

From scenarios to consequences

Dr.-Ing. Alexander Fink (corresponding author)

Scenario Management International AG

Klingenderstraße 10-14, 33100 Paderborn, Germany

Tel.: +49 (0) 5251-150570, Fax: +49 (0) 5251-150579

E-Mail: fink@scmi.de

Dr.-Ing. Andreas Siebe

Scenario Management International AG

Klingenderstraße 10-14, 33100 Paderborn, Germany

Tel.: +49 (0) 5251-150570, Fax: +49 (0) 5251-150579

E-Mail: siebe@scmi.de

Dipl.-Wirt. Inf. Benjamin Hollmann

Scenario Management International AG

Klingenderstraße 10-14, 33100 Paderborn, Germany

Tel.: +49 (0) 5251-150570, Fax: +49 (0) 5251-150579

E-Mail: hollmann@scmi.de

Abstract: *To survive and grow in an era of uncertainty, companies should not only strive for a single visionary view, which most likely corresponds with their expectations. Instead they should try to acquire multiple views (external scenarios) to assess existing strategies and to cope with these uncertainties. This scenario planning approach has to be extended in three application fields: (1) the development of external as well as internal scenarios in order to interconnect these scenarios within a scenario-matrix, (2) the use of scenarios as a basis for strategic early warning processes and (3) the use of scenarios in innovation processes, e.g to identify market potentials, new products/services and new businesses. It is shown that scenarios help to bridge the gap between strategic thinking/planning and business innovation.*

Keywords: *scenario planning, future management processes, strategy development, innovation management, strategic early warning, market potentials*

1 Scenarios as a tool in future management processes

The holistic development of companies is carried out at three levels (Fink, Siebe, 2006; see Figure 1):

- ◆ On the strategic level the company decides about its *vision*. This includes basic and normative objectives – e.g. in the form of business principles – as well as fundamental strategic objectives like positioning and core competencies.
- ◆ On the tactical level the vision is put into a business model and detailed *roadmaps*. Hence, objectives are substantiated, strategy, product or technology roadmaps are designed and the behaviour within competition is simulated.
- ◆ On the operative level this guideline is implemented by concrete *planning*. Business plans are developed, investment decisions are made, risks are identified and evaluated and crises are managed.

On all three levels future developments have to be taken into account. However, the necessary instruments differ from each other, whereas their development can be looked at from a bottom-up perspective:

- ◆ On the operative level it is necessary to get a clear picture of the future on a short-term basis. Therefore, mainly quantitative and extrapolation-based *prognoses* are used.
- ◆ On the tactical level this kind of description of the future is not adequate or is simply infeasible. Hence, expected or already visible mid-term changes have to be identified in the form of *trends*. Furthermore, they have to be considered concerning the decision.
- ◆ On the strategic level even trend considerations do not prove as sufficient. Consequently, on the one hand, several alternative future images have to be considered. On the other hand, coherences between factors and trends need to be

taken into account. Therefore, *scenarios* are the core foresight instrument at this level.

The term “scenario” is used for a variety of different objects – from simple alternative projections (“the high-price-scenario”) to results of complex simulation-models. In contrast we use the term “scenario” only for future images that combine future-open thinking with systems thinking. That means that a scenario is “one of several future images that describes a future situation based on a significant number of consistent developments.” The use of these scenarios in corporate or business planning is described as Scenario-Management.

Four phases of scenario development

Most scenario processes are initiated within concrete planning or strategy development processes. Their goal is to improve the decision process by including uncertainties in complex environments. Therefore planners have to define a specific scope that we call “scenario field”. It describes the subject of the scenario creation process. The most frequently used scenario fields are corporate or business environments in general, industries, markets, technologies and specific global issues, e.g. electronic business or payment systems. To describe possible future images of this scenario field, planners have to work through the following four phases (Fink, Schlake and Siebe, 2001; see Figure 2).

(1) *Detection of key factors (phase 1)*. Every scenario field consists of a large number of influence factors. To avoid unwanted concentration the scenario field is systematically structured into different spheres. Each sphere is described by concrete influence factors which are summarized in an influence factor catalogue. Using the full number of identified factors during scenario creation would lead to scenarios that are too complex and blurred. Only those factors are se-

lected that are either characteristic for the development of the whole scenario field or have a strong influence on the center of the scenario field. These so-called “key factors” can be extracted with the help of an influence analysis. Based on the assessment of the interconnections the systemic behavior of all factors is visualized to identify subsystems, dominant factors, and critical feedback loops.

(2) *Foresight of alternative projections (phase 2)*. This is the heart of the scenario development where the view into the future is carried out. First, a future horizon is defined by the scenario team – the time in the future that should be described by the scenarios. After this, possible developments for all key factors – so-called “future projections” are identified. This is done by the whole scenario team or by a core team with the support of different types of interviews (Ratcliffe 2002). The aim is not to find only one projection, which is most likely to take place, but to also find alternative and plausible images that can be used to enable the scenarios to utterly describe the “window of opportunity.” Usually three or four projections per factor are worked out to avoid one-dimensional and black-and-white-thinking.

(3) *Calculation and formulation of scenarios (phase 3)*. Two goals determine the third step: On one hand each scenario should represent a possible and consistent future situation and on the other hand the set of scenarios should represent the “window of possibilities” at the best. To work out consistent future images, the consistency of all pairs of projections is assessed and all possible combinations – so-called “projection bundles” – are checked by a specific scenario software. To find a suitable set of scenarios, the highly consistent projection bundles are systematically grouped in a specific kind of cluster analysis. The number of scenarios is not fixed in the beginning. The more different the scenario team thinks into the future, the more scenarios appear. Projections that appear in the majority of

projection bundles of a certain scenario are named “scenario elements”. While some projections appear in more than one scenario, others are a distinguishing feature of only one scenario. These characteristic elements stand in the center of scenario formulation which can differ between formal descriptions and stories, up to very innovative formats like newspapers, interviews or theatre play.

(4) *Analysis, mapping and interpretation of scenarios (phase 4)*. In addition to the scenario formulation, each scenario can be analyzed in detail: What are the scenario drivers? Who are the winners and losers in the scenario? What happens, if disruptive factors are included – and how robust is the scenario? What are possible sub-scenarios? A second set of questions could be asked when concerning the consequences of the scenario: What are chances and risks for us that result from the scenario? What would we have to do, if we could assume that this scenario appeared? But even if all scenarios are described and analyzed in detail, many executives strive for an overview about their “window of opportunities”. The aid of multidimensional scaling allows the projection bundles and scenarios to be visualized in a “scenario-mapping”. This mapping can be used to interpret the set of scenarios. Often the current situation can be marked in such a mapping so that alternative “development paths” can be seen as arrows from the current situation to one scenario.

Organization of scenario development processes

Scenarios should support the near-term decision processes in strategic planning in most cases. We often compare the use of scenarios in strategic planning processes with flying: Before using scenarios, one stands on the ground and analyzes the current situation. When starting the scenario development process, all participants have to leave the ground (=the current business thinking) and take a look at their markets,

industries and global environment from a future perspective. Starting this flight is always the first critical phase of the process.

Once the scenarios are described, there is a second critical moment: the landing process. Therefore the scenario developers put their new future-related knowledge into a format that stimulates executives to rethink their business premises (if they have not been involved in the scenario development process) and leads to future-oriented decisions.

Scenarios are developed in different ways (see Figure 3). Intuitive approaches are used by “gurus” (who sell scenarios as products) and by companies mainly in the Anglo-American area. These scenarios are often well formulated, but they are not reconstructable which leads to problems when companies try to integrate their dialogue-based scenarios into continuous planning processes. Systematic approaches like Scenario-Management are on the one hand used by external experts and consultants, who sell scenario-studies.

On the other hand, scenarios are developed directly within the company – for the most part supported by internal or external moderators. The most common form in which scenario management is practiced are the *scenario projects*. They last from a couple of weeks to a couple of months, depending on the complexity and work intensity. Three to six workshops are taking place where a scenario team of 10-20 persons discusses the most significant steps of the process. A smaller core team is responsible for the preparation and documentation of the workshop as well as for some specific analyses. Because this traditional approach always takes long and requires many resources, others prefer the *scenario conference*. Here the scenarios and first consequences which are derived from them, are elaborated in 2.5 days. Scenario conferences enable participating managers to think alternative concepts ahead in a creative atmosphere and to systematically develop a vision.

2 From scenarios to strategies

Today most scenarios are used for strategy assessment or strategy development. This process of “scenario-based strategic planning” is visualized in Figure 4. The first step is the “strategic analysis”. Here the present situation is described with the help of suitable methods and tools. Well-known instruments of strategic planning like portfolios, success factors, value chain analysis or business segmentation are involved.

The second step is the description of possible future developments within the external corporate environment. Traditionally companies identify *trends and issues* from their industry as well as from political, economical, social, legal or technological environments and build market prognosis upon them. With the growing uncertainty and complexity, *external scenarios* have been added to their “future toolbox”.

The third step within a strategy development process is the detection of the own options. This could be single *strategic options* – identified on the results of a SWOT-analysis or the external scenarios. This could also be a balanced bundle of consistent options, e.g. developed as *strategy scenarios*.

The central step is the ensuing “strategy finding” which is based on the current situation as well as on an external and an internal perspective on the future. Strategy finding could base on an existing strategy (strategy assessment) or could strive for a new strategy (strategy development). While there are six different approaches for strategy finding, four of them are based on alternative descriptions of the future and lead to a scenario-based strategic direction (see Figure 5):

- (1) Valuation of strategies and investment decisions with external scenarios
- (2) Development of new strategies based on external scenarios
- (3) Strategy mapping based on alternative strategy scenarios
- (4) Strategic framing in a scenario-matrix

The process of *strategy formulation* starts once the strategic direction has been settled. Recurring parts of corporate and business strategies are visions and mission statements, strategic or core competencies and strategic positions (“Where do we want to offer what by using which sales channel?”). Concrete strategic consequences, programs and measures build the bridge between the present and the objectives described as vision, mission, competencies and positions – and therefore the starting point of the *strategy implementation*.

Valuation of strategies and investment decisions with external scenarios

Only seldom does finding a strategy start with “a blank piece of paper”. Often the aim is not to invent a completely new strategy, but to examine the suitability of the existing strategy with the help of external scenarios. The strategy which has to be examined can be an existing corporate or business strategy – or it can be a hypothesis-based strategic option, put forward by the strategy team.

Development of new strategies based on external scenarios

Most of the strategy valuation processes lead to a point where problems or inconsistencies in the current strategy or new market opportunities lead to the necessity to revise the strategic direction or to consequently work out a new one. This is why the traditional scenario planners start with an analysis of the impact of external scenarios on the own company or business unit. Here the rule of thumb is to keep all scenarios “in the game for as long as possible”. This often leads to underestimated threats in a – superficially viewed – “good” scenario and to hidden opportunities in the “bad case” scenarios. After the identification of opportunities and threats companies have to develop strategies. Corporate or business strategies can be carried out in one of three

ways, depending on the specific planning situation and the corporate culture of the company (Makridakis, 1990):

- ◆ *Planning-oriented strategies.* This approach is based on the belief of “a clear enough future” On that assumption, planners do not have to wait and react but make specific decisions and take specific actions in anticipation of forthcoming changes.
- ◆ *Preventive strategies.* Here the emphasis is on reacting to environmental changes. Uncertainty is accepted, and the aim is to protect against unforeseen change.
- ◆ *Proactive strategies.* Here strategists accept that a wide range of changes in the corporate environment are unpredictable, but attempting nevertheless to anticipate events and to do things ahead of time to exploit their arrival. That is done by shaping the environment in some desired direction so that unwanted changes will be less likely to occur ... or purposeful action can be taken by the organization to bring about desired change that would not have occurred otherwise or would have happened later.”

The development of strategies can vary between two extremes: *Focused strategies* base on one single reference scenario. These are powerful strategies which are easy to communicate but they can be too narrowly focused and changes in the corporate environment could easily attack this kind of strategy. Companies which are working with focused strategies need an excellent market research and early warning process to make sure that they are always on the right track. They also need the readiness for fast changes in their strategy. *Future-robust strategies* base on multiple scenarios, ideally all the identified ones. These are very flexible strategies which are open

for changes in the environment. But robust strategies are often very complex and difficult to communicate.

In practice there are nine main approaches for scenario-based planning (Fink and Schlake, 2000; Fink, 2002; see Figure 6):

- (1) *React on foreseeable trends*. Here a focused (1) or safeguarded (2) strategy is based on the scenario with the greatest probability: This one-dimensional strategy is easy to communicate because there are less obstacles to overcome. But in an uncertain world traditional prognoses and most-probable projections come true less often than planners think.
- (2) *Cope with upcoming risks*. Here a focused strategy is based on the scenario with the greatest threats (3) or a future-robust strategy concentrates on the minimisation of threats (4). This is an effective approach to cope with upcoming threats (e.g. in risk management), but these strategies are only an "add-on" in strategy development.
- (3) *Preserve flexibility*. Here a future robust strategy concentrates on the increase of flexibility (5). This is an effective strategy to handle uncertainties. But these kind of strategies are often not powerful enough because resources are split and the strategy is difficult to communicate.
- (4) *Use opportunities for future success*. Here a focused strategy is based on the scenario with the greatest opportunities (6) or a future-robust strategy tries to capitalise on all upcoming chances (7). On the one hand, this is a very powerful strategy to foresee future potentials very early and achieve the best-possible results. On the other hand, this strategy includes very high threats because other possible developments are simply ignored.
- (5) *Influence the future – create your vision*. Here a focused (8) or safeguarded (9) strategy is based on the desirable future: This is a proactive strategy in which the

enterprise tries to create their own future by using a best case scenario as an objective in strategic planning. This strategy can be safeguarded by putting the strategy in different environments (which can be developed in a previous development of external scenarios).

Almost always the number of future-robust – meaning scenario comprehensive – options is bigger than the scenario team has anticipated beforehand. This can lead to the identification of a “future-robust strategy base”. Companies can also work out strategies that base on the most relevant scenarios and combine these strategies with contingency plans for the ones that were left out. In all cases scenarios urge executives and planners to think about the upcoming uncertainties and to avoid one-dimensional thinking.

Strategy mapping based on alternative strategy scenarios

The simple determination of options is just not sufficient in many cases. There are too many single options and often they are depending on each other. The realization that future-open thinking must not be limited to the external environment is critical for many planners and executives. While they still strive for one clear strategy, the development of *several* external scenarios is tolerated if just *one* strategy is quickly determined. Why then create uncertainties about the own options? Isn't it exhausting enough to determine all the market, industry, and technology trends and take those into consideration during decision-making? More often than not, the answer to this question is “No” – because the consequences of the traditional way of proceeding are grave: Under the guise of determined vision and strategy, alternative visions of the future develop a dangerous life of their own. Unsolved definitions of terms, unsolved conflicts, unsatisfied wishes and fears which have not been considered turn the strategy implementation into a “suicide mission” right from the beginning.

These kinds of conflicts are solved during the development of alternative strategy scenarios. The management executives bring in their personal ideas and visions of the company's future and systematically link them to several strategy scenarios. The development and interpretation of such strategy scenarios is carried out in four steps:

- (1) *Identification of key elements of the strategy (step 1)*. A strategy scenario describes "how we could approach our business in the future". Typical elements of strategy scenarios are the way the company sees itself, its competencies, the future portfolio and its behaviour in the competitive arena, its marketing, the different key processes and its resource management. During a strategic dialogue about 20 key elements are identified.
- (2) *Development and description of future options (step 2)*. The aim of this step is to describe the own "window of opportunities" for each key element. Consequently questions like the following ones are the center of attention: What could be the structure of our product program in the future? How could we handle visions and strategies in the future? How significant could alliances and partnerships be in the future? Members of the scenario team rapidly come to these questions because they are closely related to their daily business.
- (3) *Combination of future options to strategy scenarios (step 3)*. Linking the future options to strategy scenarios is done in correspondence to the creation of external scenarios. That includes a consistency check for all future options and leads to a suitable number of possible strategies that describe the whole "window of opportunity" for the company or business unit in general. Yet it is important that the members of the scenario team now develop their own image of every strategy scenario.
- (4) *Development of a strategy roadmap (step 4)*. For every strategy scenario, the essential changes compared to the current strategy and the necessary resources

are analyzed. Furthermore the “window of opportunity”, which is described by the strategy scenarios, is visualized in a “strategy roadmap” based on a scenario mapping (see Figure 7).

There are several significant arguments for the use of systematically developed strategy scenarios in contrast to usual strategic options:

- ◆ Strategy scenarios question the traditional and preferred strategies and initiate change in thinking and acting;
- ◆ Strategy scenarios contrast the different opinions and ideas within a company or a business unit and could be seen as a highly suitable instrument for a strategic dialogue, e.g. within a management board.
- ◆ By a new or unusual combination of single options, strategy scenarios show new opportunities in the competitive arena;
- ◆ Strategy scenarios are a good instrument to map the strategic situation of a company and to find a strategic direction which has to be put in concrete forms by a valuation of the achievement of overall objectives and the necessary resources for the implementation of a strategy scenario.

Strategic framing in a scenario-matrix

In succession of the development of strategy scenarios, the uncertainty has been examined in two different directions. The external scenarios reveal possible side conditions like industry, market or global developments. Strategy scenarios, on the other hand, clarify the own options. The suitability of strategy scenarios within the individual external scenarios is then valued and put into a “scenario-matrix” (see Figure 8).

Two questions can directly be answered by this matrix:

- ◆ *How robust is the strategy scenario?* The rows shows how robust a complex bundle of options expressed as a strategy scenario is against the uncertain environmental development.
- ◆ *Which strategy scenarios are suitable for a specific external development?* The scenario-matrix can also be read the other way round. A column shows at first sight which strategy scenarios are suitable for a specific situation.

Here companies reach a critical point of the process. All experiences and recognizable information have been aggregated up to this point. It does not seem possible to condense them any further. At the latest this is the moment when companies have to decide on their strategy which ideally is based on *one* strategy scenario which is suitable in *all* external scenarios. Even if this approach is not attainable, planners can profit from the development of different scenarios:

- ◆ *Demand for early warning information:* If an external scenario is not included in the strategy, there is an urgent need for a monitoring process of this critical future. To exclude this scenario from the agenda is one main cause of failure in strategic planning.
- ◆ *Understanding corporate compromises:* The combination of two or more strategy scenarios stands for a compromise within the organization. The common understanding of a strategy as an organizational compromise could significantly help their implementation.

3 From scenarios to strategic early warning

Within the last years, many companies were able to significantly improve their process of strategy implementation by the use of various instruments as, e.g., the balanced scorecard (Kaplan and Norton, 2000) and the Performance Prism (Neely, Adams and Kennerley, 2002). Nevertheless, they still were repeatedly surprised by dynamic changes in the environment of their markets and not seldomly became clear that old strategies had been maintained for too long. Only with hindsight, it became evident that even those “all of the sudden” appearing events were preceded by so-called “weak signals”, that could have been perceived in its run-up with an adequate sensibility. The recording and evaluation of such information is the subject of strategic early warning (Ashley and Morrison, 1997). Thereby, the traditional perception is changed in three dimensions (see Figure 9, left):

- ◆ *Integration of external information about the environment.* Especially in the area of strategic planning, the majority of early warning information can be gained from the corporate environment.
- ◆ *Integration of qualitative information.* Most strategically relevant developments can't be quantified, so that also qualitative factors, trends and developments have to be drawn into consideration.
- ◆ *Integration of future-open information.* The fixation on a once determined strategy within the scope of strategy implementation processes and the underlying external assumptions are leading to a substantial narrowing of the horizon. Thus, it is important for the company to extend their focus above the current strategy.

Several of those tendencies can be found in current management approaches. Thus, the balanced scorecard integrates external environment information, the qualitative risk-management focuses on not exactly measurable danger zones and scenarios

enable handling uncertainty. With strategic early warning all three approaches are combined in two core activities: In mid-term oriented *trend-management*, possible future developments are identified and analyzed. In long-term oriented *scenario-monitoring*, the scenarios are assessed by the current development and the identified trends.

The combination of strategic planning and strategic early warning

If companies succeed in detecting “weak signals” in good time and in discovering and purposely using them, then their scope to take opportunities and avoid risks is enlarged (Tessun, 1997). This strategic early warning is closely interconnected with the process of strategic planning and controlling (see Figure 10):

- ◆ *Strategic contingency controlling.* The success of a once developed strategy depends not only on the companies’ actions and performance to implement these strategy. Companies must also ensure that their strategy is always in line with the current developments of their market, industry and global environment. That’s why external indicators are integrated in most performance measurement systems – but usually as “strategy premises” which are build upon a strategy-conform market perspective. New trends usually don’t arise from this kind of well-known indicators. To recognize “weak signals” on time, controllers have to widen their horizon to those areas which are not part of their current strategy – and often beyond their current mental models. This process can be seen as “planning-indicated early warning”.
- ◆ *Issue management.* Many relevant future trends lie outside of the previous strategic viewpoints. Often they derive from initiatives apart from the traditional planning process, e.g. in business development, in product and innovation management or in separated foresight activities. As a result of these activities, new issues, strate-

gic consequences and possible actions are worked out. It is far from acceptable to wait with the discussion of these issues and the resulting decision-making until the next planning cycle. That is why companies need an additional perspective of “early-warning-indicated planning” or decision-making.

We define the combination of strategic planning and early warning as “strategic foresight”. Scenarios can play a significant and new role in combining the well-structured planning process with the often less-organized and in some planners’ minds more “chaotic” early-warning processes:

- (1) *Scenarios can be the nucleus for new early warning processes.* While the implementation of early warning processes often needs a longer timeframe, scenarios deliver first results in relatively short time. That is why a scenario project – which often delivers a framework for environmental scanning and significant scenario indicators – can be an excellent starting point for an early warning process.
- (2) *Scenarios define the scope for monitoring processes.* When companies decide for focused strategies, the scenarios which are not considered define a specific scope for the monitoring process. These important sources of “weak signals” can be structured by scenarios.
- (3) *Scenarios are needed to identify “weak signals”.* Early warning processes are much more than long-term market research. Therefore they focus on “weak signals”, which appear first in less plausible alternatives to the current mental models. Scenarios are an important tool for clearing the way for these new ideas into the executives’ thinking.
- (4) *Early warning processes initiate new scenario processes.* Often topics which suggest a closer examination in form of scenarios result from the process of early warning.

(5) *Scenarios and early warning systems use the same kind of information.* On the one hand, well-structured knowledge about future developments can be used to reduce the time of scenario processes as well as their quality. On the other hand, well-written scenarios can return into early warning systems as new information.

The future scorecard as an instrument of strategic foresight

In traditional controlling-approaches, companies continuously observe their performance and ask: “How is the implementation of our current strategy going?” (see Figure 11). In complex environments, this internal focus often leads “sudden” changes in the market environment. That is why many companies include external strategy premises into their controlling-systems and ask: “How are the premises of our current strategy developing?”

But even this strategic controlling-approach fails if dynamics are too strong and new trends and issues arise independently from the current strategy. A future scorecard could help companies to avoid these risks by monitoring

- ◆ not only the premises of the current strategy but also the *critical market indicators* (CMI) based on scenarios which are not taken into consideration within the current strategy.
- ◆ not only the internal performance indicators but also the *change indicators* from alternative strategy scenarios which are not part of the current strategy.

The combination of strategy premises, critical market indicators and strategy indicators leads to a Future Scorecard which we understand as an addition to existing performance measurement-approaches (Fink, Siebe and Marr, 2002).

Such a future-open controlling system can lead to results on three levels:

- ◆ *Change your operation!* Companies can be forced to change their operational and tactical behaviour without changing their strategy.

- ◆ *Change your strategy!* Companies could change their strategy without changing the way they see the future of the environment or their own possibilities. This kind of change leads to additional changes on the operational level.
- ◆ *Change your view on the future!* Companies could change the way they see the future of the environment or of their own possibilities. This kind of change leads to new strategic discussions and – very often – to changes in the strategy, too.

Even if the future scorecard approach is generally applicable – a “one-fits-all model” for the integration of scenarios into the processes of strategic planning and strategic early warning cannot be developed. Strategic foresight is just too dependent on the corporate culture of the company. If we understand art as the ability to shape visions, then strategic foresight is a kind of art which companies have to learn as a whole – and they have to give talented personnel the freedom to shape it.

4 From scenarios to new businesses and strategic innovation fields

In the context of strategic planning, existing strategies or decisions are evaluated and respectively sustainable business strategies are developed. Yet another, increasingly important application field is the strategic innovation management. It encompasses primarily the examination of new markets, market services and technology fields, as well as their combination to deduce new business activities. The “Four-quadrant model of strategic innovation management“ in Figure 12 provides an adequate illustration of the whole process (Fink, Schlake and Siebe, 2001).

Identifying future market segments and market potentials

With the focus on the market environment, the transfer from the strategic level to the innovation level is carried out through the identification of future market potentials. This happens within four steps. First of all, the *market and competition perspective* is defined. Afterwards, the considered market is structured and analysed. In the third step, possible future changes of the market structure are discussed. A central instrument for this purpose is the identification of future market segments. Finally, each market segment is evaluated by the means of several criteria – especially by the pre-developed external scenarios.

Defining the market and competition perspective (step 1)

The market activities of a company are a core issue on the strategic level as well as on the innovation level. An exact separation of both levels is impossible, since the depth of the strategic determination can differ significantly. However, it is essential that the determinations on the strategic level – e.g. within enterprise objectives or business principles – establish a framework for the innovation process. The external elements of this framework are referred to as the *market frame*.

In addition, companies need to consider the relevant level of their market frame for decisions concerning competition. The determination of this *competition perspective* encompasses form and degree of the market segmentation. Thereby, local, regional, supra-regional, national, international, multinational und world market strategies are differentiated on an areal basis. These are so-called areal options (Gausemeier, Fink, 1999). Moreover, the variety of needs – from mass market strategies to individual customer stimulation – can be examined. This is formulated by so-called parceling options (Gausemeier, Fink, 1999).

Displaying the present market structure (step 2)

Depending on size and specification of the planning instrument most companies have already structured their markets, either in an intuitive or an edited form. The role of the *market segmentation*, however, is to divide the total market in individual segments by the means of adequate criteria. For this purpose, mainly three distinctive factors are used:

- ◆ *User groups*: Most commonly, the market is structured according to the types of end users who buy or could buy the relevant market services. This kind of structure can be refined by several criteria, such as industries, lot sizes or lifestyles.
- ◆ *Customer regions*: When observing the sales region, a differentiation concerning the geographical location of the end consumer is carried out – e.g. according to sales area, countries or country groups.
- ◆ *Distribution channels*: Frequently, an additional segmentation concerning distributors occurs in companies that do not deliver directly to the end consumer.

Yet another instrument is the *market structuring* (also „market mapping“, see McDonald, Dunbar, 1998). Possible steps along the value chain need to be identified in order to get an idea of size proportions and value streams regarding the market (and regarding the competition). The *competitor analysis* is supposed to identify different market participants as well as their present strengths and weaknesses. This can either happen for the whole market frame or separately for individual market segments.

Frequently, this kind of market analysis is consolidated in the form of *market portfolios*. Within such a portfolio the individual segments' attractiveness is linked with the present competitive position.

Identifying future market segments (step 3)

In order to describe future markets in line with strategic innovation management, the structure derived from or verified by the present business oftentimes is not sufficient. In particular the question comes up: How should a company deal with markets, that do not even exist yet, but are developing just now? Neither are there any customers who could be questioned on a grand scale. Therefore, within a 4-stage model “scenarios” of future market segments are developed:

- ◆ *Identification of key factors (step A):* First of all, the market frame is structured. Business-close fields, concrete departments, as well as generic fields - such as demand and necessity groups - can be considered. For these fields up to 20 key factors are derived, which will afterwards define and characterize the market segments.
- ◆ *Identification of possible developments of the key factors (step B):* Afterwards, possible developments for each key factor are described.
- ◆ *Formation of future market segments by connecting consistent developments (step C):* Subsequently, through a consistency analysis, the possible developments of the key factors are connected to several future images, being conclusive within themselves and heterogeneous among each other. These images are “scenarios” describing possible market segments in the future. Scenarios for market segments are not alternative in terms of excluding each other (as known from strategic planning) but they are simultaneously conceivable – so-called *parallel scenarios* (Fink, Schlake, Siebe, 2001).
- ◆ *Visualisation of the future market frame (step D):* Finally, the future market segments (=scenarios) are visualised within a scenario mapping, similar to the development of external market and strategy scenarios. Figure 13 exemplary shows

the illustration of market segments for the target group of a health insurance company.

Estimation of market segment potentials (step 4)

The estimation of each market segment's possibilities leads to so-called market potentials. The pre-developed external scenarios build the basis which is subsequently referred to. In general, *external scenarios* are used to display the development of the total market within the relevant business environment. The central instrument for developing market potentials is the *matrix of market segments and the external market*, as shown in Figure 12 on the bottom of the left side. The individual fields show the evaluation concerning how far one market segment is affected by a certain change of the external market. The evaluation scale is used to rate these effects, ranging from strong interdependency (++) up to strong conflicting tendencies (--) (see Figure 14).

The matrix of market segments and market developments can be read in two directions: When looking at one future market segment compared to the possible external scenarios, future-robust market segments can be identified on which a company can focus. At the same time, it becomes clear which external market developments foster or argue against the growth of a single market segment. Hence, more general market trends can be observed, influencing the potentials of the individual market segments.

On the other hand, when looking at a single external scenario compared to the several market segments, the market structure for one specific market development can be derived (Which segments change and how?). This emphasises which future market segments profit particularly from a certain market development.

This specification of the market view for a single external scenario can be combined with the common portfolio approach. In this case a market portfolio is devel-

oped as the base line to picture the present situation. For this purpose, sneaking future predictions have to be sorted out of the criteria of the market attractiveness. Subsequently, the expected changes for the incidence of one of the external scenarios are pictured as vertical arrows (see Figure 14).

The matrix of market segments and market developments helps identifying growth-promising segments as well as particularly growth-fostering market developments, forming the initial point for describing the market potentials. Hence, the growth potential of an existing segment with a known size can be estimated through one especially positive external scenario.

Identification and evaluation of future products and technologies

Strategic innovation management not only takes market potentials into account but also market services, such as products, services and integrated offers as well as fundamental technologies. Concepts for the market service need to be identified and evaluated against the background of the own potentials, resulting in market service potentials, which are evaluated against the background of the business strategy.

Determination and structuring of the service frame (step 1)

As well as the market frame outlines the external perspective of innovation management, the service frame exists on the internal side. It is based on regulations of the business strategy and defines, e.g. that a company is operating in a certain industry (and wants to continue). This service frame also can be less distinctive if companies are willing to offer completely new market services due to their competencies or their customer loyalty.

Subsequently, the present service spectrum is structured. Thereto, generally products, services and integrated offers are distinguished. The further segmentation

can happen by the means of very different criteria. Service requirements (generations, quality classes), important product functions, as well as conditional production and assembly differentiations – e.g. production locations – are possible criteria.

Description of future concepts of market service (step 2)

The description of concepts of market services can be carried out – besides other methods – in the form of market service scenarios (product scenarios). They describe individual offers a company can provide within its service range. The development of such market service scenarios happens accordingly to the procedure illustrated in „Displaying the present market structure (step2) “: (A) Identification of key factors, (B) Identification of possible developments of the key factors, (C) Formation of future market segments by connecting consistent developments and (D) Visualisation of the future service frame. Figure 15 exemplary shows six product scenarios of possible light construction automobiles in a scenario mapping.

Particularly in manufacturing companies a further need exists to consider new market services concerning the established technology spectrum, as well as new technologies. By combining market service scenarios and technology fields within a matrix, (technologically oriented) *innovation fields* arise that can be evaluated and further analysed (Ullmann, Fink, Janson, 1998).

Estimation of market service potentials (step 3)

However, not every concept of a future market service described by a scenario is suitable in terms of actual application in a company, even if it is situated within the given service frame. Several products are established elements of the strategic alignment, while others do not play a formative role of the strategy or even operate in contrast to the company's positioning. Therefore, a company's specific evaluation of

the identified market services is necessary. Hence, *market service scenarios and pre-developed strategy scenarios* are combined within a *matrix* as can be seen in the upper right of Figure 12. The evaluation scale used here ranges from „necessary element of the strategy“ (++) up to „strongly opposing the strategy“ (– –) (see Figure 16).

A special option evolves from the combination of product scenarios with *specific technology field scenarios*. That way, e.g. several light construction automobiles can be evaluated concerning possible developments of fuel cell technologies. Unlike the approaches before, this is an external evaluation criterion. Consequently, this kind of evaluation can be carried out independent of the company offering the service.

Developing business opportunities

Identification of main business fields (step 1)

Nowadays, it is generally insufficient to examine one's business activities as a whole. Therefore, first of all, a „theoretical organisation“ of the line of action is necessary, based on the present market and market service segmentation. Thus, market segments and market services are combined within a business-structure-matrix (Figure 17).

A business field is an occupied field in the matrix, thus a product-market combination characterized by different criteria as sales volume, sales development and profitability. By an aggregation of the lines and columns, first comparisons on the performance of market services and market segments can be drawn.

Subsequently, by using the business-structure-matrix, main business fields can be identified. These are restrained competitive fields resulting from allied groups of business fields. Three criteria, substantial for a business field, help building them:

- ◆ *Independent tasks in the market:* main business fields differ from other business fields regarding market services and/or market segments.
- ◆ *Share of company's profit:* Presently, the main business field contributes a significant share of the company's sales volume and profit. However, it is not necessary that every single business field is allocated to a main business field. As far as our experience goes, an allocation of 90% of the total sales volume is sufficient.
- ◆ *Relative independence of strategic decisions:* The same factors of success are largely applicable for activities described in a main business field.

When identifying the main business field, oftentimes the question arises, whether the observed business should be structured rather according to market services or market segments. Correspondingly, it is differentiated between three types of main business fields: *Systematic services* combine several market services for one market segment. A *sectional service*, on the other hand, serves several market segments. *Integrated main business fields* are composed of several market services and market segments.

Within the individual main business fields several detailed analysis can be realised. In many cases, relevant factors of competition or factors crucial for purchasing are investigated. A further area is the analysis of the important competitors. A connection of these two elements results in the *competitor profiles*. On the basis of the core factors of competition, they provide an overview over the own position as well as strengths and weaknesses compared to the competitors.

The illustration of the business-structure-matrix furthermore helps identifying segmentation gaps. These are market segments that are either not served at all or only to a small extent with existing products. Through the identification of segmentation gaps, advices for first options for action evolve.

Identification of strategic business fields (step 2)

Up to this point three preliminary works have been accomplished: (1) the present business structure was described through a business-matrix and substantiated by the main business fields; (2) the external future perspective was described through future market segments and prioritised according to possible external scenarios; (3) possible offers – e.g. product or service concepts – were identified and evaluated in relation to the strategy scenarios in the context of internal future perspectives. The matching of customer groups described by the market segments with possible market services can happen in several ways (see Figure 18):

For a start, the present market segments and services are transferred to the *extended business-structure-matrix*. Subsequently, new market segments and services are added. This is carried out by exploring the market and the market service potentials for new segments, complementing the existing spectrum. This is an advantage, since it is possible to use the existing main business fields as a starting point. Four types of future business fields result from the extended business-matrix:

- ◆ In *traditional business fields* existing market segments are served with existing offers. In this case market intensification, alternatively market penetration, are at the core.
- ◆ In *market-expanding business fields* existing offers are distributed in new market segments. Most notably, they involve demographic and regional market developments.
- ◆ In *offer-expanding business fields* existing market segments are served with new offers. Most important in these fields are the product, service and integrated offer development.
- ◆ *Completely new business fields* distribute new offers in new market segments. This includes several forms of diversification.

For the future business-structure-matrix future market segments are combined with future market services. The benefit of this approach is the complete illustration of a new business structure. Therefore, this instrument is applied mainly for „new business development“.

Based on one of these matrices – or on a hybrid model – the arenas in which the company enters the competition have to be determined. This happens by defining the strategic business fields (SBF). The specification is a sensible corporate decision. The identification can lead from strategic business fields over prioritising of company activities to an appropriate design of the organisational structure of the company – e.g. by building strategic business units.

Identification of strategic innovation fields (step 3)

This approach can be enhanced if the identified strategic business fields are connected to strategic technology fields (STF) within a following, optional step. A STF displays a section of the present and potential technological field of action, which is planned relatively independent from other strategic technology fields (Bullinger, 1994). Eventually, the combination is carried out within an innovation-structure-matrix (see Figure 19): innovation fields (IF) are located within the matrix. The scopes of the combinations of strategic business fields and strategic technology fields are strictly defined and are called strategic innovation fields (SIF). They result from an analysis of the relevance of certain technologies for single business fields as well as from an analysis of business possibilities of single technology fields (technology-push-analysis). Such an innovation-structure-matrix can furthermore be integrated in a prioritisation of business activities through market resource portfolios (compare to Fink 1999).

Scenarios as a interface between strategy and innovation

Through the combination of market and strategy scenarios a strategic alignment is developed on the strategic level. Future market segments and market services lead to the innovation management. Thereby, market potentials as well as market service potentials are developed. The combination of segments and services consolidates the internal and external perspective on the innovation level. This leads to strategic business fields and, furthermore, in combination with possible business models to future business systems (see Figure 20).

5 Benefits of scenarios in strategic processes

While many companies still tend to plan on the basis of what appear to be certain estimations of the future, innovative market leaders adapt their planning approach to the existing level of uncertainty and integrate scenarios systematically into their strategic planning processes (Courtney, 2001; Fink, Schlake and Siebe, 2001). Beside the use of scenarios in the development of corporate and business strategies, there are additional benefits of scenarios in strategic management:

Developments of “orienting knowledge”: So far, planning periods and thinking horizons have mostly developed parallel. Today companies come to realize that they can use their inflexible plans for only a short time while they also have to foresee for a much longer period of time to be just the one decisive step ahead of their competitors. Because these planning periods and thinking horizons are falling apart it is important to flexibly handle “fuzzy decisive situations”. Scenarios are an important instrument which can purposefully create orienting knowledge upon which a company can fall back later.

Identification and valuation of market opportunities: Scenario Management is not limited to the area of corporate planning any more. A lot of scenarios are used for business development in order to examine future customers needs, to view the potential of new technologies and to derive new business ideas from the results. For the valuation of these new business ideas, product and service scenarios or future market segments, in form of scenarios, are developed (see Fink, Schlake and Siebe, 2001).

Creation of a forum for strategic dialogue: A central characteristic of promising management processes are creative open dialogues about the perspectives and strategies of the company. They overcome traditional limits in thinking, lead the decision makers to new questions and increase the tolerance of different points of view. Scenarios are the right instrument to initiate, carry out and document such strategic dialogues (Zohar, 1997; Ratcliffe, 2002; Van der Heijden, 2002). At the same time they enable the decision makers who are “trapped in operative daily business” to free themselves and systematically broaden their perspectives.

Overcoming industry limits: Lots of traditional incorrect prognoses are based on the automated use of “muddled” thinking routines which are often related to a strong orientation of the industry. Innovative strategy concepts and business models are mostly coming up when the one-sided orientation on the own industry is overcome. Scenarios do not only help to think “out of the box” – they even make the planners see beyond the end of their nose (Mitroff and Linstone, 1993)

Integration of the implementing level: Executive boards and management do not have a monopoly on scenario development any more. Instead the circle of participants is often broadened because this way persons can be integrated in the process of strategy development who later on have to look after it's implementation. Fink, Schlake and Siebe (2001) have described that for the Berlin Traffic Company BVG.

Handling complex questions: Well-known instruments of management like prognosis models, simulations or simple projections often fail when it comes to complex questions as e.g. “The future of payment transactions” or “The future of the health system”. Because qualitative developments of single key factors are observed and linked within the framework of scenarios, this is a very suitable instrument for complex questions.

Linking future knowledge: Every person – especially when being in a decisive position of a company – is dealing with the future from the own personal perspective. This creates “future knowledge” which is only available for a company when transformed into a suitable form, saved and finally put at the disposal of others. Scenarios and the single steps of their development – scenario fields, key factors, future projections, consistencies, etc. – are a suitable instrument to acquire this individual future knowledge for a company.

6 References

- Ashley, W.C. / Morrison, J.L. (1997), *Anticipatory Management – Tools for Better Decision Making*, *The Futurist*, Sept/Oct, pp. 47-50
- Bullinger, H.-J. (1994), *Einführung in das Technologie Management – Modelle, Methoden, Praxisbeispiele*. Teubner, Stuttgart
- Courtney, H. (2001), *20/20 Foresight. Crafting Strategy in an Uncertain World*. Harvard Business School Press, Cambridge
- De Geus, A. (1997), *The living company. Growth, learning and longevity in business*, Nicholas Brealey, London
- Fink, A. (1999), *Szenariogestützte Führung industrieller Produktionsunternehmen*. HNI- Verlagszeitschriftenreihe, Band 50, Paderborn
- Fink, A. and Schlake, O. (2000), "Scenario Management – An Approach for strategic foresight", *Competitive Intelligence Review*, Vol. 11(1) 37-45
- Fink, A., Siebe, A. and Marr, B., "The future scorecard – The benefits of a Combination of Future Scenarios with Performance Measurement". In: Nealy, Walters, A. and Austin, R. (2002): *Performance Measurement and Management 2002 – Research and Action*, Centre for Business Performance. Cranfield School of Management, Cranfield
- Fink, A., Schlake, O. and Siebe, A. (2000a), "Scenario Management - Integrating scenarios into strategic planning and early warning", *Scenarios and Strategy Planning*, August/September, p. 10-13, 2000
- Fink, A., Schlake, O. and Siebe, A. (2000b), „Wie Sie mit Szenarien die Zukunft vorausdenken“, *Harvard Business Manager*, 2/2000, 34-47
- Fink, A., Schlake, O. and Siebe, A. (2001), *Erfolg durch Szenario-Management – Prinzip und Werkzeuge der strategischen Vorausschau*, Campus, Frankfurt
- Fink, A.: *Scenarios to plan*; in: Ringland, G. (2002), *Scenarios in Business*, Wiley, Chichester
- Gausemeier, J., Fink, A. and Schlake, O. (1998) „Scenario Management: An Approach to Develop Future Potentials“, *Technological Forecasting and Social Change* 59, 111-130
- Gomez, P. and Probst, G. (1995), *Die Praxis des ganzheitlichen Problemlösens – Vernetzt denken, unternehmerisch handeln, persönlich überzeugen*; Haupt, Bern
- Kaplan, R.S. and Norton, D.P. (2000), *The Strategy-Focused Organization – How Business Scorecard Companies Thrive in the New Business Environment*, Harvard Business School Press, Cambridge
- Makridakis, S.G. (1990), *Forecasting, Planning and Strategy for the 21st Century*, Free Press, New York
- McDonald, M.; Dunbar, I. (1998), *Market Segmentation – How to do it, how to profit from it*. Macmillan, Houndsmills, London
- Mitroff, I. and Linstone, H. (1993), *Unbounded Mind – Breaking The Vahins of Traditional Business Thinking*; Oxford University Press, New York

- Moore, J.F. (1997), *The Death of Competition. Leadership & Strategy in the Age of Business Ecosystems*, HarperCollins, New York
- Neely, A., Adams, C. and Kennerley, M. (2002), *The Performance Prism – The scorecard for measuring stakeholder relationships*, FT Prentice Hall, London
- Hodgson, P. and White, R.P. (2001), *Relax it's only uncertainty. Lead the way when the way is changing*, Pearson Education, Harlow/London
- Ratcliffe, J. (2002), *Scenario Planning: strategic interviews and conversations*, foresight, Vol. 4.1, pp. 19-30
- Schoemaker, P.J.H. (1995), *Scenario Planning – A Tool for Strategic Thinking*, Sloan Management Review, Winter 1995, pp. 25-40
- Schoemaker, P.J.H. (2002), *Profiting from Uncertainty: Strategies for Succeeding No Matter What the Future Brings*, Free Press, New York
- Tessun, F. (1997), *Scenario Analysis and Early Warning Systems at Daimler-Benz Aerospace*, Competitive Intelligence Review, Vol. 8(4) 30-40
- Ullmann, F.; Fink, A.; Jansen, M.: *Zukünftige Produktionstechnologien im Kfz-Leichtbau*. Ein INPRO-Projekt im Rahmen des Technology Watch in Zusammenarbeit mit dem Heinz Nixdorf Institut der Universität Paderborn. Berlin, 1998
- Van der Heijden, K. (2002), *The Sixth Sense: Accelerating Organizational Learning with Scenarios*, Wiley, Chichester
- Wood, R. (2000), *Managing Complexity: How businesses can adapt and prosper in the connected economy*, Profile Books, London
- Zohar, D. (1997), *Rewiring the Corporate Brain : Using the New Science to Rethink How We Structure and Lead Organizations*, Berrett-Koehler, San Francisco

7 Figures, tables and diagraphs

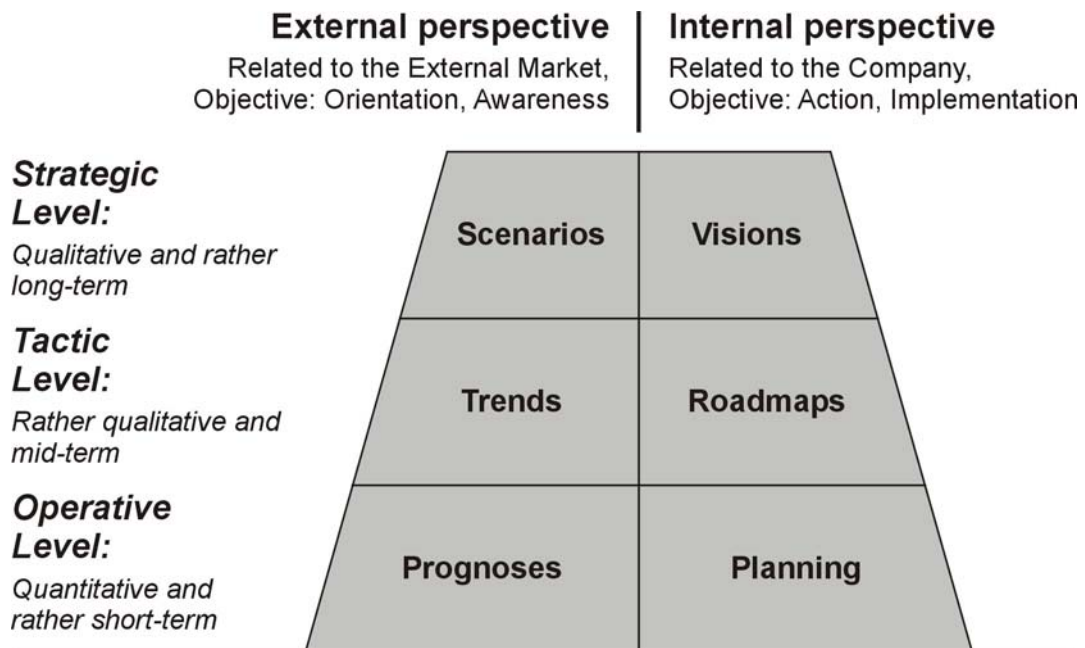


Figure 1: Model of future management

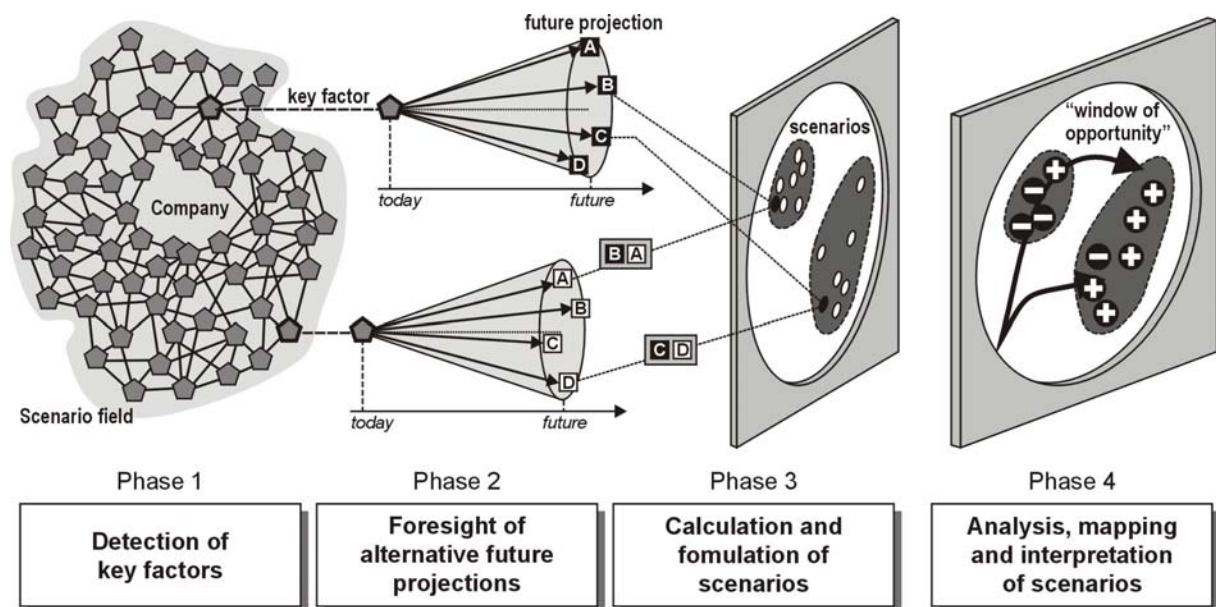


Figure 2: Four steps of scenario development

Organizational approach	Internal / Together	<p>Scenario development by dialogue</p> <p><i>Interactive development of scenarios within a working group.</i></p>	<p>Systematic development of scenarios within a working group</p> <p>A) scenario projects B) scenario conferences</p>
	External/by Experts	<p>Scenario development by gurus</p> <p><i>"Future gurus" develop alternative possible futures by their own.</i></p>	<p>Scenario development in a study</p> <p><i>Systematic development of scenarios by an external organization/ consultant</i></p>
		Intuitive	Systematically
Methodological approach			

Figure 3: Different ways to organize scenario development processes

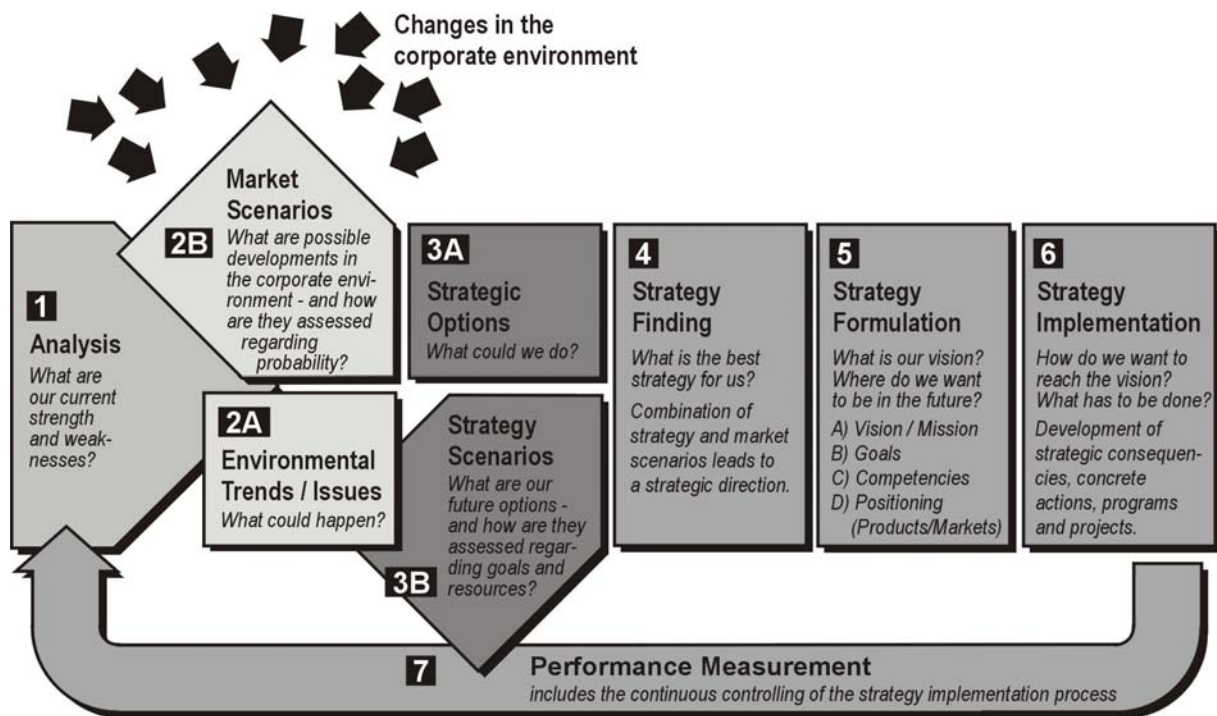


Figure 4: Process of scenario-based strategic planning

		Strategy Assessment	Strategy Development	
External perspective	Market Scenarios	Traditional scenario planning <i>Assessment of existing or hypothetic strategies against external market scenarios [1]</i>	Market-scenario-based strategy-development <i>Strategy development as finding and assessment of strategic options against external market scenarios [2]</i>	Strategic framing in a scenario-matrix <i>Strategic framing by combination of external scenarios and strategy scenarios in a scenario-matrix [4]</i>
	Env. Trends/Issues	Traditional planning approach <i>Strategy as a finding and assessment of strategic options build on environmental trends and issues</i>	Traditional strategy development <i>Strategy as a finding and assessment of strategic options build on environmental trends and issues</i>	Resource-oriented strategy mapping <i>Systematic development of alternative strategies and assessment of these strategy scenarios against environmental trends and issues [3]</i>
		Strategic Options		Strategy Scenarios
Internal perspective				

Figure 5: Four ways of scenario-based planning

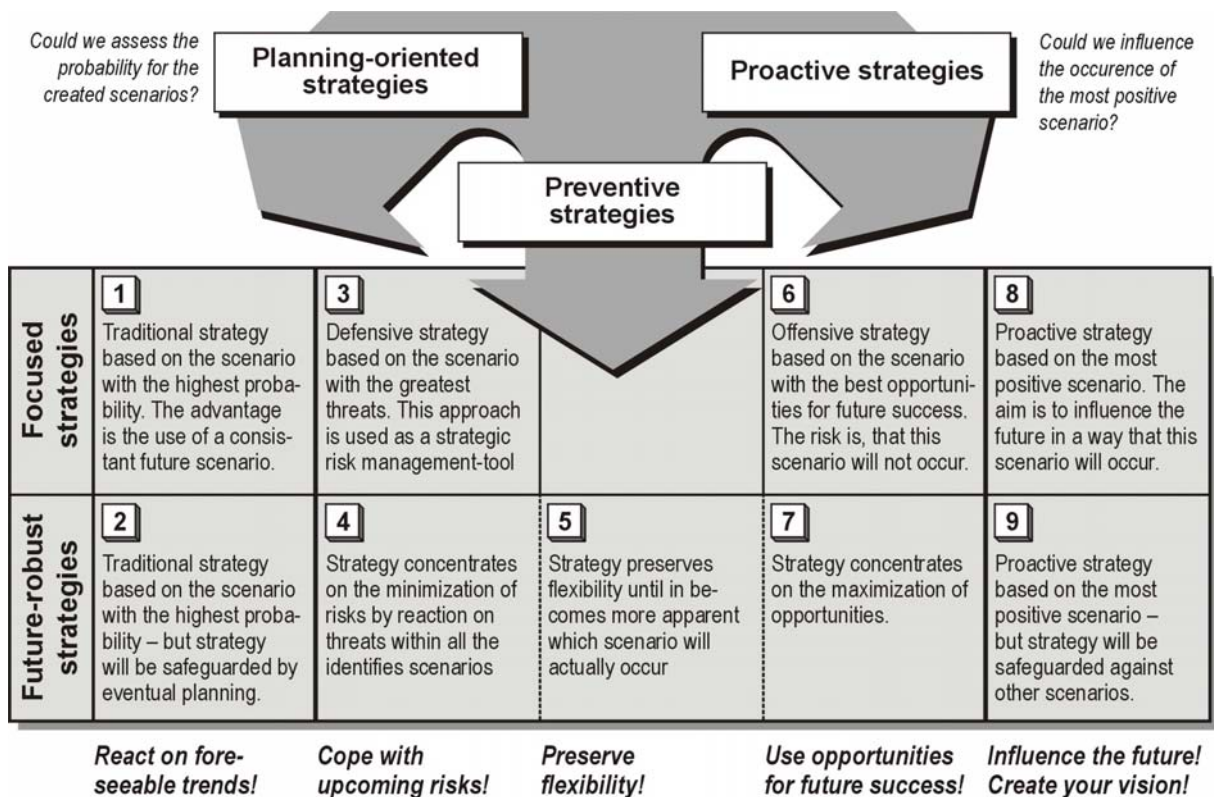


Figure 6: Main types of scenario-based strategies

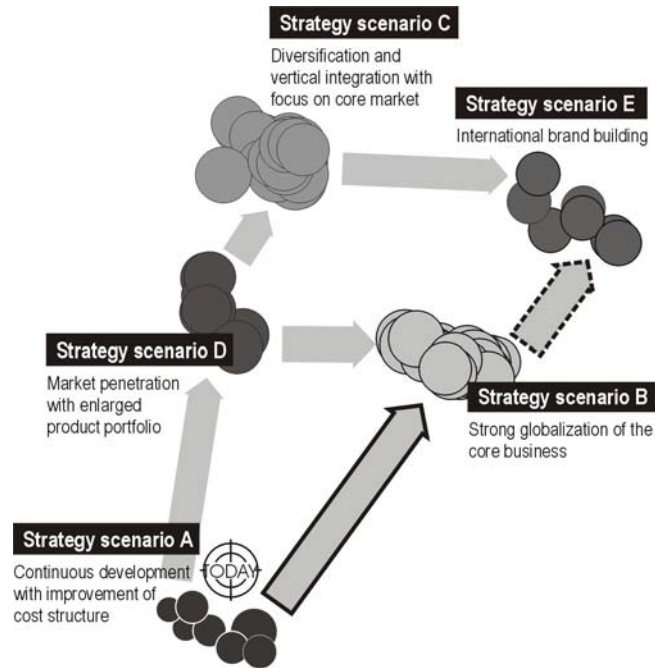


Figure 7: Strategy roadmap based on strategy scenarios

		Uncertainty in the corporate environment					
		Development of market scenarios					
		Market Scenario I	Market Scenario II	Market Scenario III	Market Scenario IV	Market Scenario V	Market Scenario VI
Development of strategy scenarios	Strategy Scenario A	+	++	○	++	-	○
	Strategy Scenario B	++	+	+	++	++	-
	Strategy Scenario C	-	++	+	○	+	○
	Strategy Scenario D	++	○	-	○	++	+
	Strategy Scenario E	-	-	++	+	-	++

STRATEGIC DIRECTION

How robust is a strategy scenario against alternative side conditions?

Which is the best strategy (scenario) Within a specific market development?

Figure 8: Scenario-matrix

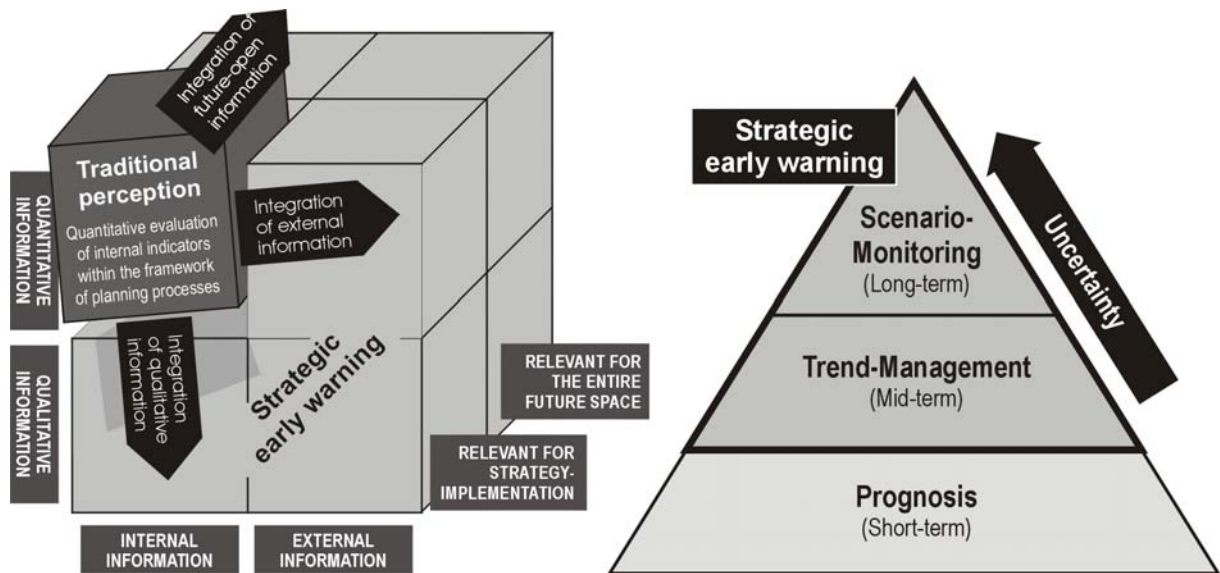


Figure 9: Dimensions and levels of strategic early warning

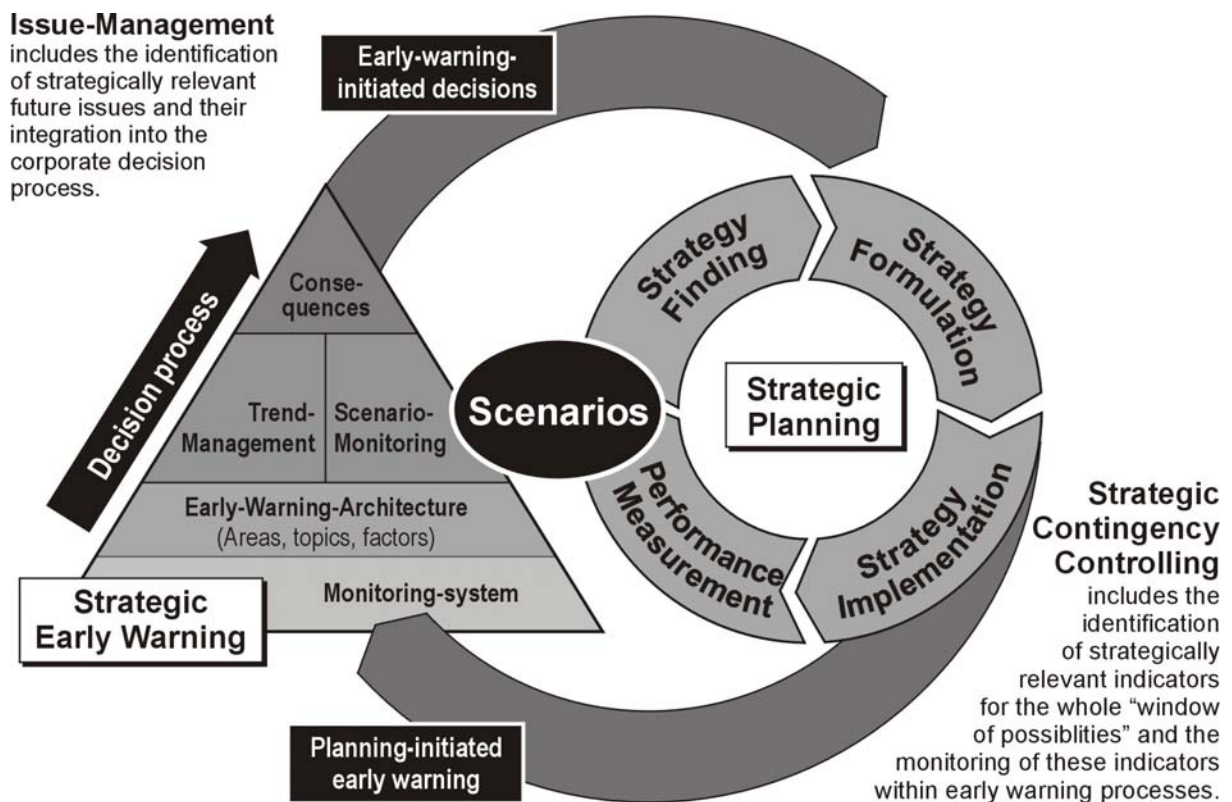


Figure 10: Combination of strategic planning and strategic early warning

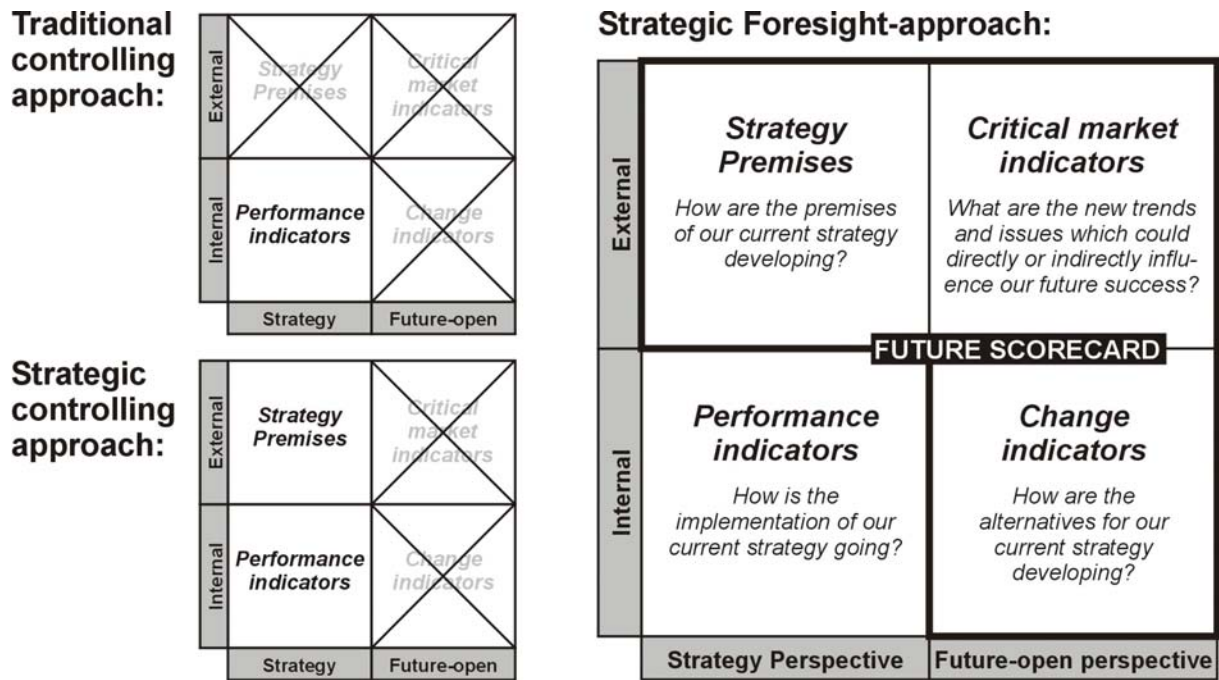


Figure 11: Principle of a future scorecard

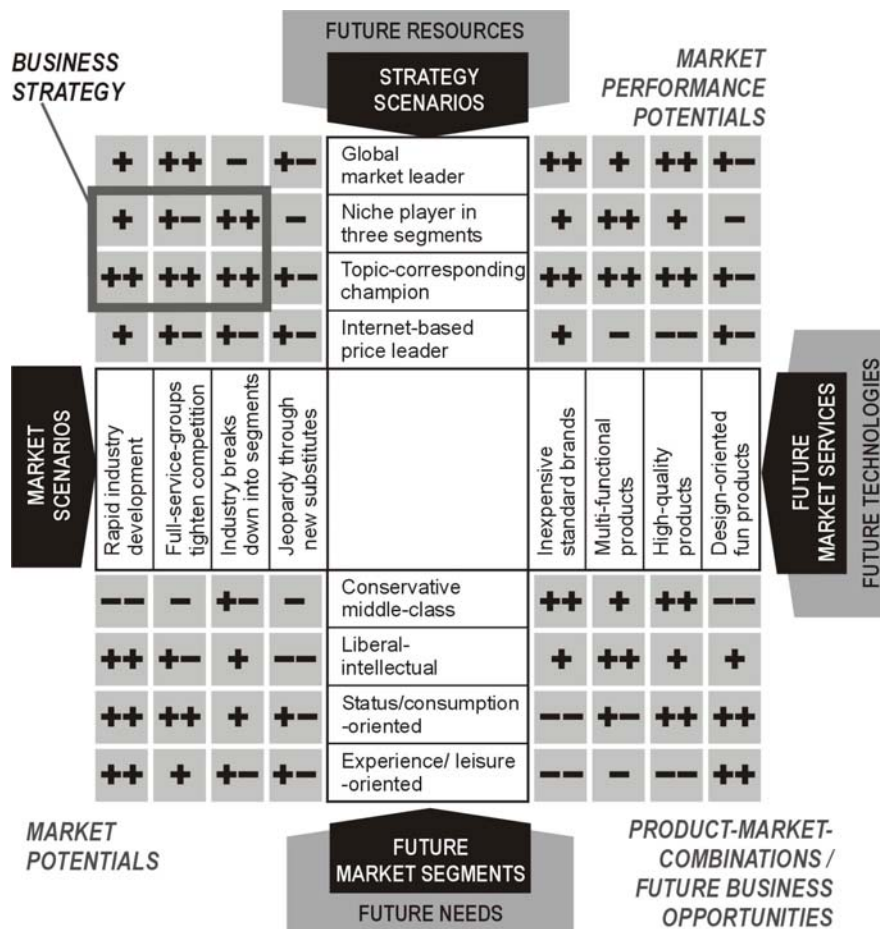


Figure 12: Four-quadrant model of strategic innovation management

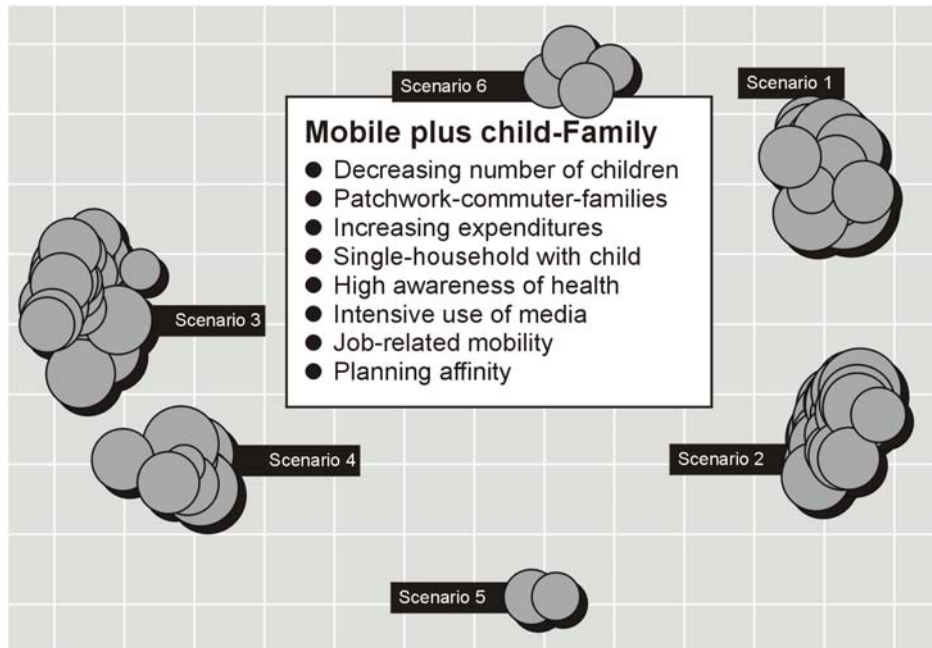


Figure 13: Future market segments within a scenario mapping

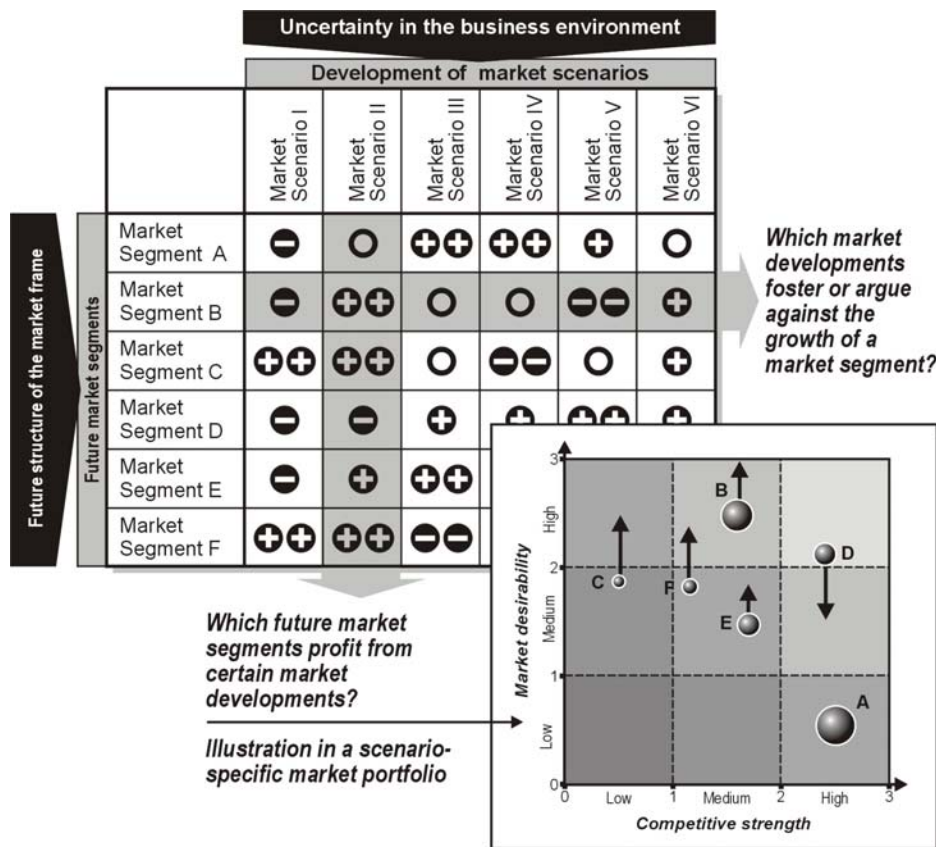


Figure 14: Matrix of market segments and market developments/
a scenario-specific market portfolio

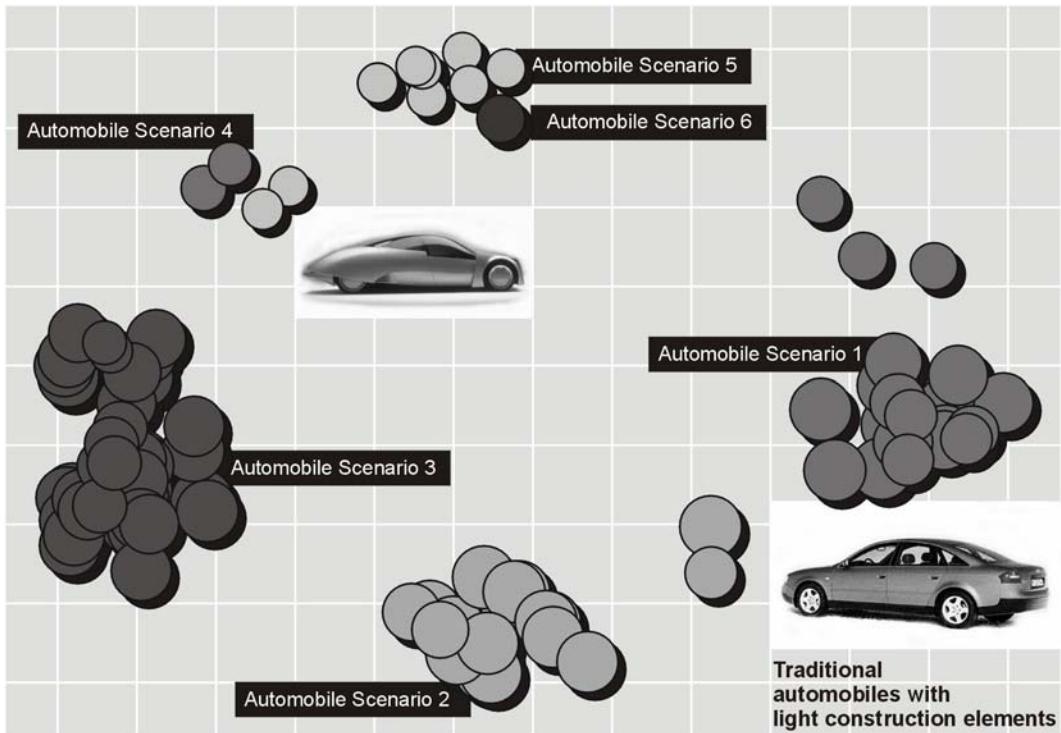


Figure 15: Six product scenarios of possible light construction automobiles

		Future structure of the service frame						
		Future market service concepts						
		Market Service Scenario 1	Market Service Scenario 2	Market Service Scenario 3	Market Service Scenario 4	Market Service Scenario 5	Market Service Scenario 6	
Uncertainty about the own options for action	Development of strategy scenarios	Strategy Scenario A	++	++	+	○	+	++
	Strategy Scenario B	+	○	--	+	++	○	
	Strategy Scenario C	-	-	++	-	++	++	
	Strategy Scenario D	++	++	○	○	--	○	
	Strategy Scenario E	--	+	+	++	-	+	

Which strategic alternative suits a certain market service concept?

Which market services/ business activities are adequate concerning a certain strategic alternative?

Figure 16: Matrix of market services and strategy scenarios

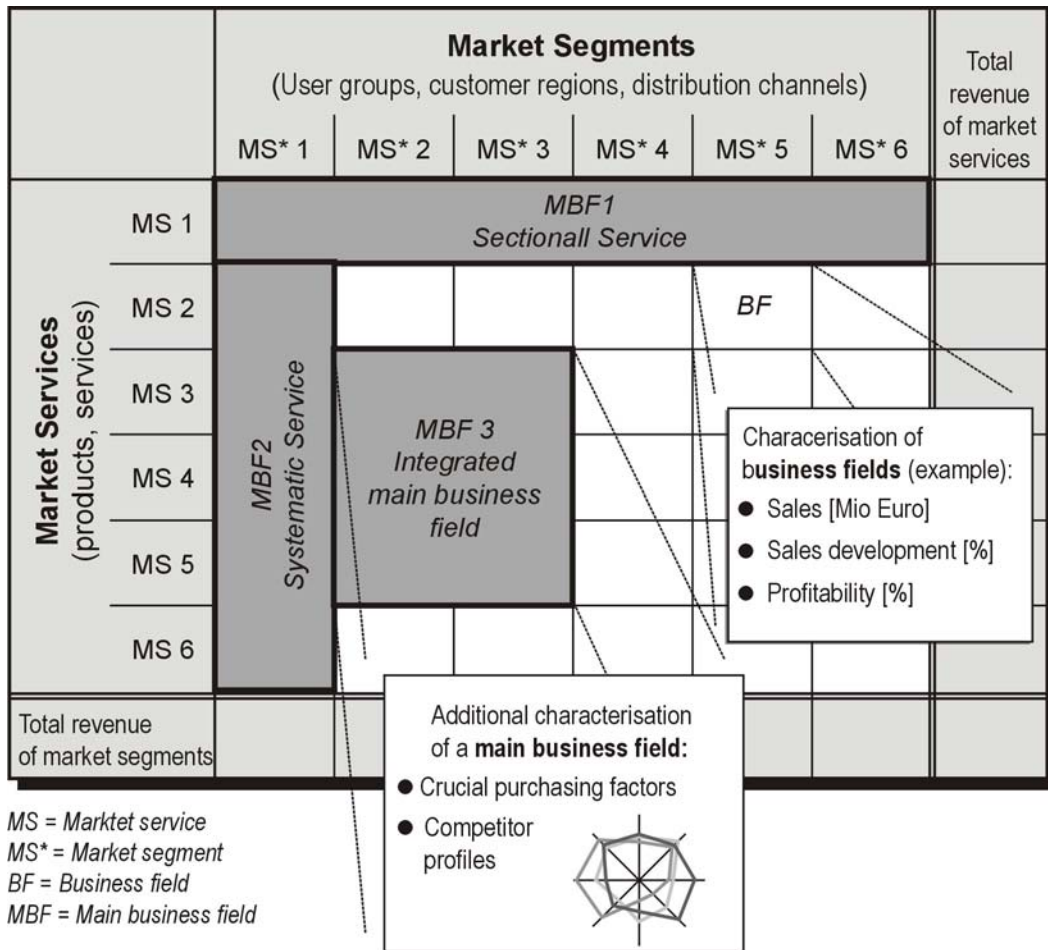


Figure 17: Business-structure-matrix

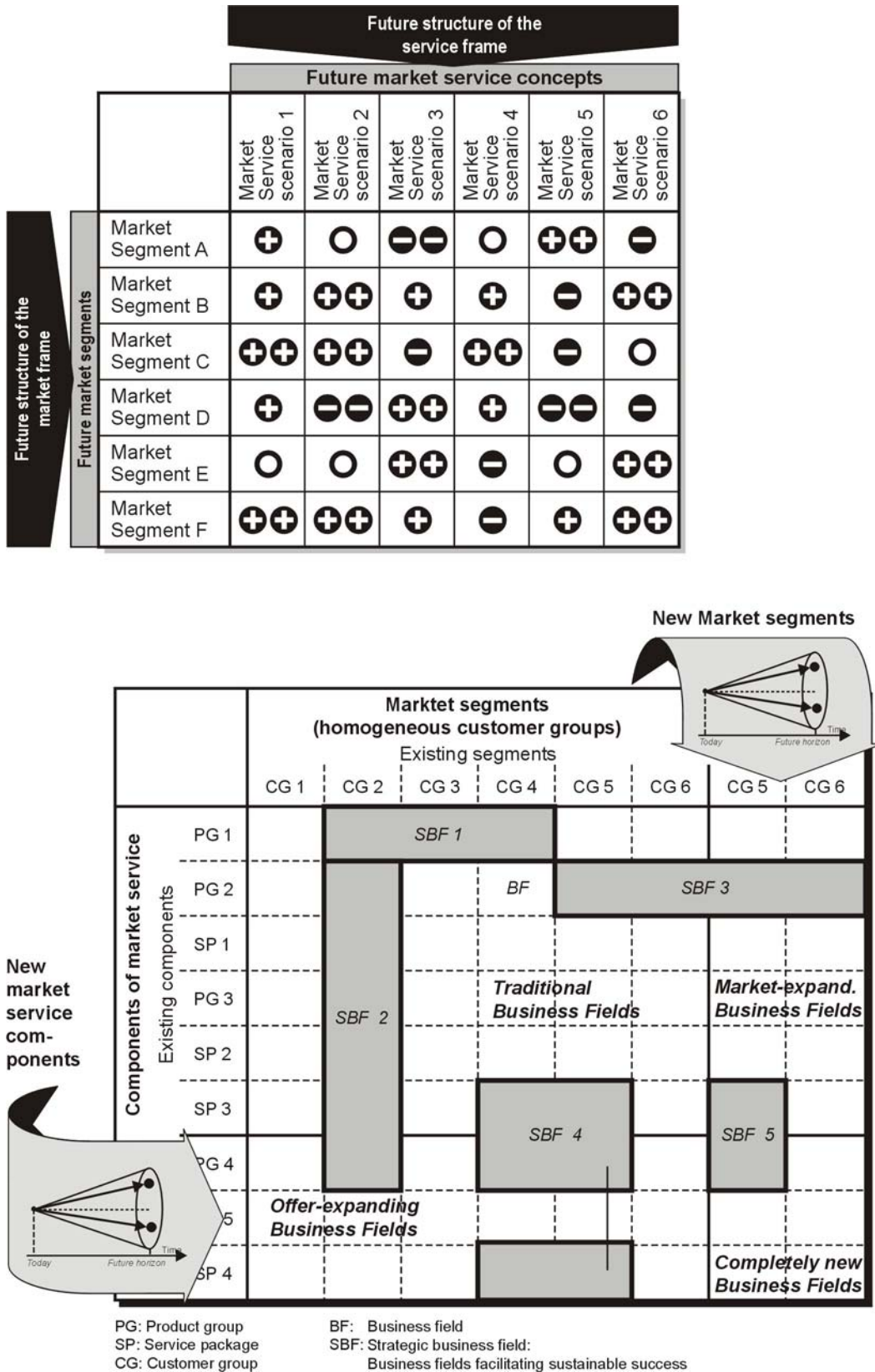


Figure 18: Future and extended business-structure-matrix

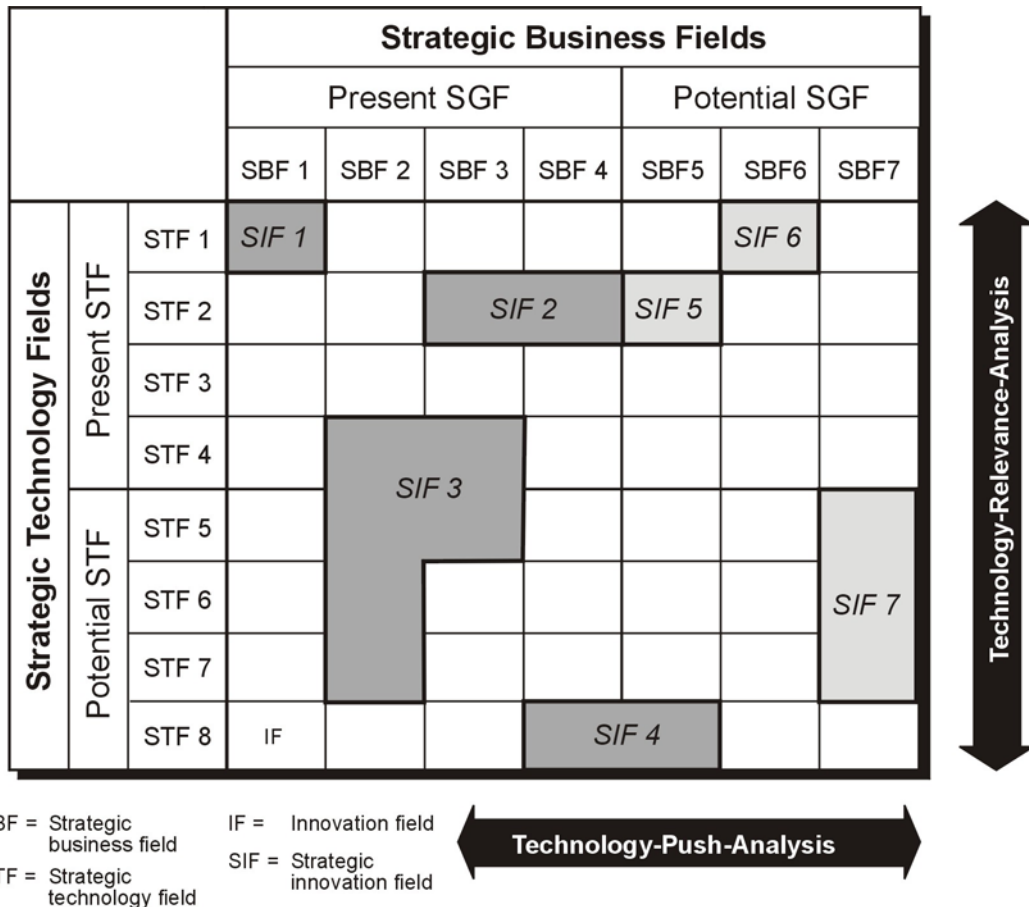


Figure 19: Innovation-structure-matrix

	Strategic Level		Innovation Level	
	Market Scenarios	Strategy Scenarios	Future Market Segments	Future Market Services
Perspective	external	internal	external	internal
Relation between scenarios	alternative	alternative	parallel	parallel
Evaluation happens in terms of...	...closeness to the current situation ...expectation (...desire)	...demand for resources ...achievement of objectives ...practicability	...market scenarios (objective: market potentials)	...strategy scenarios ...technology fields
Result of phase 1	key factors	strategy elements	key criteria	key characteristics
Result of phase 2	future projections	future options	development of key criteria	development of key characteristics
Combination happens...	...Within a future-matrix		...Within a business-structure-matrix	
Current situation is pictured throughcombination of the present strategy with close-to-present environments		...main business fields in a part of the matrix	
Result of the process isa strategic frame of action as the basis of strategic alignment		...future business opportunities / strategic business fields	

Figure 20: Overview of 4 types of scenarios