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Corporate Foresight in Small and Medium-Sized Enterprises

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Purpose

The objective of this research project is to identify the foresight requirements of German small and medium-sized enterprises (SMEs), their corporate foresight activities, to the extent that they exist, and limiting factors for systematic foresight approaches. To this end, an expert survey was conducted with SME decision-makers. Its purpose is to make executives more aware of the indispensability and the potential foresight offers in changing markets and business environments, and supporting them in their foresight approaches.

SMEs – A White Spot in Corporate Foresight Research

So far, empirical corporate foresight research has focused solely on large-scale corporations in the respective European countries, and in Europe as a whole. The foresight needs and activities of SMEs, in contrast, have stayed below the radar, even though the value of SMEs' contribution to employment, value creation, and innovation is well recognized.

This research project aims to analyse the market situation and business environment of SMEs and, in doing so, assess their foresight needs. Furthermore, there is the question whether and in what way SMEs explore possible future market and environmental developments and utilize the resulting knowledge.

Z_punkt GmbH prepared and mailed a questionnaire (in digital and paper form) to SME executives. To permit comparability, the survey gives closed questions using a five-point Likert scale (1=strongly agree, 5=strongly disagree) for most queries

concerning foresight needs, and a three-point Likert scale (1=regularly, 2=sometimes, 3=never) for most questions about foresight activities. Closed questions are always followed by open questions to elicit additional information.

Survey Participants and their Market Environments

1,000 German companies were invited to take part in the survey; 115 of which responded (11.5%). Based on annual sales volume, the participants can be classified as

- traditional SMEs (< 50 mio. € 38%),
- upscale SMEs (50 mio. – 1,000 mio. € 49%), and
- corporate-like SMEs (> 1,000 mio. € 13%).

17% of participants have fewer than 100 employees, 29% have between 100 and 250, 20% have between 250 and 1,000 employees, and 34% employ more than 1,000 people.



Market Environments

The participants come from a wide range of industries, most prominently machine building (10%), construction (9%), automotive and logistics (9%), marketing and media (9%), food (8%), retail (8%), IT and software (8%).

Asked for their main regional markets, almost all participating SMEs (95%) operate in Western Europe. Some also cover North America (15%) and Eastern Europe (13%). China and Japan, on the other hand, currently only play a very minor role (3% and 2%, respectively).

SMEs' Foresight Needs

It is assumed that the foresight needs of an SME can be derived from several indicators. Accordingly, survey participants were asked to assess their market and business environment dynamics, and their companies' development plans.

**Regional Expansion:
Eastern Europe Major Point of Interest**

The more a company is willing to change, the more it depends on foresight knowledge to provide security for investment decisions. The pressure to act is mainly the result of intense competition in terms of price (1.8 on average on the five-point Likert scale) and quality (2.2), but also innovation and time (2.6 and 2.7, respectively). Many SMEs seek to escape heightened competition by focusing on regional expansion and product innovation.

47% of all survey participants are mainly interested in expanding their business to Eastern Europe. China (32%), Western Europe (25%), North America (23%) and Japan (15%) are also future target markets.

Incremental Improvements Dominate

With regard to innovation activities, incremental improvements dominate (87%), but fully new products and services have also been developed in recent years (64%). Furthermore, new production processes (46%) and new business models (35%) have been pursued. Only 2% of the participating SMEs have not innovated at all.

Short Lead Times

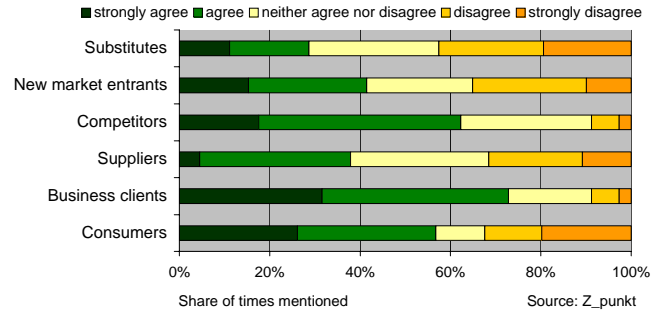
However, development lead times for new products remain short, with 28% of all SMEs surveyed having a short (0-1 year), 44% a medium (1-3 years), and 10% a long time horizon (over 3 years). 18% have no standardized development times. Therefore, market research might suffice to satisfy contextual knowledge needs given that the relevant markets and business environments remain relatively stable within planning cycles.

Market Perception: Increasingly Dynamic

However, SME executives perceive their markets as increasingly dynamic. They consider their markets to have changed strongly in the last three to five years (2.0) and further significant changes are expected for the next three to five years (1.9).

This would make foresight more useful to SMEs' future plans than short-sighted market research. The monitoring focus would have to be on the future development of high-impact market determinants, i.e. business clients (2.1) and competitors (2.3). SME executives consider consumers, new market entrants, suppliers and substitutes (2.7, 2.9, 3.0, 3.2, respectively) to be of lesser importance.

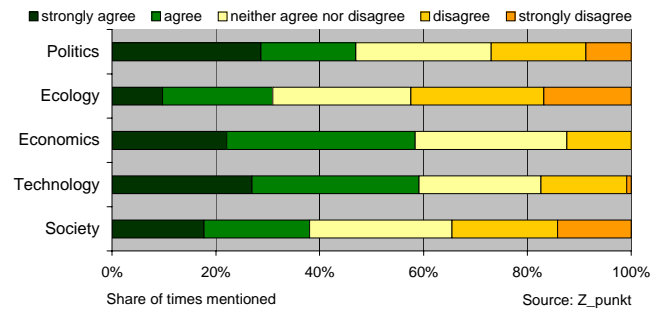
Market determinants with a high impact on market changes



Changing Business Environments

It is assumed that market dynamics are, to a certain degree, the product of environmental changes. Hence, the latter have to be closely examined to project future market developments as far as possible. SME executives also see an increase in the dynamics of their business environments. These have changed strongly over the last three to five years (2.2) and further shifts are expected for the next three to five years (2.0). Here, technology, economics (2.3 each) and politics (2.6) are key environmental sectors, while society and ecology (2.9 and 3.2) are not perceived to be crucial.

STEER sectors with a high impact on market and business environment changes



Foresight Needed in Dynamic Markets and Environments

SME executives prepare for regional expansion and innovation activities. Their planning cycles are rather short. However, since SMEs operate in highly competitive and dynamic markets, it is assumed that their foresight requirements are substantial. From their point of view, the most important fields for environmental scanning and monitoring are technology, economics and politics. Within their relevant markets, SMEs have to focus primarily on exploring possible actors' strate-

gies. However, there is reason to challenge the SMEs' ratings to a certain extent. Given that many SMEs have business clients, but that end consumers complete every value chain, consumers as an important market determinant and society as an essential environment determinant may be underrated.

SMEs' Foresight Activities

In part, SMEs respond to their foresight demands with more or less pronounced foresight activities.

Foresight Systematics and Methods Applied

85% of the SMEs regularly monitor developments in their markets and industries (sometimes: 14%, never: 1%). Furthermore, 29% frequently scan markets and industries they are not competing in for new developments (sometimes: 61%, never: 10%). 74% of the SMEs surveyed regularly monitor issues, trends and new technologies considered relevant for their business (sometimes: 26%, never: 0%); additionally, 30% often scan their environments for new issues, trends and technologies whose relevance cannot yet be assessed (sometimes: 60%, never: 10%).

Various foresight methods for scanning and monitoring, analysis and idea transfer are used. Most frequently applied are

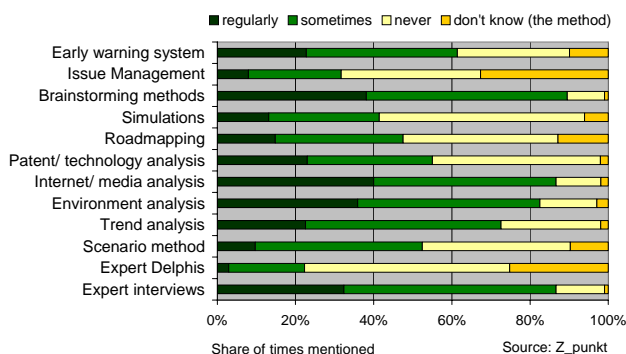
- brainstorming (regularly: 38%, sometimes: 51%),
- desk research, e.g. internet and media analysis, (regularly: 40%, sometimes: 47%), and
- expert interviews (regularly: 32%, sometimes: 54%).

These methods are not only used most often but also considered the most important ones. In contrast, more complex foresight methods, for instance expert Delphi surveys (regularly: 3%, sometimes: 19%) and the scenario-method (regularly: 10%, sometimes: 43%) are less relevant and in some cases even unknown.

Foresight Participants and Foresight Purpose

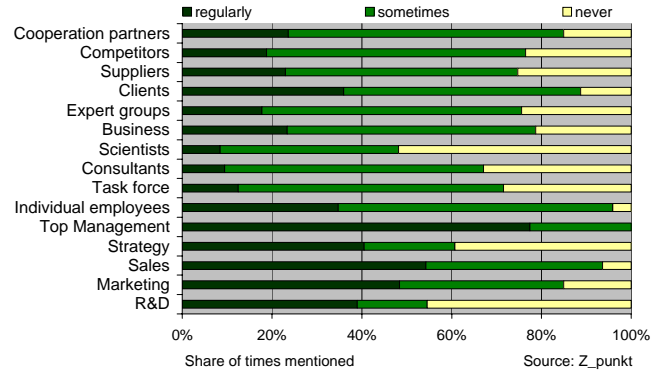
Foresight processes in SMEs are carried out by top management (regularly: 77%, sometimes: 23%) and individual employees (regularly: 35%, sometimes: 61%). In many cases, the sales department (regularly: 54%, sometimes: 39%) and individual clients (regularly: 36%, sometimes: 53%) are also involved.

Foresight methods applied by SMEs



In contrast, external scientists (regularly: 8%, sometimes: 40%) and specialized departments such as R&D (regularly: 39%, sometimes: 16%) or strategy (regularly: 40%, sometimes: 20%) are rarely involved. The latter fact may be explained by the size of the companies surveyed.

Foresight participants in SMEs



Foresight is mainly used for strategic planning (1.7 on the five-point Likert scale mentioned above) and to identify new innovation fields (2.0). Foresight information is also considered useful for product improvements (2.2) and new business models (2.3), investment decisions, risk management (2.4 each) and early warning (2.6).

Foresight Impediments

In general, SME executives are aware of their companies' foresight requirements. At the very least, they disagree (4.2) with the statement that there was no need for their company to monitor market and business environment changes. However, budget and manpower capacity constraints (3.2 and 3.3, respectively) place limits on systematic foresight approaches. Furthermore, problems may occur when foresight knowledge has to be transformed into practical knowledge and ideas for new products and strategies (3.4). In the main, SME executives do not consider a lack of know-how, methodological competence, and cooperation to be impediments to foresight (3.6 each).

Basic Corporate Foresight in SMEs

Corporate foresight understood as a future intelligence gathering process is quite systematically conducted in SMEs. While the methods may be rather simple they are capably applied. Top management and individual employees are responsible for foresight processes, but sales departments and clients are also involved. This reflects the fact that the aim of foresight is mainly to support strategic planning and product innovation. However, this transfer as well as budget and manpower constraints are also bottlenecks for the implementation of a more complex foresight approach.

Rethinking SMEs' Foresight Needs and Activities

Firstly, the research project has revealed that SMEs have substantial foresight needs. This is not so much a result of long-term planning cycles, but due to high market and business environment dynamics and actors' shifting strategies. Secondly, the survey has shown that SMEs use basic but systematic foresight activities to support strategic planning and innovation management. These foresight requirements and approaches may have been underestimated so far in the business world, in the foresight community and among policy-makers.

More Appropriate Techniques Needed

SME executives have to broaden their foresight horizons and draw on more elaborate foresight methods better suited to their needs. For the highly dynamic markets and business environments they operate in, trend analysis, roadmapping and scenarios to explore alternative futures are more appropriate. Additionally, simulation techniques may be useful in SME business contexts strongly driven by third parties (e.g. clients, competitors, politics). Foresight training courses in these more elaborate methods are also essential.

In addition, Corporate Foresight is one option to extend the scope of SMEs. Even though most SMEs are B2B suppliers, end consumers and social changes may have a considerable impact on their business. SME managers should therefore re-evaluate the importance of this sphere.

Move Foresight to Strategy Unit

The fact that in most companies, responsibility for foresight activities rests with SME top managers is remarkable. Generally, this commitment is identified as a critical success factor for corporate foresight. However, limited time resources may make the top managements' high level of involvement a

drawback. Executives might be well advised to shift foresight processes to a task force, strategy unit or to consultants.

Greater Results Orientation

However, the foresight restrictions outlined above may limit the usefulness of these recommendations. Therefore, the foresight community would do well to realize the specific requirements of SMEs and the constraints they are confronted with. The question is whether foresight tools and processes can be downsized or adapted to the needs of SMEs. Foresight approaches need to be simplified and become more results-oriented. Efforts in this direction might also be welcomed by other public and corporate foresight users or clients. SMEs could be seen as test cases for a new generation of more pragmatic foresight concepts to emerge in the long run.

In the short run, cooperation and political support can be used to improve SMEs' foresight activities. SMEs do not need tailor-made future environmental scenarios. External sources can provide regional scenarios with a time horizon of five to ten years. Companies would then adapt these to their specific industries. SMEs could also cooperate in foresight networks to generate economies of scale. External experts and scientists can be temporarily integrated as desired. Finally, political decision-makers have to encourage these initiatives.

Outlook: Identify Best Practice Models of SME Foresights

The survey results outlined are only a first step in the exploration of SMEs' foresight needs and activities. For a deeper understanding, we will, in a second stage, analyse the survey results with regard to segments of comparable foresight needs. Thirdly, within each segment, we want to identify SMEs with best practice Corporate Foresight activities. These foresight approaches will be examined in detailed case studies to serve as role models for other SMEs with similar foresight needs (from the same segment).

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About the EFMN: Policy Professionals dealing with RTD, Innovation and Economic Development increasingly recognize a need to base decisions on broadly based participative processes of deliberation and consultation with stakeholders. One of the most important tools they apply is FORESIGHT. The EFMN or European Foresight Monitoring Network supports policy professionals by monitoring and analyzing Foresight activities in the European Union, its neighbours and the world. The EFMN helps those involved in policy development to stay up to date on current practice in Foresight. It helps them to tap into a network of know-how and experience on issues related to the day to day design, management and execution of Foresight and Foresight related processes.