in and for businesses –

mostly referred to as corporate foresight – has gained importance as decision making in strategic planning and R&D has become ever more complex and the competitiveness in the highly dynamic global knowledge economy has increased. Corporate foresight is by a growing number of corporations regarded as the tool of choice for preparing business for the future, be it in form of a long-term-strategic vision, ideas for product-innovations or a scenario used for communication purposes. Nothing has changed regarding the two motives identified by Becker (2003), in which most corporate foresight activities are grounded: CF on the one hand is the consequence of a companies' business operation that inherently demands long-term orientation – in industries with long product cycles, such as the chemical and automotive industry – and on the other hand CF is taken as a proactive step for coping with uncertainties in the business environment. On the one hand using CF for mainly strategy and innovation purposes, on the other hand connecting or identifying the company (as a brand) with the future in general, painting the picture of a future proof and futurizing company, a force shaping the future, not just reacting to trends, has gained popularity in recent times.

1. Recent Developments in European Corporate Foresight

One of the core problems of evaluating the state of the art in corporate foresight is that its results, the methods used and its impacts are damned to confidentiality, as they are used for achieving competitive advantages. Coming up with a convincing innovation is one thing, letting others know that and how foresight contributed to it is another. Therefore, CF is mostly done behind closed doors. Nevertheless three new studies, one by Müller (2006), one by van der Duin (2006) and one by Schwarz (2006) shed light on the actual performance of foresight for and in business.

The new quantitative study¹ by Adrian Müller of the University of St. Gallen that we will present here was realized in cooperation with Z_punkt and provides insight into the current practice of strategic foresight in companies in Europe, mostly referred to as corporate foresight (CF). The survey's design, aims and main findings are summed up in the following and linked to the two previous studies on corporate foresight, carried out by Becker (2003) with a geographical focus on Europe as well and Z_punkt (2002) with a geographical focus on Germany².

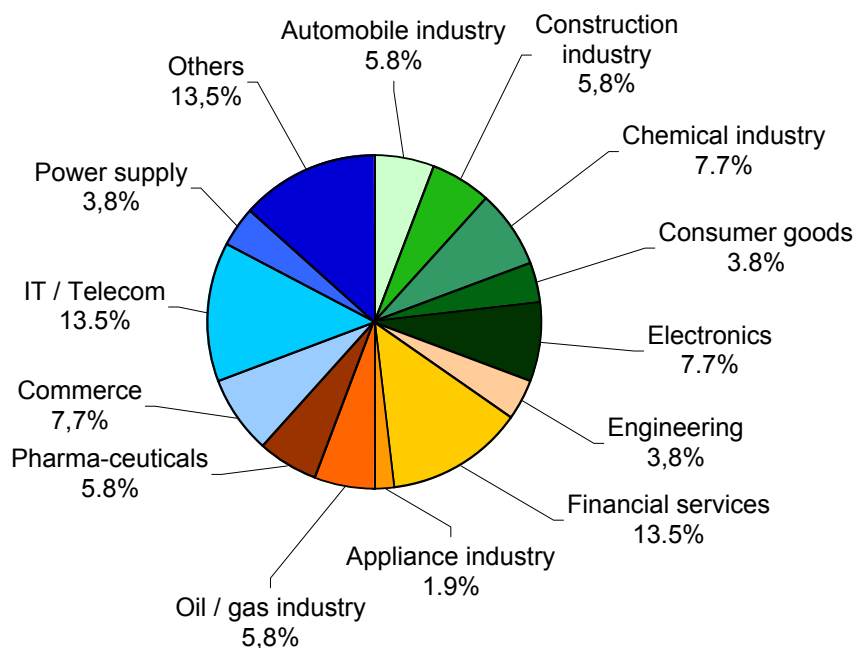
¹ The quoted data from Müller (2006) stems from an unpublished paper. The study will be published in autumn 2006. See also: <http://www.strategicforesight.ch>;

² The Z_punkt 2002 study included data from 26 German corporations, while Becker interviewed 18 European companies.

1.1. Survey Sample and Respondents' Foresight Experience

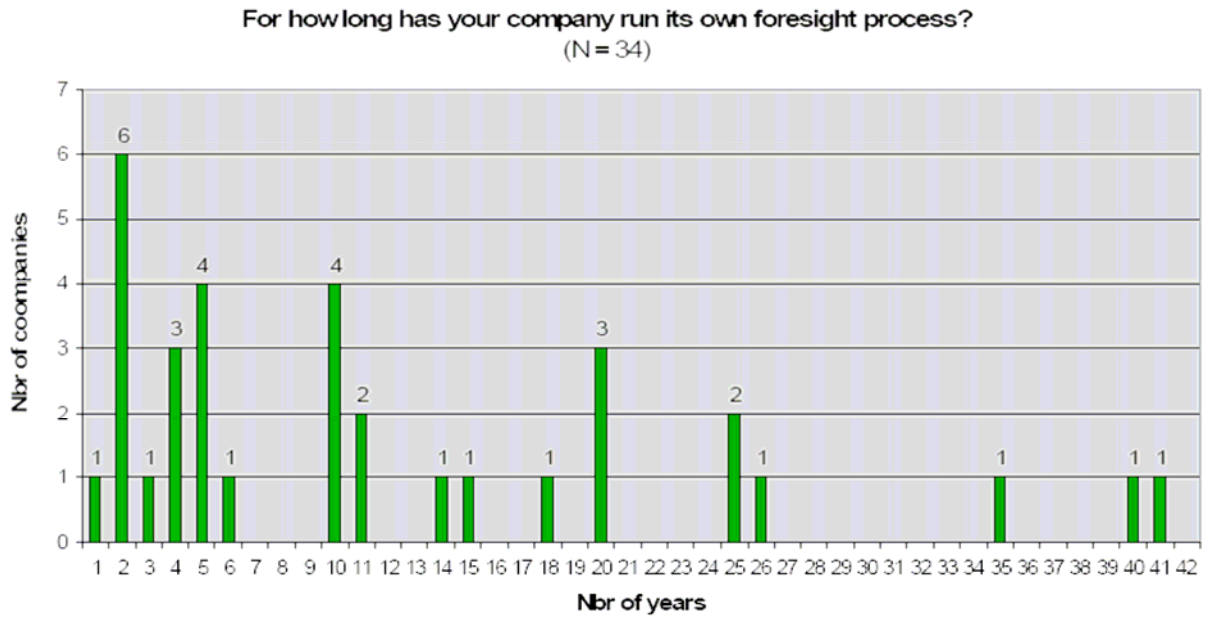
For his study on CF in Europe, Müller (2006) contacted 152 large European companies of which 44 responded (28,9%). There were three criteria for inclusion in the survey: the company must (i) be large with a turnover of at least 150mil Euros annually; (ii) have its head-quarter in Europe and (iii) have a corporate strategic foresight process.³ Businesses from 9 different countries and 13 different industries took part in the survey with half of the companies having an annual turnover of more than 10bn Euros. The majority (37,5%) of the participating companies have a total workforce between 50.001 and 100.000, 72,5% of respondents are from German-speaking countries.

Distribution of participants per line(s) of business
(N = 40, multiple answers possible)



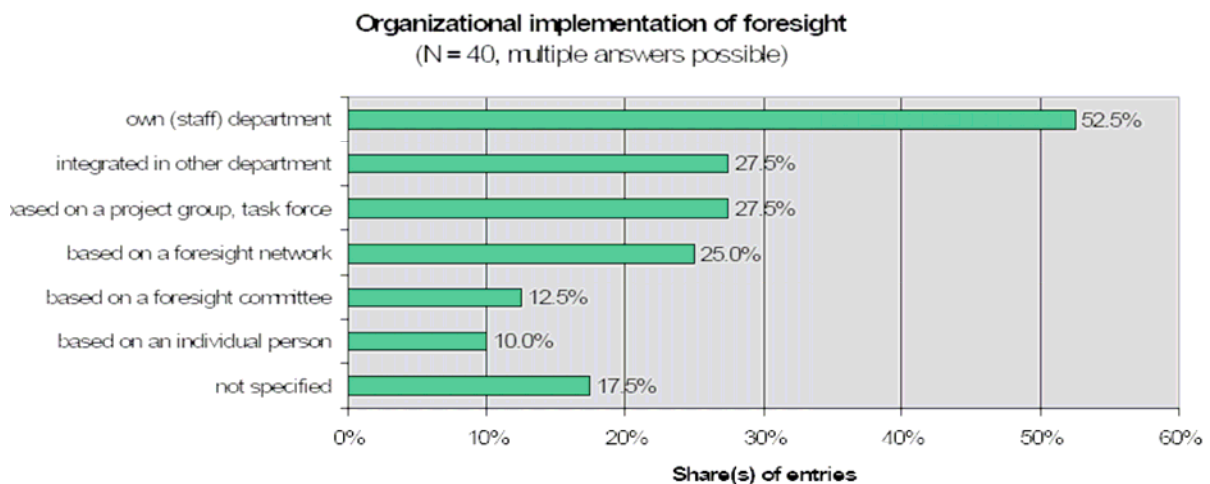
The overwhelming majority of participants has many years experience with foresight, with half of all participating companies having run their own foresight process for ten years or less (median: 10 years), about a quarter three years or less, and 8% (3 companies) for more than 30 years.

³ Finally included were 40 companies as four failed at least one criterion for inclusion.



1.2.Organizational Form

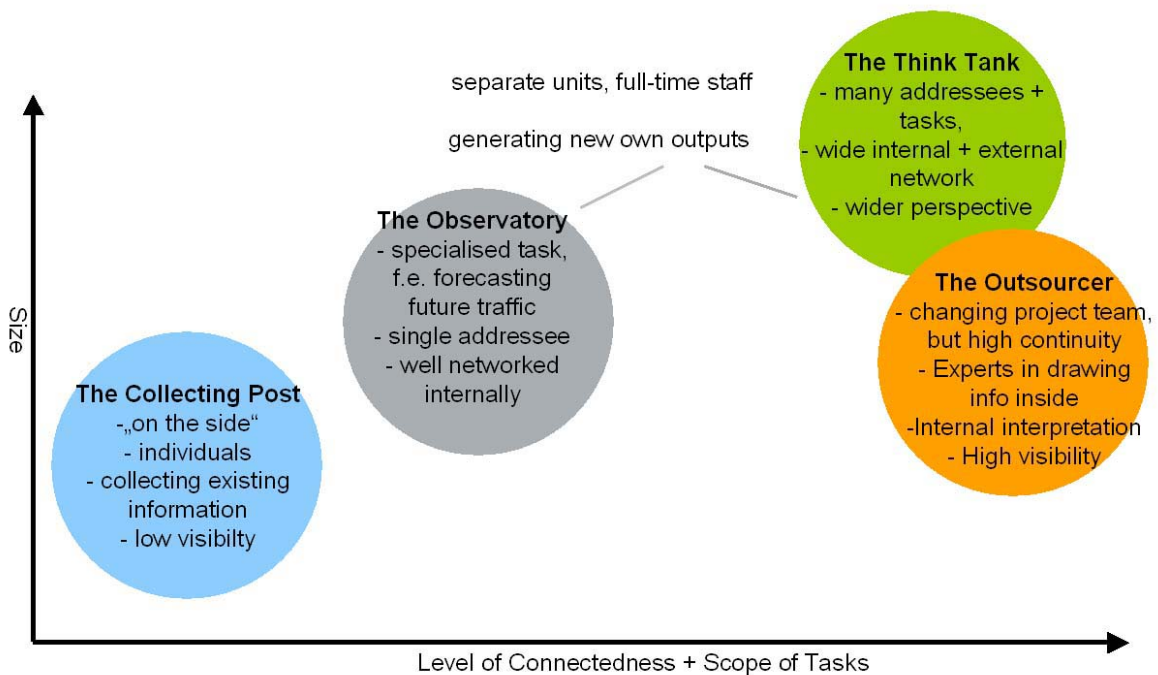
The three types of organisational forms in corporate foresight identified by Becker (2003) as (i) the collecting post; (ii) the observatory and (iii) the think-tank have not been used as classification criteria by Müller (2002), but his findings suggest that the trend towards establishing specialised foresight units working as well networked observatories or highly-visible and renowned think-tanks within large companies has continued. Results of the survey show that in more than half of the companies foresight processes are run by specialised departments, called e.g. „Trend Research“, „Global Foresight“, „Market Intelligence“ or „Issue Management“, and that the responsibility for the process only seldom rests with individual employees with a specific foresight or futurist portfolio. With the exception of one company, all participants in the survey rely on external consultants and/or services, but 60% only do so sometimes or seldom.



Looking at these results and recent developments in CF in Europe in general, it seems to be appropriate to add a fourth type of organizational forms in CF to the original Becker typology⁴: the outsourcer. This type of CF “unit” identifies and defines the subject area and goals of a foresight process from its expert perspective within the company, but often lets the processes itself or larger parts of the research involved be conducted by an external organisation/consultancy/think tank before “re-integrating” and utilizing the results in strategic planning or other business fields within the company. Within the company, the process is often carried out by a project team composed according to the specific tasks and issues of the foresight process, and even though the “unit” as such is rather small, it has a high visibility within the company, or even outside of it. Here, there is a high expertise concerning corporate foresight, but a lot of the day to day work of it, such as trend scanning, is simply outsourced.

Corporate Foresight – 4 Types of Organ. Forms

Typology from Becker 2002, with additions by Z_punkt



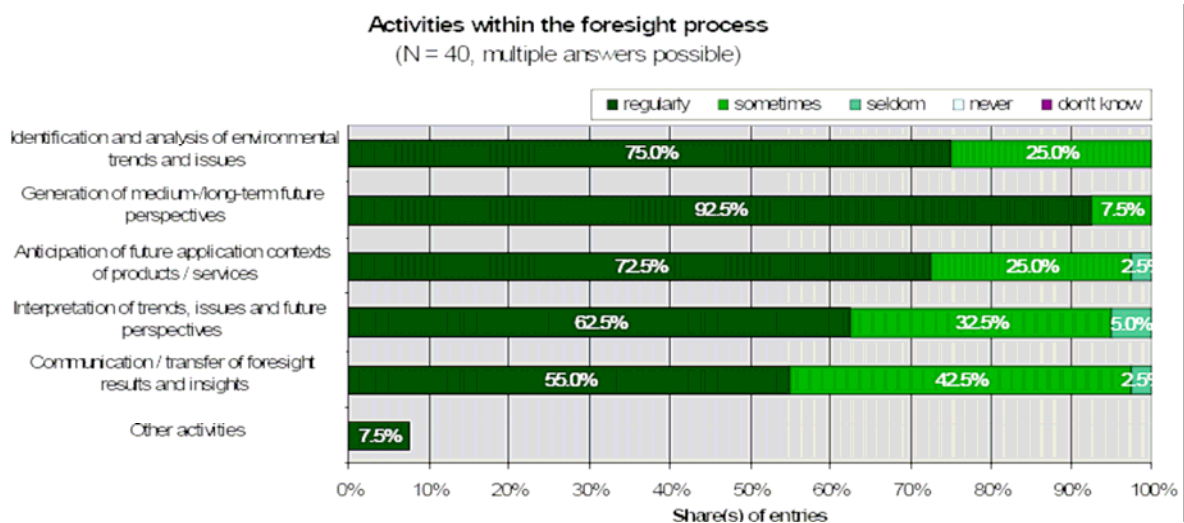
⁴ This addition is not a result from the study by Müller, but an addition by Z_punkt. It is based on our practical experience in the field, on discussions with colleagues from Europe as well as with corporate foresight experts. For some more information on this question, please see for example Heinzlbecker 2006.

1.3. Objectives and Understanding of Corporate Foresight

Foresight is primarily used to achieve „hard“ objectives⁵; it should be supporting strategic decision-making in general, as 87,5% of participants responded. Improvement of long-term planning (77,5%), enabling of an early warning system resp. being a tool for issue management (65%), improvement of the innovation process (57,5) and improvement of environmental reaction speed are ranked top regarding the objectives of corporate foresight. These findings mirror the two internal drivers for foresight Becker (2003) had identified – long-range monitoring and planning as an inevitable prerequisite to any strategic research, technology, development and innovation decisions in industries characterised by long product cycles and high development costs and firms that pursue an innovation leader strategy, who have to constantly monitor and react to the innovation activities of their competitors.

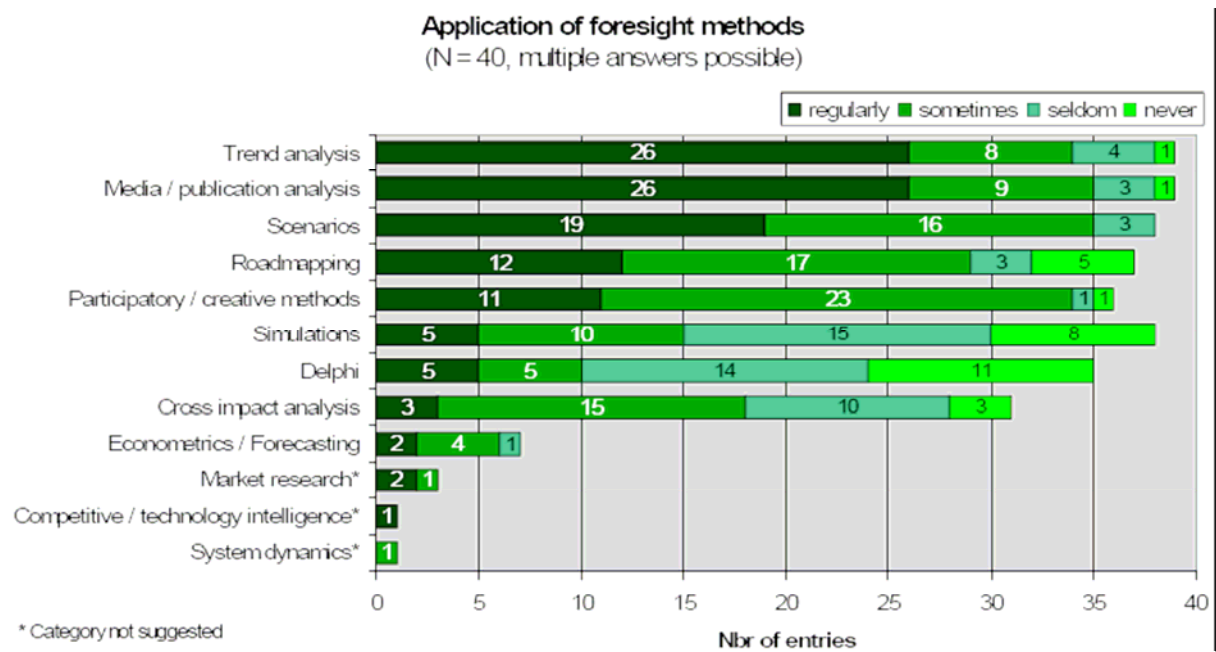
This leaning towards “harder objectives” is mirrored in an understanding of CF that is rather instrumental. Instrumentally, foresight processes are regarded as an environmental information gathering process (72,5%), as a reflection and knowledge generating process (57,5%) and as a vision-building and direction-setting process (60%). A rather surprising result of the survey that we will elaborate on further below, is the fact that only 10% of all companies agree strongly that foresight is a participative communication process. The „outside-in“ perspective, focusing on the environmental analysis and information gathering, predominates, confirming the same result for German companies from the Z_punkt 2002 survey.

1.4. Activities / Methods



⁵ By “hard” objectives Müller understands those which are explicitly, functionally related to specific strategic tasks and processes.

Trend analysis ranks top amongst the methods used in corporate foresight as 26 of the 40 companies report regular usage of this method, without further specifying how the trend analysis is conducted in detail, e.g. what sources are regarded as valuable for analysis. However, 80% of the participating companies are working with internal trend databases. Media/publication analysis is the second most regularly employed method (26 out of 40) followed by scenarios (19 out of 40), roadmapping (12) and participatory/creative methods (11). Whereas the Delphi method is in widespread use in public foresight, it is less important within corporate foresight, as 25 firms report they have never or only seldom used this tool, compared to 10 companies reporting regular or sporadic use. This is mainly in line with previous surveys and publications. What may be considered surprising is that creative and participatory methods are, in comparison, used rather seldomly.



1.5. Involvement of Top-Management and Budget

In 72,5% of all companies, foresight is promoted by top management, with 75% of all companies considering foresight to be an executive responsibility and top management in 60% of all companies regularly participating in foresight. Top management involvement in CF can be regarded as one of the crucial success factors of CF, as experience shows that continuity and impact of CF are much higher when a foresight process involves top management, which also raises chances for firmly grounding an internal foresight unit within the company. One reason is of course the fact that any process within a large corporation that involves top management has a higher visibility and is regarded as highly relevant. In addition, one may say that top management involvement also leads to a CF process being closely tied to current pressing issues a company faces, so that relevance to today's viru-

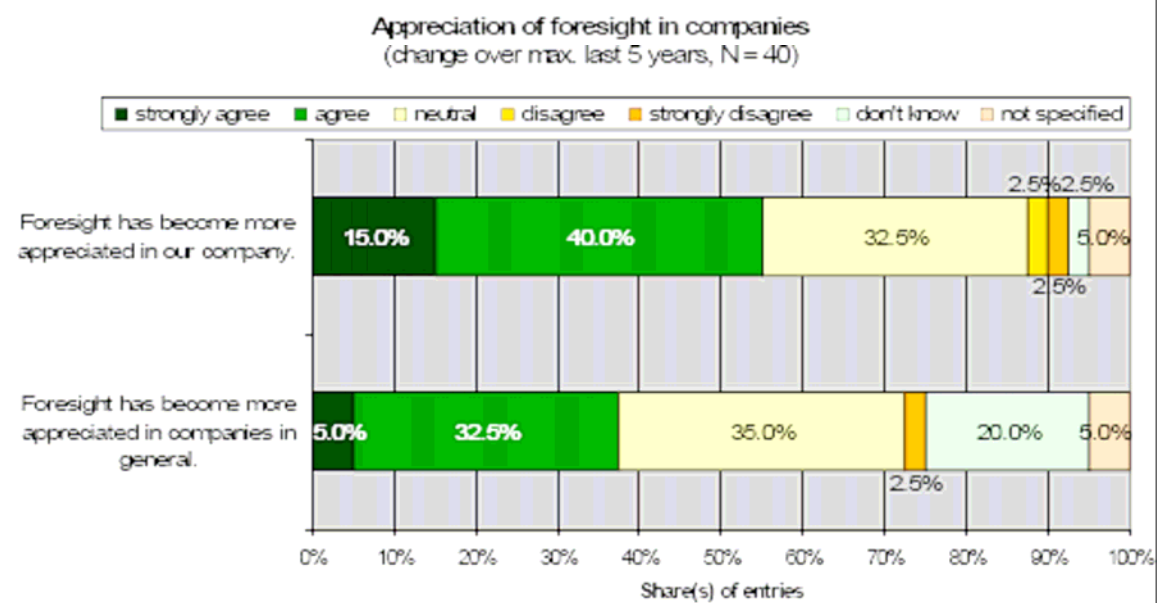
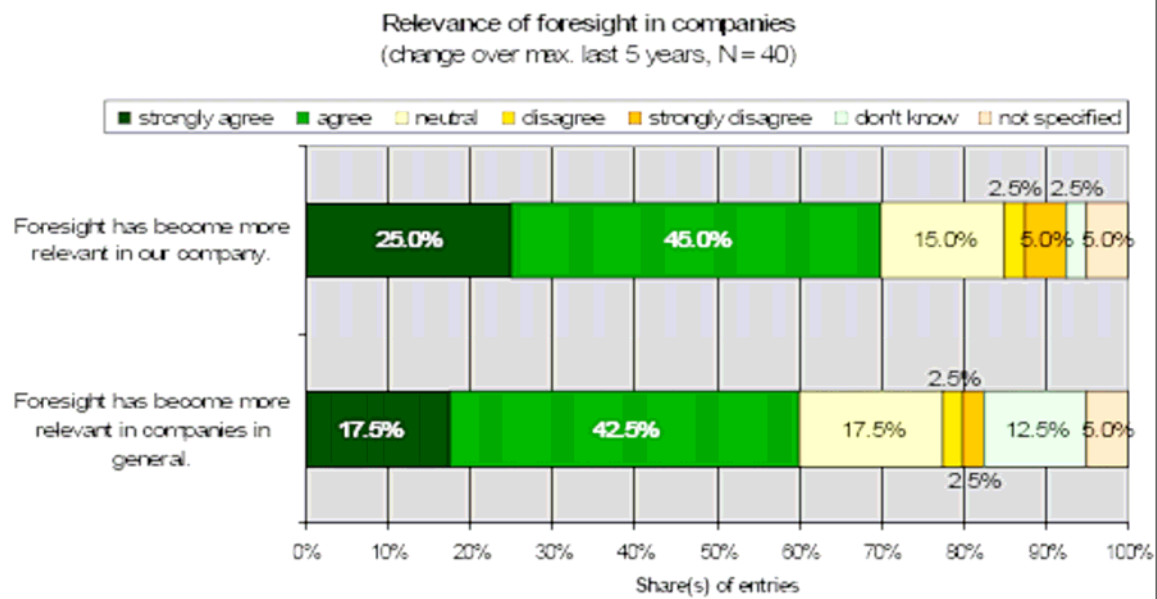
lent questions is guaranteed. Furthermore, an involvement of high-level decision-makers makes the implementation of results/consequences easier.

22 of the 40 companies gave particulars on the size of their foresight-related budgets with 20% having an annual budget of more than 1m€ and 5% of more than 5m€. Altogether 26 companies gave insight on the foresight-budget changes in the period 2000-2005 with 37,5% reporting that their annual foresight budgets had increased. 22,5% reported no budget changes in this period and only 2 companies showed a decrease.

1.6. Conclusions – Challenges for Corporate Foresight

70% of the participants in Müller's survey argue that the relevance of foresight within their company increased over the past five years and 60% believe that the relevance of foresight for the business community in general has increased. As the data gathered by Müller overall suggests, foresight is well on its way to become an acknowledged approach in widespread use within large companies.

Looking at this data, it also becomes clear that in spite of some obvious dominant tendencies (like an instrumental understanding of corporate foresight, increasing relevance of CF, rising budgets, the dominant use of trend analysis and scenarios etc.), the field is rather heterogeneous. CF operates with a variety of approaches, organizational forms and tools as well as diverging aims and different kinds of outputs. However, it is also obvious that the problems that occur and need to be solved in any corporate foresight activity are still rather similar in most cases, such as the tension between the pressure for quickly achieved outputs and a demand for methodological rigour, an unclarity about which kinds of tools are most suitable for which kind of aims, as well as new needs for communicating results and linking them firmly to today's decision-making. In addition, even though 70% of respondents state that foresight has become more relevant, only 55% say it has also become more appreciated in their company, and only 37,5% say that it has become more appreciated in general.



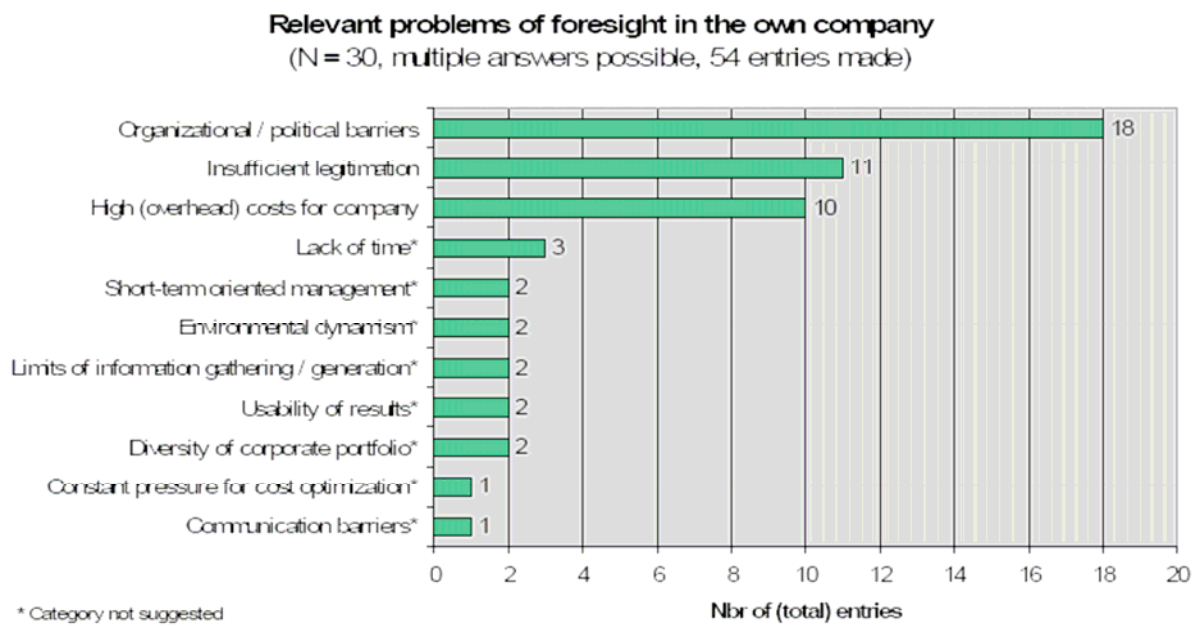
In Müller’s survey, participants report that the following arguments are put forth most often against Foresight or against taking part in Foresight processes: too long-term oriented, high costs, inapplicable results, and lack of time. Only two participants reported Foresight to be beyond controversy.

In general, the following were named as key problems of CF:

- Organizational and political barriers
- Insufficient legitimation
- (Perceived) High Costs

This outcome makes quite clear that even though CF is becoming more and more widespread, it is in many places still far from being firmly embedded – and here especially, one needs to take into account the sample used (most companies having an established fore-

sight process etc.). One reason for these persisting problems of CF may be seen in a lack of clarity about its objectives and performance: Just three quarters of the participants (30 companies) have explicit targets for their Foresight processes⁶, but some even do neither have explicit objectives nor implicit standards of success (15%, 6 companies). Only 37.5% of the participating companies control the performance of their Foresight process either formally or informally. In addition, only about one third of the companies (36.8%) overhaul and improve their Foresight process regularly, while 79% do so only occasionally⁷.

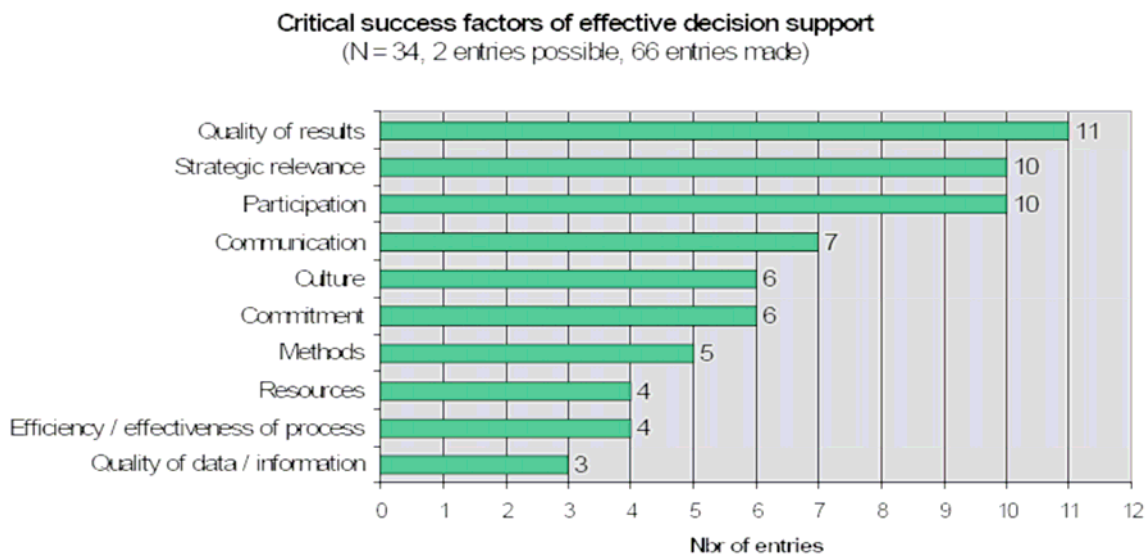


Therefore, the need to set clear objectives, connecting foresight more closely to decision-makers needs and to continuously review, adapt and improve the process is rather obvious. However, when looking closer at the survey data, there are also a number of contradictions: Only 10% regard CF as being a participative communication process (in terms of how CF is understood, or one could say conceptualized), while participation is ranked third among the critical success factors. The top factors that are being regarded as critical for success also all point in a similar direction:

⁶ The majority of these companies (16 out of 30) work with qualitative and quantitative objectives.

⁷ 63.6% of these companies overhaul and improve their process annually, one company each does its process review monthly and every four years, respectively, while – still surprising enough - only one company admits to “never” overhauling its foresight process.

- Quality of results
- Strategic relevance
- Participation
- Communication
- Culture
- Commitment

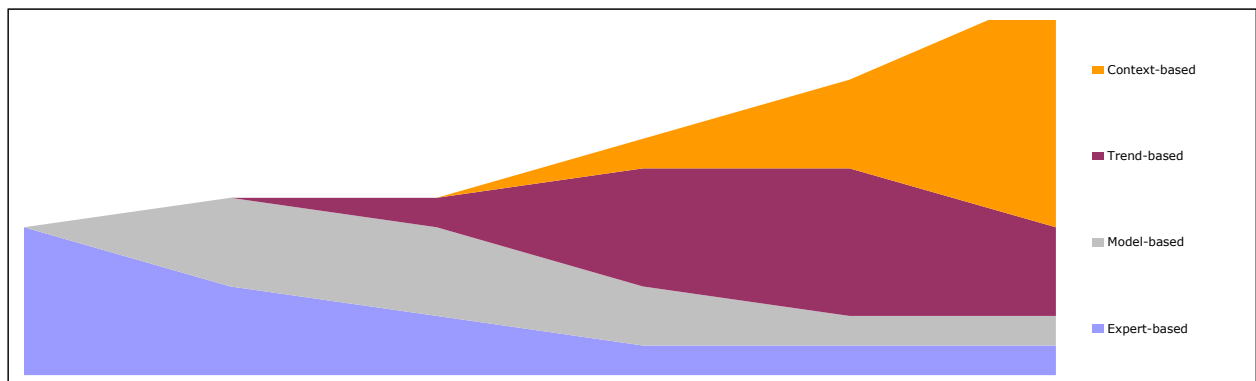


It is clear that – besides the obvious need for high quality of results and strategic relevance – all other factors named as critical for effective decision-support can be grouped as “soft factors”. Many “harder factors” that often tend to be focussed upon when discussing the “quality” of foresight projects, like methods and the quality of data and information, are regarded as being of secondary importance. To put it very simply: What is critical for the success – and thereby also for the impact – of any CF activity is that outcomes are highly relevant to today’s strategic questions and of high quality, that there is a high degree of participation and involvement, an adequate and inspiring communication within and about the process and its results, as well as a “foresight culture” and commitment to the process.

As with any survey, the results answer many questions and simultaneously pose new ones. In the following, we would like to concentrate on the one key question that the survey’s results pose: How to ensure that these critical success factors are being met? What, to put it differently, could be the next phase of CF?

2. Towards Open Foresight

Interestingly enough, the clear leaning towards soft factors in what is being regarded as critical success factors contradicts the more instrumental understanding or conceptualization of CF. In the following, we will argue that this kind of contradiction is typical for any CF process – as it touches the key question of how foresight is being framed. In order to illustrate this point, we have developed a model of four phases of CF, each phase representing a “dominant logic” of how CF is being understood. This dominant logic is not exclusive – rather, it is typical for any foresight process that different understandings of foresight will emerge and need to be integrated. Therefore, looking at this phase model also is meant to clarify different “poles” of conceptualizing and implementing foresight that are often also present simultaneously, sometimes even clashing and causing friction within foresight processes. The four – very roughly sketched – types of dominant logics should clarify how CF has evolved, that different kinds of dominant logics have coined the way it was and is being conducted, and that each dominant logic brings with it certain pitfalls. The model also encompasses what we see emerging as “the next phase”: Open Foresight as the concept that is being able to answer the above-named challenges and that can ensure that critical success factors are being met.



Dominant CF-Paradigm	Expert-based Foresight	Model-based Foresight	Trend-based Foresight	Context-based „Open“ Foresight
Assumption: The Future can be ...	Known by means of expertise	Calculated by means of models	Projected by means of (scanned) developments	Shaped by means of interaction
Key Characteristics	Belief in Experts dominant, but: 70s: Turn to the qualitative and wider environment First Opening towards “soft sciences”	Quantitative and “subjective” models Extrapolation Systems Dominated by “hard science”	Trends Weak Signals Early Warning Mix of qualitative and quantitative Indicators	Integrating “soft” and “hard” approaches Understanding & interpreting / evaluating change Opening up: Participation, interaction & process Action- and innovation-oriented More attention on discontinuities
Perspective	Exploring Change	Calculating Change	Reacting to Change	Understanding & Anticipating / Shaping Change
Output	Delphis, Roadmaps, Scenarios	Models & Matrixes	Trend-databases, Monitoring Systems	Scenarios; Wild Cards; Action Plans & Innovation Ideas

Looking at the development of corporate foresight from the mid 1970s on, three different (although overlapping) phases or waves can be identified, all grounded in (hidden) assumptions, expressing the dominant logic of futures studies/foresight and the broader socio-cultural context of the respective phase:

Phase 1: The key assumption of this phase and dominant logic is that the future can be foreseen by collecting and comparing the opinions of (numerous) experts – therefore we called this phase **expert-based foresight**. A key pitfall here is to delegate responsibility for contents and outcomes of foresight to experts, thereby losing track of interdependencies between different developments and ignoring inter-disciplinary questions and issues as well as the decisions that can and need to be taken.

Phase 2: Model-based foresight is characterized by the assumption that the future can be calculated by appropriate computer models based on huge amounts of data and mathematical finesse. As with expert-based foresight, the pitfall lies in delegating responsibility for generating foresight knowledge to a certain group of people and losing sight of impacts on today's decision relating to strategy and innovation.

Phase 3: Currently, the assumption that businesses can understand the future by anticipating the impact of trends on customers and markets seems to be the dominant logic, which we call **trend-based foresight**. Focussing on trends in CF has the advantage of high communicability of results, but poses the threat of focussing on efforts of how to best scan and monitor trends and, most importantly, of limiting CF to a reactive perspective of a company merely being "driven" by the trends or the environment in general.

Generally, one of the central questions to CF is: Is it conceptualised merely as a coping strategy – catching up with the latest trends and dealing with them – or as a proactive approach to shape the future? What unites these first three phases is a reactive perspective, rooted in the (often hidden, implicit, but very impactful) basic belief that that future can somehow be grasped, and that this is the key of a foresight activity. As a result, a lot of time is spent on calculations, methodology discussion, analysis, data collection. However, the history of futures studies, the numerous examples of predictions gone awry as well as the state of the art of any futures-related theoretical concepts make it clear that the future, very simply, cannot be grasped. The key to foresight is making sense of often contradictory information, drawing conclusions on their impact, dealing with diverging opinions, subjectivity and uncertainty, depicting future options, and, most importantly: deciding on actions to take. Therefore, any dominant logic that centres on the belief that the future can be grasped endangers the success of foresight as it tends to focus the process on rather technological, detail-oriented, data-centred questions, while the key strategic or direction-setting questions are “suppressed”, pushed into the background or delayed. Remembering the fact that Müller’s survey made it clear that the success and impact of CF does not rely on methodology or data, the ability to deal with these recurring dominant logics and to keep the process focussed on the key questions seems of highest importance to the future of CF.

From this perspective, the fact that the top-ranked foresight activity in Müller’s survey is trend analysis (with creative and participatory methods being used only half as often) seems rather disturbing, as well as the instrumental understanding of CF. At the same time, the critical success factors named by participants point into another direction: a new conceptualization of foresight in a more open sense.

Phase 4: Open Foresight – the next phase that we see emerging and also regard as an answer to many of the current challenges of CF is based on the assumption that businesses can shape future contexts and markets by anticipating – in an open dialogue- the dynamic interaction between social, technological & economic forces.

„Open“ foresight pays tribute to the increased socio-cultural and socio-technical dynamic resulting from the emergence of the networked society, where almost everything is interconnected and the separation of spheres of life, like technology, economics, politics and culture, has come to an end. Have the spheres or systems been „closed“ once, they have now become „open“, in the sense that the number of autonomous zones has decreased, as van der Duin (2006) has noted. This fact needs to be taken into account in any successful CF project – thereby opening up in terms of (content and thematic) perspective, but also in terms of interaction within the process.

The term relates to the concept of „open innovation“, pioneered by von Hippel (1988) and described by Chesbrough (2003), which created quite a stir in the business world. Basically, „open innovation“ calls for the integration/participation of (lead) users into the innovation process for developing products and services better fitting to the actual needs of customers, thereby reducing costs for failed innovations. But to adopt the adjective „open“ to foresight does need to have something more to offer than just following a current hype. Trying to characterise this emerging next type of CF, one can see that it is characterised by transparency, methodological hybridity, context orientation and participation. Though it needs to be based on methodological and topical expertise (and include of course methodologies associated with the previous phases, actually integrating them, but avoiding to let methodological discussions take center stage), its focus lies on the communication and discussion process that is needed for taking decisions related to future strategy and innovation. If carefully done, open foresight should be able to provide outcomes that fit the companies' needs. And even though it is set to diffuse into decision-making and blend into it instead of just preparing it, it still needs to dare to come up with creative irritations – which is often more important for future development of a company than just confirming and underpinning established knowledge by futures-data.

The term „open“ foresight should refer to at least three aspects of openness. Open foresight should involve relevant stakeholders from in- and outside the clients organisation; it should be „environmentally“ open, not prematurely narrowing its (thematic) perspective to just one sector/environment and it should be organised/institutionalised as an open process, that does not end, when the hard objective of one specific project has been achieved. New approaches in CF that concentrate on developing concrete innovations seem to point in this direction already, as they partly already include different kinds of stakeholders (consumers or in B2B-markets, customers; partly also societal stakeholders such as NGOs).

Furthermore, Open Foresight will need to be able to successfully deal with re-emerging "old" dominant logics and keep the process firmly focussed on its aim of taking decisions on future actions. The dominant logic is one of the, if not the most, change blocking and perception-directing factors within any company, especially in a time where corporate identities have grown stronger to strengthen cohesion within the given company as well as presenting the image of a powerful, fully integrated "unit" to the market and stakeholders. To open up perspectives to a new logic of a discontinuous, un-graspable but still in the positive sense open future and to focus foresight efforts on achieving a concept on how to shape the future will be the biggest challenge for Open Foresight.

References

Becker, Patrick (2003): Corporate Foresight in Europe: A First Overview. European Commission Community Research Working paper. Luxembourg 2003

Bezold, Clement (2006): Corporate Foresight in the US. Presentation at the WFS conference. <http://www.wfs.org/bezoldo6b.ppt>

van der Duin, Patrick (2006): Qualitative futures research for innovation. Delft 2006

Heinzelbecker, Klaus (2006): Outsourcing Corporate Foresight? Presentation at the WFS conference. <http://www.wfs.org/heinzelbeckero6.pdf>

Müller, Adrian: Strategic Foresight in Companies. An international survey on trends and futures research processes. Unpublished paper, 2006. Results to be published soon, see <http://www.strategicforesight.ch>

Schwarz Jan Oliver (2006): The Future of Futures Studies: A Delphi Study with a German Perspective. Aachen 2006

Z_punkt The Foresight Company (Ed. 2002): Burmeister, Klaus; Neef, Andreas; Albert, Bernhard; Glockner, Holger 2002: Zukunftsforschung und Unternehmen. Praxis, Methoden, Perspektiven. Ed. by Z_punkt GmbH. Essen 2002 (available in German only; a summary of the main results in English can be downloaded from: <http://www.z-punkt.de>)