A Scenario-based Approach to Strategic Planning

Tool Description – Framing Checklist

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1. Introduction

This paper is the first of a series of papers introducing a tool-based, six-step approach to scenario-based strategic planning developed by Wulf, Meissner and Stubner (2010). The scenario-based approach to strategic planning serves as an innovative management tool to develop multiple future scenarios as well as relevant strategic options to manage future developments. Each step of the scenario and strategy development process is based on specific management tools facilitating the approach’s overall implementation.

This first tool - the ‘Framing Checklist’ - focuses on the definition of scope of the scenario-based strategic planning project (Figure 1). Before being able to derive plausible scenarios for a company, industry or region one first has to frame the analysis, i.e. define the scope of the scenario development process. Thus, the overall goal of this first step is to create a common understanding of the scope of the relevant scenario project. To achieve this common level of understanding five items have to be defined as part of the ‘Framing Checklist’ tool: The goal of the scenario project, the strategic level of analysis, the participants of the scenario development process, the participants of the 360° Stakeholder Process and the time horizon of the scenarios. Each item is clarified in more detail throughout this paper. Additionally, we illustrate the application of the “Framing Checklist” by referring to a scenario study conducted on the future of the microelectronic industry in central Germany. However, before explaining the tool itself we will briefly examine why it is relevant for strategists to sufficiently plan scenario projects themselves in order to develop precise scenarios and realistic strategic recommendations.
Figure 1: Six-Step Scenario-based Approach to Strategic Planning

1. **Definition of Scope**
   - Task: Identify core problems and frame analysis
   - Tool: Framing checklist

2. **Perception Analysis**
   - Task: Identify assumptions and mental models
   - Tool: 360° stakeholder feedback

3. **Trend and Uncertainty Analysis**
   - Task: Discuss and evaluate relevant trends
   - Tool: Impact/uncertainty grid

4. **Scenario Building**
   - Task: Develop scenarios based on key uncertainties
   - Tool: Scenario matrix

5. **Strategy Definition**
   - Task: Deduct action plans for implementation
   - Tool: Strategy manual

6. **Monitoring**
   - Task: Monitor developments and challenge assumptions
   - Tool: Scenario cockpit
2. Background Information on the Framing Checklist

Each scenario-based strategic planning activity has to start by asking the question: "Why are scenarios developed and what should be the final outcome of the process?" If the basic intention of the overall scenario development process is not specified in the beginning, the overall planning activity is destined to end in a disaster (Lindgren & Bandhold, 2009). Management will not understand the scenarios if they do not agree with their initial purpose. They will not support the implementation of strategic actions developed based on a scenario planning activity if they could not share their views as part of the process and the scenarios themselves will become unrealistic if the wrong future time horizon was chosen. Hence, it is critical to start the scenario-based strategic planning activity by defining the scope and intent of the project comprehensively.

Looking at existing scenario planning techniques, these often start by identifying knowledge gaps in an organization (van der Heijden et al, 2002), a project preparation (Chermack, 2011) or tracking changes in the external environment that will have an impact on the future development of a company (Lindgren & Bandhold, 2009). Of course, all these approaches to starting a scenario-based strategic planning process define the purpose and question of a scenario project in one form or another. Nevertheless, they achieve this step in a rather vague or unstructured manner. Often, participants of a scenario planning process are given a long, extensive list of topics the scenario planning activity tries to cover. However, such a detailed or over-engineered document confuses participants rather than clarifying the scope of the scenario planning project. If participants do not understand the purpose and scope of a scenario planning activity from the beginning, the project will take-up too much time and resources and is bound to fail. It is more important to structure the discussion on the scope, goal and process of the scenario planning activity than developing a pre-defined, extensive project description. Participants of a scenario planning activity thus require a brief, ideally one page document that summarizes the most important points of the scenario-based strategic planning process. We believe that the ‘Framing Checklist’ tool described in the next
section is capable to fulfill these needs by giving extensive practical support when starting a scenario planning project.
3. Description of the ‘Framing Checklist’ Tool

The ‘Framing Checklist’ tool is a comprehensive list defining the scope of a scenario project. It allows participants of a scenario-based strategic planning activity to exhaustively consider all relevant aspects required to make the project successful. The ‘Framing Checklist’ is based on the ‘Problem Identification Checklist’ defined by Hungenberg (2010). We have taken this initial approach and extended it to fit the purpose and context of a scenario-based strategic planning exercise. Overall, five different items have to be checked in order to structurally define the purpose of a scenario-based strategic planning activity. These items are the goal of the scenario project, the strategic level of analysis, the participants of the scenario development process, the participants of the 360° Stakeholder Process and the time horizon of the scenarios (Figure 2).

<table>
<thead>
<tr>
<th>Goal of scenario project</th>
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<tbody>
<tr>
<td>Definition of the question to be solved: Focus of the scenario analysis</td>
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<table>
<thead>
<tr>
<th>Strategic level of analysis</th>
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<tbody>
<tr>
<td>Shall the scenario planning process be conducted for the macro, industry, corporate or business level?</td>
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<tr>
<th>Definition of Stakeholders</th>
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<tr>
<td>Which key stakeholders shall be involved in the 360° Stakeholder Feedback?</td>
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<table>
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<tr>
<th>Participants</th>
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<tr>
<td>How closely is the top management involved in the process? Which members of the respective departments participate in the workshops?</td>
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<tr>
<th>Time horizon</th>
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<tr>
<td>What time horizon is the planning process catered to (1, 2, 5 years or longer)?</td>
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Figure 2: Framing Checklist

3.1 Goal of Scenario Project

The first item of the ‘Framing Checklist’ tool is to define the goal of the scenario-based strategic planning activity. This item is usually described as answering the basic underlying question the whole scenario development process tries to solve. Essentially, the overall purpose of the scenario planning activity is defined at this stage.
The goal definition of a scenario project thus concentrates on one principal element. It should define the purpose of the scenario project: What is the outcome of the scenario planning activity and what will be accomplished with this outcome? In essence, the goal definition is a summary of all items of the ‘Framing Checklist’ tool.

Defining the goal of a scenario-based strategic planning activity should conclude with a precise statement describing the overall aim of the activity. When reading the statement, participants as well as externals to the scenario development process should immediately understand what the scope of the scenario activity is. An example of such a statement is for example “The goal of the scenario project is to develop scenarios for European network carriers until 2015”. Participants immediately know the goal of the activity being to develop scenarios; the scope of the scenario development exercise, i.e. the European airline industry, specifically network carriers and the time horizon being 2015. Concluding this section, the development of the goal of the scenario project is the core of the framing checklist. However, in order to successfully identify this overall goal, further analyses and coordination together with the client of the scenario planning activity are necessary.

### 3.2 Strategic Level of Analysis

Having agreed on the goal of the scenario-based strategic planning activity, the next item is to define the strategic level of analysis of the project. Scenarios can be developed for various levels. Taking a company’s perspective, the first level is to develop scenarios for a business unit. Here, the focus of the scenario development activity is to assess how future developments will affect a firm’s particular business unit. The scenarios developed are thus very specific and take into account the specific circumstances of a firm’s business unit. An example of such a focused level of analysis would be to develop scenarios for each of Lufthansa AG’s different operations. Lufthansa, a German airline, has a whole range of different business units such as passenger operations, cargo flights, ground-handling services, technical aircraft services etc. Moreover, Lufthansa operates flights in various
regions around the world, offering intercontinental flights under its Lufthansa brand, regional flights using the brands Lufthansa Regional or Eurowings as well as owning very focused operations such as Austrian Airlines having a strong presence in eastern Europe. Taking a business unit level of analysis for Lufthansa would thus for example mean to develop scenarios for its German passenger flight operations under the Lufthansa brand.

The next strategic level of analysis is to develop scenarios at the corporate level. The focus here is to assess how external developments affect a company in total. Going back to the Lufthansa example, this would mean to develop scenarios for the whole group including all its different business units. The main focus of corporate level scenarios is thus to analyze how certain developments affect Lufthansa as a whole.

Another possible level of analysis is the industry level. Here, the focus is to develop future scenarios for a whole industry. Again, the focus of the industry can vary depending on how the scenario development participants define an industry. In a scenario development project, external influences often arise outside a defined industry. When adopting this approach it is thus important to choose the industry scope wisely. For Lufthansa, this would for example mean to create scenarios for the global airline industry with a focus on intercontinental flights. Regional or short-distance flights would hence be outside the scope of this scenario development exercise.

The last strategic level of analysis is the macro level. Here, a scenario development team identifies several macroeconomic indicators that influence the economic conditions a company faces. Again, the focus of the macro level analysis needs to be chosen carefully since a team cannot only develop macro scenarios for a company, but also different geographic regions. Will the scenarios be developed on a global, regional or country level? Here, industry experts should be consulted as to which regional focus is most relevant given the goal of the scenario project. When taking the macro level of analysis the final outcome of
the scenarios will be to examine how various economic developments impact a company’s future performance.

One crucial difference between the various levels is the degree to which a business unit or company is already present in the scenarios. From our experience when adopting a business unit or corporate level perspective the business unit or company in itself is part of the scenario description. The company thus appears in both the scenarios and strategic recommendations derived from the scenarios. However, when adopting an industry perspective the company in itself is not part of the scenario description and only becomes relevant when developing strategic recommendations. Moreover, an industry perspective is also the right strategic level when wanting to assess the impact of external developments such as technological advancements upon a whole company.

One can see that the outcome of a scenario development activity varies greatly depending on the strategic level of analysis chosen. Scenarios for Lufthansa’s German operations where the firm faces a vast range of competitors will be very different than scenarios for the company’s intercontinental operations where it often faces little competition. When going through the various possible levels of strategic analysis a company should thus first look back at the goal of the scenario exercise. Next, it should consider what different industries, but also geographic regions the company has a presence in. Afterwards, it should combine both to agree on the overall level of strategic analysis. This process should be performed with care since taking the wrong focus can potentially mean that the scenarios developed will overlook important external developments.

3.3 Participants
The third item defines who is in charge and who will take part in the scenario planning process. It is usually the executive management of a company that initiates the scenario-based strategic planning process together with a company’s corporate development team.
From our experience, each scenario project is assigned a project leader from a firm’s corporate development team or a specific business unit such as sales. The project leader assesses how closely and when senior management is involved in the scenario planning process. He is also responsible for steering the whole project, defining key items such as length, deadlines, workshops and resources committed to the activity.

When developing scenarios it is often not necessary to add new resources to the process. Rather, existing resources have to be leveraged in a more structured manner (Schwartz, 1996). Hence, the project leader has to identify the relevant internal departments as well as individuals to participate in the scenario development for the organization to accept and live through the whole process. If the wrong individuals are identified, the organization will not accept the outcome of the scenario-based strategic planning exercise.

3.4 Definition of Stakeholders

Once participants and the project leader have been identified, the next item is to define internal as well as external stakeholders to be involved in the 360° Stakeholder Feedback. The purpose of the 360° Stakeholder Feedback, which is explained in more detail in a separate tool description called “A Scenario-based Approach to Strategic Planning Tool Description – 360° Degree Stakeholder Feedback”, is to identify and challenge existing perceptions and mental models of all participants involved in the planning process. Here, both internal and external stakeholders are asked to identify a comprehensive list of influencing factors that specify and shape future developments. This step is crucial, since it introduces an external perspective into the scenario development process. For this purpose, internal stakeholders such as the senior management, department heads etc. as well as external stakeholders such as politicians, industry associations, competitors, industry experts etc. are asked to participate in a two-step survey process. These stakeholders should be identified and compiled in a list right at the beginning of the scenario development process.
Looking for internal stakeholders is usually not a problem once senior management support has been granted. These internal participants should hold a senior position where they have a rough oversight of a company’s strategy and external influencing factors. External stakeholders are more difficult to identify. Here it is advisable to thoroughly consult a company’s business partners, alumni and expert networks, corporate directories and the press.

Why is it important to define the external stakeholders at such an early stage? A scenario-based strategic planning process is only successful if the appropriate external views are integrated into the scenario development process. As mentioned in the introduction, scenarios are aimed at having a structured strategic conversation about a company’s future developments. Future developments often arise outside a company’s perspective. The stakeholder definition aims at bringing these external developments into a company’s perspective. How these external developments can be identified by defining the right stakeholders should thus be completed right at the start of a scenario project.

3.5 Time Horizon

The final item is to agree on the time horizon of the scenarios to be developed. We usually recommend to take a time horizon of 5 years into the future. This is sufficiently long enough for major external developments to take place, but also still precise enough for individuals involved in the scenario development process to imagine. Moreover, the usual strategic planning cycle of companies is 5 years into the future.

Nevertheless, the time horizon is influenced by the industry or geographic region an organization operates in. Industries, such as online retailing, are very volatile and uncertain with changes happening very quickly. Here, it would make sense to take a shorter time horizon since 5 years would be too vague for individuals to accept the scenarios to be
realistic. In other industries, such as the oil and gas industry investments with a payback period of 20 to 30 years are made. Here, it is advisable to take a longer time horizon since there are hardly any significant industry changes within a 5 year period.

3.6 Application to the Microelectronic Industry in Central Germany

In a recent scenario study we developed future scenarios for the microelectronic industry in central Germany. As part of this scenario-study, we also applied the ‘Framing Checklist’ tool during a workshop to comprehensively define the scope and purpose of the scenario project (Figure 3). First, we defined the goal of the scenario project. The core question the scenarios should answer is what possible future developments will influence the microelectronics industry in central Germany and what scenarios can be produced based on these future developments. Moreover, brief strategic recommendations for actors involved in the industry such as companies, politicians or research and design institutes should be developed based on the scenarios. We thus formulated the goal of the scenario project “to develop future scenarios and strategic recommendations for the microelectronic industry in central Germany until 2015”.

Next, we defined the strategic level of analysis to be very regional, with a focus on the microelectronic industry in central Germany. Most future developments affecting the industry come from outside central Germany. Moreover, the goal of the scenario project was to develop scenarios for all industry actors covering the design and production of microelectronic chips in central Germany as well as giving them strategic recommendations how to cope with these developments.
Goal of scenario project
The goal of the scenario project is to develop future scenarios and strategic recommendations for the microelectronics industry in central Germany until 2015.

<table>
<thead>
<tr>
<th>Strategic level of analysis</th>
<th>Definition of Stakeholder</th>
</tr>
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<tbody>
<tr>
<td>- Main focus: Industry level – microelectronic industry in central Germany</td>
<td>Internal:</td>
</tr>
<tr>
<td>- Influence factors come from other global microelectronic clusters in Asia or USA</td>
<td>- Microelectronic chip designers and producers in central Germany</td>
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<table>
<thead>
<tr>
<th>Participants</th>
<th>Time horizon</th>
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<tr>
<td>- Scenario Experts (HHL - Center for Scenario Planning)</td>
<td>5 years until 2015</td>
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Figure 3: Framing Checklist for the Microelectronic Industry in Central Germany

Participants of the scenario planning project were members of the HHL – Center for Scenario Planning who were in charge of the scenario development process. Since the scenarios were not developed within a specific company no executive management had to be involved in the process. However, we relied on existing contacts to senior managers working in the microelectronic industry as well as other industry experts to validate the robustness of our process, the potential future developments taken into consideration as well as the developed scenarios.

In the fourth step of the ‘Framing Checklist’ tool we identified the stakeholders to be consulted as part of the 360° Stakeholder Feedback process. The internal stakeholders identified consisted of microelectronic chip designers and producers in central Germany. External stakeholders were microelectronic chip designers and producers in other regions as well as public institutions, industry associations, service companies, research and design institutes, financial- and educational institutions. We thus identified two internal stakeholder groups and eight external stakeholder groups. When identifying these stakeholders we first looked at the industry value chain and actors influencing this value chain. Next, we
examined corporate directories looking for chip designers and producers in central Germany. Here the focus was on identifying senior managers or staff working in corporate development. These contacts were compiled in a database. Added to this database were also contacts of actors associated with the microelectronic industry in central Germany not being chip designers or producers.

Finally, we decided to pick a 5 year time horizon. Development cycles in this industry fall into this timeframe and most microelectronic industry experts work with 5 year plans when performing strategic planning. The final outcome of having applied the ‘Framing Checklist’ tool to the microelectronic industry in central Germany is a precise and comprehensive framework for embarking on the scenario-based strategic planning process. Throughout the scenario and strategy development phase all milestones were met. The final scenarios as well as strategic recommendations fulfill the initial project goal indicating that the tool is robust and fit for its intended purpose.
4. Evaluation

The ‘Framing Checklist’ tool is an efficient and precise starting point for initiating and structuring a scenario-based strategic planning process. Its core advantages are the logical and comprehensive items which are relevant when defining the purpose and agenda of a scenario planning activity. The tool has been extensively applied in numerous scenario-based strategic planning projects and its usefulness has been exemplified by the practical case of the microelectronics industry in central Germany.

However, our experience of applying the ‘Framing Checklist’ tool has also highlighted some manageable limitations. First, the 5 items that structure the scenario development process are not exhaustive. Depending on the setting of the scenario development process, other items such as costs, deadlines or resources have to be added to the list. Nevertheless, this can be quickly achieved by noting the relevant items on the list. Second, if a company has several different business units present in different geographical regions, only using one ‘Framing Checklist’ for the overall scenario-based strategy development process is not sufficient. In this case, the tool has to be applied to each business unit individually in order to effectively manage to scenario development process.

Concluding, the outcome of the ‘Framing Checklist’ tool is a precise set of items that start and guide the scenario development process. The framing checklist is ideal to structure a strategic conversation not only on the purpose of developing scenarios, but the overall process and the resulting strategic recommendations. As Peter Schwartz (1996) describes it: “You cannot create scenarios from recipes – but you can practice creating scenarios.” The ‘Framing Checklist’ is a good tool to start that particular scenario-based strategic planning process which we continue to describe in our subsequent tool description focusing on the ‘360° Stakeholder Feedback’.
**Bibliography**


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